Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy									DATE: Feb	ruary 2012				
<b>APPROPRIATION/BUDGET ACTIV</b> 1319: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	n, Navy		<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>										
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost			
Total Program Element	87.273	77.245	71.645	-	71.645	51.697	46.125	55.548	55.572	Continuing	Continuing			
0486.: Tactical Support Center	15.736	12.985	5.245	-	5.245	5.051	5.056	6.293	6.401	Continuing	Continuing			
0709: GCCS-M Maritime Applications	25.219	17.576	5.330	-	5.330	1.852	1.868	1.889	1.922	Continuing	Continuing			
2213: Mission Planning	18.098	20.468	25.195	-	25.195	15.815	11.939	16.136	15.755	Continuing	Continuing			
2307: Shipboard LAN/WAN	0.433	0.308	0.313	-	0.313	-	-	-	-	0.000	1.054			
2351: MDA	18.752	-	-	-	-	-	-	-	-	0.000	18.752			
3032: NTCSS (Naval Tactical Command Spt Sys)	3.483	14.524	15.015	-	15.015	9.502	6.303	1.174	0.931	Continuing	Continuing			
3320: TRIDENT Warrior	-	3.712	3.579	-	3.579	3.020	3.047	2.265	2.303	Continuing	Continuing			
3323: Maritime Tactical Command & Control (MTC2)	-	0.003	7.441	-	7.441	7.305	10.908	21.651	22.016	Continuing	Continuing			
3324: Navy Air Operations Command and Control (NAOC2)	-	2.283	4.983	-	4.983	4.281	2.174	1.136	1.156	Continuing	Continuing			
9123: FORCEnet	5.552	5.386	4.544	-	4.544	4.871	4.830	5.004	5.088	Continuing	Continuing			

#### <u>Note</u>

Project 0709 Global Command & Control System Maritime (GCCS-M) Applications: In FY 2012, the Navy Command Control Air Planning Capability effort was realigned from Global Command and Control System Maritime (GCCS-M) Maritime Applications (x0709) to the Navy Air Operations Command and Control (NAOC2) program (Project Unit x3324).

Project 2351 Maritime Domain Awareness (MDA): MDA RDTEN funding was realigned to Distributed Common Ground System-Navy (DCGS-N) PE 0305208N in FY 2012 and out.

Project 3320 Trident Warrior (TW): Funding transferred from Project 9123 FORCEnet into Project 3320 beginning in FY 2012.

Project 3323 Maritime Tactical Command & Control (MTC2): Beginning in FY 2013, the development of maritime tactical command and control capabilities will be realigned from Global Command and Control System Maritime (GCCS-M) Maritime Applications (Project Unit x0709) to the MTC2 program (Project Unit x3323).

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	

#### A. Mission Description and Budget Item Justification

The Tactical Command System 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.

Tactical Support Center: The Tactical Mobile program provides evolutionary systems and equipment upgrades to support the Maritime Component Commanders (Expeditionary Ashore) and Maritime Patrol and Reconnaissance Force 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 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 Operations Centers (formerly Tactical Support Centers), the Mobile Tactical Operations Centers (formerly Mobile Operations Control Centers), and the Joint Mobile Ashore Support Terminal. TacMobile C2 systems are based on the Global Command and Control System - Maritime architecture which is Defense Information Infrastructure Common Operating Environment compliant.

Global Command and Control System - Maritime (GCCS-M): GCCS-M is the Maritime implementation of the Global Command and Control System (GCCS) Family of Systems (FoS). It supports decision making at all echelons of command with a single, integrated, scalable C4I system that fuses, correlates, filters, maintains and displays location and attribute information on friendly, hostile and neutral land, sea and air forces, integrated with available intelligence and environmental information. It operates in near real-time and constantly updates unit positions and other situational awareness data. GCCS-M also records data in appropriate databases and maintains a history of changes to those records. System users can then use the data to construct relevant tactical pictures using maps, charts, topography overlays, oceanographic overlays, meteorological overlays, imagery, and all-source intelligence information coordinated into a Common Operational Picture that can be shared locally and with other sites. Navy commanders review and evaluate the general tactical situation, plan actions and operations, direct forces, synchronize tactical movements, and integrate force maneuver with firepower. The system operates in a variety of environments and supports joint, coalition, and allied forces. GCCS-M is implemented Afloat and at Ashore fixed command centers. In FY2013, the program will complete the remaining tests of GCCS-M Increment 2 for group level ships and submarines. The program will continue integration efforts with other C2 / Command, Control, Communication and Computers systems within the Navy and Joint community, and will continue planning efforts for the transition of development efforts to the Maritime Tactical Command and Control (MTC2) program in support of Fleet requirements.

