CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5**			R-1 ITEM NOMENCLATURE 0604231N - TACTICAL COMMAND SYSTEM				
COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY 2013
Total PE Cost	61.747	87.577	128.742	73.215	62.941	64.889	65.327
2213 MISSION PLANNING	21.353	29.725	18.849	11.723	4.159	7.155	7.261
0486 TACTICAL/MOBILE (TACMOBILE) SYSTEMS	1.368	3.694	8.943	5.129	3.896	2.543	2.591
0521 SHIPBOARD TACTICAL INTEL/GCCS-M INTELLIGENCE APPLICATIONS	1.134	3.717	3.813	3.861	3.931	4.009	4.087
0709 GCCS-M MARITIME APPLICATIONS	6.561	21.282	20.800	19.494	17.229	16.762	17.043
2009 TRUSTED INFORMATION SYSTEMS JOINT CROSS DOMAIN EXCHANGE (JCDX) RADIANT MERCURY (RM)	1.684	0.510	1.087	1.309	1.394	1.179	1.410
2305 GCCS-M COMMON APPLICATIONS	7.207	5.620	0.000	0.000	0.000	0.000	0.000
2307 SHIPBOARD LAN/WAN/INTEGRATED SHIPBOARD NETWORK SYSTEM	6.582	6.319	11.354	10.685	11.737	6.226	6.204
3032 NTCSS ENTERPRISE DATABASE AND MLDN	0.045	0.052	0.050	0.050	0.051	0.052	0.053
9123 FORCEnet	14.842	14.174	63.846	20.964	20.544	26.963	26.678
9999 CONGRESSIONAL INCREASES	0.971	2.484	0.000	0.000	0.000	0.000	0.000

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

The Tactical Command System (TCS) upgrades the Navy's Command, Control, Computer and Intelligence (C3I) systems and processes C3I information for all warfare mission areas including planning, direction and reconstruction of missions for peacetime, wartime and times of crises.

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 Common Operating Environment (COE), 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.

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, anti-submarine 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.

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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.

Shipboard Local Area Network (LAN)/Wide Area Network (WAN) : Integrated Shipboard Network System (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 Service Oriented Architecture (SOA) which is the mechanism to deliver the FORCEnet interface to the warfighter. The SOA 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 knowr as "plug and fight" meets the composeable services vision of FORCEnet. SOA 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 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. SOA will utilize a spiral process fo delivering capability to the warfighter. The ISNS Inc 1, Sensitive Compartmented Information (SCI) Networks and Combined Enterprise Regional Information Exchange System (CENTRIXS) programs will begin migrating to ISNS Inc 2/Consolidated Afloat Networks and Enterprise Services (CANES) in FY09. ISNS Inc 2/CANES will serve to transition numerous Fleet networks to a single, adaptive, available, secure computing network infrastructure while delivering enhanced technologies in: Integrated Voice, Video and Data; Common Computing Environment (CCE); Service Oriented Architecture (SOA); and Multi-Level Security (MLS)/Cross Domain Solutions (CDS).

Combined Enterprise Regional Information Exchange System (CENTRIXS): The 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 Same time 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.

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APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5**	R-1 ITEM NOMENCLATURE 0604231N - Tactical Command System

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 war fighter 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). The (CENTRIXS) program will start migrating to ISNS Inc 2/Consolidated Afloat Networks and Enterprise Services (CANES) in FY09. ISNS Inc 2/CANES will serve to transition numerous Fleet networks to a single, adaptive, available, secure computing network infrastructure while delivering enhanced technologies in: Integrated Voice, Video and Data; Common Computing Environment (CCE); Service Oriented Architecture (SOA); and Multi-Level Security (MLS)/Cross Domain Solutions (CDS).

Submarine Local Area Network (SubLAN): The SubLAN program provides Navy submarines with reliable, high-speed Mission Critical SECRET and Mission Essential 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 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). Funding supports the design, development, and testing of SubLAN for addition of capabilities in support of migration to the Consolidated Afloat Network Enterprise Services (CANES) program effort.

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.

FORCEnet: Initiative's mission is to (a) accelerate the transformation to a Distributed, Networked force; (b) provide Governance/Compliance based on Architectures and Standards; and (c) Experiment with, evaluate and employ the enabling technologies. Effort is a non-acquisition program that is the operational instantiation of FORCEnet. The end-state is a distributed network of weapons, sensors, C2, platforms and warriors.

Maritime Domain Awareness (MDA): Maritime Domain Awareness is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy or environment. MDA objectives include the persistent monitoring of and ability to access and maintain data on vessels, cargo, people, and infrastructure; and the ability to collect, fuse, analyze, and disseminate information to decision makers to facilitate effective understanding. This initiative will identify, develop and transition data fusion and mining, replication, sharing and assessment tools to achieve MDA. This warfighting enhancement is designed to achieve an all-source MDA capability, leveraging existing MDA initiatives in the developmental phase and ensuring the best products transition to strategic, operational and tactical users as well as further development of MDA prototypes. The products will support all-source data fusion, replication of MDA related data gathered in various operations such as expanded-maritime interdiction operations (E-MIO), sharing information with allies, and developing subject matter expertise and assessment tools to achieve MDA and enhance operational decision making.

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) provide 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.

Congressional Increases: FY07 includes: Congressional increases for Logistics Common Operating Picture (LOGCOP). FY08 includes: Congressional Increase for Mission Planning Distributed Multi-Platform Sensor Support System.

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(U) B. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2007	FY 2008	FY 2009
FY08/09 President's Budget	56.406	86.921	79.714
FY09 President's Submit	61.747	87.577	128.742
Total Adjustments	5.341	0.656	49.028
Summary of Adjustments			
Small Business Innovation Research (SBIR) Tax	-0.820	-1.191	
Congressional Adjustments		-0.583	
Miscellaneous Adjustments	6.161	2.430	5.528
Maritime Domain Awareness (MDA) Initiatives			43.500
Subtotal	5.341	0.656	49.028

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(U) B. PROGRAM CHANGE SUMMARY (Continued):

(U) Schedule:

TACTICAL/MOBILE (TACMOBILE) SYSTEMS (Project 0486)

Acquisition strategy is being revised to reflect a tech refresh in lieu of increment 2B.

Schedule: Acquisition Milestones from JMPS V1.5 became JMPS V1.4 to align with established Air Force naming conventions in FY06 with OTRR scheduled for 4Q FY09. JMPS V 1.2.4 FQT, System Test, OTRR, OT, and IOC efforts experienced a one year schedule slip due to critical performance parameters that were addressed and verified prior to operational fielding.
JMPS V1.4 is being procured under a shared development contract with the USAF. JMPS 1.4 will be divided into four future builds JMPS V1.4.1 through V1.4.4.
JMPS V1.4 FQT moved from 3Q FY09 to 4Q FY08, and System Test was moved from 4Q FY09 and 1Q - 4Q FY10 to 1Q-4Q FY09 to meet the anticipated schedule for analysis of FQT and System Testing prior to Operational Readiness. JMPS V1.4 OTRR was added in order to perform OT, and IOC.

GENERAL INFORMATION

TEST AND EVALUATION MILESTONES
Mission Planning Environment (MPE). MPE System Test and Integration/Validation is an ongoing effort throughout the FYDP. This process is aircraft/platform dependent.

PRODUCTION MILESTONES
JMPS V1.2.3 MPE (V-22 & P-3) IOC: 2Q FY07

CENTRIXS (Project 2307)

Program schedule has been modified to reflect shift in Full Rate Production (FRP) from March, 2009 (2Q FY09) to August, 2009 (4Q FY09) for Increment 1 Force Level (FL) & February, 2010 (2Q FY10) for Increment I Unit Level (UL).

ISNS (Project 2307)

The ISNS program schedule has been updated to align with the new master schedule. Changes include the acceleration of the Fielding Decision (FD) for ISNS' variants A(V)1 and A(V)2 from 2QFY08 to 1QFY07. In addition, there was a slip of the Increment 1Wireless/COMPOSE 3.5 DT/OT from 4QFY08 to 2QFY09, and Fielding Decision milestones were added for C(V)X in 2QFY08 and for Inc1/Wireless in 3QFY09. Full Rate Production (FRP) milestones were added for SOA, Increment 1/Wireless COMPOSE 3.5, and Increment 2/CANES. The COMPOSE software delivery schedule was also updated.

FORCEnet / Maritime Domain Awareness (MDA) (Project 9123)

Program schedule has been modified to reflect increase in FY09 funds.

(U) Technical: Not applicable

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2008**	
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**21.353**	**29.725**	**18.849**	**11.723**	**4.159**	**7.155**	**7.261**
RDT&E Articles Qty Not Applicable							

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 framework, common capabilities, and the necessary system hardware required to satisfy mission planning objectives.

R-1 SHOPPING LIST - Item No. 90

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EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	2213 Mission Planning

B. Accomplishments/Planned Program

JMPS Version 1.2.3/1.2.4	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	4.647	2.910	
RDT&E Articles Quantity			

JMPS Version 1.2.3 efforts, DOD/CIO mandate for IPV6 with the migration to XP operating system . JMPS Version 1.2.4 efforts: development of common helo tool sets and navigation functionality and common helo transfer device. Future framework and MPE efforts will be developed in Framework 1.4.

JMPS Expeditionary (JMPS-E)	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost		2.329	1.688
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 capability will be initially fielded using Framework Version 1.2.3.

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RDT&E, N / BA-5	0604231N Tactical Command System	2213 Mission Planning

B. Accomplishments/Planned Program (Cont.)

Framework V1.4	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	5.996	12.505	5.937
RDT&E Articles Quantity			

Framework Version 1.4 is scheduled for contract award 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) , integration and systems of systems testing of MPEs to capture planned common capabilities. Migration to a .net environment in framework versions 1.3 & 1.4 will enable interoperability improvements through utilization of the service-oriented architecture (SOA) and supported by the Global Information Grid-Enterprise Services (GIG-ES). Additional common capabilities will also include Dynamic replanning and retargeting efforts.

MPE Integration and Test	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	10.710	11.980	11.223
RDT&E Articles Quantity			

Mission Planning Environment (MPE) Integration and Test efforts support the Navy's DT/OT, integration and system of system testing for MPE fielding. Efforts consist of integration components provided by various developers into a 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	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost		0.001	0.001
RDT&E Articles Quantity			

Common Capabilities (CC) software augments core mission planning capabilities with capabilities common across multiple aircraft. CC will be developed as common software tools to automate mission planning in the air warfare, expeditionary operations and maritime environments. Requirements for CC include: Mission Rehearsal, Collaboration, Query and Process Imagery, Intel, Communications Planning, Asset Management, Anti-Submarine Warfare (ASW), etc. Continue component development, full documentation, and component installation.

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C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
BLI 287600 TAC A/C Mission Planning Systems (OPN)	8.121	8.757	9.512	9.151	9.506	9.669	9.611	Continuing	Continuing
PE 0208006F Air Force Mission Planning Support System (total)	129.259	105.371	99.028	99.213	99.964	101.896	103.967	Continuing	Continuing

D. ACQUISITION STRATEGY:

Engineering 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, extensive joint requirements analysis, design to cost estimates, 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 basic flight planning components. Phase II focused on strike planning requirements (i.e., support Precision Guided Missions and other tactical data load intensive missions) in order to migrate platforms from legacy mission planning systems to JMPS. The USAF continued development of JMPS Version 1.3 and has contractual control of the program which is facilitated via a Mission Planning Enterprise Contract (MPEC). The USN continued limited development in JMPS Version 1.2 which is focused on helicopter platform migrations. USN integration and fielding strategy changed to support a Mission Planning Environment (MPE) focus, where framework and common components are integrated as bundled packaged and fielded by airwings. The completion of Phase II is targeted for JMPS Version 1.4, which focuses on migration to a .net architecture and rejoins the multi-service enterprise to reduce costs through co-development. JMPS 1.4 will be divided into four builds, numbered 1.4.1 through 1.4.4. As platforms plan their migration to JMPS, the acquisition strategy, plan, and baseline will be updated in order to drive the retirement of legacy mission planning systems.

