

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification				DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5				R-1 ITEM NOMENCLATURE 0604231N - TACTICAL COMMAND SYSTEM				
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY 2013
Total PE Cost	62.814	56.406	86.921	79.714	69.046	58.617	61.568	62.443
2213 MISSION PLANNING	9.392	21.597	30.375	25.089	16.786	7.667	10.344	10.505
0486 TACTICAL/MOBILE (TACMOBILE) SYSTEMS	1.114	1.472	3.775	3.228	3.319	2.584	2.621	2.660
0521 SHIPBOARD TACTICAL INTEL/GCCS-M INTELLIGENCE APPLICATIONS	2.947	1.134	3.741	3.829	3.886	3.954	4.028	4.103
0709 GCCS-M MARITIME APPLICATIONS	6.922	6.989	21.816	21.241	19.082	9.872	8.746	8.866
2009 TRUSTED INFORMATION SYSTEMS/JOINT CROSS DOMAIN EXCHANGE (JCDX)	2.118	1.684	0.513	1.392	0.390	0.401	0.407	0.415
2305 GCCS-M COMMON APPLICATIONS	9.397	4.269	5.757	0.061	0.066	7.500	7.638	7.781
2307 SHIPBOARD LAN/WAN/INTEGRATED SHIPBOARD NETWORK SYSTEM	3.340	3.100	6.452	10.029	10.781	11.831	6.307	6.276
3032 NTCSS ENTERPRISE DATABASE AND MLDN	0.048	0.045	0.052	0.050	0.050	0.051	0.052	0.053
9123 FORCENET	14.330	15.120	14.440	14.795	14.686	14.757	21.425	21.784
9999 CONGRESSIONAL INCREASES	13.206	0.996	0.000	0.000	0.000	0.000	0.000	0.000
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>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.</p> <p>Global Command and Control System - Maritime (GCCS-M): A major component of the TCS is the GCCS-M. GCCS-M is the Navy's fielded Command and Control system, a key component of the FORCENet Command, Control, Communications, Computers, Intelligence and Reconnaissance (C4ISR) 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 Command, Control, Communications, Computers and Intelligence (C4I) capabilities for GCCS-M Afloat and GCCS-M Ashore Tactical/Mobile and Trusted Information Systems (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 Universal Network Information Exchange (UNIX)/personal computer (PC)/commercial-off -the-shelf (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.</p> <p>Tactical/Mobile (TacMobile) Systems: The TacMobile program provides evolutionary systems and equipment upgrades to support Maritime Surveillance 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), the Mobile Operations Control Centers (MOCCs), the Joint Mobile Ashore Support Terminals (JMASTs), and their equivalents. 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.</p>								

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<p>Trusted Information Systems (TIS): Trusted Information Systems (TIS) is a combination of the Joint Cross Domain eXchange (JCDX) system and Radiant Mercury (RM), incorporating Multi-Level Security (MLS) web technologies and Multiple Levels of Security technologies in order to successfully provide accredited Cross Domain Solutions (CDS). Provides the core on-line, automated, near-real time, multi-level secure, information analysis, dissemination, and receipt capabilities that enable Combatant Commanders 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. JCDX 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. JCDX is a certified, accredited, operational, Multi-Level Secure (MLS), Command, Control, Communications, Computers & Intelligence (C4I) system providing analysis and correlation of near-real time, all source intelligence information. Radiant Mercury provides an automated means to sanitize, downgrade, guard, and transliterate formatted data at various classifications, compartments and releasabilities. With the aid of a reliable human reviewer, RM can process nonstandard messages, such as messages with National Imagery Transmission Format (NITF) products and other non/semi-formatted file types.</p> <p>Shipboard Local Area Network (LAN)/Wide Area Network (WAN) - Integrated Shipboard Network Systems (ISNS): The Integrated Shipboard Network Systems (ISNS) provides Navy ships with reliable, high-speed SECRET and UNCLASSIFIED Local Area Networks (LANs), providing the network infrastructure (switches and drops to the PC), Basic Network Information Distribution Services (BNIDS) and access to the Defense Information Security Network (DISN) Wide Area Network (WAN) (Secure and Nonsecure Internet Protocol Router Network (SIPRNET and NIPRNET) which are used by other hosted applications or systems such as Naval Tactical Command Support System (NTCSS), Global Command and Control System - Maritime (GCCS-M), Defense Messaging System (DMS), Navy Standard Integrated Personnel System (NSIPS), Navy/Marine Corps Portal (NMCP), Naval Mission Planning System (NAVMPs), Theater Battle Management Core Systems (TBMCS), and Tactical Tomahawk Weapons Control System (TTWCS). It enables real-time information exchange within the ship and between afloat units, Component Commanders, and Fleet Commanders and is a key factor in the implementation of the Navy's portion of Joint Vision 2020. Funding supports the design, development and testing of the ISNS LAN for surface ships. ISNS includes integrated core services to provide a Tactical Service Oriented Architecture (TSOA) which is the mechanism to deliver FORCENet interface to the warfighter. The TSOA provides a composable warfighting environment enabling dynamic configuration of capabilities tailored to meet specific warfighting missions. As the warfighting mission changes, the capabilities or services can be re-configured on the fly to meet the new warfighting requirement. This dynamic reconfiguration of services also known as "plug and fight" meets the composable services vision of FORCENet. TSOA also provides the common core enterprise services and framework to allow organizations ubiquitous access to reliable, decision-quality information through a net-based services infrastructure and applications to bridge real-time and near-real-time communities of interest (COI). The TSOA will empower the edge user to pull information from any available source, with minimal latency, to support the mission. Its capabilities will allow Department of the Navy as well as Global Information Grid (GIG) users to task, post, process, use, store, manage and protect information resources on demand for warfighters, policy makers and support personnel. TSOA will utilize a spiral process for delivering capability to the warfighter.</p> <p>Combined Enterprise Regional Information Exchange System (CENTRIXS): The Combined Enterprise Regional Information Exchange System (CENTRIXS) program provides US Navy ships with secure, reliable, high-speed Local Area Network (LAN) with access to the Coalition Wide Area Network (WAN) to include CENTRIXS Four-Eyes (CFE), Global Counter Terrorism Task Force (GCTF), North Atlantic Treaty Organization (NATO) Information Data Transfer System (NIDTS), Multinational Coalition Force - Iraq (MCFI), bilateral networks such as CENTRIXS-J (Japan) and CENTRIXS-K (Korea), and Communities Of Interest (COI) virtual networks such as Coalition Naval Forces - U.S. Central Command (CENTCOM) (CNFC), and Cooperative Maritime Forces - Pacific (CMFP). The CENTRIXS system provides real-time tactical and operational information sharing at the SECRET and SECRET REL (Releasable) level between naval afloat units, Component Commanders, Fleet Commanders, Numbered Fleet Commanders and Coalition Forces/Allies. When the CENTRIXS network is combined with other subsystems (Radio/Satellite Communications), it delivers an end-to-end network centric warfighting capability. The CENTRIXS program is comprised of Block 0, I, and II systems fielded across the Fleet, and Increment 1 which provides a network infrastructure that allows simultaneous access to multiple Coalition Wide Area Networks (WAN) and incorporates the Common PC Operating System Environment (COMPOSE) which provides a server and client operating system environment for other applications and collaborative tools such as Sametime Chat, Domino and Command and Control PC (C2PC) as means to share a Common Operational Picture (COP) and exchange information using Collaboration At Sea (CAS). The CENTRIXS program uses both Commercial Off The Shelf (COTS) hardware and software and Open Standards to maximize commercial technology and support. In-service engineering and technical support ensures existing systems are upgraded and modified to keep pace with current technology and industry.</p>	

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<p>CENTRIXS Funding supports the design, development and testing of the CENTRIXS LAN for surface and subsurface platforms and the CENTRIXS Network Operations Center (NOC). The goal of the CENTRIXS program is to provide a cost-efficient, operationally effective network that dramatically reduces current infrastructure requirements while maximizing operational flexibility and warfighter utility in a coalition environment. Multi-Level Thin Client (MLTC) architecture support shipboard Space, Weight and Power (SWAP) reductions and include initiatives for server virtualization (ability to run multiple servers on a single server), drop scalability leveraging existing SIPRNET drops, remote authentication and remote system management. Additionally funding will provide design, development and testing for a Unit Level MLTC system (provides a compressed shipboard rack/client footprint) and initiatives to include Language Translation, Communities Of Interest (COI) and Network Enclave Agility (ability to dynamically shift between all coalition networks and COIs) and Multi-Level Chat (a Cross Domain Solution (CDS) chat capability).</p> <p>Submarine Local Area Network (SubLAN): The SubLAN program provides Navy submarines, with reliable, high-speed SECRET and UNCLASSIFIED Local Area Networks (LANs). When the SubLAN network is combined with other subsystems, it will deliver an end to end network-centric warfare capability. The SubLAN program is comprised of two increments - SubLAN 1 and SubLAN 2. SubLAN 1 provides network infrastructure including an Unclassified Wireless Local Area Network (UWLAN), servers, and the Common Personal Computer Operating System Environment (COMPOSE), which provides the server and operating system environment for other applications such as Non Tactical Data Processing System (NTDPS) and Navy/Marine Corps Portal (NMCP). SubLAN 2 provides a full complement of Secret Internet Protocol Network (SIPRNET) drops, Special Compartmented Information (SCI) drops, additional switch/backbone capacity, and improved reliability upgrades to SubLAN 1. Funding supports the design, development and testing of the SubLAN for submarines.</p> <p>Navy Tactical Command Support System (NTCSS) Enterprise Database and Maritime Logistics Data Network (MLDN): Funding supports design, development and testing of two components of the 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.</p> <p>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-centrally 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 will lead 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.</p> <p>Mission Planning: The goal of the Naval Mission Planning System (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 United States Navy (USN), United States Air Force (USAF), United States Army (USA), and United States Special Operations Command (USSOCOM) 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.</p> <p>Congressional Increases: FY06 includes: Congressional increases for Tactical 3 Dimensional (3D) Common Operational Picture (COP), AN/UYQ-70 Based Information Technology (IT) for the 21st Century (IT-21) Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) upgrades, ACETEF upgraded RDT&E capability, Advanced Technology Sensor Payloads, and Naval Special Warfare UUV Sensors and C2 STTR. Logistics Common Operating Picture (LOGCOP). FY 07 includes: Logistics Common Operating Picture (LOGCOP)</p>	

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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION, NA BA-5				0604231N - Tactical Command System		
(U) B. PROGRAM CHANGE SUMMARY:						
(U)	Funding:		FY 2006	FY 2007	FY 2008	FY 2009
	FY07 President's Budget		64.003	74.225	85.773	85.221
	FY08 President's Budget		62.814	56.406	86.921	79.714
	Total Adjustments		-1.189	-17.819	1.148	-5.507
Summary of Adjustments						
	Trusted Information Systems reduction				-1.053	0.000
	GCCS-M Undersea FORCENet				7.600	7.940
	FORCENet Reduction				-3.867	-5.531
	GCCS-M and Distributed Common Ground Station (DCGS) Interfaces				5.200	3.900
	ISNS Tactical Service Oriented Architecture (TSOA)				2.400	4.614
	ISNS Next Generation increment development and testing of SubLan 2				3.123	7.360
	Mission Planning reduction				-6.700	-7.000
	Joint Mission Planning System (JMPS) Expeditionary				2.365	1.680
	Anti-Submarine Warfare (ASW) Maritime Improvement Program (AMIP) Interfaces for TacMobile				1.085	0.250
	BRAC-Est Centers for Rotary Wing Air Platform Dev & Acq, Test & Evaluation				-0.001	-0.001
	Restoral of Labor Funding				-0.745	-0.457
	Fixed Submarine Broadcast System (FSBF) Unfunded				-3.000	-2.000
	CIVPERS/CS Adjustment for Aviation Enterprise				-0.394	-0.301
	Small Business Innovation Research (SBIR) Tax		-1.016		0.000	0.000
	CIVPERS/CS Adjustment for NETWARCOM Enterprise				-0.293	-1.293
	Non-Enterprise related CIVPERS/CS Adjustments				-0.003	-0.003
	Centralized DISN GIG BE funding at CFFC				-0.033	-0.033
	FY08/09 NWCF Rate Adjustments				0.419	0.456
	Sec. 8125: Revised Economic Assumptions		-0.045			
	Congressional Action 1% Reduction		-0.108			
	Navy Region Northwest Counterterrorism Program		-0.023		0.394	0.301
	Execution Realignments by Fundholder		0.003			
	Sec. 8106: Revised Economic Assumptions		0	-0.214		
	Sec. 8023: Federally Funded R&D Center			-0.005		
	JMPS - Reduction To Growth			-13.600		
	Defer New Start			-5.000		
	Navy Logistics Common Operation Picture (LOGCOP)			1.000		
	Pricing				0.251	1.125
	Warfighting Enhancements				2.000	2.000
	Net-Centricity - Net-Enabled Command Capability (NECC)					-10.000
	Alternative Offset for New Triad-DNC2				-7.600	-4.614
	Net-Centricity - DCJ2					-3.900
	Subtotal		-1.189	-17.819	1.148	-5.507

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<p>(U) B. PROGRAM CHANGE SUMMARY (Continued):</p> <p>(U) Schedule:</p> <p>ShipBoard Tactical Intel /GCCS-M Intelligence Applications (project 0521)/GCCS-M Maritime Applications (project 0709), and GCCS-M Common Applications (project 2305)</p> <p>Program schedule has been modified to reflect moving the 4.1 Milestone C date from May, 2007 to July, 2007 and Full Rate Production (FRP) date to September, 2008. The new scheduled milestone dates for Milestone C and FRP have been modified due to a change in ship schedule and these dates reflect new availability periods necessary to conduct Operational Testing.</p> <p>Mission Planning (project 2213)</p> <p>Schedule: Acquisition Milestones from PB06 (JV1-JMPS V1.0 and JC1-JMPS V1.1 to follow software configuration naming convention). JMPS V1.5 became JMPS V1.4 to align with established Air Force naming conventions.</p> <p>TEST AND EVALUATION MILESTONES</p> <p>Unique Planning Component (UPC) changed to Mission Planning Environment (MPE). MPE System Test and Integration/Validation is an ongoing effort throughout the FYDP. This process is aircraft/platform dependant.</p> <p>PRODUCTION MILESTONES</p> <p>JMPS V1.1 official IOC date, as a result of a formalized OTRR event, for the fielding of the F/A-18 19C/JMPS MPE, was completed in 1Q FY06. JMPS V1.2.3 and related milestones are identified.</p> <p>JMPS V1.2.3/1.2.4 FQT was completed in 2Q/3Q FY05, respectively. OTRR is being conducted in 3Q FY06 and 2Q FY07 respectively due to reliability and maintainability technical issues.</p> <p>(U) Technical: Not applicable</p>		

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007	
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	9.392	21.597	30.375	25.089	16.786	7.667	10.344	10.505
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 conduct post-mission analysis of recorded data. JMPS is a 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 Joint Technical Architecture (JTA) compliant Windows 2000/XP framework, a mission-planning infrastructure of basic databases, management tools, and framework services, as well as common mission planning components. An individual JMPS mission-planning environment (MPE) is a combination of the JMPS together with platform/service unique planning components and the necessary system hardware to meet user mission planning needs.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System	PROJECT NUMBER AND NAME 2213 Mission Planning

B. Accomplishments/Planned Program

JMPS Version 1.2.3	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.500	1.370		
RDT&E Articles Quantity				

JMPS Version 1.2.3 efforts, DOD/CIO mandate for IPV6 with the migration to XP operating system. Future framework and MPE efforts will be developed in framework 1.4.

JMPS Expeditionary (JMPS-E)	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			2.365	1.680
RDT&E Articles Quantity				

JMPS Expeditionary (JMPS-E): The goal of the JMPS-E team is to produce a scaleable, tailorable, mission planning environment for both staff and operational levels and an execution-monitoring tool. The primary focus of this capability is the planning and execution of expeditionary ship-to-shore movements. The variety of forces involved in an expeditionary operation amplifies the need for web-based technologies to enable collaborative planning, improve overall situational awareness and enable the monitoring of mission execution from different locations. A staff level planner capability is needed to collaborate and share information in a distributive environment to speed the planning process, provide concurrent planning, and track execution of plans. A tailored operational-level mission planner is needed to plan and analyze expeditionary missions for aircraft, amphibious, naval, and other support craft under various mission configurations and operational threat environments. The primary outputs are tasking orders, course of actions (COAs), route plans, and mission briefs in digital and printed forms. Execution-monitoring tools are required to minimize exposure during ship-to-shore and other force movements. This application will reside in framework 1.4.