Mission Planning: The Joint Mission Planning System (JMPS) is the designated automated mission planning system for the Navy. JMPS enables weapon system employment by providing the information, automated tools, and decision aids needed to rapidly plan aircraft, weapon, or sensor missions, load mission data into aircraft and weapons, and conduct post-mission analysis. JMPS is a mission critical system which is a co-development effort between the United States Navy (USN) and United States Air Force (USAF). Common requirements are identified and capabilities are developed and prioritized in an evolutionary approach. An individual JMPS mission-planning environment is a combination of the JMPS framework, common capabilities, and the necessary system hardware required to satisfy mission planning objectives. Most Tactical Naval Aviation platforms are dependent solely on JMPS to plan precision guided munitions, sensor systems, tactical data links, secure voice communications, and basic Safety of Flight functions. The following type/model/series (T/M/S) naval aircraft are supported by JMPS: F/A-18 A-F, E-2C, EA-6B, AV-8B, S-3, V-22, Chief of Naval Air Training (CNATRA), EA-18G, MV-22, C-2, MH-53E, Aircraft Carrier Intelligence Center (CVIC), SH-60B/F, HH-60H, CH-53D/ E, CH-46E, UH-1N and VH-3/VH-60. All of the aforementioned T/M/S are required to transition to Microsoft Windows 7 before Microsoft XP support ends April 2014 by using Framework (FW) Version 1.3.5. Future JMPS platforms include: AH-1Z/W, UH-1Y, MH-60R/S, P-3, KC-130T/J, EP-3E, Broad Area Maritime Surveillance

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	1
319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	
BA 5: Development & Demonstration (SDD)		
route "publish and subscribe" capabilities. Funding profile reflerequirements.	ects required operating system upgrades due to emerging	technology and Information Assurance (IA)
Shipboard Local Area Network (LAN)/Wide Area Network (WA speed SECRET and UNCLASSIFIED LANs, providing the network and access to the Defense Information Systems Network WAN		

by other hosted applications or systems such as Naval Tactical Command Support System, Global Command and Control System - Maritime, Defense Messaging System. Navy Standard Integrated Personnel System, Naval Mission Planning System, Theater Battle Management Core Systems, and Tactical Tomahawk Weapons Control System. 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 also known as Afloat Core Services (ACS) which is the mechanism to deliver the FORCEnet interface to the warfighter. ACS 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. ACS 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. The ACS 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 users to task, post, process, use, store, manage, and protect information resources on demand for warfighters, policy makers, and support personnel. ACS will utilize a spiral process for delivering capability to the warfighter. The ISNS Inc 1, Sensitive Compartmented Information (SCI) Networks and Combined Enterprise Regional I

Maritime Domain Awareness (MDA): MDA 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 infrastructures; 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 across the non-classified, unclassified and classified enclaves. Additionally, MDA will ensure capability integration with related activities and sites (both technologies and facilities). 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 within the DCGS-N Increment 2 Program of Record. This includes the enhanced and future fusion and analysis capabilities defined in the Maritime Fusion and Analysis Services Initial Capabilities Document (MFAS ICD), DCGS Enterprise ICD, and the DCGS-N Increment 2 Gap Analysis. The products support all-source data fusion, development and replication of MDA and Intelligence Surveillance and Reconnaissance( ISR) related data gathered in various operations such as Expanded-Maritime Intercept Operations, sharing information with allies, and developing subject matter expertise and assessment tools to achieve MDA and enhance operational decision making.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	

Naval Tactical Command Support System (NTCSS): Enterprise Database and Maritime Logistics Data Network (MLDN): The NTCSS is a multi-function program designed to provide standard tactical support information systems to various afloat and associated shore-based fleet activities. The mission is to provide the Navy and Marine Corps with an integrated, scalable system that supports the management of logistical information, personnel, material and funds required to maintain and operate ships, submarines, and aircraft.