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Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 2213 Mission Planning							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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 Software Development/CC	MIPR	USAF, Hanscom AFB, MA				0.001	Dec-07	0.001	Dec-08	Continuing	Continuing	
Primary Software Development/FW	MIPR	USAF, Hanscom AFB, MA		6.806	Dec-06	10.334	Dec-07	3.979	Dec-08	Continuing	Continuing	
Primary Software Development/ JMPS-E	MIPR	USAF, Hanscom AFB, MA				2.365	Dec-07	1.356	Dec-08	Continuing	Continuing	
Primary Software Development	SS/CPIF	Northorp Grumman, VA	68.091								68.091	68.091
Primary Software Development	VARIOUS	VARIOUS		3.426	Dec-06	4.365	Dec-07	1.380	Dec-08	Continuing	Continuing	
		FY99-06	15.791								15.791	
Subtotal Product Development			83.882	10.232		17.065		6.716		Continuing	Continuing	
Remarks:												
SUPPORT												
Integrated Logistics Support	WX	SPAWAR, Phila, PA	8.815	0.850		0.873		0.900		Continuing	Continuing	
Subtotal Support			8.815	0.850		0.873		0.900		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Mission Planning						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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												
Syst Eng Integration & Test	WX	NAWCWD, Pt. Mugu, CA	11.652	8.837	Dec-06	9.521	Dec-07	8.884	Dec-08	Continuing	Continuing	
Test & Evaluation	WX	COTF, Norfolk, VA		0.147	Jan-07	0.110	Jan-08	0.100	Jan-09	Continuing	Continuing	
Subtotal T&E			11.652	8.984		9.631		8.984		Continuing	Continuing	
Remarks:												
MANAGEMENT												
Program Management Support	WX	NAWCAD, Pax River, MD	21.852	1.287	Dec-06	2.156	Dec-07	2.249	Dec-08	Continuing	Continuing	
Subtotal Management			21.852	1.287		2.156		2.249		Continuing	Continuing	
Remarks:												
Total Cost			126.201	21.353		29.725		18.849		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 90

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2008**

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	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
Acquisition Milestones																												
JMPS V 1.2.3 OTRR																												
JMPS V 1.2.4 OTRR					▲																							
JMPS V 1.4 OTRR												△																
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																												
Production Milestones																												
JMPS V 1.2.3 IOC		▲																										
JMPS V 1.2.4 IOC						△																						
JMPS V 1.4 IOC																△												

Exhibit R-2a, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail			DATE: **February 2008**				
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Acquisition Milestones							
JMPS V 1.1							
JMPS V 1.2.4 OTRR		1Q					
JMPS V 1.4 OTRR			4Q				
JMPS V 1.2.4 OT		2Q					
JMPS V 1.4 OT				2Q-3Q			
Test & Evaluation Milestones							
MPE Integration/Validation	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q	1Q/4Q
JMPS V 1.2.4 System Test	1Q-4Q						
JMPS V 1.4 FQT		4Q					
JMPS V 1.4 Systems Test			1Q-4Q				
Production Milestones							
JMPS V 1.2.3 IOC	2Q						
JMPS V 1.2.4 IOC		2Q					
JMPS V 1.4 IOC				4Q			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2008**	
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**1.368**	**3.694**	**8.943**	**5.129**	**3.896**	**2.543**	**2.591**
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 provide the ground Command and Control capabilities and C4I interfaces for the Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems (FOS) aircraft and systems evolution including P-3C aircraft updates to sensors and weapons systems, such as the Anti-Surface Warfare Maritime Improvement Program (AMIP), and the Command Control Communications Computers for Anti-Submarine Warfare (C4 for ASW) P-3C aircraft upgrades, as well as development of emergent, ground C4I support capabilities for the P-8A 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.

FY09: Funding increase supports SEA Shield efforts in ASW planning integration efforts with P3, P8A and TacMobile.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0486 Tactical/Mobile (TacMobile) Systems

(U) B. Accomplishments/Planned Program

Net Ready	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.119	0.359	0.800
RDT&E Articles Quantity			

FY07 Accomplishments - Conducted analysis to update TacMobile technical Roadmap documentation to ensure compliance with evolving and emerging Navy and Joint communications interoperability requirements (FORCEnet, Global Information Grid (GIG), etc) and implementations that support Net Centric, Internet Protocol (IP) addressing. Commenced 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.

FTAS	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.329	1.085	0.732
RDT&E Articles Quantity			

FY07 Accomplishments - Improved the acoustic Fast Time Analysis System (FTAS) to increase reliability of the obsolete proprietary hardware, incorporating Commercial Off The Shelf (COTS) technology, and incorporating new functionality in support of emerging aircraft acoustic replay capabilities. Continued development to incorporate 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0486 Tactical/Mobile (TacMobile) Systems

(U) B. Accomplishments/Planned Program

Aircraft Interfaces	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.196	0.619	0.549
RDT&E Articles Quantity			

FY07 Accomplishments - Continued 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. Analyzed 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. Continued to develop Aircraft Tape Operating System (ATOS) interfaces for emerging aircraft data transport devices. Developed 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: Continue to develop new ground support capabilities to support capabilities being developed for Maritime Patrol and Reconnaissance Aircraft (MPRA). Continue to 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. 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 segment portions of this for a particular Area of Region (AOR).

Tactical Data Links	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.330	0.354	0.164
RDT&E Articles Quantity			

FY07 Accomplishments - Analyzed TSC/MOCC requirements for advanced data links such as LINK-16, Common Data Link (CDL) and other high bandwidth data transmission paths. Developed new ground workstation software for new and upgraded aircraft sensors. Continued to develop interfaces for emerging aircraft data transport devices. Continued to perform testing on new software and hardware components. Developed, documented and began integration of ground support systems and associated interfaces to support various data exchange devices for air platforms. Developed new ground workstation software for new and upgraded aircraft sensors. Analyzed and began update of 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 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0486 Tactical/Mobile (TacMobile) Systems

(U) B. Accomplishments/Planned Program

Enterprise Solutions	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.394	0.777	1.000
RDT&E Articles Quantity			

FY07 Accomplishments - Began Investigation and analysis of transition to Service Oriented Architecture (SOA) and Net Centric Enterprise Services (NCES) elements for TacMobile capabilities. Analyzed and began update of TacMobile Roadmap and documents in support of FORCEnet, GiG (Global Information Grid) and other architectures (Net Ready Key Performance Parameters (NR-KPP), Information Support Plan (ISP), etc. Developed detailed requirements linking TacMobile systems and development directly to FORCEnet, GiG and next generation communications systems. Began analysis for GiG repository capabilities required for existing legacy and future Maritime Patrol and Reconnaissance Aircraft (MPRA) operations. Began investigation and analysis to determine level of support for Distributed Common Ground System-Navy (DCGS-N) capabilities in TacMobile community. Began analysis and coordination 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 Net centric 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.

C2	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.000	0.500	0.200
RDT&E Articles Quantity			

FY07- 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

Mission Planning	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	5.498
RDT&E Articles Quantity			

FY09 - Mission Planning: Analyze Fleet requirement to identify unique Maritime Patrol fixed wing mission planning capabilities for P-3C and it's C4ISR Ground Support Systems (TSCs and MOCCs). Develop overarching Maritime Patrol ASW mission planning user environment to operate with Joint Collaborative distributed networks that interface to existing Multistatic, Acoustic and Non Acoustic ASW mission planning Tactical Decision Aids as well as ASW Decision Support Systems and TDA's under development. Develop Maritime Patrol weapons planning environment for weapons such as SLAM-ER. Integrate mission planning outputs to MPRA flight, mission, and sensor systems for development of Aircraft Pre-flight Insertion Data and participation in coordinated ASW mission rehearsal.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
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:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
MPRF Mission Support Systems (OPN - BLI 2246) Note 1	11.878	7.125	25.188	27.189	24.036	24.495	24.692
TacMobile (OPN - BLI 2608)	12.789						
TacMobile C4I (OPN - BLI 2906) Note 2		3.956	6.209	8.630	8.307	12.586	14.542

Note 1: Maritime Patrol & Reconnaissance Force (MPRF) Mission Support Systems formerly Tactical/Mobile Systems (Aircraft Interface).
Note 2: Funding realigned from BLI 2608 beginning FY08.

(U) D. ACQUISITION STRATEGY:

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).

(U) E. MAJOR PERFORMERS:

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.

(U) G. METRICS:

Earned Value Management is used for metrics reporting and risk management.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 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				1.226	VARIOUS	0.656	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	0.479	VARIOUS	0.459	VARIOUS	2.470	VARIOUS	Continuing	Continuing	
Training Development	VARIOUS	VARIOUS				0.200	VARIOUS	0.350	VARIOUS	Continuing	Continuing	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			19.918	0.479		1.885		3.476		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	35.796	0.579	VARIOUS	1.079	VARIOUS	4.262	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	0.579		1.079		4.262		Continuing	Continuing	
Remarks:												

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2) | DATE: **February 2008**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-5** | PROGRAM ELEMENT: 0604231N - Tactical Command System | PROJECT NUMBER AND NAME: 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	0.200	VARIOUS	Continuing	Continuing	
Government Engineering Support	WX	SSC CH				0.200	VARIOUS	0.350	VARIOUS	Continuing	Continuing	
Program Management Support	WX	SSC CH	11.141	0.250	VARIOUS	0.250	VARIOUS	0.450	VARIOUS	Continuing	Continuing	
Travel	WX	SSC CH				0.030	VARIOUS	0.030	VARIOUS	Continuing	Continuing	
Transportation											0.000	
											0.000	
Subtotal Management			11.141	0.250		0.530		1.030		Continuing	Continuing	

Remarks:

Total Cost			70.180	1.368		3.694		8.943		Continuing	Continuing	

Remarks:

Exhibit R-3, Project Cost Analysis

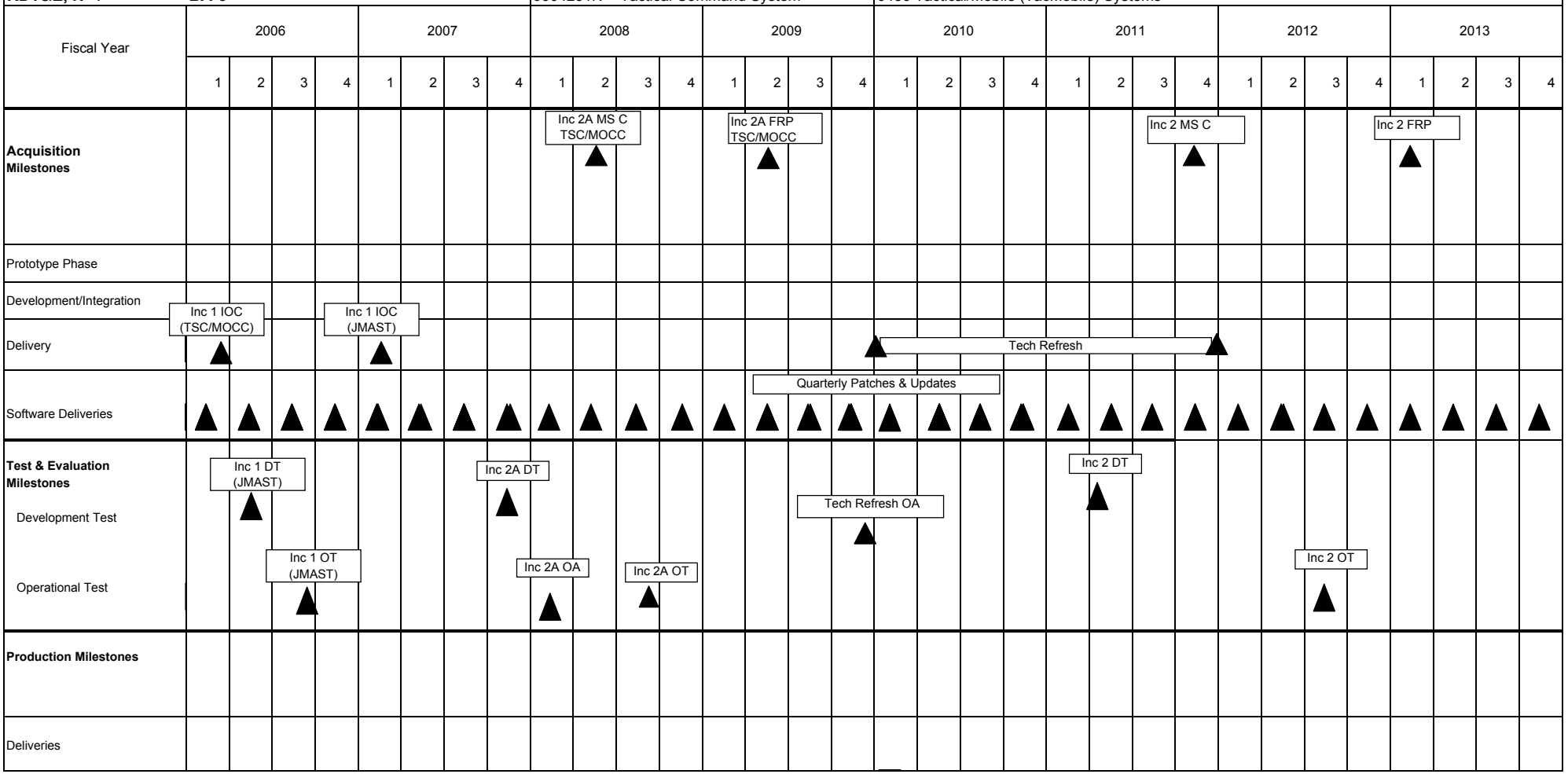
CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2008**

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



Note: Acquisition strategy is being revised to reflect a tech refresh in lieu of increment 2B.