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B. Accomplishments/Planned Program (Cont.)

Framework V1.4	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		10.727	13.610	12.409
RDT&E Articles Quantity				

Framework Version 1.4 is scheduled for contract award early in 2007. Previous funding constraints prohibited the current Navy MPEs from migrating to FW Version 1.3 with the AF MPEs. The increase in funding for FW 1.4 will be used to support the Navy's Developmental Test/Operational Test (DT/OT) support, integration and systems of systems testing of MPEs to capture planned common capabilities. Additionally, the Navy's UPCs will be faced with migrating to a ".net" environment post AF MPEs' migration effort during FW 1.3/1.4 timeframe. Scheduled capabilities for this framework include battle space net centric environment functionally, and Global Information Grid-Enterprise Service (GIG-ES). Additional common capabilities will also include Dynamic Replanning and retargeting efforts.

MPE Integration and Test	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	7.892	9.500	9.800	8.500
RDT&E Articles Quantity				

Mission Planning (MPE) Integration and Test efforts support the Navy's DT/OT, integration and system of system testing for MPE fielding. Efforts consist of interactive components provided by various developers into four platform-centric MPE and testing of the integrated MPE. MPE integration and testing results in a consistent and repeatable system configuration that enables stability and reliability.

Common Capabilities	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			4.600	2.500
RDT&E Articles Quantity				

Common Capabilities (CC) software augments core mission planning capabilities with capabilities common across multiple aircraft. CC is a software module, installable into the Mission Planning Environment (MPE) that contains an extension of the basic mission planning capability, CC will be developed as common software tools to automate mission planning in the expeditionary operations and maritime environments. CC such as Mission Prehearsal, Collaboration, Query and Process Imagery, Intel, Communications Planning, Asset Management, Anti-Submarine Warfare (ASW), etc. Portable Flight Planning Seat (PFPS) Component Migration to JMPS. Continue component development encompassed functionality, full documentation, and component installation.

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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. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
BLI 2876 TAC A/C Mission Planning Systems (OPN)	7.752	8.121	8.959	9.325	9.248	9.602	9.758	9.689	Continuing	Continuing
PE 0208006F Air Force Mission Planning Support Sys	119.860	146.396	103.021	96.405	98.371	99.378	100.869	102.382	Continuing	Continuing
D. ACQUISITION STRATEGY:										
<p>Manufacturing Development (EMD) efforts. The strategy entails a two-phased evolutionary approach to acquire the initial JMPS development effort. Phase I was a combined USAF/USN effort that obtained various studies, segment architect concept, design to cost estimates, and an architecture concept, and development statement of work. The Program's Phase I was planned to identify reduced costs strategies through software reuse from both USN Tactical Automated Mission Planning Systems (TAMPS) and USAF Air Force Mission Support Systems (AFMSS) legacy mission planning programs. Additionally, this phase provided a risk reduction plan by identifying the most effective migration of existing mission planning systems. Phase I was awarded to two contractors. Post Phase I during the down select process, one contractor was selected to develop the JMPS architecture work and Version 1.0 mission planning components. After Version 1 components have been developed, Version 1.1 component development will commence. Version 1.1 component development is required to retire TAMPS for the USN and meet F-15 planning requirements for the AF. Version 1.1 will be developed under a separate architect framework contract. All other combat and force level components will be acquired through a mission planning enterprise and open competition.</p>										

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Primary Hardware Development/CC	MIPR	USAF, Hanscom AFB, MA				4.600	Dec-07	2.500	Dec-08	Continuing	Continuing	
Primary Hardware Development/FW	MIPR	USAF, Hanscom AFB, MA		9.697	Dec-06	10.700	Dec-07	10.410	Dec-08	Continuing	Continuing	
Primary Hardware Development/ISEA	WX	SPAWAR San Diego, CA				2.365	Dec-07	1.680	Dec-08	Continuing	Continuing	
Primary Hardware Development	SS/CPIF	Northrop Grumman, VA	68.091								68.091	68.091
		FY99-05	15.791								15.791	
Subtotal Product Development			83.882	9.697		17.665		14.590		Continuing	Continuing	
Remarks:												
SUPPORT												
Integrated Logistics Support	WX	SPAWAR, Phila, PA	8.818								8.818	
Subtotal Support			8.818								8.818	
Remarks: Funding for outyears being realigned to O&M,N.												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604231N Tactical Command System				2213 Mission Planning					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TEST & EVALUATION												
Test & Evaluation	WX	NAWCWD, Pt. Mugu, CA	11.652	9.500	Dec-06	9.800	Dec-07	8.500	Dec-08	Continuing	Continuing	
Subtotal T&E			11.652	9.500		9.800		8.500		Continuing	Continuing	
Remarks:												
MANAGEMENT												
Program Management Support	WX	NAWCAD, Pax River, MD	21.852	2.400	Dec-06	2.910	Dec-07	1.999	Dec-08	Continuing	Continuing	
Subtotal Management			21.852	2.400		2.910		1.999		Continuing	Continuing	
Remarks:												
Total Cost			126.204	21.597		30.375		25.089		Continuing	Continuing	
Remarks:												

CLASSIFICATION:																																		
EXHIBIT R4, Schedule Profile																DATE: February 2007																		
APPROPRIATION/BUDGET ACTIVITY																PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME										
RDT&E, N / BA-5																0604231N Tactical Command System								2213 MISSION PLANNING										
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013					
	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																																		
JMPS V1.1 OT	▲																																	
JMPS V 1.2.3 OTRR			▲																															
JMPS V 1.2.4 OTRR								△																										
JMPS V 1.2.3 OT			▲																															
JMPS V 1.2.4 OT																																		
JMPS V 1.4 OT																				△														
Test & Evaluation Milestones																																		
MPE Integration/Validation	█																																	
JMPS V 1.2.3 FQT		▲																																
JMPS V 1.2.4 FQT				▲																														
JMPS V 1.2.3 DT		▲																																
JMPS V 1.2.4 DT				▲																														
JMPS V 1.2.3 System Test	█																																	
JMPS V 1.2.4 System Test					█																													
JMPS V 1.4 FQT																△																		
JMPS V 1.4 Systems Test																	█																	
JMPS V 1.5 FQT																								△										
JMPS V 1.5 Systems Test																									█									
Production Milestones																																		
JMPS V1.1 IOC	▲																																	
JMPS V 1.2.3 IOC								△																										
JMPS V 1.2.4 IOC												△																						
JMPS V 1.4 IOC																				△														
JMPS V 1.5 IOC																												△						

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Naval Mission Planning		
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Acquisition Milestones								
JMPS V 1.1								
JMPS 1.1 OT	1Q							
JMPS V 1.2.3 OTRR	3Q							
JMPS V 1.2.4 OTRR		2Q						
JMPS V 1.2.3 OT	3Q							
JMPS V 1.2.4 OT		2Q-3Q						
JMPS V 1.4 OT					1Q			
Test & Evaluation Milestones								
MPE Integration/Validation	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q
JMPS V 1.2.3 FQT	2Q							
JMPS V 1.2.4 FQT	4Q							
JMPS V 1.2.3 DT	2Q							
JMPS V 1.2.4 DT	4Q							
JMPS V 1.2.3 System Test	1Q-2Q							
JMPS V 1.2.4 System Test	4Q	1Q-2Q						
JMPS V 1.4 FQT				3Q				
JMPS V 1.4 Systems Test				4Q	1Q-4Q			
JMPS V 1.5 FQT						3Q		
JMPS V 1.5 Systems Test						4Q	1Q-4Q	
Production Milestones								
JMPS V 1.1 IOC	1Q							
JMPS V 1.2.3 IOC		2Q						
JMPS V 1.2.4 IOC		3Q						
JMPS V 1.4 IOC					4Q			
JMPS V 1.5 IOC							4Q	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0486 Tactical/Mobile (TacMobile) Systems				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		1.114	1.472	3.775	3.228	3.319	2.584	2.621	2.660
RDT&E Articles Qty									

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

Tactical/Mobile (TacMobile) Systems: The 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), the Mobile Operations Control Centers (MOCCs), and the Joint Mobile Ashore Support Terminal (JMAST). 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 Global Command and Control System - Maritime (GCCS-M) architecture, which is Defense Information Infrastructure (DII) Common Operating Environment (COE) compliant.

TSCs and their equivalents provide Command, Control, Communications, Computers and Intelligence (C4I) capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MOCCs and their equivalents are scalable and mobile versions 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 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 Maritime Aircraft (MMA) and Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS).

The Joint Mobile Ashore Support Terminal (JMAST) supports the Fleet Commanders, Joint Task Force (JTF) Commanders, deployed Components, and other military commanders from forward deployed bases or operational sites ashore that are not equipped with C4I facilities. It provides the JTF, Navy Component, and other military commanders with the mobile ability to command, control and communicate with assigned forces via voice, video, and data media forms, during all aspects of military operations, including joint, combined, and coalition operations.

The TacMobile program was designated as an Acquisition Category (ACAT) III weapons system program July 2004 by the Program Executive Officer (PEO) C4I and Space and is no longer directly associated with the GCCS-M program. The TacMobile program follows an Evolutionary Acquisition approach, which provides a mechanism for adding a series of future capabilities that maintain and enhance the operational relevance of the systems provided. Transformation of the TSC/MOCC Force to a more mobile, scaleable configuration, convergence of TSC, MOCC, and JMAST architectures to a single configuration, and operational C4I support for new and upgraded Maritime Patrol and Reconnaissance Aircraft (MPRA) such as MMA (Multi-mission Aircraft), AIP, and BAM UAS are primary objectives.

Exhibit R-2a, RDTE Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0486 Tactical/Mobile (TacMobile) Systems
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(U) B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.205	0.140	0.359	0.800
RDT&E Articles Quantity				

FY06 Accomplishments - Developed interface documentation based on joint and coalition Satellite Communications (SATCOM) and line of sight radios, cryptographic units and antenna technology. Continued development activities necessary to stay current with joint and coalition SATCOM and line of sight radios, cryptographic units, antenna technology and the U. S. Navy/Department of the Defense (USN/DoD) satellite replacement programs.

FY07 - Perform necessary analysis and update TacMobile technical Roadmap documentation to ensure compliance with Navy and Joint communications interoperability requirements (FORCEnet, Global Information Grid (GIG), etc) and implementations that support Net Centric, Internet Protocol (IP) addressing. Conduct testing of air platform support systems and data exchange devices for incorporation into baseline systems for deployment.

FY08 - Communications: Investigate and evaluate integration of Wide Band Line Of Sight (LOS) and Beyond LOS (BLOS) Tactical Edge Networking Waveforms, to support IP connected end-to-end Net Centric Undersea Warfare (USW) communications between TacMobile units and Maritime Patrol and Reconnaissance Aircraft (MPRA) enabling networked reach back, data sharing and real time collaborative analysis. Investigate and initiate development to enhance Homeland Defense and Disaster Relief communications capabilities compatibility to support interoperability and information sharing.

FY09 - Communications: Integrate Wide Band LOS and BLOS Tactical Edge Networking Waveforms, to support IP connected end-to-end Net Centric Undersea Warfare (USW) communications between TacMobile units and MPRA enabling networked reach back, data sharing and real time collaborative analysis. Integrate communications capabilities compatible with Federal, State and Local government agencies and Non Government Organizations (NGO) activities to enhance Humanitarian Assistance/Disaster Relief (HADR) and Homeland Defense (HD) interagency interaction.

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.350	0.350	1.085	0.500
RDT&E Articles Quantity				

FY06 Accomplishments - Developed a detailed set of requirements for follow-on acoustic system to include Net Centric, IP addressable functionality. Continued development of new capabilities to support post-flight analysis of acoustic data collected from similar capabilities development for Maritime Patrol and Reconnaissance Aircraft (MPRA).

FY07 - 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. Continue development of new capabilities to support post-flight analysis of acoustic data collected from similar capabilities development for Maritime Patrol and Reconnaissance Aircraft (MPRA).

FY08 - Analysis: Develop Sea Shield USW, FORCEnet Intelligence, Surveillance & Reconnaissance (ISR) & Common Operational/Tactical Picture (COTP) transformation post flight acoustic analysis capabilities, enhancing the detect to engage sequence for P-3 Anti-surface warfare Improvement Program (AIP), Block Modification Update Program (BMUP), Anti-Submarine Warfare (ASW) Maritime Improvement Program (AMIP) and P-8A by utilizing Enhanced Signal Processing, Advanced Sonobuoy Processing and Networked Data to feed Collaborative Planning and expediting Target Confirmation. Transform TacMobile non-acoustic Electro Optic and Infra Red analysis capabilities for P-3 AIP, BMUP, AMIP and P-8A, incorporating FORCEnet ISR & Common Operational and Tactical Picture (COTP) tenets.

FY09 - Analysis: Integrate Acoustic Analysis capabilities to support post-flight Fast Time Acoustic Analysis and intelligence gathering for Operational Plans (OPLANs) execution to include advanced multi-statics and digital capabilities. Integrate advanced Non-Acoustic Electro Optical/Infrared (EO/IR) Analysis capabilities to support emerging and developing Maritime Patrol and Reconnaissance ISR sensor systems.

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0486 Tactical/Mobile (TacMobile) Systems
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(U) B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.330	0.217	0.700	0.564
RDT&E Articles Quantity				

FY06 Accomplishments - Developed new capabilities to support emerging aircraft weapons and non-acoustic sensors on P-3C Anti-Surface Warfare (ASW) Improvement Program (AIP, AMIP), P-3C Block Modification Upgrade Program (BMUP), and other derivative aircraft. Developed Aircraft Tape Operating System (ATOS) interfaces for emerging aircraft data transport devices.

FY07 - Continue evolutionary development of new capabilities to support emerging aircraft weapons and non-acoustic sensors on P-3C Anti-Surface Warfare (ASW) Improvement Program (AIP)/Anti-Submarine Warfare (ASW) Maritime Improvement Program (AMIP), P-3C Block Modification Upgrade Program (BMUP), and other derivative aircraft. Analyze Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS) and Multi-mission Maritime Aircraft (MMA) specifications and concept documents for impact on TSC and MOCC systems. Continue to develop Aircraft Tape Operating System (ATOS) interfaces for emerging aircraft data transport devices. Develop new ground support capabilities concurrently with related, new capabilities developed for Maritime Patrol and Reconnaissance Aircraft (MPRA).

FY08 - Media: Transform TacMobile C4I ground support to include P-8A Multi-mission Maritime Aircraft (MMA) and Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS) to ensure platform Warfighting wholeness. Assess and analyze MMA and BAMS UAS data, services, Information Assurance (IA), and transport requirements to develop discovery-search and storage services capable of providing persistent and reliable searchable access and storage as a proxy for the P-8A MMA produced data that satisfies the data sharing and data visibility tenets of the DoD Net-Centric Data Strategy. Engineer and design capability to read/write shipwreck data, bottom contour data, and training scenarios on to one of the P-3C AMIP Data Acquisition Storage Devices (DASDs) (dual load).

FY09 - Media: Integrate and evaluate discovery-search and storage services capable of providing persistent and reliable searchable access and storage as a proxy for the P-8A MMA produced data that satisfies the data sharing and data visibility tenets of the DoD Net-Centric Data Strategy. Design and develop software application that stores shipwreck and bottom contour data for P-3C AMIP and allows the user to segmentize portions of this for a particular Area of Region (AOR).

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.229	0.350	0.354	0.164
RDT&E Articles Quantity				

FY06 Accomplishments - Migrated two-way LINK-11 to new platform. Develop interfaces for emerging aircraft data transport devices. Performed testing on new software and hardware components.