Maritime Tactical Command and Control (MTC2): provides Navy with the ability to deliver maritime domain-unique tactical Command and Control (C2) capabilities from Maritime Operations Centers down to the lowest tactical unit of operations. MTC2 supports alignment and provides interoperability of Navy C2 with the DoD joint C2 way-forward. The program will fully align with joint C2 data and service exposure and consumption goals, architectures, and Net-Centric Enterprise Service efforts. These resources support the evolutionary acquisition, materiel solution analysis, technology development, engineering and software development of these capabilities.

Navy Air Operations Command and Control (NAOC2): integrates and tests Air Force produced systems that provide for an integrated and scalable planning system that provides standardized, secure, automated decision support for Air Force, Joint, and Allied commanders worldwide. These programs provide automated air operations planning, execution management and intelligence capabilities at the Force level to include Fleet Commanders, Numbered Fleet Commanders, Commander Carrier Strike Group, Commander Expeditionary Strike Group, Commander Landing Force, and Joint Task Force Commanders. NAOC2 includes Theater Battle Management Core System (TBMCS), Command and Control Air and Space Operations Suite (C2AOS), plus Command, Control and Information Services (C2IS). C2AOS and C2IS are being developed as Service Oriented Architecture (SOA) services to allow for scalability and integration with Common Computing Environments (CCE). Continuation of these efforts will significantly enhance the Joint Force Air Component Commander (JFACC) and Combined Air Operations, addressing the requirement of war fighter of distributed planning and execution processes and significantly improving Joint interoperability. TBMCS continues a hardware transition to CCEs such as Consolidated Afloat Networks and Enterprise Services (CANES). Currently, TBMCS is the key system that is used to conduct real world air planning in the Joint and Navy environment. C2AOS and C2IS will replace TBMCS in a SOA environment while bringing more flexibility to the war fighter, planner, and executor. In FY2012, the program will continue efforts previously funded by Global Command and Control System Maritime (GCCS-M) to migrate Air Force delivered TBMCS software to the Navy unique CANES environment.

FORCEnet: Initiative's mission is to deliver Information Dominance by (a) accelerating the transformation to a Distributed, Networked force; (b) achieve interoperability 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, Command and Control (C2), platforms and warriors.

Trident Warrior (TW): From FY 2012 forward, funding transferred from Project 9123 FORCEnet into Project 3320 Trident Warrior. TW enables early delivery of Net-Centric Operation/Warfare (NCO/W) capabilities to the warfighter via Fleet-directed Trident Warrior operational events with an emphasis on delivering Maritime Domain Awareness (MDA) with Maritime Operations Center (MOC) capability.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy					ebruary 2012
PPROPRIATION/BUDGET ACTIVITY 319: Research, Development, Test & Evaluation, Navy A 5: Development & Demonstration (SDD)		EM NOMENCLA 04231N: Tactical	TURE Command System		
Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	89.955	81.257	49.709	-	49.709
Current President's Budget	87.273	77.245	71.645	-	71.645
Total Adjustments	-2.682	-4.012	21.936	-	21.936
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.012			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-4.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	1.889	-			
SBIR/STTR Transfer	-2.086	-			
<ul> <li>Program Adjustments</li> </ul>	-	-	21.882	-	21.882
Rate/Misc Adjustments	-	-	0.054	-	0.054
<ul> <li>Congressional General Reductions Adjustments</li> </ul>	-0.485	-	-	-	-
Congressional Directed Reductions     Adjustments	-2.000	-	-	-	-

Schedule: TACTICAL SUPPORT CENTER (Project 0486): Operational Test is scheduled for 2nd Qtr FY12. FRP is scheduled for 4th Qtr FY12.