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-5**	PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0486 Tactical/Mobile (TacMobile) Systems				
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
Initial Operational Capability (Increment 1) (TSC/MOCC)	Q1							
Developmental Test (Increment 1) (JMAST)	Q2							
Operational Test (Increment 1) (JMAST)	Q3							
Initial Operational Capability (Increment 1) (JMAST)		Q1						
Developmental Test (Increment 2A)		Q4						
Operational Assessment (Increment 2A)			Q1					
Milestone C (Increment 2A)			Q2					
Operational Test (Increment 2A)			Q3					
Full Rate Production (Increment 2A)				Q2				
Operational Assessment (Tech refresh)				Q4				
Tech Refresh Delivery					Q1-Q4	Q1-Q4		
Developmental Test (Increment 2)						Q2		
Milestone C (Increment 2)						Q4		
Operational Test (Increment 2)							Q3	
Full Rate Production (Increment 2)								Q1

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2008**	
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**1.134**	**3.717**	**3.813**	**3.861**	**3.931**	**4.009**	**4.087**
RDT&E Articles Qty							

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

The Navy's Integrated Imagery and Intelligence Applications (I3 Apps) are an integrated set of applications designed to support tactical intelligence processing and provide a useful integration framework to ensure joint intelligence interoperability across the Global Command and Control System (GCCS) and Distributed Common Ground System (DCGS) enterprise. Development of I3 applications includes end to end intelligence analysis applications that leverage the Modernized Integrated Database (MIDB) and military integration with NGA-provided digital map and imagery systems. I3 imagery applications provide for archiving, viewing and measurement of still and video images. This effort is also continuing the transition to Commercial Off The Shelf (COTS) hardware and software. The Navy's I3 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 FY08 will entail preparation for Operational Evaluation (OPEVAL), and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO), Maritime Domain Awareness (MDA), and sharing unique Navy sensor information across the DCGS enterprise.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications

(U) B. Accomplishments/Planned Program

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

FY07:Provided standardized, linked intelligence and imagery software tools and services to 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, ensuring accessibility and analysis / targeting support based on current / next generation sensors and datastreams including Moving Target Indicator (MTI), Unmanned Aerial Sensors (UASs), and the Distributed Common Ground Station (DCGS) joint enterprise.

Imagery/Video Processing	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.217	0.712	0.852
RDT&E Articles Quantity			

FY07:Provided 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 sensors and datastreams including Moving Target Indicator (MTI), Unmanned Aerial Sensors (UASs), and the DCGS joint enterprise.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0521 Shipboard Tactical Intel/GCCS-M Intelligence Applications

(U) B. Accomplishments/Planned Program

Threat Order of Battle (OOB)	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.589	1.909	1.944
RDT&E Articles Quantity			

FY07: Enhanced intelligence data and tools, to include dissemination tools such as sending intelligence data directly to the Common Operational Picture (COP) nominating a unit or facility as target, sending email, posting, and exporting data to eXtensible Markup Language (XML) or Microsoft (MS) Excel, were 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 support 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 support for maritime interdiction operations, Maritime Domain Awareness, and end to end intelligence analysis tools that leverage Modernized Integrated Database (MIDB), NGA-related digital mapping and imagery products, and other intelligence support streams, while continuing to ensure joint intelligence interoperability across the Global Command and Control System (GCCS) and Distributed Common Ground Station (DCGS) enterprise.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost	Total Cost
DCGS-N (RDTE PE 0305208N)	17.801	21.141	44.540	43.024	38.054	37.952	30.634			
GCCS-M Totals (OPN - BLI 2608)	58.165	59.309	25.923	59.832	52.409	73.437	86.754	Cont	Cont	
DCGS-N (OPN - BLI 2914)	42.531	61.136	67.133	58.823	60.917	91.803	92.399			

(U) D. ACQUISITION STRATEGY:

N/A

(U) E. Major Performers:

Northrop Grumman Defense Mission Systems (NGDMS) 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.

(U) F. METRICS:

Earned Value Management is used for metrics reporting and risk management.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
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					
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												
Ancillary Hardware Development												
Aircraft Integration												
Ship Integration												
Ship Suitability												
Systems Engineering	VARIOUS	VARIOUS	19.772	0.250	VARIOUS	0.824	VARIOUS	0.868	VARIOUS	Continuing	Continuing	Continuing
Training Development												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			19.772	0.250		0.824		0.868		Continuing	Continuing	Continuing
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	31.786	0.854	VARIOUS	2.781	VARIOUS	2.815	VARIOUS	Continuing	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		2.781		2.815		Continuing	Continuing	Continuing
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
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						
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												
Operational Test & Evaluation	WX	OPTEVFOR	2.056	0.000		0.000		0.000			Continuing	Continuing
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			2.056	0.000		0.000		0.000			Continuing	Continuing
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	VARIOUS	VARIOUS	2.219	0.030	VARIOUS	0.112	VARIOUS	0.130	VARIOUS	Continuing	Continuing	Continuing
Travel												
Transportation												
Subtotal Management			2.219	0.030		0.112		0.130		Continuing	Continuing	Continuing
Remarks:												
Total Cost			55.833	1.134		3.717		3.813		Continuing	Continuing	Continuing
Remarks:												

Exhibit R-3, RDTEN Project Cost Analysis

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2008**

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

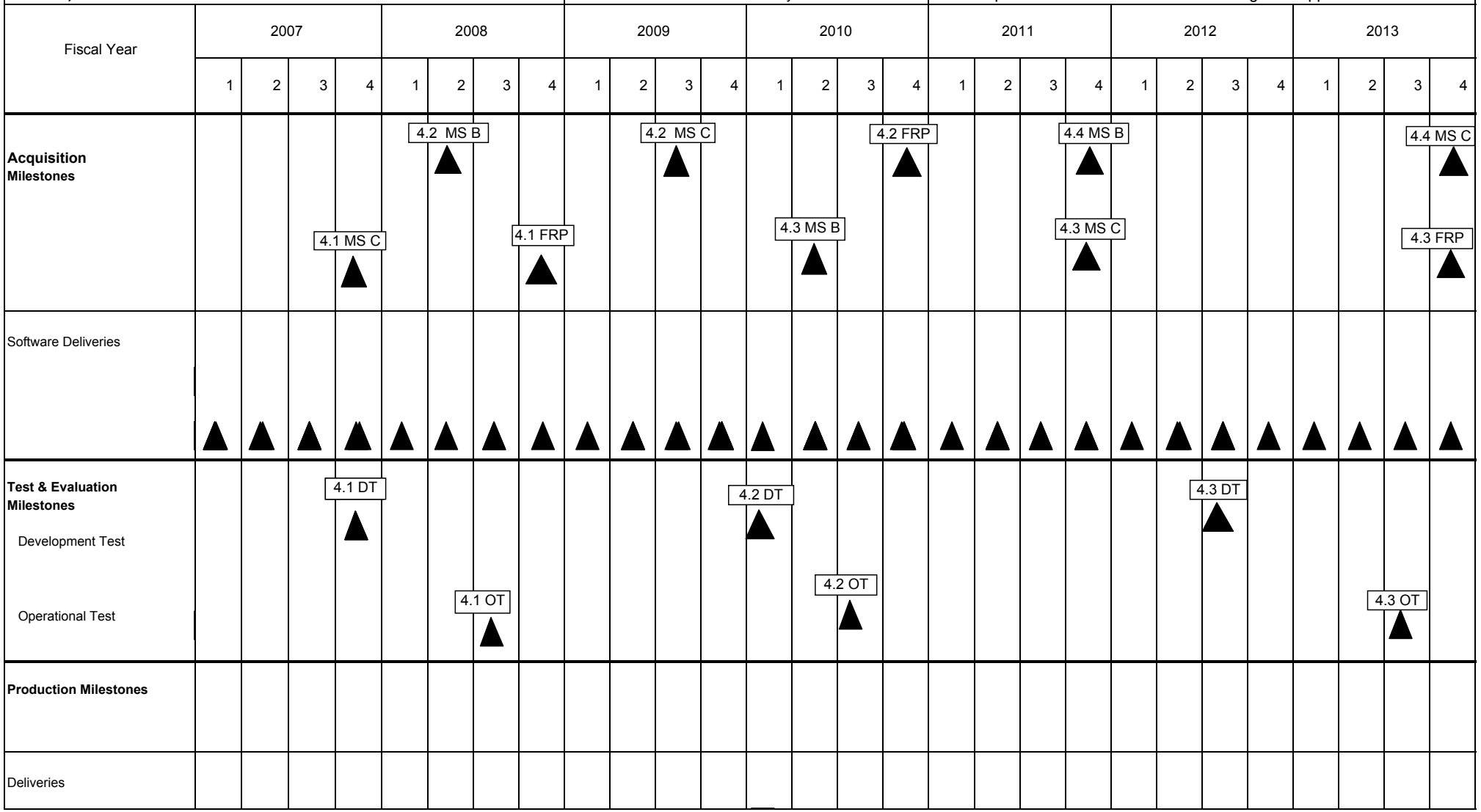


EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2008**	
APPROPRIATION/BUDGET ACTI **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 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
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			
Full Rate Production 4.2				Q4			
Milestone C 4.3					Q4		
Milestone B 4.4					Q4		
Development Test 4.3						Q3	
Operational Test 4.3							Q3
Full Rate Production 4.3							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 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0521 Shipboard Tac Intel/GCCS-M Intel App		
Program Title	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
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 2008**		
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**6.561**	**21.282**	**20.800**	**19.494**	**17.229**	**16.762**	**17.043**
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. Small Footprint Architecture (SFA) also enhances warfighting capabilities by reducing the server requirements and client complexity of the GCCS-M system. It is being developed for unit level ships with long term plans to expand to group and force level ships. 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, and transition capabilities into a Service Oriented Architecture (SOA). GCCS-M is a key system currently being used to support real world operations afloat, ashore, and with tactical/mobile commanders. Efforts in FY08 will entail preparation for Operational Evaluation (OPEVAL), and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO). Beginning in FY09, GCCS-M Common Applications funding (x2305) will be consolidated into GCCS-M Maritime Applications. Efforts in FY09 will focus on the continued transition to address Navy specific Command and Control (C2) capabilities residing in a Service Oriented Architecture (SOA) .

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 FORCENet 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

Combat Systems Interface	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.600
RDT&E Articles Quantity			

FY07-08: N/A

FY09: Migrate and integrate evolving organic shipboard systems interfaces. GCCS-M RDT&E efforts in FY-09 will focus on ensuring Global COP users have ability to access and share information from organic data sources.

Situational Awareness (formerly JPN)	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.860
RDT&E Articles Quantity			

FY07-08: Funded in project 2305.

FY09: Situational Awareness, formerly Joint Planning Network (JPN)/Tactical Data Information Links (TADILS)/Broadcasts, provides 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 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. Leveraged investment in new and upgraded sensors to further develop Situational Awareness and Command and Control throughout the extended Battlespace. Efforts in FY09 also address emergent Fleet requirements, which improve the user's ability to maintain Situational Awareness and reduced system complexity.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

Force Readiness	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	2.768	2.207	1.602
RDT&E Articles Quantity			

FY07: Ensured the capability to plan and manage the prepositioning and repositioning of units, 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 is successfully integrated and developmentally tested. This capability included 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 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.717	1.054	0.482
RDT&E Articles Quantity			

FY07: Ensured 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 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

Aircraft Mission Planning	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	1.020	0.000	0.000
RDT&E Articles Quantity			

FY07: Investigated, initiated, and implemented transition plans to future releases of GCCS-M 4.x. Performed 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. Conducted testing of air platform support systems taking advantage of capabilities inherent in future GCCS-M 4.x increments. Ensured continued interoperability with GCCS-M planned increments.

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 (PEO C4I).

Warfighter Enhancements	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	2.000	0.000
RDT&E Articles Quantity			

FY07- N/A

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 baselin software to ensure AIS data is correctly parsed, correlated, and distributed in a net-centric Global COP environment.

FY09 - N/A

Testing	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	2.056	1.421	3.191
RDT&E Articles Quantity			

FY07: 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.

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 as well as proof-of-concept testing of emergent capabilities and technologies. Testing will include an Operational Test of GCCS-M 4.1 at multiple OT sites to ensure system meets all requirements for Fleet use.

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 as well as proof-of-concept testing of emergent capabilities and technologies. Testing will ensure capabilities transitioned into a Service Oriented Architecture (SOA) environment are effective and suitable for Fleet use.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	0709 GCCS-M Maritime Applications

(U) B. Accomplishments/Planned Program

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

FY07: N/A

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 2008**
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:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
GCCS-M Totals (OPN - BLI 2608)	58.165	59.309	25.923	59.832	52.409	73.437	86.754	Cont	Cont

(U) D. ACQUISITION STRATEGY:

N/A

(U) E. Major Performers:

Northrop Grumman Defense Mission Systems (NGDMS) 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.