FY07 - Analyze TSC/MOCC requirements for advanced data links such as LINK-16, Common Data Link (CDL) and other high bandwidth data transmission paths. Develop new ground workstation software for new and upgraded aircraft sensors. Continue to develop interfaces for emerging aircraft data transport devices. Continue to 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. Perform necessary analysis and update TacMobile Roadmap documentation to ensure compliance with Navy and Joint sensor interoperability requirements (FORCENet, GIG, etc.) and implementations that support Net Centric, IP addressable capabilities.

FY08 -Tactical Data Links: Investigate and initiate development to enable TacMobile support for LINK-16 data and other emerging aircraft data transport devices. Investigate and initiate development to leverage multiple communication transport nodes to enable TacMobile to provide interoperable IP addressable high bandwidth data transmission to support persistent Command and Control (C2), P-3 AMIP & P-8 MMA sensor, and interagency information capabilities.

FY09 -Tactical Data Links: Integrate and test software and communications capabilities to provide interoperable IP addressable high bandwidth data transmission to support persistent C2, sensor, and interagency information capabilities.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0486 Tactical/Mobile (TacMobile) Systems

(U) B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.000	0.415	0.777	1.000
RDT&E Articles Quantity				

FY07 - Investigate and initiate transition to Service Oriented Architecture (SOA) and Net Centric Enterprise Services (NCES) elements for TacMobile capabilities. Perform necessary analysis and update TacMobile Roadmap and documents in support of FORCEnet, GiG and other architectures (Net Ready Key Performance Parameters (NR-KPP), Internet Service Provider (ISP), etc. Develop detailed requirements linking TacMobile systems and development directly to FORCEnet, GiG and next generation communications systems. Perform necessary analysis for GiG repository capabilities for existing legacy and future Maritime Patrol and Reconnaissance Aircraft (MPRA) operations. Investigate and initiate requisite level of support for Distributed Common Ground System-Navy (DCGS-N) capabilities in TacMobile community. Perform necessary analysis to plan and implement network enabled MPRA required components of Undersea Warfare Decision Support System (USW DSS).

FY08 - Enterprise Solutions/Computers: Assess and Analyze TacMobile system for compliance to the data, services, Information Assurance (IA), and transport requirements of FORCEnet Architecture and Standards including Netcentric Enterprise Solutions for Interoperability (NESI), DoD Metadata Registry, Internet Protocol version 6 (IPv6), and Common Criteria. Analyze and test interfaces with other related systems for data schemas, data, Information Assurance (IA), and transport interoperability to ensure horizontal integration. Incorporate previous analysis and design in development of a fully secure, adaptive and networked end-to-end Service Oriented Architecture (SOA) with seamless access to timely assured, accurate and complete decision-quality information in a dynamic collaborative, information-sharing environment. Develop and analyze a logical data reference model and support registering of MPRA unique data schemas into the DoD Metadata Registry to support data interoperability. Analyze MPRA Information Assurance (IA) requirements and develop adequate IA controls to be interoperable on the GiG with other related systems. Investigate and perform necessary analysis to identify and initiate requisite level of support to implement appropriate integrated Multi-level Security Networking options in TacMobile systems. Analyze GiG Enterprise Services and develop migration plans for integration into the TacMobile architecture. Integrate TSC and MOCC configurations. Develop next generation software and hardware that is modular and scalable, surge able and sustainable, promoting responsiveness to mission requirements. Develop replacement for obsolete, maintenance-intensive hardware, eliminate legacy systems and technologies to reduce logistics tail and ease training burden.

FY09 - Computers/Knowledge Management: Integrate TSC and MOCC configurations. Develop next generation software and hardware that is modular and scalable, surgeable and sustainable, promoting responsiveness to mission requirements. Develop replacement for obsolete, maintenance-intensive hardware, eliminate legacy systems and technologies to reduce logistics tail and ease training burden. Integrate DCGS-N ISR and USW-DSS USW Battle Space Characterization capabilities, and GiG Enterprise Services into TacMobile systems architecture.

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.500	0.200
RDT&E Articles Quantity				

FY06-07 - TacMobile related funding reflected in Project 0709 as the program was part of GCCS-M ACAT I program. TacMobile was designated an ACAT III program in July, 2004, by Program Executive Officer, Command, Control, Communications, Computers, Intelligence and Space (PEO C4I & S).

FY08 Command and Control (C2): Develop necessary technical documentation and make necessary preparations to support fielding and evaluation of GCCS-M 4.1 in TacMobile Systems. Test and evaluate GCCS-M 4.1 in TacMobile Systems. Investigate use of other applicable C2 components such as Under Sea Warfare Decision Support System (USW DSS), environmental and meteorological components, and Joint C2 applications.

FY09 C2: Investigate, initiate, and implement plans to integrate Intelligence Preparation of the Battle Space capabilities to provide access to Signal Intelligence (SIGINT), Electronic Warfare (EW), and General Military Intelligence database products, into TacMobile systems architecture. Investigate, initiate, and implement transition plans to future release of GCCS-M 4.2

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N / BA-5			0604231N - TACTICAL COMMAND SYSTEM				0486 Tactical/Mobile (TacMobile) Systems			
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>		
MPRF Mission Support Systems (OPN - BLI 2246) Note 1	5.200	5.212	7.173	25.461	27.731	24.538	24.948	25.063		
TacMobile (OPN - BLI 2608)	11.789	5.823								
TacMobile C4I (OPN - BLI 2906) Note 2			3.983	9.537	12.363	11.946	17.017	17.702		
<p>Note 1: Maritime Patrol & Reconnaissance Force (MPRF) Mission Support Systems formerly Tactical/Mobile Systems (Aircraft Interface).</p> <p>Note 2: Funding realigned from BLI 2608 beginning FY08.</p>										
(U) D. ACQUISITION STRATEGY:										
<p>Evolutionary Acquisition - Increment 1 supports Fleet introduction of GCCS-M 4.0 and aircraft systems upgrades. Future increments will support the GCCS-M migration and introduction of the P-8A Multi-mission Maritime Aircraft (MMA).</p>										
(U) E. MAJOR PERFORMERS:										
<p>Space and Naval Warfare Systems Command (SPAWAR) Systems Center Charleston, SC (SSC-CH) performs all design, development and integration of new capabilities into the Tactical/Mobile systems.</p>										
(U) G. METRICS:										
<p>Earned Value Management is used for metrics reporting and risk management.</p>										

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2007				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			0486 Tactical/Mobile (TacMobile) Systems						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	VARIOUS	VARIOUS				1.250	VARIOUS	0.214	VARIOUS	Continuing	Continuing	
Ancillary Hardware Development												0.000
Aircraft Integration												0.000
Ship Integration												0.000
Ship Suitability												0.000
Systems Engineering	VARIOUS	VARIOUS	19.918	0.521	VARIOUS	0.459	VARIOUS	0.970	VARIOUS	Continuing	Continuing	
Training Development	VARIOUS	VARIOUS				0.200	VARIOUS	0.200	VARIOUS	Continuing	Continuing	
Licenses												0.000
Tooling												0.000
GFE												0.000
Award Fees												0.000
Subtotal Product Development			19.918	0.521		1.909		1.384		Continuing	Continuing	
Remarks:												
Development Support												0.000
Software Development	VARIOUS	VARIOUS	35.796	0.621	VARIOUS	1.136	VARIOUS	1.039	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			35.796	0.621		1.136		1.039		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			0486 Tactical/Mobile (TacMobile) Systems						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation												0.000
Operational Test & Evaluation	WX	OPTEVFOR	3.325	0.060		0.200	VARIOUS	0.175	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			3.325	0.060		0.200		0.175		Continuing	Continuing	
Remarks:												
Contractor Engineering Support	VARIOUS	VARIOUS				0.050	VARIOUS	0.100	VARIOUS	Continuing	Continuing	
Government Engineering Support	WX	SSC CH				0.200	VARIOUS	0.200	VARIOUS	Continuing	Continuing	
Program Management Support	WX	SSC CH	11.141	0.270	VARIOUS	0.250	VARIOUS	0.300	VARIOUS	Continuing	Continuing	
Travel	WX	SSC CH				0.030	VARIOUS	0.030	VARIOUS	Continuing	Continuing	
Transportation												0.000
Subtotal Management			11.141	0.270		0.530		0.630		Continuing	Continuing	
Remarks:												
Total Cost			70.180	1.472		3.775		3.228		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: February 2007																	
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																		
RDT&E, N / BA-5								0604231N - Tactical Command System								0486 Tactical/Mobile (TacMobile) Systems																		
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013					
	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								▲ Inc 2A MS C TSC/MOCC					▲ Inc 2A FRP TSC/MOCC								▲ Inc 2C MS C					▲ Inc 2C FRP								
Prototype Phase													▲ Inc 2B MS C					▲ Inc 2B FRP																
Development/Integration																																		
Delivery		▲ Inc 1 IOC (TSC/MOCC)				▲ Inc 1 IOC (JMAST)																												
Software Deliveries	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	Quarterly Patches & Updates				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
Test & Evaluation Milestones																																		
Development Test		▲ Inc 1 DT (JMAST)							▲ Inc 2A DT				▲ Inc 2B DT								▲ Inc 2C DT													
Operational Test			▲ Inc 1 OT (JMAST)							▲ Inc 2A OT				▲ Inc 2B OT												▲ Inc 2C OT								
Production Milestones																																		
Deliveries																																		

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		2.947	1.134	3.741	3.829	3.886	3.954	4.028	4.103
RDT&E Articles Qty									

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

Global Command and Control System - Maritime (GCCS-M) Intelligence Applications (Intel Apps) 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 the Modernized Integrated Database (MIDB) 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 Command, Control, Communications, Computers and Intel (C4I). Efforts in FY07 will include integration and developmental testing (DT). FY08 efforts will include Operational Evaluation (OPEVAL) and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO).

EXHIBIT R-2a, RDT&E Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications
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(U) B. Accomplishments/Planned Program

C2 Fires Integration	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.849	0.328	1.096	1.017
RDT&E Articles Quantity				

FY06 Accomplishments - Command and Control (C2)/Intelligence, Surveillance and Reconnaissance (ISR) Integration : Provided for the continued migration of standardized, linked intelligence and imagery software tools and services. GCCS-M RDT&E efforts in FY06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure the standardized, linked intelligence and imagery software tools and services undergo successful integration and developmental testing.

FY08 - Conduct operational testing and continue to provide for the technical migration of standardized, linked intelligence and imagery software tools and services from a platform-centric model to a services oriented architecture.

FY09 - Continue to conduct operational testing, and provide for the technical migration of standardized, linked intelligence and imagery software tools and services from a platform-centric model to a services oriented architecture.

Imagery/Video Processing	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.663	0.217	0.712	0.842
RDT&E Articles Quantity				

FY06 - Imagery Exploitation: Provided the capability for Commanders, their battle staffs, and supporting intelligence analysts to exploit ISR from current/next generation UAV platforms and national sensors. GCCS-M RDT&E efforts in FY06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Imagery Exploitation: Ensure the capability for Commanders, their battle staffs, and supporting intelligence analysts, to exploit ISR from current/next generation UAV platforms and national sensors are successfully integrated and developmentally tested.

FY08 - Imagery Exploitation: Conduct operational testing and conduct new software development to provide the capability for Commanders, their battle staffs, and supporting intelligence analysts to exploit ISR from current/next generation UAV platforms and national sensors.

FY09 - Imagery Exploitation: Continue to conduct operational testing and new software development to provide the capability for Commanders, their battle staffs, and supporting intelligence analysts to exploit ISR from current/next generation UAV platforms and national sensors.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications
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(U) B. Accomplishments/Planned Program

Threat Order of Battle (OOB)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.435	0.589	1.933	1.970
RDT&E Articles Quantity				

FY06 Accomplishments- Enhanced intelligence related production tools such as Candidate Target List and Order of Battle Reports (OBREP). Provided intelligence data and tools in a service-oriented architecture, including enhanced dissemination tools such as sending intelligence data directly to the Common Operational Picture (COP), nominating a unit or facility as a target, sending email, posting, and exporting data to eXtensible Markup Language (XML) or Microsoft (MS) Excel. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure intelligence data and tools, including enhanced dissemination tools such as sending intelligence data directly to the COP, nominating a unit or facility as a target, sending email, posting, and exporting data to XML or MS Excel, are successfully integrated and developmentally tested for introduction to the Fleet in a timely manner.

FY08 - Conduct operational testing and begin new development to provide intelligence data and tools in a service-oriented architecture including integration of biometrics data for maritime interdiction operations.

FY09 - Continue to conduct operational testing and begin new development to provide intelligence data and tools in a service-oriented architecture including integration of biometrics data for maritime interdiction operations.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications																										
<p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. & Name</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2006</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2007</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2008</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2009</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2010</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2011</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2012</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2013</th> <th style="text-align: center; border-bottom: 1px solid black;">To Complete</th> <th style="text-align: center; border-bottom: 1px solid black;">Total Cost</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">GCCS-M (OPN - BLI 2608)</td> <td style="text-align: center; padding: 5px;">62,892</td> <td style="text-align: center; padding: 5px;">38,617</td> <td style="text-align: center; padding: 5px;">56,559</td> <td style="text-align: center; padding: 5px;">56,152</td> <td style="text-align: center; padding: 5px;">78,388</td> <td style="text-align: center; padding: 5px;">75,765</td> <td style="text-align: center; padding: 5px;">89,088</td> <td style="text-align: center; padding: 5px;">90,719</td> <td></td> <td></td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) D. ACQUISITION STRATEGY:</p> <p style="margin-left: 20px;">N/A</p> <p style="margin-top: 20px;">(U) E. Major Performers:</p> <p style="margin-left: 20px;">Northrop Grumman Mission Systems (NGMS) is the prime contractor that provides software development and integration for GCCS-M. SPAWAR Systems Center San Diego, CA provides support as the Government testing facility.</p> <p style="margin-top: 20px;">(U) F. METRICS:</p> <p style="margin-left: 20px;">Earned Value Management is used for metrics reporting and risk management.</p>											Line Item No. & Name	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost	GCCS-M (OPN - BLI 2608)	62,892	38,617	56,559	56,152	78,388	75,765	89,088	90,719		
Line Item No. & Name	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost																						
GCCS-M (OPN - BLI 2608)	62,892	38,617	56,559	56,152	78,388	75,765	89,088	90,719																								

EXHIBIT R-2a, RDT&E Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 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	19.772	0.250	VARIOUS	0.824	VARIOUS	0.858	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			19.772	0.250		0.824		0.858		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	31.786	0.854	VARIOUS	2.805	VARIOUS	2.841	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			31.786	0.854		2.805		2.841		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation	WX	OPTEVFOR	2.056			0.000		0.000			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	2.219	0.030	VARIOUS	0.112	VARIOUS	0.130	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
Subtotal Management			2.219	0.030		0.112		0.130		Continuing	Continuing	
Remarks:												
Total Cost			55.833	1.134		3.741		3.829		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																				DATE: February 2007																								
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																												
RDT&E, N / BA-5								0604231N - Tactical Command System								0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications																												
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013															
	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									4.2 MS B								4.2 MS C								4.2 FRP								4.4 MS B								4.4 MS C			
Software Deliveries	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲				
Test & Evaluation Milestones									4.1 MS C								4.1 FRP								4.3 MS B								4.3 MS C								4.3 FRP			
Development Test									4.1 DT												4.2 DT												4.3 DT											
Operational Test													4.1 OT												4.2 OT												4.3 OT							
Production Milestones																																												
Deliveries																																												

EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-5	PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications				
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Software Delivery (quarterly)	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone C 4.1		Q4						
Development Test 4.1		Q4						
Milestone B 4.2			Q2					
Operational Test 4.1			Q3					
Full Rate Production 4.1			Q4					
Milestone C 4.2				Q3				
Development Test 4.2					Q1			
Milestone B 4.3					Q2			
Operational Test 4.2					Q3			
4.2 Full Rate Production					Q4			
Milestone C 4.3						Q4		
Milestone B 4.4						Q4		
Development Test 4.3							Q3	
Operational Test 4.3								Q3
4.3 Full Rate Production								Q4
Milestone C 4.4								Q4

Exhibit R-4a, Schedule Detail

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding (\$000)	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME			
RDT&E, N / BA-5		0604231N - Tactical Command System			0521 Shipboard Tac Intel/GCCS-M Intel App			
Program Title	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
GCCS-M INTEL APPLICATIONS	-	-	-	-	-	-	-	-

GCCS-M software is developed under an engineering services based contract. Maximum Government liability is limited to the total obligated value of annually awarded task orders.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2007				
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)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		6.922	6.989	21.816	21.241	19.082	9.872	8.746	8.866
RDT&E Articles Qty									

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

The Global Command and Control System Maritime (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 Commander in Chiefs (CINCs), 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. Efforts in FY07 will include integration and developmental testing (DT). FY08 efforts will include Operational Evaluation (OPEVAL) and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO).