Global Command and Control System - Maritime (GCCS-M) (Project 0709):

In March 2011, GCCS-M Increment 2 was declared to have reached its Initial Operational Capability (IOC) after successfully demonstrating Operational Suitability and Operational Effectiveness of the Unit Level (Patrol Coastal) variant to Commander Operational Test and Evaluation Force.

Due to the delay in release of Request For Proposal and subsequent Delivery Order Awards, the following events were delayed by 1 quarter; Group Level Final Engineering Drop, Development Test, Operational Assessment, Technical Evaluation, Operational Test, and Fielding Decision Review. Overall, the program incurred a six month delay in the Group Level development effort.

Global Force Management - Data Initiative (GFM-DI) development included in the GCCS-M baseline in FY 2013.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	
BA 5: Development & Demonstration (SDD)		
Mission Planning (Project 2213):		
Acquisition Milestones:		
JMPS V1.4 IOC 3Q FY13/ Removed from schedule - Due	e to USAF Increment IV (PE 0208006F) Critical Char	nge Review, FW V1.4 will not achieve Windows 7
transition need date.		
JMPS V1.3.5 IOC - Details added to the schedule in 4Q		
program (OFP) development schedules of EA-6B, V-22 a		
correct operating system, Windows 7, without significantly System Development:	y delaying the MPE and platform OFP development	and test schedules.
JMPS V1.4 OTRR 3Q FY12/Removed from schedule -	Due to LISAE Increment IV (PE 0208006E) Critical C	bange Review, FW V1.4 will not achieve Windows
transition need date.		
JMPS V1.3.5 OTRR - Details added to the schedule in 1	1O FY13 In order to accommodate the mission plan	ning environment (MPE) and platform operational
flight program (OFP) development schedules of EA-6B, V		
the correct operating system, Windows 7, without signification		
JMPS FW 64 Bit Architecture Development - Details adde		
Development is required to transition from current FW 32	bit to 64 bit architecture. Failure to move to 64 bit m	nay result in an inability to support future advanced
platform mission planning needs based on processing sp	ace and capability.	
Test and Evaluation		
JMPS V1.4 OT 4Q FY12-1Q FY13/ Removed from sched	lule - Due to USAF Increment IV (PE 0208006F) Crit	ical Change Review, FW V1.4 will not achieve
Windows 7 transition need date.		
JMPS V1.3.5 OT - Details added to the schedule. Effort r		
operational flight program (OFP) development schedules		
that will offer the correct operating system, Windows 7, w		
JMPS FW 64 Bit Architecture Integration/Validation - Deta Integration/Validation is required to transition from current		
advanced platform mission planning needs based on proc		of bit may result in an mability to support future
advanced plation mission planning needs based on plot	cessing space and capability.	
Maritime Domain Awareness (MDA) (Project 2351):		
MDA program schedule has been modified to reflect the t	transition of MDA capabilities as defined in the Mariti	me Fusion and Analysis Services (MFAS) Initial
Capabilities Document (ICD) into the Distributed Common		
identified funding in FY 2012 and beyond has been realig		
	( 0000)	
Naval Tactical Command Support System (NTCSS) (Proj		for a strategic de la secondada esta en esta <del>a</del> n esta for
Increasing requirements in information security and function		
schedule reflects a more integrated plan to accomplish re		
approaches and build requirements are solidified, change	es to the schedule will reliect more accurate time fran	thes for multiple in 1000 system bullas.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	
BA 5: Development & Demonstration (SDD)		

Maritime Tactical Command and Control (MTC2) (Project 3323):