(U) F. METRICS:

Earned Value Management is used for metrics reporting and risk management.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System				PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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	2.416	VARIOUS	7.446	VARIOUS	6.885	VARIOUS	Continuing	Continuing	Continuing
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			14.012	2.416		7.446		6.885		Continuing	Continuing	Continuing
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	61.831	2.395	VARIOUS	9.642	VARIOUS	9.191	VARIOUS	Continuing	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	2.395		9.642		9.191		Continuing	Continuing	Continuing
Remarks:												

CLASSIFICATION: **6.561**

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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												
Operational Test & Evaluation	WX	OPTEVFOR	1.135	0.760		1.135		1.135		Continuing	Continuing	Continuing
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			1.135	0.760		1.135		1.135		Continuing	Continuing	Continuing
Remarks:												
Contractor Engineering Support	VARIOUS	VARIOUS	0.000	0.200	VARIOUS	0.829	VARIOUS	0.947	VARIOUS	Continuing	Continuing	Continuing
Government Engineering Support												
Program Management Support	VARIOUS	VARIOUS	10.578	0.790	VARIOUS	2.23	VARIOUS	2.642	VARIOUS	Continuing	Continuing	Continuing
Travel												
Transportation												
Subtotal Management			10.578	0.990		3.059		3.589		Continuing	Continuing	Continuing
Remarks:												
Total Cost			87.556	6.561		21.282		20.800		Continuing	Continuing	Continuing
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile

DATE: **February 2008**

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

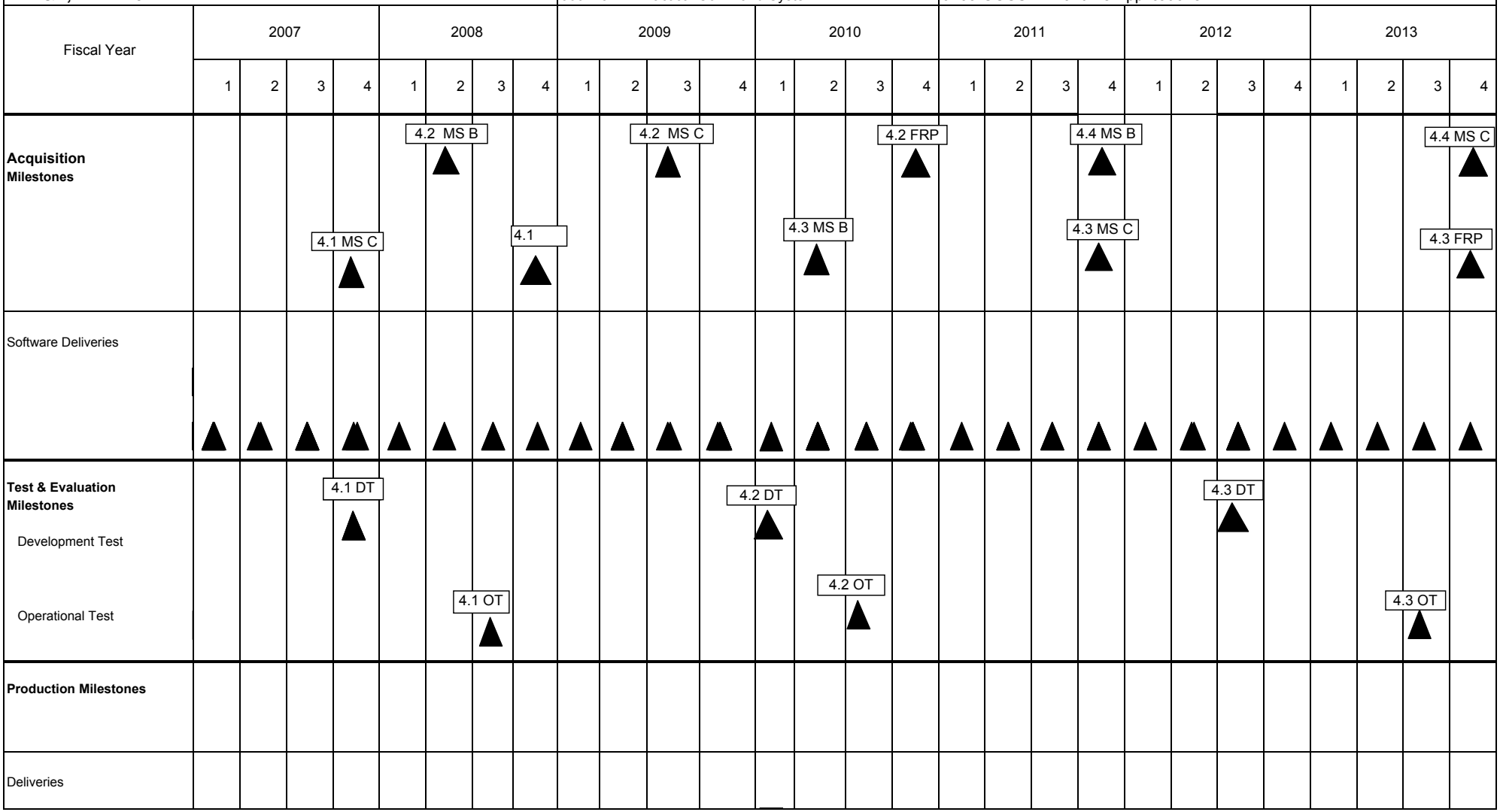


EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2008**	
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 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
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			
Full Rate Production 4.2				Q4			
Milestone C 4.3					Q4		
Milestone B 4.4					Q4		
Development Test 4.3						Q3	
Operational Test 4.3							Q3
Full Rate Production 4.3							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 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 0709 GCCS-M Maritime Applications		
Program Title	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
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 2008**				
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY2013
Project Cost	**1.684**	**0.510**	**1.087**	**1.309**	**1.394**	**1.179**	**1.410**
RDT&E Articles Qty							

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

(U) Trusted Information Systems (TIS) Joint Cross Domain eXchange (JCDX) system and Radiant Mercury (RM) provide Multi-Level Security (MLS) technologies in order to successfully provide accredited Cross Domain Solutions (CDS) to the USN, DoD, and Intelligence Community. 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 Cross Domain Solution (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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION (Continued):

(U) Radiant Mercury (RM): RM provides 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), Operation Iraqi Freedom (OIF), and Homeland Security operations. 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 Automatic Identifiaction System (AIS)) and numerous other DoD and Intelligence agencies.

(U) TIS RM provides a mechanism for adding future capabilities and functionality improvement 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 not limited to, web services, XML functionality , Services Oriented Architechture (SOA) environment, operating systems (OS) migration, remote monitoring and maintenance capability in support of FORCEnet, NCES, MNIS, and GIG architectures.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) B. Accomplishments/Planned Program

JCDX	FY 07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.279	0.000	0.000
RDT&E Articles Quantity			

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

Radiant Mercury	FY 07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.405	0.510	1.087
RDT&E Articles Quantity			

FY07: Released version 4.5. Developed v5.0 porting to new Operating System, integrated, and tested additional unformatted file types, secured remote maintenance, and enhanced audit management. Enhanced 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. Conduct version 5.0. Certification, Test and Evaluation (CT&E) . Conduct version 5.0 System Test and Evaluation (ST&E) with Joint Interoperability Test Command (JITC) assessment.

FY09: Release follow-on 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 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY012	FY013
GCCS-M (TIS) (OPN - BLI 2608)	0.561	0.000	0.480	0.633	0.350	1.022	0.591

(U) D. ACQUISITION STRATEGY:

N/A

(U) E. Major Performers:

SPAWAR System Center San Diego provides support as the Government testing facility.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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												
Ancillary Hardware Development												
Aircraft Integration												
Ship Integration												
Ship Suitability												
Systems Engineering	VARIOUS	VARIOUS	9.892	1.132	VARIOUS	0.333	VARIOUS	0.739	VARIOUS	Continuing	Continuing	
Training Development												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			9.892	1.132		0.333		0.739		Continuing	Continuing	
Remarks:												
Development Support												
Software Development	VARIOUS	VARIOUS	52.731	0.488	VARIOUS	0.152	VARIOUS	0.316	VARIOUS	Continuing	Continuing	
Integrated Logistics Support												
Configuration Management												
Technical Data												
Studies & Analyses												
GFE												
Award Fees												
Subtotal Support			52.731	0.488		0.152		0.316		Continuing	Continuing	
Remarks:												

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

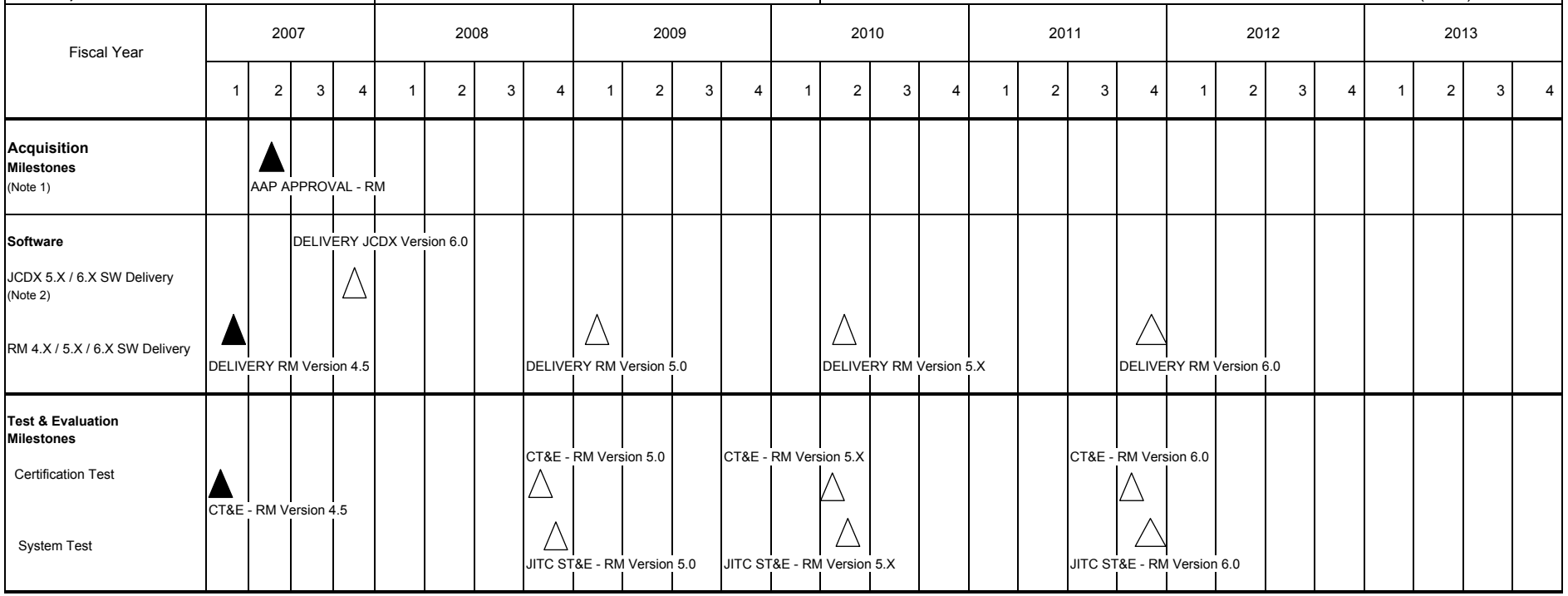
Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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												
Operational Test & Evaluation	WX	OPTEVFOR	0.680	0.000		0.000		0.000		Continuing	Continuing	Continuing
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			0.680	0.000		0.000		0.000		Continuing	Continuing	Continuing
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	VARIOUS	VARIOUS	2.281	0.054	VARIOUS	0.025	VARIOUS	0.032	VARIOUS	Continuing	Continuing	Continuing
Travel				0.010	VARIOUS							
Transportation												
Subtotal Management			2.281	0.064		0.025		0.032		Continuing	Continuing	Continuing
Remarks:												
Total Cost			65.584	1.684		0.510		1.087		Continuing	Continuing	
Remarks:												

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2008**

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)



NOTES:

1) RM Abbreviated Acqusion Program Approval (AAP) - 5 January 2007

2) JCDX capability was disinvested in POM 08.

Exhibit R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail				DATE: **February 2008**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS/JOINT CROSS DOMAIN EXCHANGE (JCDX)			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
RM AAP Approval	2Q						
Software Delivery JCDX Version 6.0	4Q						
Software Delivery RM Version 4.5	1Q						
Software Delivery RM Version 5.0			1Q				
Software Delivery RM Version 5.X				2Q			
Software Delivery RM Version 6.0					4Q		
Certification Test RM Version 4.5	1Q						
Certification Test RM Version 5.0		4Q					
Certification Test RM Version 5.X				2Q			
Certification Test RM Version 6.0					4Q		
System Test RM Version 5.0		4Q					
System Test RM Version 5.X				2Q			
System Test RM Version 6.0					4Q		

Exhibit R-4a, Schedule Detail

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: **February 2008**		
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**7.207**	**5.620**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
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.