Undersea Superiority: This effort will significantly enhance tactical units ability to perform precision engagements by consolidating the common operational and undersea tactical pictures into a single comprehensive Command and Control (C2) picture, addressing the requirement of Warfighters and significantly improving interoperability. This effort is necessary to address FORECEnet compliance requirements and transition operational capability currently dependent on standalone, stovepiped systems, into a Service Oriented Architecture that will make data available and interoperable with other C4I systems. By combining situational awareness data with data derived from combat systems, the warfighter is provided with a single, integrated picture of the battlespace.

EXHIBIT R-2a, RDT&E Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

Force Readiness	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	3.157	2.982	2.207	2.432
RDT&E Articles Quantity				

FY06 Accomplishments - Force Readiness/Maritime Mission Planning and Execution: Provided the capability to plan and manage the prepositioning and repositioning of units and stores and the allocation and reallocation of units for next-generation Force Structure planning and execution management per Office of the Secretary of Defense (OSD) and Chief of Naval Operations (CNO) mandates. This capability includes the means for the assignment, deconfliction and monitoring of multiple undersea assets. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure the capability to plan and manage the prepositioning and repositioning of units and stores and the allocation and reallocation of units for next-generation Force Structure planning and execution management per OSD and CNO mandates is successfully integrated and developmentally tested. This capability includes the means for the assignment, deconfliction and monitoring of multiple undersea assets.

FY08 - Conduct operational testing and begin new development to address emerging Fleet requirements to provide the capability to plan and manage the prepositioning and repositioning of units and stores and the allocation and reallocation of units for next-generation Force Structure planning and execution management per Office of the Secretary of Defense (OSD) and Chief of Naval Operations (CNO) mandates. This capability includes the means for the assignment, deconfliction and monitoring of multiple undersea assets.

FY09- Continue to conduct operational testing and begin new development to address emerging Fleet requirements to provide the capability to plan and manage the prepositioning and repositioning of units and stores and the allocation and reallocation of units for next-generation Force Structure planning and execution management per Office of the Secretary of Defense (OSD) and Chief of Naval Operations (CNO) mandates. This capability includes the means for the assignment, deconfliction and monitoring of multiple undersea assets.

Spectral and Environmental Analysis	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.670	0.717	1.588	2.053
RDT&E Articles Quantity				

FY06 - Provided the capability to develop, manage, and execute an Emission Control Plan in order to prevent exploitation of next-generation emitters by emergent/future hostile collection capabilities. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure the capability to develop, manage, and execute an Emission Control Plan in order to prevent exploitation of next-generation emitters by emergent/future hostile collection capabilities is successfully integrated and operationally tested for timely Fleet introduction.

FY08 - Continue to enhance Emission Control Plan capabilities in order to prevent exploitation of next-generation emitters by emergent/future hostile collection capabilities is successfully integrated and operationally tested for timely Fleet introduction.

FY09 - Continue to enhance Emission Control Plan capabilities in order to prevent exploitation of next-generation emitters by emergent/future hostile collection capabilities is successfully integrated and operationally tested for timely Fleet Introduction.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2007	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications		
(U) B. Accomplishments/Planned Program				
Aircraft Mission Planning	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.886	1.020	0.000	0.000
RDT&E Articles Quantity				
<p>FY06 Accomplishments - Migrated Maritime Patrol and Reconnaissance Aircraft (MPRA) unique shared situational awareness capabilities and systems interfaces, including those brought by the next generation Multi-Mission Maritime Aircraft (MMA) and Unmanned Aerial Systems (UASs). This capability will support the real-time prosecution of hostile targets identified and localized by MPRA/MMA/UAS assets.</p> <p>FY07 - Investigate, initiate, and implement transition plans to future releases of GCCS-M 4.x. Perform necessary analysis and update Tactical/Mobile (TacMobile) technical Roadmap documentation to ensure compliance with Navy and Joint command and control interoperability requirements (FORCENet, Global Information Grid (GIG), etc) and implementations. Conduct testing of air platform support systems taking advantage of capabilities inherent in future GCCS-M 4.x increments. Ensure continued interoperability with GCCS-M planned increments.</p> <p>FY08-09 - TacMobile funding is realigned to Project 0486 as the program was part of GCCS-M ACAT I program. TacMobile was designated an ACAT III program in July, 2004, by Program Executive Officer, Command, Control, Communications, Computers, Intelligence and Space (PEO C4I & S).</p>				
Warfighter Enhancements	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.000	2.000
RDT&E Articles Quantity				
<p>FY08 - Effort provides warfighters with automated tools to inject Automated Identification System (AIS) into GCCS-M, including any software changes required on the DISA-provided baseline software to ensure AIS data is correctly parsed, correlated, and distributed in a net-centric Global COP environment.</p> <p>FY09 - Continues effort to provide warfighters with automated tools to inject AIS into GCCS-M, including any software changes on the DISA-provided baseline software and end-to-end testing required to ensure AIS data is correctly parsed, correlated, and distributed in a net-centric Global COP environment.</p>				
Testing	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	2.209	2.270	1.421	2.691
RDT&E Articles Quantity				
<p>FY06 - Provided for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events as well as proof-of-concept testing of emergent capabilities and technologies. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.</p> <p>FY07 - Continue to provide for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events for GCCS-M 4.1 throughout the fiscal year as well as proof-of-concept testing of emergent capabilities and technologies.</p> <p>FY08 - Continue to provide for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events for GCCS-M 4.1 in 1QFY08 as well as proof-of-concept testing of emergent capabilities and technologies.</p> <p>FY09 - Continue to provide for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events for GCCS-M 4.1 -based versions and GCCS-M 4.2 as well as proof-of-concept testing of emergent capabilities and technologies.</p>				

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

Undersea Superiority	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	14.600	12.065
RDT&E Articles Quantity				

FY08 - Effort funds development of Undersea FORCEnet capabilities to support a real-time command and control capability of all USW assets (Maritime Patrol Aircraft (MPA) & Submersible Ship, Nuclear (SSN)). The ASW Commander has a requirement for robust track management capabilities to support contact fusion, correlation and synchronization to improve operators ability to manage contacts on system displays in light of the high density of contacts, latency of reports, lack of filtering and numerous track input option. This effort will fund development and integration of USW track correlation and data fusion capabilities into GCCS-M. Efforts will also identify and implement Human Systems Integration (HSI) and display management improvements within the system. This effort will also support development of low confidence level track types to allow ASW community to share information on possible enemy submarine before elevating to a track in the Common Operational Picture. This effort also supports continued transition of ASW demonstrated capabilities into GCCS-M Program of Record.

FY09 - Continue the development of effort funds development of Undersea FORCEnet capabilities to support a real-time command and control capability of all USW assets (Maritime Patrol Aircraft (MPA) & Submersible Ship, Nuclear (SSN)). The ASW (Anti Submarine Warfare) Commander has a requirement for robust track management capabilities to support contact fusion, correlation and synchronization to improve operators ability to manage contacts on system displays in light of the high density of contacts, latency of reports, lack of filtering and numerous track input option. This effort will fund development and integration of USW track correlation and data fusion capabilities into GCCS-M. Efforts will also identify and implement Human Systems Integration (HSI) and display management improvements within the system. This effort will also support development of low confidence level track types to allow ASW community to share information on possible enemy submarine before elevating to a track in the Common Operational Picture. This effort also supports continued transition of ASW demonstrated capabilities into GCCS-M Program of Record.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007			
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				
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
GCCS-M (OPN - BLI 2608)	62,892	38,617	56,559	56,152	78,388	75,765	89,088	90,719		
(U) D. ACQUISITION STRATEGY:										
N/A										
(U) E. Major Performers:										
Northrop Grumman Mission Systems (NGMS) is the prime contractor that provides software development and integration for GCCS-M. SPAWAR Systems Center San Diego, CA provides support as the Government testing facility. Maxim Systems provides systems engineering support for GCCS-M.										
(U) F. METRICS:										
Earned Value Management is used for metrics reporting and risk management.										

EXHIBIT R-2a, RDT&E Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604231N - Tactical Command System				0709 GCCS-M Maritime Applications					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 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	14.012	2.630	VARIOUS	7.446	VARIOUS	7.324	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			14.012	2.630		7.446		7.324		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	61.831	2.609	VARIOUS	9.850	VARIOUS	9.191	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			61.831	2.609		9.850		9.191		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604231N - Tactical Command System				0709 GCCS-M Maritime Applications					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation	WX	OPTEVFOR	1.135	0.760		1.135		1.135		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			1.135	0.760		1.135		1.135		Continuing	Continuing	
Remarks:												
Contractor Engineering Support	VARIOUS	VARIOUS	0.000	0.200	VARIOUS	0.829	VARIOUS	0.831	VARIOUS	Continuing	Continuing	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	10.578	0.790	VARIOUS	2.556	VARIOUS	2.760	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
Subtotal Management			10.578	0.990		3.385		3.591		Continuing	Continuing	
Remarks:												
Total Cost			87.556	6.989		21.816		21.241		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																				DATE: February 2007																								
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	2006				2007				2008				2009				2010				2011				2012				2013															
	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									4.2 MS B								4.2 MS C								4.2 FRP								4.4 MS B								4.4 MS C			
Software Deliveries	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲				
Test & Evaluation Milestones									4.1 DT												4.2 DT												4.3 DT											
Development Test									▲												▲												▲											
Operational Test													4.1 OT												4.2 OT												4.3 OT							
Production Milestones																																												
Deliveries																																												

EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-5	PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications				
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Software Delivery (quarterly)	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone C 4.1		Q4						
Development Test 4.1		Q4						
Milestone B 4.2			Q2					
Operational Test 4.1			Q3					
Full Rate Production 4.1			Q4					
Milestone C 4.2				Q3				
Development Test 4.2					Q1			
Milestone B 4.3					Q2			
Operational Test 4.2					Q3			
4.2 Full Rate Production					Q4			
Milestone C 4.3						Q4		
Milestone B 4.4						Q4		
Development Test 4.3							Q3	
Operational Test 4.3								Q3
4.3 Full Rate Production								Q4
Milestone C 4.4								Q4

Exhibit R-4a, Schedule Detail

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding (\$000)	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications
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Program Title	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
GCCS-M MARITIME APPLICATIONS	-	-	-	-	-	-	-	-

GCCS-M software is developed under an engineering services based contract. Maximum Government liability is limited to the total obligated value of annually awarded task orders.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007						
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)					FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY2013
Project Cost					2.118	1.684	0.513	1.392	0.390	0.401	0.407	0.415
RDT&E Articles Qty												

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

(U) Trusted Information Systems (TIS) is a combination of the Joint Cross Domain eXchange (JCDX) system and Radiant Mercury (RM) incorporating both Multi-Level Security (MLS) web technologies and Multiple Levels of Security technologies in order to successfully provide accredited Cross Domain Solutions (CDS). TIS is a critical component of network-centric warfare, supporting joint operations and coalition forces in the Global War on Terrorism (GWOT) and in Homeland Security operations. The ability to pass sensitive, yet critical, data across security domains and to our Coalition partners in a timely fashion can only be met by accredited CDS systems such as JCDX and RM.

(U) Joint Cross Domain eXchange (JCDX): Provides the core on-line, automated, near-real time, multi-level secure, information analysis, dissemination, and receipt capabilities that enable Combatant Commanders 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. JCDX 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 simultaneously. In addition, it is required to provide near-real-time all-source fusion, correlation and analysis tools to include robust graphics presentation and geospatial analysis capabilities, directly feeding automated reporting capabilities. JCDX 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. JCDX disseminates operational products at different classification and releasability levels over numerous serial and network communications paths to operational users and other Command and Control (C2) systems of U.S., Allied and Coalition operating forces. JCDX supports international information sharing agreements with key allies: United Kingdom, Japan, Australia, and South Korea. The United Kingdom and Australia depend on JCDX for their National intelligence data.

(U) JCDX is built on an evolutionary development strategy, which provides a mechanism for adding future capabilities including the incorporation of proven Fleet-initiated prototypes. TIS is the CDS foundation for transformational capabilities and functionalities required for the success of FORCEnet, Net-Centric Enterprise Services (NCES), Multi-National Information Sharing (MNIS), and Global Information Grid (GIG). These transformational capabilities and functionalities include, but are not limited to, web services, CDS to single level and/or untrusted clients, conversion of legacy serial communications to Internet Protocol (IP) connectivity, vastly improved throughput to support increasingly larger files, and operating system (OS) migration in support of FORCEnet, NCES, MNIS, and GIG architectures.

(U) Radiant Mercury (RM): RM provides a fully automated, bi-directional sanitization, transliteration and guarding capability for formatted and unformatted data between security enclaves. Radiant Mercury helps ensure critical Indications and Warning intelligence is provided quickly to operational decision-makers. RM is actively involved in the production and cross domain dissemination of information for operating forces worldwide, including the operating forces of key allies involved in the Global War On Terrorism (GWOT) and Operation Iraqi Freedom (OIF). 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 cryptologic analysts. Unformatted data is handled by the Information Review Process (IRP). The system provides cross domain services to a wide variety of customers including Combatant Commanders, Air Force (Shared Early Warning program), Army (Blue Force Tracking program), Navy (Global Command and Control System - Maritime (GCCS-M)) and numerous other DoD and Intelligence agencies.

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
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

(U) B. Accomplishments/Planned Program

	FY 06	FY 07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.427	1.279	0.390	1.057
RDT&E Articles Quantity				

JCDX:

FY06: Operational feature enhancement to Hewlett Packard-UX (HP-UX) only JCDX server. Incorporated Horizontal Fusion (HF) Web Service Gateway features to deliver Service-Oriented Architecture (SOA) capabilities relying on Macintosh protection of JCDX HP server. Provided subset of JCDX CDS capability to DTW/Multi-Level Thin Client (MLTC), CENTRIXS, and single level clients. Systems engineering in support of JCDX migration to Net-Centric Enterprise Services (NCES)/FORCENET architecture. Developed system interface capabilities for current releases for record communications systems with in an accreditable Multi-Level Security (MLS) baseline.

FY07: Implement message and Portable Document Format (PDF) profiling to Web Service Gateway. Implement labeled posting for specified users. Systems Engineering in support of JCDX migration to NCES/FORCENET architecture. Develop system interface capabilities as required for current releases for record communications systems with in an accreditable MLS baseline.

FY08: Complete migration to a newer supported trusted operating system such as Security Enhanced Linux (SELinux) or Trusted Solaris 10. Extend JCDX database support to additional file types such as Microsoft Office Documents.

FY09: Extend JCDX database support for Extensible Markup Language (XML) content. Develop Security service enhancements and remote administration capabilities.

	FY 06	FY 07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.691	0.405	0.123	0.335
RDT&E Articles Quantity				

RM:

FY06: Analyzed Trusted Operating Systems (Solaris 10 and Security Enhanced Linux (SELinux)) to migrate from the current Trusted Operating System (Trusted Solaris 8) in order to remain compatible with the operating system and hardware available. Integrated Radiant Mercury Information Guard components from three servers to a single server reducing space requirements. Researched transition to Internet Protocol version 6 (IPv6). Improved socket communications throughput. Designed approaches to facilitate RM regionalization. Performed factory acceptance test on RM version 4.5.

FY07: Release version 4.5. Develop, integrate, and test additional unformatted file types, secure remote maintenance, and enhanced audit management. Enhance support for emerging cross domain Web service requirements.