MTC2 will follow the DoD Rapid Information Technology Acquisition process. Milestone decisions are no longer applicable, but rather replaced by Build Decisions (BDs) and Fielding Decision Reviews (FDRs) for each release of new capabilities to the user community. The MTC2 Materiel Development Decision (MDD) will be documented and supported by a Build Decision (Release 1) which will authorize entry into the program's Incremental & Iterative Developmental & Deployment (IIDD) phase and development of intial software capabilities required by the fleet. A FDR will be conducted following the successful completion of an Operational Test. Subsequent tentative BDs/FDRs have been added to the schedule, which will be further updated as funding and user needs are finalized in the future.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: Feb	ruary 2012		
APPROPRIATION/BUDGET ACTIVITY       R-1 ITEM NOMENCLATURE         1319: Research, Development, Test & Evaluation, Navy       PE 0604231N: Tactical Command System         BA 5: Development & Demonstration (SDD)       PE 0604231N: Tactical Command System				PROJECT 0486.: Tacti	cal Support	Center					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0486.: Tactical Support Center	15.736	12.985	5.245	-	5.245	5.051	5.056	6.293	6.401	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

The Tactical/Mobile program provides evolutionary systems and equipment upgrades to support Maritime Component Commanders (Expeditionary Ashore) and Maritime Patrol and Reconnaissance Force 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 Operations Centers (TOCs), the Mobile Tactical Operations Centers (MTOCs), and the Joint Mobile Ashore Support Terminals (JMASTs). Services provided include analysis and correlation of diverse sensor information; data management support; command decision aids; rapid data communication; mission planning, evaluation and dissemination of surveillance data and threat alerts to operational users ashore and afloat. Tactical/Mobile Command and Control systems are based on the Global Command and Control System - Maritime (GCCS-M) architecture, which is defense information infrastructure common operating environment compliant.

TOCs and MTOCs 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. MTOCs are scalable and mobile versions of the TOC for operations from airfields that do not have TOC support. This program assures that existing TOCs and MTOCs are modernized to fulfill their operational requirements. TOC/MTOC will continue to provide the ground Command and Control capabilities and C4I interfaces for the MPRF Family of Systems aircraft and systems evolution including P-3C aircraft updates to sensors and weapons systems, such as the anti-surface warfare maritime improvement program, and the Command Control Communications Computers for Anti-Submarine Warfare (C4 for ASW) P-3C aircraft upgrades, P-8A Multi mission Aircraft (MMA) Increment 1, as well as development of emergent, ground C4I support capabilities for the P-8A MMA Increment 2 and the Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS).

JMAST supports the Fleet commanders, Naval component commanders, and other military commanders from forward deployed bases or operational sites ashore that are not equipped with C4I facilities. It provides the Navy component, and other military commanders with flexible, mobile, organic response, 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 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, as well as augments improvements in airborne networking. Transformation of the TOC/MTOC Force to a more mobile, scalable, and Network-centric Services Oriented Architecture (SOA) configuration, convergence of TOC, MTOC to a single configuration, and as an integral component of the Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems, operational Command, Control, Communications, Computers and Intelligence (C4I) integration support for new and upgraded Maritime Patrol and Reconnaissance Aircraft (MPRA) such as MMA, Aircraft Improvement Program, BAM UAS as well as other Command and Control and fighter aircraft are primary objectives.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Februa	ary 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		OJECT				
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command Syste	tem 0486.: Tactical Support Center					
FY13: Funding supports TacMobile systems development to achieve for additional security enclaves, and enhancing flexibility and mobility, P-8A MMA operations. Network-centric SOA and airborne C4I integra networking technologies are matured. Development will achieve inter enhancing mobility capability. The DARK FUSION JCTD will provide intelligence analysts, joint warf significant maritime domain awareness (MDA) improvement, aimed at fasts", semi-submersibles, non-emitting vessels, etc.) not being detect not be emitting their normal complement of maritime signals (e.g., not	to offset the size/weight/cube of additional ation efforts continue as improvements to a operability with emerging MPRF aircraft an ighters, Combatant Commanders (COCON t increased awareness of certain vessels a ted by current means, using newly develop	I required ai airborne and ad sensors v A) and othen nd "dark" ta bed and und	ircraft interfa I intelligence while reduci r interagenc irgets (e.g.,	aces develo e/surveilland ng TacMobi y senior deo smaller ves	ped to supple ce/reconnai le footprint cision make sels, "fast r	oort ssance ers novers/go	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quar	ntities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
<i>Title:</i> Net Ready	Articles:	0.900 0	0.789 0	0.638 0	-	0.638 0	
<b>FY 2011 Accomplishments:</b> Communications: Began investigation of technology readiness and ove System (JTRS) and other software definable radio options for applicable communications architecture. Conduct developmental test and evaluat Beyond Line of Sight (BLOS) Internet Protocal (IP) solutions. Began in standards to the wide band BLOS networking systems. Investigated re Command and Control (ROWC2) reach-back IP connectivity options.	lity for incorporation into TacMobile ion of cipher text routing wide band tegration of converged IP interoperability						
<b>FY 2012 Plans:</b> Communications: Conduct operational test and evaluation of cipher test System (ADNS) Architecture and Routing, wide band BLOS IP capabil to investigate and develop analysis of alternatives of identified Joint Tac other software definable radio options for incorporation into TacMobile Refresh 2.1.1). Continue investigation of requirements for ROWC2 real communications continuity.	ities (Increment 2.1). Continue ctical Radio System (JTRS) and communications architecture (Tech						
<b>FY 2013 Base Plans:</b> Communications: Begin down select study of alternatives for identified or other software definable radio options for incorporation into TacMob down select study for ROWC2 reach-back IP connectivity options for co	ile communications architecture. Begin						
Title: Tactical Mobile Acoustic Support System (TACMASS)		0.745	0.736	0.736	-	0.736	