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. 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 Common Operating Environment (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 COE, new technology, and Commercial-off-the-shelf (COTS) products. Efforts in FY08 will entail preparation for Operational Evaluation (OPEVAL), and software development to address emerging Fleet requirements in areas such as Maritime Interdiction Operations (MIO). Funding in FY09-13 will be consolidated into GCCS-M Maritime Applications (x0709), to aid in the migration towards Maritime specific Command and Control (C2) capabilities that reside within the Service Oriented Architecture (SOA) environment.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.330	0.000	0.000
RDT&E Articles Quantity			

FY07: Ensured the capability to process and disseminate aircraft mission planning and execution data for disparate sources and platforms. Executed 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.

FY08-09- N/A

Documentation Training	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.551	0.958	0.000
RDT&E Articles Quantity			

FY07: Documentation Training, formerly Web-Enabling/Readiness, ensured the integration and operational testing of web-enabled, task-oriented documentation and help capability emphasizing execution of missions.

FY08 - Ensure the integration and operational testing of web-enabled, task-oriented documentation and help capability emphasizing execution of missions.

FY09- N/A

Testing/Usability	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.632	1.823	0.000
RDT&E Articles Quantity			

FY07: 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 for GCCS-M 4.1 throughout the fiscal year as well as proof-of-concept testing of emergent capabilities and technologies.

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 as well as proof-of-concept testing of emergent capabilities and technologies.

FY09 - N/A

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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

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

FY07: Migrated and integrated evolving organic shipboard systems. GCCS-M RDT&E efforts in FY-07 were focused on software development of Fleet-validated requirements for the next major release of GCCS-M.

FY08: Ensure integration and certification of required organic shipboard systems interfaces.

FY09: N/A

Situational Awareness (formerly JPN)	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	4.923	2.072	0.000
RDT&E Articles Quantity			

FY07: 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. Efforts in FY07 also addressed emergent Fleet requirements, which improved the user's ability to maintain Situational Awareness and reduced system complexity.

FY08: 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, Standarc 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.

FY09: Funded in project 0709.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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

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

FY07: Provided emergent and transformational command and control capabilities are successfully integrated and developmentally tested for timely introduction to the Fleet.

FY08: Continue to ensure emergent and transformational command and control capabilities are successfully integrated and developmentally tested for timely introduction to the Fleet.

FY09: N/A

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

FY07: 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). Ensured maximum lethality from weapon-target pairing while minimizing collateral damage and preventing fratricide during Joint and Coalition strike operations.

FY08: N/A

FY09: N/A

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - Tactical Command System	2305 GCCS-M Common Applications

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost	Total Cost
GCCS-M Totals (OPN - BLI 2608)	58.165	59.309	25.923	59.832	52.409	73.437	86.754			

(U) D. ACQUISITION STRATEGY:

N/A

(U) E. Major Performers:

Northrop Grumman Defense Mission Systems (NGDMS) 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.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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												
Ancillary Hardware Development												
Aircraft Integration												
Ship Integration												
Ship Suitability												
Systems Engineering	VARIOUS	VARIOUS	10.105	2.052	VARIOUS	1.635	VARIOUS	0.000			13.792	13.792
Training Development												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			10.105	2.052		1.635		0.000			13.792	13.792
Remarks:												
Development Support												
Software Development	VARIOUS	VARIOUS	64.006	4.021	VARIOUS	2.809	VARIOUS	0.000			70.836	70.836
Integrated Logistics Support												
Configuration Management												
Technical Data												
Studies & Analyses												
GFE												
Award Fees												
Subtotal Support			64.006	4.021		2.809		0.000			70.836	70.836
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 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	0.547	VARIOUS	0.000			9.258	9.258
Operational Test & Evaluation	VARIOUS	VARIOUS	1.474	0.212	VARIOUS	0.200	VARIOUS	0.000			1.886	1.886
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			9.638	0.759		0.747		0.000			11.144	11.144
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	VARIOUS	VARIOUS	4.727	0.375	VARIOUS	0.429	VARIOUS	0.000			5.531	5.531
Travel												
Transportation												
Subtotal Management			4.727	0.375		0.429		0.000			5.531	5.531
Remarks:												
Total Cost			88.476	7.207		5.620		0.000			101.303	101.303
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile			DATE: **February 2008**
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	

Fiscal Year	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
Acquisition Milestones			4.1 MS C			4.2 MS B		4.1 FRP																				
Software Deliveries	▲	▲	▲	▲	▲	▲	▲	▲																				
Test & Evaluation Milestones			4.1 DT																									
Development Test			▲																									
Operational Test							4.1 OT																					
Production Milestones																												
Deliveries																												

EXHIBIT R-4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2008**	
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Software Delivery (quarterly)	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					

Exhibit R-4a, Schedule Detail

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding ($000)					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5 BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2305 GCCS-M Common Applications		
Program Title	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
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 2008**		
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**6.582**	**6.319**	**11.354**	**10.685**	**11.737**	**6.226**	**6.204**
RDT&E Articles Qty							

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

The Shipboard LAN / WAN / Integrated Shipboard Network System (ISNS) provides Navy ships, including submarines, with reliable, high-speed SECRET and UNCLASSIFIED Local Area Networks (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), 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), Tactical Tomahawk Weapons Control System (TTWCS) and Information Security (INFOSEC) programs. The ISNS program provides the infrastructure to support implementation/fielding of these programs. 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 Service Oriented Architecture (SOA) which is the mechanism to deliver the FORCEnet interface to the warfighter. SOA 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. SOA 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. SOA will utilize a spiral process for delivering capability to the warfighter.

The ISNS Inc 1, Sensitive Compartmented Information (SCI) Networks and Combined Enterprise Regional Information Exchange System (CENTRIXS) programs will begin migrating to ISNS Inc 2/Consolidated Afloat Networks and Enterprise Services (CANES) in FY09. ISNS Inc 2/CANES will serve to transition numerous Fleet networks to a single, adaptive, available, secure computing network infrastructure while delivering enhanced technologies in: Integrated Voice, Video and Data; Common Computing Environment (CCE); Service Oriented Architecture (SOA); and Multi-Level Security (MLS)/Cross Domain Solutions (CDS).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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

The Combined Enterprise Regional Information Exchange System (CENTRIXS) program provides US Navy ships and submarines 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-US. Korea (K), and Communities Of Interest (COI) virtual networks such as Coalition Naval 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. CENTRIXS is the primary means for sharing classified, but releasable, data with coalition partners to enable the Navy to mean the National Strategy for Maritime Domain Awareness. 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 Same time 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.

Funding supports the design, development and testing of the CENTRIXS LAN for surface and submarine 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). The (CENTRIXS) program will begin migrating to ISNS Inc 2/Consolidated Afloat Networks and Enterprise Services (CANES) in FY09. ISNS Inc 2/CANES will serve to transition numerous Fleet networks to a single, adaptive, available, secure computing network infrastructure while delivering enhanced technologies in: Integrated Voice, Video and Data; Common Computing Environment (CCE); Service Oriented Architecture (SOA); and Multi-Level Security (MLS)/Cross Domain Solutions (CDS).

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 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - Tactical Command System	2307 - Shipboard LAN / WAN / Integrated Shipboard Network System

(U) B. Accomplishments/Planned Program

ISNS	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	4.468	2.958	7.319
RDT&E Articles Quantity			

FY07: Continued the development of COMPOSE 3.5. Continued to investigate, develop and test Storage Attached Network (SAN), Network Attached Storage (NAS), wireless, server consolidation and dual Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6) routing architectures. Developed and tested security technologies that monitor and control network and server traffic. Performed tailored developmental testing on ISNS GiG-E LAN Increment I A(V) 1 and A(V)2. Developed the Capabilities Development Document (CDD) for ISNS Increment 2/CANES. Initiated the development of the Cost Analysis Requirements Document (CARD) and Life Cycle Cost Estimate (LCCE) for ISNS Increment 2/CANES.

FY08: Complete development of COMPOSE 3.5. Continue to develop and integrate ISNS Increment 2/CANES capabilities. Investigate software management including distribution, license management, and inventory management. Perform network consolidation and network capacity studies. Develop and integrate Expanded Maritime Intercept Operation (EMIO) and increased security. Complete development of the CARD. Continue development of the LCCE. Begin development of the Clinger Cohen Act (CCA) and Acquisition Strategy documentation for ISNS Incr 2/CANES.

Perform developmental testing and at sea demonstrations on the following ISNS Increment 2 technologies:

1. Identity Management/Service Security, including Authentication, Authorization, and Auditing.
2. Collaboration, including Text Collaboration.
3. Messaging, including Java Messaging Service
4. Service Oriented Architecture (SOA)
5. Multi-Level Security (MLS) / Cross Domain Solutions (CDS)

FY09: Continue to 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.

Continue with at sea demonstrations for the following technologies:

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.
4. Cross Domain Solutions (CDS)

Complete acquisition documentation required for ISNS Inc 2/CANES. Achieve Milestone B. Award the prototype development contract for ISNS Incr 2/CANES. Set up lab for applicable Early Adopter testing. Perform Developmental and Operational Testing (DT/OT) on Increment 1 Wireless, COMPOSE 3.5 and SOA 1.0.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - Tactical Command System	2307 - Shipboard LAN / WAN / Integrated Shipboard Network System

(U) B. Accomplishments/Planned Program

SubLAN	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.379	1.519	1.256
RDT&E Articles Quantity			

FY07 - Investigated server consolidation architectures using multi-Secure server Operating Systems. Performed verification for Correction of Deficiency event to SubLAN 1 SSGN architecture in support of SubLAN 1 Operational Evaluation (OPEVAL).

FY08 - Investigate, develop, and test cross domain solution architecture enabling capability for other submarine programs such as SCI, JTRS, CENTRIXS. Investigate, develop, test server architecture in support of Commercial off the Shelf (COTS) End-of-Life (EOL) and enablement of Consolidated Afloat Networks and Enterprise Services (CANES) functionality.

FY09 - Test and integrate follow-on COMPOSE software package in support of Consolidated Afloat Networks and Enterprise Services (CANES) migration strategy. Perform Operational Test Readiness Review (OTRR) of Inc 1.

CENTRIXS	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.735	1.842	2.779
RDT&E Articles Quantity			

FY07 - Continued the development of Increment 1. Integrated the Server Virtualization Development to provide the ability to run multiple virtual servers on one physical server reducing the server/rack footprint and creating a scalable MLS solution. Researched Community of Interest (COI) dynamic agility for Inc I. Developed the Cross Domain Solutions (CDS) security technology that will further reduce the network infrastructure. Investigated Voice over Internet Protocol (VoIP) technology for coalition enclaves. Continued the development of acquisition documents in support of a MS C.

FY08 - Obtain MS C Decision and LRIP for Inc 1. Utilize existing Q-70 contract for LRIP. Continue to evaluate dynamic COI capability, patch management capability, and client-loadable software capability in coordination with the CDS. Perform Operational Assessment (OA) on Block II with Engineering Change Order (ECO).

FY09 - Perform environmental testing and a combined DT/OT for Increment 1 with COMPOSE 3.0. Achieve Increment 1 (FL) Initial Operational Capability (IOC) and Full Rate Production (FRP). Begin migration to ISNS Inc 2/CANES. Develop CENTRIXS capability on submarines.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - Tactical Command System	2307 - Shipboard LAN / WAN / Integrated Shipboard Network System

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
OPN 3050							
ISNS	67.822	151.594	133.315	115.012	134.351	170.142	171.947
CENTRIXS	14.279	9.331	29.106	39.196	39.988	32.787	8.823
SubLAN	31.297	20.667	31.745	28.272	21.109	33.347	36.862
Total:	113.398	181.592	194.166	182.480	195.448	236.276	217.632

(U) D. ACQUISITION STRATEGY:

Procurement and integration efforts for ISNS, CENTRIXS, and SubLAN are accomplished through various contracts.

(U) E. MAJOR PERFORMERS:

SPAWAR Systems Center, San Diego (SSC SD), CA, provides hardware and software interface design and testing for ISNS and SubLAN.
Commander Operational Test and Evaluation Force (COMOPTEVFOR), Norfolk, VA, provides operational test and evaluation support for ISNS, CENTRIXS, and SubLAN.
Lockheed Martin, Egan, MN, provides the engineering development module hardware for CENTRIXS.
Booz Allen Hamilton, San Diego, CA provides aquisition documentation support for ISNS and CENTRIXS.