FY08: Release version 5.0 on follow-on trusted operating system. Continue the development, integration and testing of emerging unformatted file types. Commence investigating technologies related to collaboration (chat, whiteboarding, language translations, etc.). Develop criteria and procedures for system verification and validation in anticipation of updated information assurance and cross-domain policies.

FY09: Release update to version 5.0. Investigate and develop support for emerging communication mechanisms. Continue the development, integration and testing of emerging unformatted file types. Continue to investigate technologies related to collaboration.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007		
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			
(U) C. OTHER PROGRAM FUNDING SUMMARY:								
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY012</u>	<u>FY013</u>
GCCS-M (TIS/JCDX) (OPN - BLI 2608)	1.710	0.569	0.000	0.283	1.461	0.292	2.350	2.391
 (U) D. ACQUISITION STRATEGY:								
N/A								
 (U) E. Major Performers:								
SPAWAR System Center San Diego provides support as the Government testing facility.								

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - TACTICAL COMMAND SYSTEM			2009 TRUSTED INFORMATION SYSTEMS						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 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	9.892	0.195	VARIOUS	0.109	VARIOUS	0.112	VARIOUS	Continuing	Continuing	
Training Development												0.000
Licenses												0.000
Tooling												0.000
GFE												0.000
Award Fees												0.000
Subtotal Product Development			9.892	0.195		0.109		0.112		Continuing	Continuing	
Remarks:												
Development Support												0.000
Software Development	VARIOUS	VARIOUS	52.731	1.435	VARIOUS	0.348	VARIOUS	1.222	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			52.731	1.435		0.348		1.222		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - TACTICAL COMMAND SYSTEM			2009 TRUSTED INFORMATION SYSTEMS						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation	WX	OPTEVFOR	0.680	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			0.680	0.000		0.000		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	2.281	0.054	VARIOUS	0.056	VARIOUS	0.058	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
Subtotal Management			2.281	0.054		0.056		0.058		Continuing	Continuing	
Remarks:												
Total Cost			65.584	1.684		0.513		1.392		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: February 2007																			
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/JOINT CROSS DOMAIN EXCHANGE(JCDX)																							
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013							
	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					MILESTONE "C" - JCDX Version 6.0												MILESTONE "C" - JCDX Version 6.2																			
Prototype Phase																																				
Development																																				
Delivery																																				
Software JCDX 5.X / 6.X SW Delivery					DELIVERY JCDX Version 5.1				DELIVERY JCDX Version 6.0				Delivery JCDX Version 6.1								DELIVERY JCDX Version 6.2								DELIVERY JCDX Version 6.3							
Test & Evaluation Milestones																																				
Development Test																																				
Operational Test					FOT&E - JCDX Version 5.1				DT/OT - JCDX Version 6.0				FOT&E JCDX Version 6.1				DT/OT - JCDX Version 6.2				FOT&E - JCDX Version 6.3															
Production Milestones																																				
Deliveries																																				

NOTES:
1) JCDX V5 POST-MILESTONE C

Exhibit R-4, Schedule Profile

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2007				
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)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		9.397	4.269	5.757	0.061	0.066	7.500	7.638	7.781
RDT&E Articles Qty									

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

The Global Command and Control System Maritime (GCCS-M) Common Applications program contains the fundamental building blocks and common applications for all fielded GCCS-M 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 (COE) program is a core function of the GCCS-M Common Applications 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 with the growing complexity and size of the COE. 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. FY08 efforts will include Operational Evaluation (OPEVAL) and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO).

GCCS-M Common Applications 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

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2007	
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				
Aircraft Mission Planning	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.699	0.330	0.000	0.000
RDT&E Articles Quantity				
<p>FY06 - Provided the capability to process and disseminate aircraft mission planning and execution data for disparate sources and platforms. Execute near-real time strike, deep interdiction and power projection missions by current and next-generation manned and unmanned air assets.</p> <p>FY07- Ensure the capability to process and disseminate aircraft mission planning and execution data for disparate sources and platforms. Execute near-real time strike, deep interdiction and power projection missions by current and next-generation manned and unmanned air assets to ensure a successful integration and operational testing.</p> <p>FY08-09- N/A</p>				
Documentation Training	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.351	0.638	0.958	0.000
RDT&E Articles Quantity				
<p>FY06 - Documentation Training, formerly Web-Enabling/Readiness, provided the continued migration of web-enabled, task-oriented documentation and help capability emphasizing execution of missions. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.</p> <p>FY07 - Ensure the integration and operational testing of web-enabled, task-oriented documentation and help capability emphasizing execution of missions.</p> <p>FY08- Provide the continued migration of web-enabled, task-oriented documentation and help capability emphasizing execution of missions.</p>				
Testing/Usability	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.628	0.719	1.823	0.061
RDT&E Articles Quantity				
<p>FY06 - Provided continued end-to-end system testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events as well as proof-of-concept testing of emergent capabilities and technologies.</p> <p>FY07 - Continue to provide for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events for GCCS-M 4.1 throughout the fiscal year as well as proof-of-concept testing of emergent capabilities and technologies.</p> <p>FY08 - Continue to provide for the continued efforts of holistic, end-to-end systems engineering and testing of Maritime C4I capabilities. This includes developmental, operational, and interoperability test events for GCCS-M 4.1 in 1QFY08 as well as proof-of-concept testing of emergent capabilities and technologies.</p> <p>FY09 - Provides for a test event from Navy Center for Tactical Systems Interoperability (NCTSI). NCTSI is responsible for testing the parsing, storage, and retrieval of formatted message data and compliance with established Tactical Digital Information Links (TADIL) and Operational Specifications for Over the Horizon Targeting (OS-OTG) standards and conducts Navy interoperability certification testing in accordance with OPNAVINST 9410.5A, Interoperability Requirements, Testing, and Certification for Tactical Naval Warfare Systems (TNWS). This will ensure the Navy's C2 system is compliant with all the latest message standards for C4I communication.</p>				

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications

(U) B. Accomplishments/Planned Program

Combat Systems Interface	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.687	0.377	0.637	0.000
RDT&E Articles Quantity				

FY06 - Migrated and integrated evolving organic shipboard systems. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure successful integration and certification of required organic shipboard systems interfaces.

FY08 - Migrate and integrate evolving organic shipboard systems.

Situational Awareness (formerly JPN)	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	3.543	1.811	2.209	0.000
RDT&E Articles Quantity				

FY06 - Situational Awareness, formerly Joint Planning Network (JPN)/Tactical Data Information Links (TADILS)/Broadcasts, provided bi-directional shared situational awareness by integrating and exchanging information with disparate systems, sensors and real time event reporting networks (e.g. weapons/fire control, navigation, cryptologic, tactical data links and broadcasts). This was required to prevent fratricide and mutual interference of current (e.g. Tomahawk, Aegis, Standard Missile and Patriot) and future weapon systems/platforms (Joint Strike Fighter (JSF), Multi-Mission Aircraft (MMA), Predator/DD-21 ship class) during multi-platform strike operations. Leveraged investment in new and upgraded sensors to further develop Situational Awareness and Command and Control throughout the extended Battlespace. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Provide bi-directional shared situational awareness by integrating and exchanging information with disparate systems, sensors and real time event reporting networks (e.g. AIS weapons/fire control, navigation, cryptologic, tactical data links and broadcasts). This is required to prevent fratricide and mutual interference of current (e.g. Tomahawk, Aegis, Standard Missile and Patriot) and future weapon systems/platforms (Joint Strike Fighter (JSF), Multi-Mission Aircraft (MMA), Predator/DD-21 ship class) during multi-platform strike operations. Leverages investment in new and upgraded sensors to further develop Situational Awareness and Command and Control throughout the extended Battlespace.

FY08 - Ensure bi-directional shared situational awareness by integrating and exchanging information with disparate systems, sensors and real time event reporting networks (e.g. weapons/fire control, navigation, cryptologic, tactical data links and broadcasts). Ensure the GCCS-M system successfully passes operational testing by meeting all Key Performance Parameters. This is required to prevent fratricide and mutual interference of current (e.g. Tomahawk, Aegis, Standard Missile and Patriot) and future weapon systems/platforms (JSF, MMA, Predator/DD-21 ship class) during multi-platform strike operations. Leverages investment in new and upgraded sensors to further develop Situational Awareness and Command and Control throughout the extended Battlespace.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications
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(U) B. Accomplishments/Planned Program

Emergent Capabilities	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.136	0.094	0.130	0.000
RDT&E Articles Quantity				

FY 06 - Emergent Capabilities, formerly Force Protection/Counter-terrorism, provided the continued migration of emergent and transformational command and control capabilities such as Universal Chat Client. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY 07 - Ensure emergent and transformational command and control capabilities are successfully integrated and developmentally tested for timely introduction to the Fleet.

FY08 - Provide the continued migration of emergent and transformational command and control capabilities.

Intelligence Surveillance Reconnaissance	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.353	0.300	0.000	0.000
RDT&E Articles Quantity				

FY06 - Intelligence Surveillance Reconnaissance, formerly C2 Fires Integration, provided the capabilities to plan and conduct targeting activities, such as tasking, assignment, and direction of weapons delivery platforms (e.g. Naval Fires Control System (NFCS), Tomahawk) and execute strike operations in near-real time using existing and emerging systems, sensors, and data sources (e.g. Joint Services Imagery Processing System-Navy (JSIPS-N), Distributed Common Ground Station (DCGS). Ensure maximum lethality from weapon-target pairing while minimizing collateral damage and preventing fratricide during Joint and Coalition strike operations. GCCS-M RDT&E efforts in FY-06 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M scheduled for Fleet Release in FY-08. All GCCS-M software development efforts are successfully progressing on schedule for developmental testing in FY07 and operational evaluation (OPEVAL) in FY08.

FY07 - Ensure capabilities to plan and conduct targeting activities, such as tasking, assignment, and direction of weapons delivery platforms (e.g. NFCS, Tomahawk) and execute strike operations in near-real time using existing and emerging systems, sensors, and data sources (e.g. JSIPS-N, DCGS) are successfully integrated and operationally tested. Ensure maximum lethality from weapon-target pairing while minimizing collateral damage and preventing fratricide during Joint and Coalition strike operations.

FY08/09 - N/A

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007				
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) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
GCCS-M (OPN - BLI 2608)	62,892	38,617	56,559	56,152	78,388	75,765	89,088	90,719		
(U) D. ACQUISITION STRATEGY:										
N/A										
(U) E. Major Performers:										
Northrop Grumman Mission Systems (NGMS) is the prime contractor that provides software development and integration for GCCS-M. SPAWAR System Center San Diego provides support as the Government testing facility.										
(U) F. METRICS:										
Earned Value Management is used for metrics reporting and risk management.										

EXHIBIT R-2a, RDT&E Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604231N - Tactical Command System				2305 GCCS-M Common Applications					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 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	10.105	0.683	VARIOUS	0.953	VARIOUS	0.000		Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			10.105	0.683		0.953		0.000		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	64.006	2.452	VARIOUS	2.860	VARIOUS	0.000		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			64.006	2.452		2.860		0.000		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604231N - Tactical Command System				2305 GCCS-M Common Applications					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	VARIOUS	VARIOUS	8.164	0.547	VARIOUS	0.343	VARIOUS	0.000				
Operational Test & Evaluation	VARIOUS	VARIOUS	1.474	0.212	VARIOUS	1.086	VARIOUS	0.061	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			9.638	0.759		1.429		0.061		Continuing	Continuing	
Remarks:												
Contractor Engineering Support												
Government Engineering Support												0.000
Program Management Support	VARIOUS	VARIOUS	4.727	0.375	VARIOUS	0.515	VARIOUS	0.000		Continuing	Continuing	
Travel												0.000
Transportation												0.000
Subtotal Management			4.727	0.375		0.515		0.000		Continuing	Continuing	
Remarks:												
Total Cost			88.476	4.269		5.757		0.061		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: February 2007															
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	2006				2007				2008				2009				2010				2011				2012				2013			
	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									4.2 MS B				4.2 MS C				4.2 FRP				4.4 MS B								4.4 MS C			
									4.1 MS C				4.1 FRP				4.3 MS B				4.3 MS C								4.3 FRP			
Software Deliveries	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Test & Evaluation Milestones									4.1 DT								4.2 DT								4.3 DT							
Development Test									▲								▲								▲							
Operational Test													4.1 OT								4.2 OT								4.3 OT			
Production Milestones																																
Deliveries																																

EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-5	PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications				
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Software Delivery (quarterly)	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone C 4.1		Q4						
Development Test 4.1		Q4						
Milestone B 4.2			Q2					
Operational Test 4.1			Q3					
Full Rate Production 4.1			Q4					
Milestone C 4.2				Q3				
Development Test 4.2					Q1			
Milestone B 4.3					Q2			
Operational Test 4.2					Q3			
4.2 Full Rate Production					Q4			
Milestone C 4.3						Q4		
Milestone B 4.4						Q4		
Development Test 4.3							Q3	
Operational Test 4.3								Q3
4.3 Full Rate Production								Q4
Milestone C 4.4								Q4

Exhibit R-4a, Schedule Detail

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding (\$000)							DATE: February 2007	
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications			
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Program Title	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
GCCS-M COMMON APPLICATIONS	-	-	-	-	-	-	-	-

GCCS-M software is developed under an engineering services based contract. Maximum Government liability is limited to the total obligated value of annually awarded task orders.

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		3.340	3.100	6.452	10.029	10.781	11.831	6.307	6.276
RDT&E Articles Qty									

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

The Integrated Shipboard Network System (ISNS) program provides Navy ships, including submarines, with reliable, high-speed SECRET and UNCLASSIFIED Local Area Network (LAN)s. The LAN provides Basic Network Information Distribution Services (BNIDS) and access to the Defense Information Systems Network (DISN) Wide Area Network (WAN) (Secure and Nonsecure Internet Protocol Router Network -SIPRNet and NIPRNet). It provides the network infrastructure and services to enable real-time information exchange within the ship and between afloat units, Component Commanders, and Fleet Commanders. It is a key factor in the implementation of the Navy's portion of Joint Vision 2020 and the migration of existing legacy systems into the IT-21 strategy. Program funding supports the design, development and testing of the ISNS LAN for surface ships and SubLAN for submarines.

The ISNS program maximizes the use of both COTS software and hardware. Engineering and technical support is provided so that existing systems will keep pace with hardware and software that continues to be commercially supported. ISNS uses a combination of high speed wired and wireless switches, routers, servers, workstations 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. Under the Navy's information modernization strategy, full synchronization of shipboard networks, mission and information applications, radio/satellite communications, and shore data dissemination infrastructure 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 over 460 different systems of application configurations including the following: Global Command and Control System Maritime (GCCS-M) and Navy Tactical Command Support System (NTCSS), Navy Standard Integrated Personnel System (NSIPS), Theatre Medical Information Program – Maritime (TMIP-M), Defense Messaging System (DMS), Automated Digital Network System (ADNS), Global Broadcasting System (GBS), Advanced Tomahawk Weapons Control System (ATWCS) and Information Security (INFOSEC) programs. The ISNS program provides the infrastructure to support implementation/fielding of programs listed above. The LAN modernization rate must keep pace with hardware and software that is supported commercially in order to provide a supportable and secure FORCEnet infrastructure. ISNS includes Tactical Service Oriented Architecture (TSOA) which is the mechanism to deliver the FORCEnet interface to the warfighter. TSOA provides a composeable warfighting environment enabling dynamic configuration of capabilities tailored to meet specific warfighting missions. As the warfighting mission changes, the capabilities or services can be re-configured on the fly to meet the new warfighting requirement. This dynamic reconfiguration of services also known as "plug and fight" meets the composeable services vision of FORCEnet. TSOA also provides the common core enterprise services and technical framework to allow organizations ubiquitous access to reliable, decision-quality information through a net-based services infrastructure and applications to bridge real-time and near-real-time communities of interest (COI). The Service Oriented Architecture (SOA) will empower the end user to pull information from any available source, with minimal latency, to support the mission. Its capabilities will allow Department of the Navy as well as Global Information Grid (GIG) users to task, post, process, use, store, manage and protect information resources on demand for warfighters, policy makers and support personnel. TSOA will utilize a spiral process for delivering capability to the warfighter.