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY		OJECT				
319: Research, Development, Test & Evaluation, Navy 3A 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command System	m 048	86.: <i>Tactica</i>	I Support C	enter	
3. Accomplishments/Planned Programs (\$ in Millions, Articl	le Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
	Articles:	0	0	Dase 0	000	TOLAI
FY 2011 Accomplishments: Analysis: Conducted Developmental Test and Evaluation of cap interfaces for P-8A Multi mission Aircraft (MMA) Increment 1 Inter ISR) and Anti Submarine Warfare sensor systems. Assessed a and concurrent processing capabilities, automation capabilities, development/integration of auto detection, tracking and screenin workload and increase Anti Submarine Warfare (ASW)probabilit proadband processing capabilities. Integrated acoustic intercep capabilities to support evolving data standards and media interfa Surveillance/Reconnaissance (ISR) and ASW sensor systems. and Advanced Multi-Static Acoustic Analysis capabilities require Aircraft (MMA) Increment 2. Began analysis for development ar	elligence/Surveillance/Reconnaissance and evaluated advanced multi static, digital and advanced display formats. Completed ng capabilities to reduce acoustic analyst by of detection. Began development of enhanced t system updated screeners. Integrated analysis aces for Maritime Patrol Aircraft Intelligence/ Began development and integration of Improved ed to support fielding of P-8A Multi mission					
<b>FY 2012 Plans:</b> Conduct Operational Test and Evaluation of capabilities to supp P-8A MMA Increment 1 ISR and ASW sensor systems (Increme proadband processing capabilities. Continue Integration of Acor Continue Integration of analysis capabilities to support evolving maritime patrol aircraft ISR and ASW sensor systems. Continue and advanced multi-static acoustic analysis capabilities required Continue development and integration of high altitude ASW capa	ent 2.1). Continue development of enhanced ustic Intercept System updated screeners. data standards and media interfaces for e development and integration of improved I to support fielding of P-8A MMA Increment 2.					
<b>FY 2013 Base Plans:</b> Conduct development testing of selected enhanced broadband p developmental testing of acoustic intercept system updated scree analysis capabilities to support evolving data standards and med and ASW sensor systems. Begin integration and developmenta acoustic analysis capabilities required to support fielding of P-8A developmental testing of high altitude ASW capabilities.(Tech Re for expeditionary post flight analysis capability. Begin requireme (AAS). (Increment 3)	processing capabilities. Begin integration and eeners. Begin development and integration of dia interfaces for maritime patrol aircraft ISR I testing of improved and advanced multi-static A MMA Increment 2. Begin integration and efresh 2.1.1) Establish analysis of alternatives					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy				DATE: Febru	ary 2012	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syste</i>		PROJECT 0486.: <i>Tactica</i>	enter		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	·	FY 2011		FY 2013 Base	FY 2013 OCO	FY 2013 Total
<i>FY 2011 Accomplishments:</i> Media: Conducted developmental test and evaluation of new ground sup being developed for Maritime Patrol and Reconnaissance Aircraft (MPR/ 1. Continued to evaluate design requirements for those interfaces requir surveillance unmanned aerial system to ensure platform Warfighting who assess network-centric interfaces. Began review and analysis of integra Increment 2.	A) incorporating P-8A MMA Increment red to support broad area maritime bleness. Continued to evaluate and		0 0	0		
<b>FY 2012 Plans:</b> Media: Conduct operational test and evaluation of new ground support c being developed for Maritime Patrol and Reconnaissance Aircraft (MPR/ Maritime Aircraft (MMA) Increment 1 (Increment 2.1). Continue to evalua required to support Broad Area Maritime Surveillance Unmanned Aerial 3 Warfighting wholeness. Continue to evaluate and assess network-centri integration requirements for P-8A MMA Increment 2. Begin developmen P-8A MMA Increment 2 (Tech Refresh 2.1.1).	A) incorporating P-8A Multi-mission ate and design for those interfaces System (BAMS UAS) to ensure platform c interfaces. Continue analysis of					
<b>FY 2013 Base Plans:</b> Media: Continue to evaluate and design for those interfaces required to swarfighting wholeness. Continue to evaluate and assess network-centric developing testing of those interfaces required to support P-8A Increment Advanced Airborne Systems (AAS). Begin analysis of integration require 3)	c interfaces.(Tech Refresh 2.1.1). Begin at 2. Begin requirements analysis for					
Title: Tactical Data Links	Articles:	0.16	9 0.158 0 0		-	0.158
<b>FY 2011 Accomplishments:</b> Continued to explore emergent Tactical Data Links (TADIL) standards and develop alternatives for TacMobile TADIL transition roadmap. Conducte TADIL in conjunction with P-8A MMA Increment 1. Began review and as replacement options.	d integrated developmental testing of					
FY 2012 Plans:						