(U) F. METRICS:

CLASSIFICATION:

Exhibit R-3, RDT&E Cost Analysis (page 1)										DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 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	CPAF	Titan		0.109	VARIOUS	0.227	VARIOUS	0.858	VARIOUS	Continuing	Continuing	Continuing
Integration & Test	WX	SSC SD		0.077	11/06	0.887	12/07	0.985	12/08	Continuing	Continuing	Continuing
Systems Engineering	VARIOUS	VARIOUS	2.576	0.244	VARIOUS	0.652	VARIOUS	0.684	VARIOUS	Continuing	Continuing	Continuing
Systems Engineering	WX	SSC SD		0.339	11/06	1.025	12/07	1.166	12/08	Continuing	Continuing	Continuing
Systems Engineering	CPAF	SAIC		0.285	02/07	0.049	12/07	0.049	12/08	Continuing	Continuing	Continuing
Systems Engineering	WX	SSC CH		0.725	02/07	0.893	01/08	1.012	01/09	Continuing	Continuing	Continuing
Subtotal Product Development			2.576	1.779		3.733		4.754		Continuing	Continuing	Continuing
Remarks:												
Software Development	TBD	TBD		0.000	12/06	0.400	TBD	0.325	TBD	Continuing	Continuing	Continuing
Software Development	CPAF	Titan		0.014	01/07	0.029	01/08	0.026	01/09	Continuing	Continuing	Continuing
Subtotal Support			0.000	0.014		0.029		0.026		Continuing	Continuing	Continuing
Remarks:												

Exhibit R-3, RDT&E Cost Analysis

CLASSIFICATION:

Exhibit R-3, RDT&E Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 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	3.169	1.695	12/06	0.576	12/07	1.564	12/08	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WX	NIOC		0.015	02/07	0.020	01/08	0.018	01/09	Continuing	Continuing	Continuing
Developmental Test & Evaluation	MP	JITC	0.077	0.115	11/06	0.000	12/07	0.166	12/08	Continuing	Continuing	Continuing
Developmental Test & Evaluation	VARIOUS	NSMA		0.255	VARIOUS	0.134	VARIOUS	0.418	VARIOUS	Continuing	Continuing	Continuing
Developmental Test & Evaluation	CPAF	NAVSEA/LM		0.350	08/07	0.000	12/07	0.000	12/08	Continuing	Continuing	Continuing
Developmental Test & Evaluation	VARIOUS	VARIOUS	0.200	0.000	VARIOUS	0.157	VARIOUS	0.226	VARIOUS	Continuing	Continuing	Continuing
Operational Test & Evaluation	WX	COMOPTEVFOR	0.488	0.070	02/07	0.244	12/07	0.360	12/08	Continuing	Continuing	Continuing
Operational Test & Evaluation	WX	SSC		0.000		0.598	TBD	0.650	TBD	Continuing	Continuing	Continuing
Subtotal T&E			3.934	2.500		1.729		3.402		Continuing	Continuing	Continuing
Remarks:												
Program Management Support	WX	SSC SD		0.892	12/06	0.000	12/07	0.193	12/08	Continuing	Continuing	Continuing
Program Management Support	VARIOUS	VARIOUS	0.750	0.000	VARIOUS	0.793	VARIOUS	2.480	VARIOUS	Continuing	Continuing	Continuing
Program Management Support	CPAF	Booz Allen Hamilton		1.397	01/07	0.035	01/08	0.499	01/09	Continuing	Continuing	Continuing
Subtotal Management			0.750	2.289		0.828		3.172		Continuing	Continuing	Continuing
Remarks:												
Total Cost			7.260	6.582		6.319		11.354		Continuing	Continuing	Continuing
Remarks:												

Exhibit R-3, RDT&E Cost Analysis

CLASSIFICATION:

EXHIBIT R4, RDT&E Schedule Profile

DATE: **February 2008**

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 Inc 1 (see note 1) Inc 2 & 3/CANES					FD (V)8			FD A(V)1 A(V)2		FD C(V)X					Inc 1 Wireless FD	Inc 2 MS B							Inc 2/CANES MS C						Inc 3/CANES 2 MS B			
Prototype Phase Demonstrations (Trident Warrior)											TW				TW				TW				TW				TW				TW	
System Development Inc 2/CANES Inc 3/CANES 2																Inc 2/CANES System Development													Inc 3/CANES 2 System Development			
Software Deliveries (see note 3)									COMPOSE 3.0.1				COMPOSE 3.5		SOA 1.0	COMPOSE 4.0					SOA/MLS				SOA/MLS				SOA/MLS			
Test & Evaluation Milestones (see note 4) Development Test Operational Test				(V)8 DT/OT DT OT			A(V)1 A(V)2 DT Assist DT						Inc 1 Wireless/ COMPOSE 3.5 DT OT		SOA 1.0 DT OT	COMPOSE 4.0 DT OT											Inc 2 DT OT							
Production Milestones LRIP FRP	Inc 1 LRIP for (V)8, A(V)1, and A(V)2 A(V)9 FRP							A(V)1 A(V)2 FRP					Inc 1 Wireless/ COMPOSE 3.5 FRP			SOA FRP									Inc 2/CANES LRIP						Inc 2/CANES FRP		
Deliveries																																

NOTES:

1. Events added for follow on increments reflecting migration to ISNS Inc 2/CANES.
2. Software release versions and delivery dates updated to reflect current software fielding schedule.

EXHIBIT R4, RDT&E Schedule Profile

CLASSIFICATION:

Exhibit R-4a, RDT&E Schedule Detail						DATE: **February 2008**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-5**	PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System (ISNS)			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Acquisition Milestone - FD (V)8	1Q						
Acquisition Milestone - A(V)1 & AV(2)	4Q						
Acquisition Milestone - FD C(V)X		2Q					
Acquisition Milestone - Inc 1 Wireless			3Q				
Acquisition Milestone - Inc 2 MS B			4Q				
Acquisition Milestone - Inc 2 MS C					4Q		
Acquisition Milestone - Inc 3 MS B						3Q	
Prototype Phase - TW Demonstration		3Q					
Prototype Phase - TW Demonstration			3Q				
Prototype Phase - TW Demonstration				3Q			
Prototype Phase - TW Demonstration					3Q		
Prototype Phase - TW Demonstration						3Q	
Prototype Phase - TW Demonstration							3Q
System Development - Inc 2/CANES			4Q	1Q-4Q	1Q-4Q		
System Development - Inc 3/CANES 2						3Q-4Q	1Q-4Q
Software Delivery - 3.0.1		2Q					
Software Delivery - 3.5			1Q				
Software Delivery - SOA 1.0			4Q				
Software Delivery - 4.0				1Q			
Software Delivery - SOA/MLS					2Q		
Software Delivery - SOA/MLS						2Q	
Software Delivery - SOA/MLS							2Q
Development Test - (V)8							
Development Test - A(V)1 & A(V)2	3Q						
Development Test - Inc 1 Wireless/3.5			2Q				
Development Test - SOA 1.0			3Q				
Development Test - 4.0				1Q			
Development Test - Inc 2/CANES						3Q	
Operational Test - (V)8							
Operational Test - Inc 1 Wireless/3.5			2Q				
Operational Test - SOA 1.0			3Q				
Operational Test - 4.0				1Q			
Operational Test - Inc 2/CANES						3Q	
Production Milestone - A(V)9 FRP							
Production Milestone - LRIP Inc 1	1Q						
Production Milestone - A(V)1 & A(V)2 FRP	4Q						
Production Milestone - Inc 1 Wireless/3.5 FRP			3Q				
Production Milestone - SOA FRP			4Q				
Production Milestone - LRIP Inc 2						1Q - 4Q	1Q
Production Milestone - Inc 2/CANES FRP							2Q

NOTES:
1. Events added for follow on increments reflecting migration to ISNS Inc 2/CANES.
2. Software release versions and delivery dates updated to reflect current software fielding schedule.

CLASSIFICATION:

EXHIBIT R4, RDT&E Schedule Profile

DATE: **February 2008**

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)

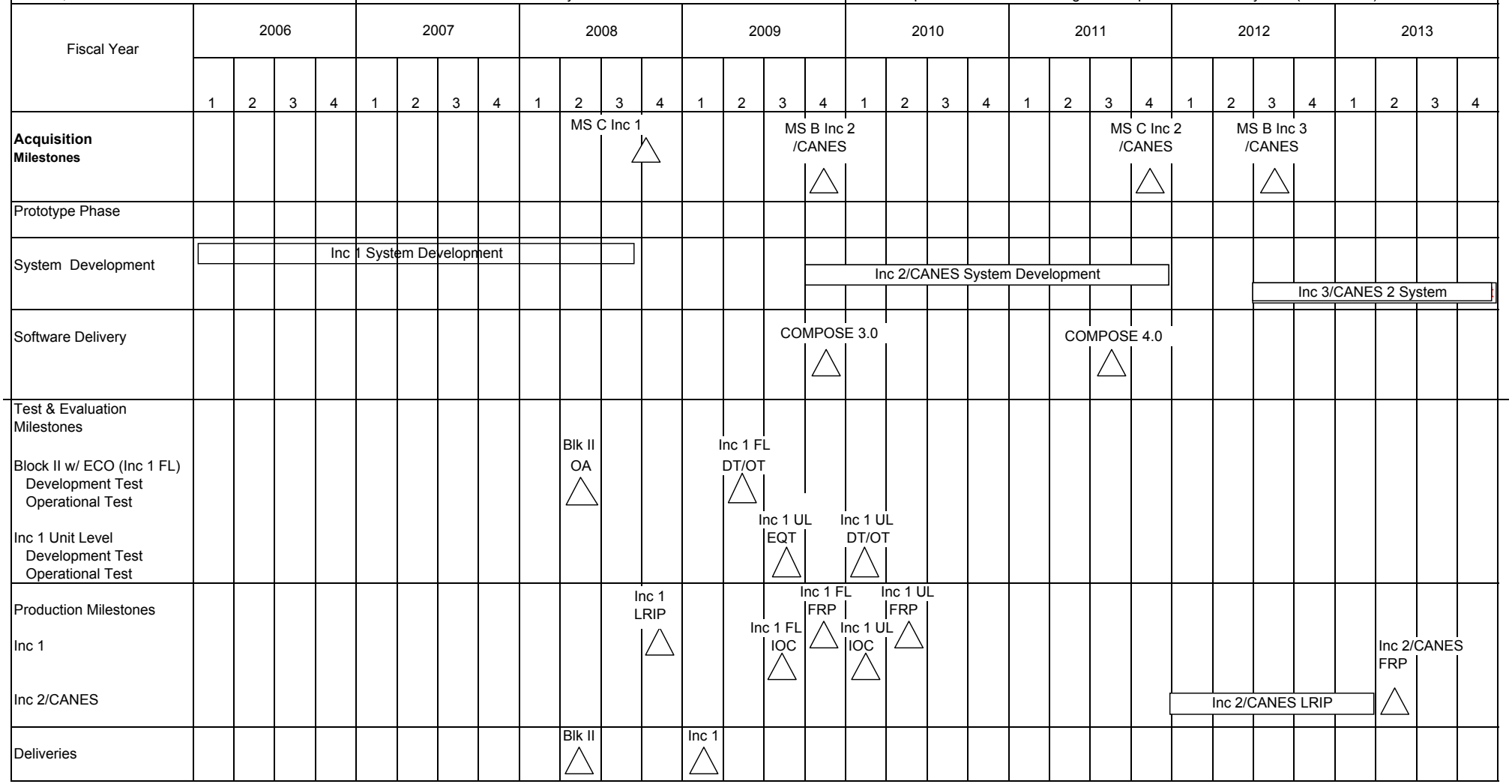


EXHIBIT R4, RDT&E Schedule Profile

NOTES:
1. MS C and FRP (Inc 1) slip due to Capabilities Production Document (CPD) approval delays.
2. DT/OT slip due to the MS C slip, addition of EQT, and delays in the accreditation process. IOC and FRP shifted as a result.
3. Events added for follow on increments reflecting migration to ISNS Inc 2/CANES.
4. Block II with the Engineering Change Order (ECO) is equivalent to the Increment 1 Force Level (FL).

CLASSIFICATION:

Exhibit R-4a, RDT&E Schedule Detail						DATE: **February 2008**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, BA-5**	PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System (CENTRIXS)			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Acquisition Milestone - Inc 1 MS C		3Q-4Q					
Acquisition Milestone - ISNS Inc 2/ CANES MS B			4Q				
Acquisition Milestone - ISNS Inc 2/CANES MS C					4Q		
Acquisition Milestone - ISNS Inc 3/ CANES 2 MS B						3Q	
System Development - Inc 1	1Q-4Q	1Q-3Q					
System Development - ISNS Inc 2/CANES			4Q	1Q-4Q	1Q-4Q		
System Development - ISNS Inc 3/CANES 2						3Q-4Q	1Q-4Q
Software Delivery - COMPOSE 3.0			4Q				
Software Delivery - COMPOSE 4.0					3Q		
Development Test - Inc 1			2Q	1Q			
Operational Test - Blk II OA		2Q					
Operational Test - Inc 1 FL			2Q				
Operational Test - Inc 1 UL EQT			3Q				
Operational Test - Inc 1 UL				1Q			
Production Milestone - Inc 1 LRIP		4Q					
Production Milestone - Inc 1 FL IOC			3Q				
Production Milestone - Inc 1 FL FRP			4Q				
Production Milestone - Inc 1 UL IOC				1Q			
Production Milestone - Inc 1 UL FRP				2Q			
Production Milestone - ISNS Inc 2/CANES LRIP						1Q-4Q	1Q
Production Milestone - ISNS Inc 2/CANES FRP							2Q
Deliveries - Block II		2Q					
Deliveries - Inc 1			1Q				

NOTES:
1. MS C and FRP (Inc 1) slip due to Capabilities Production Document (CPD) approval delays
2. DT/OT slip due to the MS C slip, addition of EQT, and delays in the accredidation process. IOC and FRP shifted as a result.
3. Events added for follow on increments reflecting migration to ISNS Inc 2/CANES.
4. Block II with Engineering Change Order (ECO) is equivalent to the Increment 1 Force Level (FL).