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		3.340	3.100	6.452	10.029	10.781	11.831	6.307	6.276
RDT&E Articles Qty									
<p>The Combined Enterprise Regional Information Exchange System (CENTRIXS) program provides US Navy ships with secure, reliable, high-speed Local Area Network (LAN) with access to the Coalition Wide Area Network (WAN) to include CENTRIXS Four-Eyes (CFE), Global Counter Terrorism Task Force (GCTF), NATO Information Data Transfer System (NIDTS), Multinational Coalition Force - Iraq (MCFI), bilateral networks such as CENTRIXS-U.S. Japan (J) and CENTRIXS-U.S. Korea (K), and Communities Of Interest (COI) virtual networks such as Coalition Nava Forces - CENTCOM (CNFC), and Cooperative Maritime Forces - Pacific (CMFP). The CENTRIXS system provides real-time tactical and operational information sharing at the SECRET and SECRET REL (Releasable) level between naval afloat units, Component Commanders, Fleet Commanders, Numbered Fleet Commanders and Coalition Forces/Allies. When the CENTRIXS network is combined with other subsystems (Radio/Satellite Comms), it delivers an end-to-end network centric warfighting capability. The CENTRIXS program is comprised of Block 0, I, and II systems fielded across the Fleet, and Increment 1 which provides a network infrastructure that allows simultaneous access to multiple Coalition Wide Area Networks (WAN) and incorporates the Common PC Operating System Environment (COMPOSE) which provides a server and client operating system environment for other applications and collaborative tools such as Sametime Chat, Domino and Command and Control PC (C2PC) as means to share a Common Operational Picture (COP) and exchange information using Collaboration At Sea (CAS). The CENTRIXS program uses both Commercial Off The Shelf (COTS) hardware and software and Open Standards to maximize commercial technology and support. Engineering and technical support ensures existing systems are upgraded and modified to keep pace with current technology and industry.</p> <p>Funding supports the design, development and testing of the CENTRIXS LAN for surface and subsurface platforms and the CENTRIXS Network Operations Center (NOC). The goal of the CENTRIXS program is to provide a cost-efficient, operationally effective network that dramatically reduces current infrastructure requirements while maximizing operational flexibility and warfighter utility in a coalition environment. Multi-Level Thin Client (MLTC) architecture supports shipboard Space, Weight and Power (SWAP) reductions and includes initiatives for server virtualization (ability to run multiple servers on a single server), drop scalability leveraging existing SIPRNET drops, remote authentication and remote system management. Additionally, funding will provide design, development and testing for a Unit Level MLTC system (provides a compressed shipboard rack/client footprint) and initiatives to include Language Translation, COI and Network Enclave Agility (ability to dynamically shift between all coalition networks and COIs) and Multi-Level Chat (a Cross Domain Solution (CDS) chat capability).</p> <p>Submarine Local Area Network (SubLAN): The SubLAN program provides Navy submarines, with reliable, high-speed SECRET and UNCLASSIFIED Local Area Networks (LAN)s. When the SubLAN network is combined with other subsystems, it delivers an end-to-end network-centric warfare capability. SubLAN I provides network infrastructure including an Unclassified Wireless Local Area Network (UWLAN), servers, and the Common PC Operating System Environment (COMPOSE), which provides the server and operating system environment in which other applications such as Non-Tactical Data Processing System (NTDPS) application suite can run.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	2307 - Shipboard LAN / WAN / Integrated Shipboard Network System

(U) B. Accomplishments/Planned Program

ISNS	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.211	0.926	3.020	6.947
RDT&E Articles Quantity				

FY06 - Investigated, developed and tested major and minor data and service disaster improvements, and dual Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6) routing architectures. Investigated and tested Storage Attached Network (SAN) and Network Attached Storage (NAS) architectures in support of server consolidation. Designed and tested increased availability and survivability network solutions. Further investigated increasing availability and survivability of networks and reduction of network infrastructure footprint. Investigated increased security technologies that will monitor and control network and server data. Integrated wireless network technologies (Expanded Maritime Intercept Operation (EMIO) and ISNS Increment 2) into shipboard networks. Performed developmental testing and operational testing on ISNS Global Information Grid-Electronic (GiG-E) LAN Increment I (V)8. Worked with Commander, Operational Test & Evaluation Force (COMOPTEVFOR) and ISNS system engineers to determine the level of operational testing required for A(V)1 and A(V)2.

FY07 - Continue to develop COMPOSE 3.1. Investigate, develop and test server consolidation architectures. Continue to investigate, develop and test SAN, NAS, and server consolidation. Develop and test security technologies that monitor and control network and server traffic. Perform tailored developmental and operational testing on ISNS GiG-E LAN Increment I A(V)1 and A(V)2. Develop LCCE for ISNS Increment 2/CANES.

FY08 - Continue to develop and integrate ISNS Increment 2 (Consolidated Afloat Networks and Enterprise Services (CANES)) capabilities to include those investigated in FY06 and FY07. Investigate software management including distribution, license management, and inventory management. Develop and integrate Expanded Maritime Intercept Operation (EMIO) and increase security. Perform developmental testing on ISNS Increment 2.

1. Identity Management/Service Security, including Authentication, Authorization, and Auditing.
2. Collaboration, including Text Collaboration.
3. Messaging, including Java Messaging Service

FY09 - Develop ISNS Increment 2/CANES capabilities which will begin to consolidate the afloat networks and enterprise services aboard ships. These capabilities include increased availability to mission critical level ships, multiple security enclaves, application hosting, and collaboration services.

1. Identity Management/Service Security, including Entity Management & Credential Management.
2. Collaboration, including Session Management and Presence & Awareness.
3. Discovery, including Content/Device/People Discovery.

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EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System
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(U) B. Accomplishments/Planned Program

SubLAN	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.364	0.397	1.549	1.240
RDT&E Articles Quantity				1

FY06 - Investigated, developed and tested major and minor data and service disasters improvements, dual IPv4 and Ipv6 routing architectures. Investigated and tested Storage Attached Network (SAN), Network Attached Storage (NAS) architectures in support of server consolidation. Designed and tested increased availability and survivability network solutions. Further investigated increasing availability and survivability of networks and reduction of network infrastructure footprint. Investigated increased security technologies that will monitor and control network and server data. Increased submarine wireless network throughput.

FY07 - Investigate, develop and test server consolidation architectures using multi-Secure server Operating Systems. Continue to investigate, develop and test SAN, NAS, server consolidation, and IP telephony architectures. Build acquisition documentation Test and Evaluation Master Plan (TEMP). Perform environmental qualification tests of EDM of SubLAN Incr 2 shipset.

FY08 - Continue building acquisition documentation Test and Evaluation Master Plan (TEMP). Training Course development in support of SubLAN Incr 2. Perform environmental qualification tests of EDM of SubLAN Incr 2 shipset.

FY09 - Install 1st article for test. Prepare and perform DT / OT for SubLAN Increment 2.

CENTRIXS	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.765	1.777	1.882	1.843
RDT&E Articles Quantity				

FY06 - Initiated the Server Virtualization Development that provides ability to run multiple virtual servers on one physical server reducing the server/rack footprint and created a scalable Multi-Level Security (MLS) solution. Investigated Cross Domain Solutions (CDS) technology that will further reduce the network infrastructure. Developed acquisition documents in support of an MS C Decision. Conducted developmental testing.

FY07 - Continue the Server Virtualization Development that provides ability to run multiple virtual servers on one physical server reducing the server/rack footprint and creating a scalable MLS solution. Research Community of Interest (COI) dynamic agility for Inc I. Continue the Cross Domain Solutions (CDS) security technology that will further reduce the network infrastructure. Investigate Voice over Internet Protocol (VoIP) technology for coalition enclaves. Continue to develop acquisition documents in support of a MS C Decision and perform Operational Assessment (OA).

FY08 - Obtain MS C Decision and LRIP for Inc 1. Award a production contract with industry for LRIP. Continue to evaluate dynamic COI capability, patch management capability, and client-loadable software capability in coordination with the CDS.

FY09 - Complete environmental testing and a combined DT/OT for Inc 1 (including Legacy Block 0, I, II designs).

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007																																																									
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME																																																										
RDT&E, N / BA-7		0604231N - Tactical Command System			2307 - Shipboard LAN / WAN / Integrated Shipboard Network System																																																										
<p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. & Name</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2006</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2007</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2008</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2009</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2010</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2011</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2012</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2013</th> </tr> </thead> <tbody> <tr> <td>OPN 0204163N</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">ISNS</td> <td style="text-align: right;">76.029</td> <td style="text-align: right;">74.401</td> <td style="text-align: right;">154.130</td> <td style="text-align: right;">150.959</td> <td style="text-align: right;">137.590</td> <td style="text-align: right;">139.460</td> <td style="text-align: right;">170.900</td> <td style="text-align: right;">172.675</td> </tr> <tr> <td style="padding-left: 20px;">CENTRIXS</td> <td style="text-align: right;">11.208</td> <td style="text-align: right;">11.438</td> <td style="text-align: right;">5.621</td> <td style="text-align: right;">26.644</td> <td style="text-align: right;">28.589</td> <td style="text-align: right;">24.232</td> <td style="text-align: right;">7.593</td> <td style="text-align: right;">7.723</td> </tr> <tr> <td style="padding-left: 20px;">SubLAN</td> <td style="text-align: right;">38.788</td> <td style="text-align: right;">30.586</td> <td style="text-align: right;">21.170</td> <td style="text-align: right;">33.361</td> <td style="text-align: right;">30.456</td> <td style="text-align: right;">21.382</td> <td style="text-align: right;">33.347</td> <td style="text-align: right;">36.862</td> </tr> <tr> <td style="padding-left: 20px;">Total:</td> <td style="text-align: right;">126.026</td> <td style="text-align: right;">116.425</td> <td style="text-align: right;">180.922</td> <td style="text-align: right;">210.965</td> <td style="text-align: right;">196.635</td> <td style="text-align: right;">185.074</td> <td style="text-align: right;">211.840</td> <td style="text-align: right;">217.261</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) D. ACQUISITION STRATEGY: Procurement and integration efforts for ISNS, CENTRIXS, and SubLAN are accomplished through various contracts at PEO C4I.</p> <p style="margin-top: 20px;">(U) E. MAJOR PERFORMERS: SPAWAR Systems Center, San Diego (SSC SD), San Diego, CA, provides hardware and software interface design and testing for ISNS. SPAWAR Systems Center, Charleston (SSC CH), Charleston, SC, provides software support activity. Lockheed Martin, Egan, MN, provides the engineering development module hardware for CENTRIXS.</p> <p style="margin-top: 20px;">(U) F. METRICS:</p>										Line Item No. & Name	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	OPN 0204163N									ISNS	76.029	74.401	154.130	150.959	137.590	139.460	170.900	172.675	CENTRIXS	11.208	11.438	5.621	26.644	28.589	24.232	7.593	7.723	SubLAN	38.788	30.586	21.170	33.361	30.456	21.382	33.347	36.862	Total:	126.026	116.425	180.922	210.965	196.635	185.074	211.840	217.261
Line Item No. & Name	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013																																																							
OPN 0204163N																																																															
ISNS	76.029	74.401	154.130	150.959	137.590	139.460	170.900	172.675																																																							
CENTRIXS	11.208	11.438	5.621	26.644	28.589	24.232	7.593	7.723																																																							
SubLAN	38.788	30.586	21.170	33.361	30.456	21.382	33.347	36.862																																																							
Total:	126.026	116.425	180.922	210.965	196.635	185.074	211.840	217.261																																																							

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			2307 - Shipboard LAN / WAN / Integrated Shipboard Network System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	MP	FEDSIM/SAIC	1.635								1.635	0.000
Primary Hardware Development	WX	SSC CH	2.232								2.232	0.000
Primary Hardware Development	WX	SSC SD	3.114								3.114	0.000
Primary Hardware Development	TMM	EDS	0.193								0.193	0.000
Primary Hardware Development	VARIOUS	VARIOUS				0.200	VARIOUS	0.400	VARIOUS	Continuing	Continuing	0.000
Ship Integration	WX	SSC SD				0.200	VARIOUS	0.400	VARIOUS	Continuing	Continuing	0.000
Systems Engineering	MP	MITRE	0.426								0.426	0.000
Systems Engineering	MP	FEDSIM/SAIC	1.498								1.498	0.000
Systems Engineering	VARIOUS	VARIOUS	2.576			0.150	VARIOUS	0.400	VARIOUS	Continuing	Continuing	0.000
Systems Engineering	WX	SSC SD		0.824	11/06	2.072	12/07	2.650	12/08	Continuing	Continuing	0.000
Systems Engineering	MP	JITC				0.030	12/07	0.025	12/08	Continuing	Continuing	0.000
Training Development	VARIOUS	VARIOUS				0.100	VARIOUS	0.200	VARIOUS	Continuing	Continuing	0.000
Licenses	VARIOUS	VARIOUS				0.100	VARIOUS	0.200	VARIOUS	Continuing	Continuing	0.000
Subtotal Product Development			11.674	0.824		2.852		4.275		Continuing	Continuing	0.000
Remarks:												
Development Support											0.000	0.000
Software Development	VARIOUS	VARIOUS	0.429	0.595	VARIOUS	0.724	VARIOUS	0.849	VARIOUS	Continuing	Continuing	0.000
Integrated Logistics Support	WX	SSC SD				0.100	12/07	0.400	12/08	Continuing	Continuing	0.000
Configuration Management	WX	SSC SD				0.100	12/07	0.400	12/08	Continuing	Continuing	0.000
Technical Data	VARIOUS	VARIOUS		0.072	VARIOUS	0.121	VARIOUS	0.193	VARIOUS	Continuing	Continuing	0.000
Studies & Analyses	VARIOUS	VARIOUS				0.150	VARIOUS	0.400	VARIOUS	Continuing	Continuing	0.000
GFE											0.000	0.000
Award Fees											0.000	0.000
Subtotal Support			0.429	0.667		1.195		2.242		Continuing	Continuing	0.000
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			2307 - Shipboard LAN / WAN / Integrated Shipboard Network System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	SSC CH	1.036			0.545	12/07	0.558	12/08	Continuing	Continuing	0.000
Developmental Test & Evaluation	WX	SSC SD	1.378								1.378	0.000
Developmental Test & Evaluation	WX	SSC Chesapeake	0.755								0.755	0.000
Developmental Test & Evaluation	MP	JITC	0.077	0.113	11/06	0.217	12/07	0.340	12/08	Continuing	Continuing	0.000
Developmental Test & Evaluation	VARIOUS	VARIOUS	0.200	0.505	VARIOUS	0.458	VARIOUS	0.369	VARIOUS	Continuing	Continuing	0.000
Operational Test & Evaluation	WX	COMOPTVFOR	0.488	0.118	04/07	0.165	12/07	0.623	12/08	Continuing	Continuing	0.000
Operational Test & Evaluation	VARIOUS	VARIOUS		0.375	VARIOUS	0.293	VARIOUS	0.400	VARIOUS	Continuing	Continuing	0.000
Test Assets	VARIOUS	VARIOUS				0.100	VARIOUS	0.200	VARIOUS	Continuing	Continuing	0.000
Subtotal T&E			3.934	1.111		1.778		2.490		Continuing	Continuing	0.000
Remarks:												
Contractor Engineering Support	VARIOUS	VARIOUS				0.100	VARIOUS	0.090	VARIOUS	Continuing	Continuing	0.000
Government Engineering Support	WX	SSC SD				0.200	12/07	0.450	12/08	Continuing	Continuing	0.000
Program Management Support	WX	SSC CH	0.331								0.331	0.000
Program Management Support	VARIOUS	VARIOUS	0.750	0.498	VARIOUS	0.327	VARIOUS	0.482	VARIOUS	Continuing	Continuing	0.000
Travel											0.000	0.000
Transportation											0.000	0.000
Subtotal Management			1.081	0.498		0.627		1.022		Continuing	Continuing	0.000
Remarks:												
Total Cost			17.118	3.100		6.452		10.029		Continuing	Continuing	0.000
Remarks:												

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																				DATE: February 2007													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5										PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System								PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System (ISNS)															
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013				
Quarter	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	A(V)9 FRP				FD (V)8		FD A(V)2		FD A(V)1																								
ISNS Incr 1	▲				△		△		△																								
ISNS Incr 2																																	
ISNS Incr 3																																	
Software Deliveries								3.1 △							4.0 △				5.X △														
Test & Evaluation Milestones				(V)8		A(V)2		A(V)1																									
Development Test				DT		DT		DT																									
Operational Test				OT		OT		OT																									
Production Milestones																																	
ISNS LRIP	ISNS Inc 1 LRIP																																
Deliveries																																	

NOTE: DT/OT required to occur for every ISNS GiG-E LAN Increment 1 variant (i.e. A(V)9, A(V)8, A(V)2...) based on COMOPTEVFOR requirement. FRP decision for ISNS Increment 1 with fielding and procurement authority for A(V)9 was granted in December 2005 after successful Operational Testing. Successful testing of A(V)8, A(V)2, and A(V)1 will result in system fielding decision.