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syste</i>		<b>OJECT</b> 86.: <i>Tactica</i>	Support Co	enter	
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	<u>ntities in Each)</u>	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Conduct operational test and evaluation of TADIL capabilities to support for P-8A MMA Increment 1 and legacy P-3C Orion Intelligence/Surveill Submarine Warfare tactical data exchange (Increment 2.1.1). Evaluate analysis of alternatives options for TacMobile TADIL transition roadma	ance/Reconnaissance (ISR) and Anti e, assess, prioritize and down select					
<b>FY 2013 Base Plans:</b> Begin integration and commence developmental testing for selected of roadmap.	ption for TacMobile TADIL transition					
Title: Enterprise Solutions	Articles:	1.107	0.380 0	0.581	-	0.581
<b>FY 2011 Accomplishments:</b> Began design of tactical mobile networking infrastructure to comply with Agency and Navy net-centric operating standards that support evolution Architecture (SOA) with cross domain accessibility. Conducted develop of network infrastructure to meet increased ISR data volume, provide r QOS. Continued investigation into modern navy networking infrastruct environment that comply with net ready, Defense Information Systems operating standards that support evolutionary transition to a Services O accessibility. Began study of data at rest storage, data content manag Multi mission Aircraft (MMA) Increment 2 and Broad Area Maritime Sur (BAMS UAS) mission data. Continued research of available options for Common Ground System Navy (DCGS-N) capabilities.	phary transition to a Services Oriented opmental/integrated, test and evaluation edundant back-up and disaster recovery ture appropriate for a tactical and mobile Agency (DISA) and Navy net-centric Driented Architecture with Cross Domain ement and security requirements for P-8A rveillance Unmanned Aircraft System					
<b>FY 2012 Plans:</b> Continue design of tactical mobile networking infrastructure to comply Centric Operating standards that support evolutionary transition to a C Services (CANES) compatible SOA with cross domain accessibility (Te test and evaluation of network infrastructure to meet increased Intellige data volume, provide redundant back-up and disaster recovery Quality testing and evaluation of network infrastructure to meet increased ISR and disaster recovery QOS, and architectural updates to maintain evol (Increment 2.1). Begin development of tactical and mobile architectural with net ready, DISA and Navy net-centric operating standards that sup	onsolidated Afloat Network Enterprise ech Refresh 2.1.1). Conduct operational ence/Surveillance/Reconnaissance (ISR) of Service (QOS). Conduct operational data volume, provide redundant back-up ving information assurance standards. al networking infrastructure that complies					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PF	ROJECT			
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command Syste	<i>m</i> 04	86.: Tactica	Support Co	enter	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	<u>tities in Each)</u>	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
cross domain accessibility. Begin development of data at rest storage, requirements for P-8A Increment 2.0 and BAMS UAS mission data (Tec options for incorporation of appropriate DCGS-N capabilities (Increment	ch Refresh 2.1.1). Assess available					