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																												DATE: **February 2008**
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 (SubLAN)																
Fiscal Year	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
Acquisition Milestones SubLAN Incr 1 (Note 1)				PDR △				CDR △											FOC △										
System Development (e.g., Radar System dev.)																												
Software Deliveries COMPOSE								3.0.1 △				3.5 △																
Test & Evaluation Milestones Development Test Operational Test (Note 2)								OTRR △			Incr 1 FOTE																	
Production Milestones																												
Deliveries																												

EXHIBIT R4, Schedule Profile

NOTES:
(1) SSBN availability slipped right one year, precluding completion in FY10, causing FOC scheduled skip.
(2) Shift in strategy is to incorporate Inc 2 functionality into Inc 1, and perform FOT&E.

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-5**			PROJECT NUMBER AND NAME 2307 - Shipboard LAN / WAN / Integrated Shipboard Network System (SubLAN)				
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Inc 1 Preliminary Design Review	4Q						
Inc 1 Critical Design Review		4Q					
Inc 1 Operational Test Readiness Review		4Q					
Full Rate Production - SubLAN I							
Full Operational Capability - SubLAN 1					3Q		
Software Delivery - 3.0.1		4Q					
Software Delivery - 3.5			4Q				
Follow-On Test - SubLAN 1 (Note 2)			3Q				

NOTES:

Exhibit R-4a, RDT&E Schedule Detail

(1) SSBN availability slipped right one year, precluding completion in FY10, causing FOC schedule skip.

(2) Shift in strategy is to incorporate Inc 2 functionality into Inc 1, and perform FOT&E.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2008**	
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**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**

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

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.

(U) JUSTIFICATION FOR BUDGET ACTIVITY:

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

CLASSIFICATION:

EXHIBIT R-2a, RDT&E,N Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - Tactical Command System	3032 NTCSS Enterprise Database and MLDN

(U) B. Accomplishments/Planned Program

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

FY07: Supported Web-enabled NTCSS applications. NTCSS software development received.

FY08/09: Continue Web-enabling of NTCSS applications.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	3032 NTCSS Enterprise Database and MLDN

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
OPN 261100 Naval Tactical Command Support System	7.278	26.037	31.283	33.594	33.137	34.484	35.303	Cont.	Cont.

Related RDT&E:
RDT&E PE 0604231N 9895C 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 2008**									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System				PROJECT NUMBER AND NAME 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												
Aircraft Integration												
Ship Integration												
Ship Suitability												
Systems Engineering	VARIOUS	VARIOUS	1.000								1.000	
Training Development												
Licenses	VARIOUS	VARIOUS	0.700								0.700	
Tooling												
GFE												
Award Fees												
Subtotal Product Development			2.368								2.368	
Remarks:												
Development Support												
Software Development	VARIOUS	VARIOUS	10.622	0.045	VARIOUS	0.052	VARIOUS	0.050	VARIOUS	Continuing	Continuing	Continuing
Integrated Logistics Support												
Configuration Management	VARIOUS	VARIOUS	0.460								0.460	
Technical Data	VARIOUS	VARIOUS	0.200								0.200	
Studies & Analyses												
GFE												
Award Fees												
Subtotal Support			11.282	0.045		0.052		0.050		Continuing	Continuing	Continuing
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 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												
Operational Test & Evaluation	WX	NAWC-AD	0.585								0.585	
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
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												
Travel												
Transportation												
Subtotal Management			1.175								1.175	
Remarks:												
Total Cost			15.410	0.045		0.052		0.050		Continuing	Continuing	
Remarks:												

Exhibit R-3, RDTEN Project Cost Analysis

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: **February 2008**											
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																
Fiscal Year	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
Acquisition Milestones																												
System Development			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲
Software Deliveries				▲				▲				▲				▲				▲				▲				▲
Test & Evaluation Milestones																												
NTCSS web services FOT&E																												
Development Test																												
Operational Test																												
Production Milestones																												
FRP																												
Deliveries																												

Exhibit R-4, RDTEN Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT 0604231N - Tactical Command System		PROJECT NUMBER AND NAME 3032 NTCSS Enterprise Database and MLDN				
Schedule Profile	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
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
Preproduction Readiness Review (PRR)							
EDM Radar Delivery - Flt Related							
Milestone C (MS C)							
Operational Testing (OT-IIIA)							
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							
Full Rate Production Start							
First Deployment							

Classification:

Exhibit R-5, Termination Liability Funding for Major Defense Acquisition Programs, RDT&E Funding ($000)							DATE: **February 2008**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - Tactical Command System			PROJECT NUMBER AND NAME 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 2008**
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 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	**14.842**	**14.174**	**63.846**	**20.964**	**20.544**	**26.963**	**26.678**
RDT&E Articles Qty							

(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, implementing Maritime Domain Awareness (MDA), 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.

The FORCEnet project line funds the following efforts:

(1) Department of Navy (DoN) C4ISR Transformation/Strategic Planning within DoN/Joint/Department of Defense (DoD) Framework: Assesses existing and emerging capabilities, develops and evaluates Navy-wide policies, plans, requirements, and compliance; develops integration and investment strategies; and accelerates innovation, testing, assessment and fielding of material and non-material solutions for enhanced operational capability, Joint/Allied/Coalition interoperability and application/enforcement of enterprise requirements/architectures/standards toward greater NCO/W capability. Supports Navy implementation of Maritime Domain Awareness (MDA) capability, Maritime Headquarters with Maritime Operations Centers (MHQ w/MOC) and enterprise network efforts.

(2) Accelerating Joint Warfighting Capability (Trident Warrior): Enables early delivery of NCO/W capabilities to the warfighter via Fleet-directed Trident Warrior operational events with a strong emphasis on delivering MDA and MHQ w/MOC capability. 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.

(3) Implementing Sea Power-21 /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. Execute Systems Engineering Technical Authority and process implementation including execution of SETR reviews throughout all Navy POR lifecycles in the FORCEnet domain.

(4) Systems Requirements Analysis / Systems Engineering (formerly Osprey Hawksbill): Supports requirements analysis and systems engineering of systems under development by DoN/DoD. Funding supports the technical and systems engineering expertise required for C4ISR systems technical requirements generation, requirements tracking, architecture development, and detailed analyses on various warfare systems under development to determine if the required C4 infrastructure, resources, and other capabilities are aligned and synchronized. The funding also supports the systems engineering for the synthesis of current network-centric, C4ISR programs of record with existing/emerging capabilities.

(5) Maritime Domain Awareness (MDA): Maritime Domain Awareness is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy or environment. MDA objectives include the persistent monitoring of and ability to access and maintain data on vessels, cargo, people, and infrastructure; and the ability to collect, fuse, analyze, and disseminate information to decision makers to facilitate effective understanding. This initiative will identify, develop and transition data fusion, replication, sharing and assessment tools to achieve MDA. The initiative extends the reach of MDA tools and capabilities to include the Atlantic approaches to the United States and the European Area of Responsibility (AOR).

This MDA focused Deep Lightning Bolt (DLB) warfighting enhancements are designed to achieve an all-source distributed MDA capability, leveraging existing MDA Navy and Non-Navy initiatives in the developmental phase and ensuring the best products transition to strategic, operational and tactical users as well as further development of MDA prototypes. The products will support all-source data fusion and mining, replication of MDA related data gathered in various operations such as expanded-maritime interdiction operations (E-MIO), sharing information with allies, and developing subject matter expertise and assessment tools to achieve MDA and enhance operational decision making.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	9123 FORCEnet

(U) B. Accomplishments/Planned Program

FORCEnet	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	14.842	14.174	63.846
RDT&E,N Articles Quantity			

FY07 Accomplishments:

1) DoN Transformation within Joint/DoD Framework (Strategic Planning): Continued to refine expanded Joint/Interagency/Allied/Coalition coordination/policy/planning. Convened third annual FRCC Review Board and FRCC Flag Board. Validated FORCEnet Requirements/Architectures/Standards Spiral/Iteration. Updated integrated FORCEnet Consolidated Compliance Checklist (FCCC) and began execution of DoN-wide implementation of FORCEnet/FCCC compliance under SECNAVINST 5000.2D.
2) Accelerating Joint Warfighting Capability (Trident Warrior): Completed analyses of TW06 experiment results and delivered Military Utility Assessment to Naval Network Warfare Command (NETWARCOM), Commander Fleet Forces Command (CFFC), and the Sea Trial Expeditionary Strike Group (ESG). Conducted TW07 in Commander Second Fleet (C2F) Area of Responsibility (AOR) using Carrier Strike Group (CSG)/ESG units with continued Coalition presence. TW07's major initiatives included National Maritime Security, coalition interoperability and Joint Command and Control (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. Investigated 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 Concept of Operations (CONOPS). Provided support for the spiral development of programs of record. Planned and executed TW07 operational events to accelerate transition of FORCEnet capability to the Fleet. Provided leave-behind capability for one deployment cycle of successful technologies for extended operational assessment. Completed analyses of TW07 experiment results and delivered Military Utility Assessment to NETWARCOM, CFFC and the Sea Trial ESG. Began planning for Trident Warrior 08. Developed FY 08-09 FORCEnet Sea Trial Plan.
3) Implementation of FORCEnet Requirements (FORCEnet Compliance): Performed POR compliance reviews using validated assessment tools, compliance test procedures/methodologies. Reported POR level of FORCEnet compliance to OPNAV, NETWARCOM, ASN(RD&A) and the FORCEnet Coordination Council. Continued to refine/support the FET process; initiated FET feedback to Naval Capabilities Development Process (NCDP) to integrate FORCEnet Compliance into the DoN Planning/Programming/Budgeting/Execution (PPBE) process.
4) Osprey Hawksbill - This is a classified program.

Exhibit R-2a, RDTEN Project Justification

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	9123 FORCEnet

(U) B. Accomplishments/Planned Program (Continued)

FY08 Plans:

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 .
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 Domain Awareness (MDA), Maritime Headquarters (MHQ) Maritime Operations Center (MOC), 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.
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 FORCEnet Capabilities Development Process, integrating FORCEnet Compliance into the DoN Planning/Programming/Budgeting/Execution (PPBE) and JCIDS processes. Implement Netcentric Data Strategy across all Navy led Communities of Interest.
4) Osprey Hawksbill - This is a classified program.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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)

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

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 Domain Awareness (MDA), Maritime Headquarters (MHQ) Maritime Operations Center (MOC), 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. Support MDA Spiral 2 testing. 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.

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 FORCEnet Capabilities Development Process, integrating FORCEnet Compliance into the DoN Planning/Programming/Budgeting/Execution (PPBE) and JCIDS processes. Implement Netcentric Data Strategy across all Navy led Communities of Interest.

4) Systems Requirements Analysis / Systems Engineering (formerly Osprey Hawksbill): Conducts requirements analysis and systems engineering of systems under development by DoN/DoD. Provides technical and systems engineering expertise required for C4ISR systems technical requirements generation and tracking, architecture development, systems analysis to evaluate alignment and synchronization of infrastructure, resources and other existing/developing systems. Funding also supports the systems engineering for the synthesis of current net-centric C4ISR systems with existing and emerging C4ISR systems.

5) Maritime Domain Awareness (MDA):

-- MDA capability will leverage Comprehensive Maritime Awareness (CMA) JCTD's results and technologies and other MDA related initiatives to provide baseline MDA capabilities to transition into a MDA fusion services program start.

-- In addition to technical or software products, the MDA initiative supports the startup of a Central Repository and Fusion Center at the National Maritime Intelligence Center (NMIC), along with 4 Regional Gateways at Maritime Headquarters with Maritime Operational Centers (MHQ/MOC) (MDA Fusion Support Services), PACFLT, 5th Fleet, 7th Fleet. These nodes will support tactical units such as U.S. Navy force level ships and any unanticipated user at any echelon/location within comprehensive maritime domain architecture that requires MDA Fusion services to conduct Global War on Terrorism (GWOT) and Homeland Defense operations.

-- MDA fusion services initiative will support the acceleration of prototype systems to support AIS unclass data sharing and the transition of emerging MDA related technologies into the MDA architecture. This warfighting enhancement is designed to achieve an all- source MDA capability, leveraging existing MDA initiatives in the developmental phase and ensuring the best products transition to strategic, operational and tactical users. The products will support all-source data fusion and mining, replication of MDA related data gathered in various operations such as expanded-maritime interdiction operations (E-MIO), sharing information with allies, and developing subject matter expertise and assessment tools to achieve MDA and enhance operational decision making.