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CLASSIFICATION:

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EXHIBIT R4, Schedule Profile																				DATE: February 2007																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5					PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System										PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System (CENTRIXS)																					
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013							
	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 (See Notes 1 & 2)																																				
Prototype Phase																																				
System Development (See Note 3)	System Development																																			
Software (See Note 4)																																				
Test & Evaluation Milestones																																				
Development Test (See Note 1) Operational Test																																				
Production Milestones BLK II INC I																																				
Deliveries																																				

NOTES:

1. IOC, OA, and DT/OT change and contract award deletion made to align with updated acquisition strategy.
2. MS C schedule slip due to a decision to modify the CPD and perform an engineering design change to replace the previously planned component (CONET) with a new component (NetTop2) to mitigate EOL issues.
3. System Development for Inc 1 completes at FRP.
4. COMPOSE 4.X software was deleted. Version 3.0 will be used in Inc 1.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 3032 NTCSS Enterprise Database and MLDN				
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	0.048	0.045	0.052	0.050	0.050	0.051	0.052	0.053
RDT&E Articles Qty	1	1	1	1	1	1	1	1
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>Navy Tactical Command Support System (NTCSS) - This RDT&E,N Project funding supports design, development and testing of the Navy Tactical Command Support System (NTCSS) web initiative. A web-enabled NTCSS will place all NTCSS databases into a similar structure, allowing greater interoperability between applications and will facilitate the movement of administrative workload from ships to shore.</p>								
(U) JUSTIFICATION FOR BUDGET ACTIVITY:								
<p>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.</p>								

Exhibit R-2a, RDTEEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E,N Project Justification	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 3032 NTCSS Enterprise Database and MLDN
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(U) B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.048	0.045	0.052	0.050
RDT&E,N Articles Quantity	1	1	1	1

FY06 Accomplishments - Supported Web-enabled NTCSS applications.

FY07/08/09 - Continue Web-enabling of NTCSS applications.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 3032 NTCSS Enterprise Database and MLDN				
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 261100 Naval Tactical Command Support System	50.914	7.460	27.853	35.926	39.676	39.243	40.596	41.371	Cont.	Cont.
<u>Related RDT&E:</u>										
RDT&E PE 0604231N 9373C AN/UYQ-70 Based IT-21 C4ISR Upgrades										
RDT&E PE 0604231N 9895N Logistics Common Operating Picture										
 (U) E. ACQUISITION STRATEGY:										
The NTCSS Acquisition Strategy is defined in its Single Acquisition Management Plan (SAMP) dtd 7 May 99.										
 (U) F. MAJOR PERFORMERS:										
SPAWAR Systems Center (SSC) Norfolk: Software Development, Award Date: Various.										
 (U) G. METRICS:										
Earned Value Management is used for metrics reporting and risk management.										

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2007					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			3032 NTCSS Enterprise Database and MLDN						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	VARIOUS	VARIOUS	0.668								0.668	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VARIOUS	VARIOUS	1.000								1.000	
Training Development											0.000	
Licenses	VARIOUS	VARIOUS	0.700								0.700	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			2.368								2.368	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	10.622	0.045	VARIOUS	0.052	VARIOUS	0.050	VARIOUS	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management	VARIOUS	VARIOUS	0.460								0.460	
Technical Data	VARIOUS	VARIOUS	0.200								0.200	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			11.282	0.045		0.052		0.050		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604231N - Tactical Command System			3032 NTCSS Enterprise Database and MLDN						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation	WX	NAWC-AD	0.585								0.585	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.585								0.585	
Remarks:												
Contractor Engineering Support	VARIOUS	VARIOUS	0.896								0.896	
Government Engineering Support	VARIOUS	VARIOUS	0.279								0.279	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
Subtotal Management			1.175								1.175	
Remarks:												
Total Cost			15.410	0.045		0.052		0.050		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
RDT&E, N / BA-5	0604231N - Tactical Command System			3032 NTCSS Enterprise Database and MLDN				
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Contract Preparation								
Software Specification Review (SSR)								
Preliminary Design Review (PDR)								
System Development	Q3-Q4	Q3-Q4	Q3-Q4	Q3-Q4	Q3-Q4	Q3-Q4	Q3-Q4	Q3-Q4
Critical Design Review (CDR)								
Quality Design and Build								
Test Readiness Review (TRR)								
Developmental Testing (DT-IIA)								
Eng Dev Model (EDM) Radar Delivery - Lab								
Software Delivery	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4
Preproduction Readiness Review (PRR)								
EDM Radar Delivery - Flt Related								
Milestone C (MS C)								
Operational Testing (OT-IIIA)	Q2-Q4							
Start Low-Rate Initial Production I (LRIP I)								
Software Delivery 2XXSW								
Developmental Testing (DT-IIIB1)								
Developmental Testing (DT-IIIB2)								
Start Low-Rate Initial Production II								
Operational Testing (OT-IIB)								
Developmental Testing (DT-IIC)								
Functional Configuration Audit (FCA)								
Low-Rate Initial Production I Delivery								
Technical Evaluation (TECHEVAL)								
Physical Configuration Audit								
Operational Evaluation (OT-IIC) (OPEVAL)								
Low-Rate Initial Production II Delivery								
IOC								
Full Rate Production (FRP) Decision		Q1						
Full Rate Production Start		Q1						
First Deployment								

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding (\$000)	DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME			
RDT&E, N / BA-5		0604231N - Tactical Command System			3032 NTCSS Enterprise Database and MLDN			
Program Title	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
	-	-	-	-	-	-	-	-

* NTCSS does not budget for Termination Liability. Termination Liability Clauses indicate that the maximum funding available to the contractor is the total amount obligated for the task, upon proposal to the Procurement Contracting Officer, if the government should terminate the contract or task for convenience.

CLASSIFICATION:									
EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System			PROJECT NUMBER AND NAME 9123 FORCEnet				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		14.330	15.120	14.440	14.795	14.686	14.757	21.425	21.784
RDT&E Articles Qty									
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: FORCEnet is the Navy and Marine Corps initiative to achieve Department of Navy (DoN)/Department of Defense (DoD) Transformation, Joint/Allied/Coalition Interoperability, and Net-Centric Operations/Warfare (NCO/W). FORCEnet is the driver of Sea Power 21, Naval Power 21, the Naval Operating Concept for Joint Operations, and the Department of the Navy's Naval Transformation Roadmap. FORCEnet is executing these policies as detailed in the Secretary of the Navy's Report to Congress on FORCEnet (16 May 03).</p> <p>The FORCEnet project line funds four efforts:</p> <p>(1) Department of Navy (DoN) Transformation within Joint/Department of Defense (DoD) Framework (Strategic Planning): Develops and establishes DoN-wide FORCEnet policy, planning, requirements, compliance, and capabilities, with supporting integration and investment strategies, to effect enterprise implementation of NCO/W. Drives DoN/DoD transformation efforts, accelerated innovation/testing/assessment/fielding of warfighter capability, Joint/Allied/Coalition interoperability, and application/enforcement of enterprise FORCEnet requirements/architectures/standards.</p> <p>(2) Accelerating Joint Warfighting Capability (Trident Warrior): Enables early delivery of NCO/W capabilities to the warfighter via Fleet-directed Trident Warrior operational events. Integrates stand-alone systems and efforts to achieve substantially enhanced capability, demonstrates/tests these capabilities in both laboratory and operational environments, and evaluates their effectiveness. Develops supporting concepts/Concept of Operations (CONOPS) to improve warfighting effectiveness. Coordinates FORCEnet efforts with other Service/Joint/DoD/National efforts to ensure Joint/Interagency/Allied/Coalition applicability and interoperability.</p> <p>(3) Implementing FORCEnet Requirements (FORCEnet Compliance): Implements and assesses FORCEnet requirements in DoN acquisition programs. Develops supporting architectures/standards and data strategies. Develops FORCEnet Implementation Tool Suite (FITS). Develops FORCEnet compliance services. Develops FORCEnet compliance test procedures and test methodologies. Refines FORCEnet compliance and defines levels of compliance. Conducts compliance testing reviews and reports on compliance adherence to Office of the Chief of Naval Operations (OPNAV), Naval Network Warfare Command (NETWARCOM), Assistant Secretary of the Navy Research, Development and Acquisition (ASN RDA) and the FORCEnet Coordination Council.</p> <p>(4) Osprey Hawksbill - This is a classified program.</p>									

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System	PROJECT NUMBER AND NAME 9123 FORCEnet

(U) B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	14.330	15.120	14.440	14.795
RDT&E,N Articles Quantity				

FY06 Accomplishments:

- 1) Department of Navy (DoN) Transformation within Joint/Department of Defense (DoD) Framework (Strategic Planning): Refined expanded Joint/Interagency/Allied/Coalition coordination/policy/planning. Convened second annual FORCEnet Requirements/Capabilities and Compliance (FRCC) Review Board and FRCC Flag Board. Validated FORCEnet Requirements/Architectures/Standards Spiral/Iteration. Updated integrated FORCEnet Consolidated Compliance Checklist (FCCC) and executed Navy-wide implementation. Established planning for DoN-wide FORCEnet /FORCEnet Consolidated Compliance Checklist (FCCC) compliance via transition of Deputy Chief of Naval Operations (DCNO) (N6/N7) FRCC Policy to Secretary of the Navy Instruction (SECNAVINST) 5000.2D. Conducted presentations to key leadership in DoN, Office of Secretary of Defense (OSD), Joint Staff, National Agencies, and Industry to maximize collaboration, effectiveness, and efficiency across organizations.
- 2.) Accelerated Joint Warfighting Capability (Trident Warrior): Executed Trident Warrior 05 (TW05) in December 05 with Commander, Second Fleet (COMSECONDFLT) and Australia, Canada, New Zealand, United Kingdom, United States (AUSCANZUKUS)--major initiatives were coalition interoperability and Maritime Domain Awareness (MDA) in support of global MDA, in the 2nd Fleet Area of Responsibility (AOR). Provided direct inputs for coalition interoperability capabilities [(Subnet Relay (SNR), High Frequency (HQ) Internet Protocol (IP)]. Supported the spiral development of programs of record. Focus on FORCEnet Coalition/Allied Interoperability. Created Coalition Naval Force Network with shore infrastructure to remain in place to support Trident Warrior 06 (TW06), with potential to support real-world operations. Provided leave-behind capability for one deployment cycle of successful technologies for extended operational assessment. Conducted analysis of TW 05 experiment results and delivered Military Utility Assessment recommendations to Naval Network Warfare Command (NETWARCOM), Commander Fleet Forces Command (CFFC) and the Sea Trial Expeditionary Strike Group (ESG). Completed planning and preparation for TW06 including scenario and objective development, risk mitigation and logistics planning. Conducted TW06 in June-July 2006 in the Commander Third Fleet (C3F) AOR with C3F Expeditionary Strike Group (ESG) units, Marine Corps Combat Development Center (MCCDC), International Military Education and Training (IMET) and AUSCANNZUKUS Multi-National Task Group focused on Expeditionary Warfare and Maritime Domain Awareness to include coalition operations, Joint Command and Control (C2), MDA and Homeland Defense (HLD)/Homeland Security (HLS) and Navy support of Commander's Guidance (CG)and first responders. Planned and executed TW06 operational events to accelerate transition of FORCEnet capability to the fleet. Performed analysis of TW06 experiment results. Started planning for Trident Warrior 07 (TW07), conducted concept development conference, initial technology selection, initial planning conference and scenario development. Developed FY 07-08 FORCEnet Sea Trial Plan.
- 3) Implemented FORCEnet Requirements (FORCEnet Compliance): Performed Program of Record (POR) capability reviews using validated assessment tools, capability test procedures/methodologies. Continued development of FITS to report POR level of FORCEnet compliance to OPNAV, NETWARCOM, ASN(RD&A) and the FORCEnet Coordination Council. Refined/updated FORCEnet Integrated Baseline and inserted compliance data/results. Developed validated assessments tools for PORs involved in Surface Warfare (SuW) and Antisubmarine Warfare (ASW) for SeaShield. Convened/supported FORCEnet Enterprise Team (FET), providing Fleet/operational input to the end-to-end FORCEnet Compliance process. In addition, as part of the draft Secretary of Navy Instruction (SECNAVINST) 5000.2 FORCEnet operational compliance criteria; completed follow on to FORCEnet Functional Concept, the FORCEnet annex which provides detailed breakdown of FORCEnet capabilities and provides metrics. Completed eleven Operational View (OV) products through the Naval verification and validation governance process and posted eleven products in DoD Architecture Repository System (DARS). Continued to develop FORCEnet Capability List (FCL), which provides a FORCEnet capability evolution over time through and beyond Future Years Defense Plan (FYDP).
- 4) Osprey Hawksbill - This is a classified program.

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System	PROJECT NUMBER AND NAME 9123 FORCEnet
(U) B. Accomplishments/Planned Program (Continued)		
<p>FY07 Planning:</p> <p>1) DoN Transformation within Joint/DoD Framework (Strategic Planning): Continue to refine expanded Joint/Interagency/Allied/Coalition coordination/policy/planning. Convene third annual FRCC Review Board and FRCC Flag Board. Validate FORCEnet Requirements/Architectures/Standards Spiral/Iteration. Update integrated FORCEnet Consolidated Compliance Checklist (FCCC) and begin execution of DoN-wide implementation of FORCEnet/FCCC compliance under SECNAVINST 5000.2D.</p> <p>2) Accelerating Joint Warfighting Capability (Trident Warrior): Complete analysis of TW06 experiment results and deliver Military Utility Assessment to NETWARCOM, CFFC and the Sea Trial ESG. Conduct TW07 in Commander Second Fleet (C2F) Area of Responsibility (AOR) using Carrier Strike Group (CSG)/Expeditionary Strike Group (ESG) units with continued Coalition presence. TW07's major initiatives include National Maritime Security, coalition interoperability and Joint C2 with a theme of Maritime Security and with a focus on Maritime Headquarters (MHQ) Maritime Operations Center (MOC), Maritime Domain Awareness (MDA), and Coalition Operations. Investigate operational level implementation of MHQ MOC, MDA, Coalition, Global Information Grid (GIG) and Network Centric Enterprise Services (NCES) technologies and associated Tactics, Techniques, and Procedures (TTPs) and CONOPS. Provide support for the spiral development of programs of record. Plan and execute TW07 operational events to accelerate transition of FORCEnet capability to the Fleet. Provide leave-behind capability for one deployment cycle of successful technologies for extended operational assessment. Complete analysis of TW07 experiment results and deliver Military Utility Assessment to NETWARCOM, CFFC and the Sea Trial ESG. Begin planning for Trident Warrior 08. Develop FY 08-09 FORCEnet Sea Trial Plan.</p> <p>3) Implementing FORCEnet Requirements (FORCEnet Compliance): Perform POR compliance reviews using validated assessment tools, compliance test procedures/methodologies. Report POR level of FORCEnet compliance to OPNAV, NETWARCOM, ASN(RD&A) and the FORCEnet Coordination Council. Continue to refine/support the FET process; initiate FET feedback to Naval Capabilities Development Process (NCDP) to integrate FORCEnet Compliance into the DoN Planning/Programming/Budgeting/Execution (PPBE) process.</p> <p>4) Osprey Hawksbill - This is a classified program.</p>		

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System	PROJECT NUMBER AND NAME 9123 FORCEnet
(U) B. Accomplishments/Planned Program (Continued)		
<p>FY08 Planning:</p> <p>1) DoN Transformation within Joint/DoD Framework (Strategic Planning): Refine expanded Joint/Interagency/Allied/Coalition coordination/policy/planning. Convene the fourth annual FORCEnet Requirements/Capabilities and Compliance (FRCC) Review Board and FRCC Flag Board. Validate FORCEnet Requirements/Architectures/Standards Spiral/Iteration. Update integrated FORCEnet Consolidated Compliance Checklist (FCCC) and continue to refine/expand DoN-wide implementation of FORCEnet/FCCC compliance under SECNAVINST 5000.2D .</p> <p>2) Accelerating Joint Warfighting Capability (Trident Warrior): Explore TW08 in Commander Third Fleet (C3F)/Commander Seventh Fleet (C7F) Area of Responsibility (AOR) using Carrier Strike Group/Expeditionary Strike Group (CSG/ESG) units with continued Coalition presence. Investigate operational level implementation of Maritime Headquarters (MHQ) Maritime Operations Center (MOC), Maritime Domain Awareness (MDA), Coalition, Global Information Grid (GIG) and Network Centric Enterprise Services (NCES) technologies and associated Tactics, Techniques, and Procedures (TTPs) and CONOPS. Provide support for the spiral development of programs of record. Plan and execute TW08 operational events to accelerate transition of FORCEnet capability to the Fleet. Provide leave-behind capability for one deployment cycle of successful technologies for extended operational assessment. Complete analysis of TW08 experiment results and deliver Military Utility Assessment to NETWARCOM, CFFC and the Sea Trial ESG. Begin planning for Trident Warrior 09. Develop FY 09-10 FORCEnet Sea Trial Plan.</p> <p>3) Implementing FORCEnet Requirements (FORCEnet Compliance): Perform POR compliance reviews using validated assessment tools, compliance test procedures/methodologies. Report POR level of FORCEnet compliance to OPNAV, NETWARCOM, ASN(RD&A) and the FORCEnet Coordination Council. Deliver two FORCEnet Implementation Tool Suite Spirals. Continue to refine/expand the FET process.</p> <p>4) Osprey Hawksbill - This is a classified program.</p> <p>FY09 Planning:</p> <p>1) DoN Transformation within Joint/DoD Framework (Strategic Planning): Refine expanded Joint/Interagency/Allied/Coalition coordination/policy/planning. Convene the fifth annual FRCC Review Board and FRCC Flag Board. Validate FORCEnet Requirements/Architectures/Standards Spiral/Iteration. Update integrated FORCEnet Consolidated Compliance Checklist (FCCC) and continue to refine/expand DoN-wide implementation of FORCEnet/FCCC compliance under SECNAVINST 5000.2D</p> <p>2) Accelerating Joint Warfighting Capability (Trident Warrior): Explore TW09 in Commander Second Fleet (C2F)/Commander Sixth Fleet (C6F) Area of Responsibility (AOR) using Carrier Strike Group/Expeditionary Strike Group (CSG/ESG) units with continued Coalition presence. Investigate operational level implementation of Maritime Headquarters (MHQ) Maritime Operations Center (MOC), Maritime Domain Awareness (MDA), Coalition, Global Information Grid (GIG) and Network Centric Enterprise Services (NCES) technologies and associated Tactics, Techniques, and Procedures (TTPs) and CONOPS. Provide support for the spiral development of programs of record. Plan and execute TW09 operational events to accelerate transition of FORCEnet capability to the Fleet. Provide leave behind capability for one deployment cycle of successful technologies for extended operational assessment. Complete analysis of TW09 experiment results and deliver Military Utility Assessment to NETWARCOM, CFFC and the Sea Trial ESG. Begin planning for Trident Warrior 10. Develop FY 10-11 FORCEnet Sea Trial Plan.</p> <p>3) Implementing FORCEnet Requirements (FORCEnet Compliance): Perform POR compliance reviews using validated assessment tools, compliance test procedures/methodologies. Report POR level of FORCEnet compliance to OPNAV, NETWARCOM, ASN(RD&A) and the FORCEnet Coordination Council. Deliver two FORCEnet Implementation Tool Suite Spirals. Continue to refine/expand the FET process.</p> <p>4) Osprey Hawksbill - This is a classified program.</p>		

Exhibit R-2a, RDTE Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA- 5			PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System			PROJECT NUMBER AND NAME 9123 FORCEnet				
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable										
 (U) D. ACQUISITION STRATEGY:										
Not Applicable										
 (U) E. MAJOR PERFORMERS:										
FY 2006 / FY 2007 / FY 2008 / FY 2009: Space and Naval Warfare Systems Command System Center (SSC) - Charleston, SC: Trident Warrior (TW) , FITS - Systems Engineering Support Space and Naval Warfare Systems Command System Center (SSC) - San Diego, CA: Trident Warrior (TW) Risk Reduction, Limited Objective Experimentation (LOE), Test Director, Tech Lead, Analysis Support, Network Engineering Naval Post Graduate School - Monterey, CA: Analysis Support and Analysis Lead Defense Technical Information Center (DTIC) - Fort Belvoir, VA: NETWARCOM Engineering Information Assurance (IA) Support Ausgar Technologies Inc. - San Diego, CA: Trident Warrior Execution Director, Tech Lead, Network Engineering Support, Install Support Anteon Corporation - Fairfax, VA: Program Management Support iBASEt - Foothill Ranch, CA: FITS - Systems Engineering Support Northrop Grumman Defense Mission Systems, Inc. - Reston, VA: OPNAV Strategic Planning Support										

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2007**

APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA- 5			0604231N Tactical Command System			9123 FORCEnet						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	0.000
Ancillary Hardware Development											0.000	0.000
Aircraft Integration											0.000	0.000
Ship Integration	Various	Various	0.935								0.935	0.000
Ship Suitability											0.000	0.000
Systems Engineering	Various	Various	1.600								1.600	0.000
Award Fees											0.000	0.000
Subtotal Product Development			2.535	0.000				0.000		0.000	2.535	0.000

Remarks:

Development Support	Various	Various	2.700								2.700	0.000
Software Development	Various	Various	2.900								2.900	0.000
Integrated Logistics Support											0.000	0.000
Configuration Management											0.000	0.000
Technical Data											0.000	0.000
Osprey Hawksbill	Various	Various	8.361	2.002	Various	1.912		1.959	Various	Continuing	Continuing	0.000
GFE											0.000	0.000
Subtotal Support			13.961	2.002		1.912		1.959		0.000	Continuing	0.000

Remarks:

CLASSIFICATION:												
Exhibit R-3 Cost Analysis (page 2)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 9123 FORCEnet					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various	1.300								1.300	0.000
Accelerating Joint Warfighting Capabi	Various	Various	11.277	5.459	Various	5.214	Various	5.342	Various	Continuing	Continuing	0.000
FORCEnet Compliance Implementation			5.872	3.974	Various	3.795	Various	3.888	Various	Continuing	Continuing	0.000
DoN Transformation (Strategic Planning)			9.288	3.685	Various	3.519	Various	3.606	Various	Continuing	Continuing	0.000
Tooling											0.000	0.000
GFE											0.000	0.000
Subtotal T&E			27.737	13.118		12.528		12.836		0.000	Continuing	0.000
Remarks:												
Technical Support			2.124								2.124	0.000
Government Engineering Support			3.899								3.899	0.000
Program Management Support			0.800								0.800	0.000
Travel			0.299								0.299	0.000
Subtotal Management			7.122	0.000		0.000		0.000			7.122	0.000
Remarks:												
Total Cost			51.355	15.120		14.440		14.795			Continuing	0.000
Remarks:												

CLASSIFICATION:																																	
EXHIBIT R4, Schedule Profile																		DATE: February 2007															
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME																			
RDT&E / Navy BA-5		0604231N Tactical Command System												9123 FORCEnet																			
Fiscal Year [CFY = Current Fiscal Year]		2006				2007				2008				2009				2010				2011				2012				2013			
QTR		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
TRIDENT WARRIOR																																	
TW[CFY-1] Military Utility Assessment					▲																												
TW [CFY] Execution				▲	▲				△	△						△																	
TW[CFY+1] Concept Development Conferences				▲					△	△						△																	
TW[CFY+1] Data Calls & CAA				▲					△	△						△																	
TW[CFY+1] Initial Planning Conferences				▲					△	△						△																	
TW[CFY] Mid-Term Planning Conferences		▲			▲				△	△						△																	
TW[CFY] Final Planning Conferences			▲						△	△						△																	
TW [CFY] Military Utility Assessment					▲											△																	
STRATEGIC PLANNING																																	
NNFE CFT Participation																																	
Interoperability across Navy Report				▲					△							△																	
Interoperability across Joint Report					▲				△						△																		
FORCEnet Compliance																																	
MS Reviews																																	
ISP Review																																	
C5I Mod Inputs																																	
NCIDS Profiles																																	
Verification/Validation Assessments																																	
NNFE Mod/LCS & Certs/Test																																	
Imp/SE/NCIDS																																	
FITS																																	
FITS OIPT				▲					△					△					△						△				△				
S/W Test				▲					△					△					△					△				△					
FITS IOC									△					△					△					△				△					
FITS FOC									△					△					△					△				△					
Data Refresh									△					△					△					△				△					
FITS Spiral Delivery				▲					△					△					△					△				△					

Exhibit R-4, Schedule Profile

CLASSIFICATION:								
Exhibit R-4a, Schedule Detail					DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E / Navy BA-5				PROJECT NUMBER AND NAME 9123 FORCEnet				
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
TRIDENT WARRIOR [CFY = Current Fiscal Year]								
TW[CFY-1] Military Utility Assessment	3Q							
TW[CFY] Execution	3Q	2Q/3Q	2Q/3Q	2Q/3Q	2Q/3Q	2Q/3Q	2Q/3Q	2Q/3Q
TW[CFY+1] Concept Development Conferences	2Q	2Q	2Q	2Q	2Q	2Q	2Q	2Q
TW[CFY+1] Data Calls & CAA	3Q	2Q	2Q	2Q	2Q	2Q	2Q	2Q
TW[CFY+1] Initial Planning Conferences	4Q	4Q	4Q	4Q	4Q	4Q	4Q	4Q
TW[CFY] Mid-Term Planning Conferences	1Q	1Q	1Q	1Q	1Q	1Q	1Q	1Q
TW[CFY] Final Planning Conferences	2Q	2Q	2Q	2Q	2Q	2Q	2Q	2Q
TW[CFY] Military Utility Assessment	4Q	4Q	4Q	4Q	4Q	4Q	4Q	4Q
STRATEGIC PLANNING								
NNFE CFT Participation	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
Interoperability across Navy Report	2Q	2Q	2Q	2Q	2Q	2Q	2Q	2Q
Interoperability across Joint Report	4Q	4Q	4Q	4Q	4Q	4Q	4Q	4Q
FORCEnet Compliance Implementation								
MS Reviews	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
ISP Review	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
C5I Mod Inputs	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
NCIDS Profiles	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
Verification/Validation Assessments	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
NNFE Mod/LCS & Certs/Test	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
Imp/SE/NCIDS	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
FITS								
FITS OIPT	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q
S/W Test	1Q/3Q	1Q/3Q	1Q/3Q	1Q/3Q	1Q/3Q	1Q/3Q	1Q/3Q	1Q/3Q
FITS IOC		1Q						
FITS FOC			1Q					
Data Refresh		4Q	4Q	4Q	4Q	4Q	4Q	4Q
FITS Spiral Delivery	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q	2Q/4Q

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 9999 Various Congressional Increases

(U) B. Accomplishments/Planned Program

9372 Tactical 3D Common Operational Picture (COP)	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	3.256	0.000	0.000	0.000
RDT&E Articles Quantity				

Congressional increase for Tactical 3 Dimensional (3D) Common Operational Picture (COP)

FY06 Accomplishments: Tactical 3D COP Congressional Increase provided for the requirements analysis, design, software development, testing and demonstration support necessary to mature a Global Command and Control - Maritime (GCCS-M) 3D capability. Specific capability improvements included performance analysis and improvement, full Range Ring / Drop Down line capability, 3D model scaling (relative sizes), enhanced automatic model selection for other track types (Units, Link, etc.), improved track hook (more attributes), additional overlay display in 3D (mission routes, etc.), enhanced support for Space and Missile tracks, I3 access for sensor coverage areas, collaboration tools, 3D Display issues (No Altitude, No Z axis, etc.), record/replay feature (possible Experiment / Demonstration).

9373 UYQ-70 based IT-21 C4ISR upgrades	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.628	0.000	0.000	0.000
RDT&E Articles Quantity	4	0	0	0

Congressional increase for Information Technology (IT) for the 21st Century (IT-21) Block 1 Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Computing Equipment (IT-21 Block 1) developmental engineering effort that adds functionality and focus on improving supportability of deployed systems that reduces fleet maintenance and training requirements. Many of the C4ISR and other similar applications run on outdated, unsupported equipment. Existing computer systems are inadequate to host the software that is needed to improve the functionality of fleet C4ISR systems. Innovations in network solutions are needed to support existing needs as well as provide sufficient growth potential for additional functionality. Commercially produced products suffer from the lack of coordination of technology upgrades and life cycle support that plagued the Tactical Advanced Computer (TAC) series of equipment. C4ISR systems have become critical to the overall effectiveness of deployed units. Access to information located anywhere (network centric warfare) is needed to accomplish increasingly complex missions. Legacy equipment was not designed for survivability in harsh combat environments and scenarios. Development of prototypes to replace this legacy equipment will provide a more robust capability under the most demanding conditions, and will also avoid costly and inefficient support of outdated systems. This RDT&E,N funding will be used to develop a common AN/UYQ-70 based solution for IT-21 Block 1 and ultimately FORCENet. Capitalizing on the AN/UYQ-70 Technology allows fast-cycle development and provides improved fleet capability at a reduced cost.

FY06 Accomplishments:

- Designed, developed and tested upgraded AN/UYQ-70 IT-21 integrated racks.
- Continued to standardize configuration, integrate documentation and integrate software applications.
- Continued to develop Integrated Logistics Support (ILS) Plans.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA5	PROGRAM ELEMENT NUMBER AND NAME 0604231N - Tactical Command System	PROJECT NUMBER AND NAME 9999 Various Congressional Increases
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(U) B. Accomplishments/Planned Program (Continued)

9893 ACETEF UPGRADED RDT&E CAPABILITY	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	2.070	0.000	0.000	0.000
RDT&E Articles Quantity				

FY06 -Congressional Increase for Air Combat Environmental Test and Evaluation Facility (ACETEF). Upgraded RDT&E Capability. This project will procure and integrate an Unmanned Air System control system. Electronic Warfare simulator, common data logger, and a visualization toolset into ACETEF.

9894 ADVANCED TECHNOLOGY SENSOR PAYLOADS	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	3.351	0.000	0.000	0.000
RDT&E Articles Quantity				

Congressional Increase for Advanced Technology Sensor Payloads.
 FY06 Accomplishments - R&D efforts completed development and testing of three small modular advanced technology payloads for small UAV's (Unmanned Aerial Vehicle). This effort will put UAV assets and their specialized payloads in the hands of small tactical units in the conduct of dangerous and stressful military missions.

9895 LOGISTICS COMMON OPERATING PICTURE	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.915	0.996	0.000	0.000
RDT&E Articles Quantity	1	0	0	

Congressional Increase for Logistics Common Operating Picture (LOGCOP)
 FY06 Accomplishments - Funds will be used to design, develop and test the Logistics Common Operating Picture (LOGCOP) tool. This logistics decision-support management tool will utilize emergent technologies to enable the visibility of logistics data and provide actionable logistics information both afloat and ashore.
 FY07 Plan - Continue to design, develop and test the Logistics Common Operating Picture (LOGCOP) tool. This logistics decision-support management tool will utilize emergent technologies to enable the visibility of logistics data and provide actionable logistics information both afloat and ashore.

9896 NAVALSPECIAL WARFARE UUV SENSORS AND C2 STTR	FY 06	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.986	0.000	0.000	0.000
RDT&E Articles Quantity				

FY06 - Congressional increase for Naval Special Warfare UUV Sensors and C2 STTR