--Enhance automated fusion at additional sites.

-- MDA collecting and monitoring includes enhanced vessel tracking and long term storage and access to historical vessel tracking data. Greater fidelity in automated anomaly detection and enhanced pattern recognition, trend analysis and predictive behavior. Dissemination capabilities will include enterprise alerting and enhanced detection of illegal activities.

-- MDA data sharing with agency and coalition partners. Training, systems integration / engineering and testing / assessments and transition MDA capabilities to programs of record.

-- Non-Classified Enclave will provide monitoring, collection and dissemination of identity and mission data, to include sensor identity data from a tactical environment. This capability will introduce an appropriate environment to vet identity information across participating United States agencies and other multi-national organizations. The Non-Classified Enclave will provide capabilities to cooperate and coordinate the sharing of information in the Maritime Domain Awareness (MDA) spiral 1 and 2 nodes, mapped to the various networks and to the capabilities provided by installed equipment or by user Web-access.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
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:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost

Not Applicable

(U) D. ACQUISITION STRATEGY:

Not Applicable

(U) E. MAJOR PERFORMERS:

FY 2007 / FY 2008 / FY 2009:
Space and Naval Warfare Systems Command System Center (SSC) - Charleston, SC: Trident Warrior (TW) , FITS - Systems Engineering Support, Software Develop, Integrate, Demonstrate, Field - MDA Prototypes
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, Software Develop, Integrate, Demonstrate, Field - MDA Prototypes
Naval Air Warfare Center - Patuxent River, MD: Systems Engineering Support
Naval Post Graduate School - Monterey, CA: Analysis Support and Analysis Lead, MDA Research Support (PMW 180 Sponsor), MDA Analysis and Capabilities Definition
American Systems Corporation - Chantilly, VA & San Diego, CA: Program Management, Program Office Support, Transition Management, Risk Management, System Engineering
System Planning & Analysis Corporation - Arlington, VA & San Diego, CA: Acquisition Management, Program Office Support
Naval Research Lab - Washington, DC: Technical Management, R&D Engineering, MDA Software Fast Prototyping
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
AMSEC LLC - Virginia Beach, VA: Program Management Support
Anteon Corporation - Fairfax, VA: Program Management Support
Booz Allen Hamilton, Inc. - McLean VA: Design, Planning, and Engineering Support
iBASEt - Foothill Ranch, CA: FITS - Systems Engineering Support
Northrop Grumman Defense Mission Systems, Inc. - Reston, VA: OPNAV Strategic Planning Support
SYS Technologies - San Diego, CA: Systems Engineering Support
X-Feds, Inc. - San Diego, CA: Trident Warrior (TW) Systems Engineering Support

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2008**

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 Dev - MDA	Various	Various						1.440	TBD	Continuing	Continuing	0.000
Ancillary Hardware Development												0.000
Aircraft Integration												0.000
Ship Integration	Various	Various	0.935								0.935	0.000
Shore Integration												
Systems Engineering - MDA	Various	TBD						0.650	TBD	Continuing	Continuing	0.000
Systems Engineering	Various	Various	1.600								1.600	0.000
Award Fees												0.000
Subtotal Product Development			2.535	0.000				2.090		0.000	Continuing	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 - MDA	TBD	TBD						0.250	TBD	Continuing	Continuing	0.000
Configuration Management - MDA	TBD	TBD						0.165	TBD	Continuing	Continuing	0.000
Development Support - MDA	TBD	TBD						0.250	TBD	Continuing	Continuing	0.000
Sys Req Analysis/Sys Eng	Various	Various	8.361	1.824	Various	1.877		1.954	Various	Continuing	Continuing	0.000
Software Development - MDA	TBD	TBD						2.250	TBD	Continuing	Continuing	0.000
Software Develop, Integrate, Demonstrate, Field - MDA Prototypes	TBD	TBD						43.500	TBD	Continuing	Continuing	0.000
Subtotal Support			13.961	1.824		1.877		48.369		0.000	Continuing	0.000

Remarks:

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **February 2008**

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 Capability	Various	Various	11.277	5.359	Various	5.118	Various	5.332	Various	Continuing	Continuing	Continuing
FORCEnet Compliance Implementation			5.872	3.974	Various	3.725	Various	3.880	Various	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)			9.288	3.685	Various	3.454	Various	3.280	Various	Continuing	Continuing	Continuing
Developmental Test & Evaluation - MDA	TBD	TBD						0.500	TBD	Continuing	Continuing	Continuing
GFE											0.000	0.000
Subtotal T&E			27.737	13.018		12.297		12.992		Continuing	Continuing	Continuing

Remarks:

Technical Support			2.124								2.124	0.000
Government Engineering Support			3.899								3.899	0.000
Program Management Support - MDA								0.250	TBD	Continuing	Continuing	Continuing
Travel - MDA								0.145	TBD	Continuing	Continuing	Continuing
Program Management Support			0.800								0.800	0.000
Travel			0.299								0.299	0.000
Subtotal Management			7.122	0.000		0.000		0.395		Continuing	Continuing	Continuing

Remarks:

Total Cost			51.355	14.842		14.174		63.846			Continuing	0.000

Remarks:

Exhibit R-3, Project Cost Analysis

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2008**

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

PROJECT NUMBER AND NAME: 9123 FORCEnet

Fiscal Year	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
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/SETR																												
FITS																												
FITS OIPT		△		△		△		△		△		△		△		△		△		△		△		△		△		△
S/W Test																												
FITS IOC	△																											
FITS FOC					△																							
Data Refresh				△								△				△				△				△				△
FITS Spiral Delivery		△		△		△		△		△		△		△		△		△		△		△		△		△		△

Exhibit R-4, Schedule Profile

CLASSIFICATION:

EXHIBIT R4, Schedule Profile

DATE: **February 2008**

APPROPRIATION/BUDGET ACTIVITY
RDT&E / Navy BA-5

PROJECT NUMBER AND NAME
9123 FORCEnet

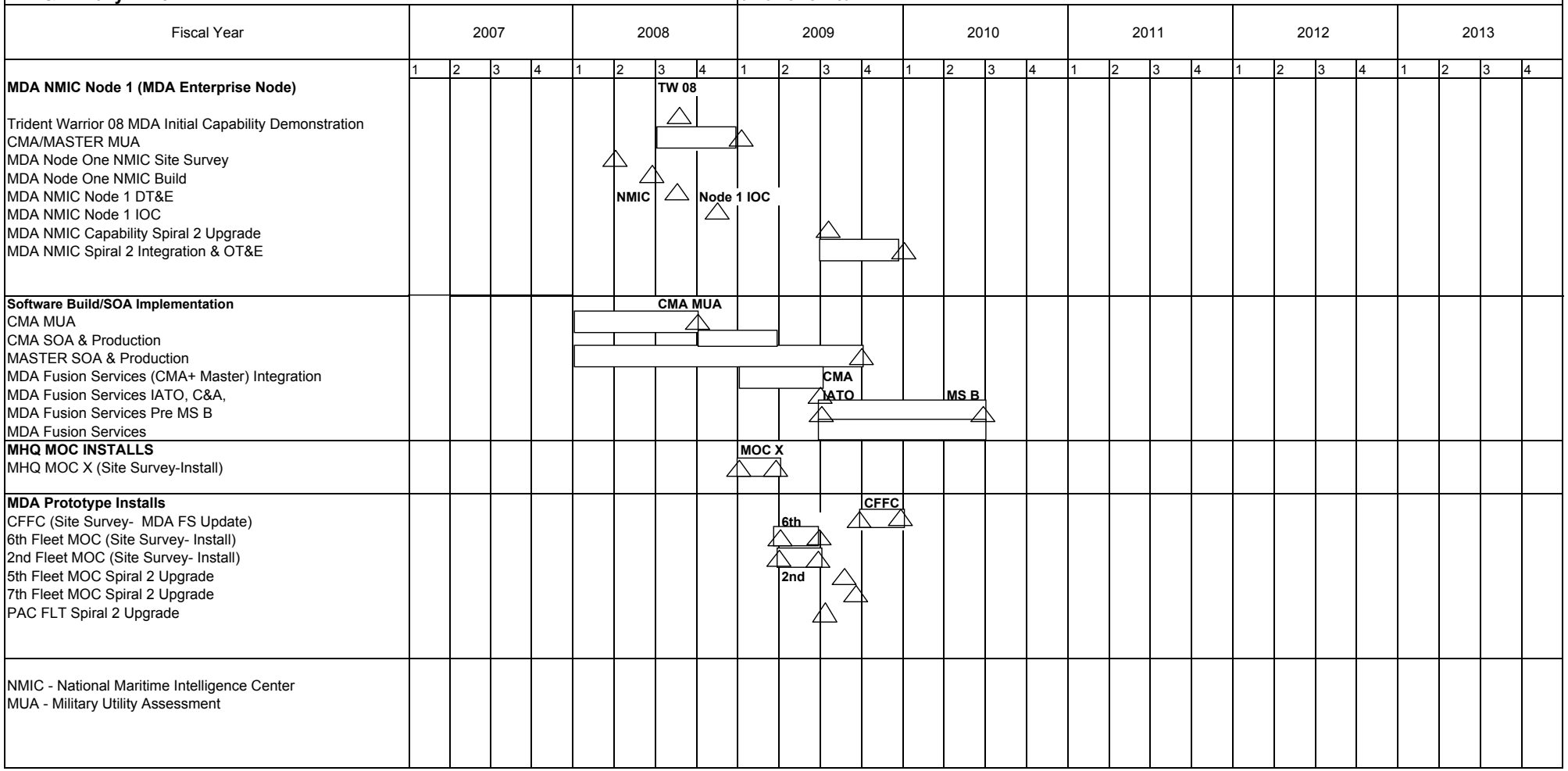


Exhibit R4, Schedule Profile

CLASSIFICATION:

Exhibit R-4a, Schedule Detail			DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E / Navy BA-5**		PROJECT NUMBER AND NAME 9123 FORCEnet					
Schedule Profile	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							
TW[CFY] Execution	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
TW[CFY+1] Data Calls & CAA	2Q	2Q	2Q	2Q	2Q	2Q	2Q
TW[CFY+1] Initial Planning Conferences	4Q	4Q	4Q	4Q	4Q	4Q	4Q
TW[CFY] Mid-Term Planning Conferences	1Q	1Q	1Q	1Q	1Q	1Q	1Q
TW[CFY] Final Planning Conferences	2Q	2Q	2Q	2Q	2Q	2Q	2Q
TW[CFY] Military Utility Assessment	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
Interoperability across Navy Report	2Q	2Q	2Q	2Q	2Q	2Q	2Q
Interoperability across Joint Report	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
ISP Review	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
NCIDS Profiles	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
NNFE Mod/LCS & Certs/Test	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
Imp/SETR	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
S/W Test	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

CLASSIFICATION:

Exhibit R-4a, Schedule Detail			DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E / Navy BA-5**		PROJECT NUMBER AND NAME 9123 FORCEnet					
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
MDA NMIC Node 1 (MDA Enterprise Node)							
Trident Warrior 08 MDA Initial Capability Demonstration		3Q					
CMA/MASTER MUA		3Q-4Q					
MDA Node One NMIC Site Survey		1Q					
MDA Node One NMIC Build		2Q					
MDA NMIC Node 1 DT&E		3Q					
MDA NMIC Node 1 IOC		4Q					
MDA Spiral Two Upgrade			3Q				
MDA Spiral Two Integration, Test & Evaluation			4Q				
Software Build/SOA Implementation							
CMA MUA		1Q-3Q					
CMA SOA & Production		4Q	1Q				
MASTER SOA & Production		1Q-4Q	3Q				
MDA Fusion Services (CMA+ Master) Integration			1Q-2Q				
MDA Fusion Services IATO, C&A,			3Q				
MDA Fusion Services Pre MS B			3Q				
MDA Fusion Services			2Q				
MHQ MOC INSTALLS							
MHQ MOC X (Site Survey - Install)			1Q				
MDA Prototype Installs							
CFFC (Site Survey- MDA FS Update)			4Q				
6th Fleet MOC (Site Survey - Install)			3Q				
2nd Fleet MOC (Site Survey - Install)			2Q				
5th Fleet MOC Spiral Two Upgrade			3Q				
7th Fleet MOC Spiral Two Upgrade			3Q				
PAC FLT Spiral Two Upgrade			4Q				

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - Tactical Command System	9999 Various Congressional Increases

(U) B. Accomplishments/Planned Program

9895 LOGISTICS COMMON OPERATING PICTURE	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.971	0.000	0.000
RDT&E Articles Quantity	0	0	0

Congressional Increase for Logistics Common Operating Picture (LOGCOP)

FY07 Accomplishments - Funds 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.

FY08-09-N/A

9999 DISTRIBUTED MULTI-PLATFORM SENSOR SUPPORT SYSTE	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.000	2.484	0.000
RDT&E Articles Quantity	0	0	0

Congressional Increase for Mission Planning Distributed Multi-Platform Sensor Support System.