<b>FY 2013 Base Plans:</b> Begin integration and developmental testing of tactical mobile networkin DISA and Navy net-centric operating standards that support evolutionar SOA with multi-level enclaves accessibility. Begin developmental testing management and security requirements for P-8A Increment 2.0 and BA options for incorporation of appropriate DCGS-N capabilities. (Increment	y transition to a CANES compatible g of data at rest storage, data content MS UAS mission data. Assess available					
Title: Command and Control (C2)	Articles:	0.202 0	0.202 0	0.402 0	-	0.402 0
<b>FY 2011 Accomplishments:</b> Continued integration and developmental test and evaluation of Global (GCCS-M) 4.0.3 to provide intelligence preparation of the battle space of (SIGINT), Electronic Warfare (EW), and general military intelligence dat display, and processing capabilities that meet information assurance state Began identification of follow on Command and Control (C2) prototype. Patrol and Reconnaissance Force (MPRF) Commander Task Force (CT) track data correlation and fusion tool options.	capabilities, access to Signal Intelligence abase products, and COP management, andards and maintain interoperability. Investigated and studied Maritime					
<b>FY 2012 Plans:</b> Conduct Operational Test and evaluation of GCCS-M 4.0.3 to provide In Space capabilities, access to SIGINT, EW, and general military intellige management, display, and processing capabilities that meet information interoperability (Increment 2.1). Continue integration of follow on C2 pro for capabilities to support MPRF CTF C2 requirements and C2 track dat (Tech Refresh 2.1.1/Increment 3.0)	nce database products, and COP a assurance standards and maintain ptotype. Develop analysis of alternatives					
<i>FY 2013 Base Plans:</i> Begin investigating GCCS-M 4.0.3 replacement options to provide Intell capabilities, access to SIGINT, EW, and general military intelligence dat display, and processing capabilities that meet information assurance stat Continue integration of follow on C2 prototype.(Tech refresh 2.1.1) Beg	tabase products, and COP management, andards and maintains interoperability.					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PF	ROJECT						
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command System 0486.: Tactical Support C								
B. Accomplishments/Planned Programs (\$ in Millions, Article Quar	ntities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total			
of a correlator, to support MPRF CTF C2 requirements and C2 track da (Increment 3)	ata correlation and fusion tool options.								
Title: Mission Planning	Articles:	1.383 0	-	-	-	-			
<b>FY 2011 Accomplishments:</b> Mission Planning: Conducted developmental test and evaluation of marmission planning user environment, maritime patrol weapons planning aircraft pre-flight insertion data outputs. Studied and evaluated P-8A m broad area maritime surveillance unmanned aerial system mission plan prototype development of alternatives.	environment, and TacMobile systems aulti-mission aircraft Increment 2 and aning requirements, to prepare for								
Title: Maritime Patrol and Reconnaissance Force (MPRF) Interoperabi	lity/TacMobile Footprint Reduction <i>Articles:</i>	3.816 0		2.147 0	-	2.147 C			
<b>FY 2011 Accomplishments:</b> Architecture Engineering: Began design for integration of modular and mobile system architecture footprint. Began design for convergence of Mobile Tactical Operations Center (MTOC) architecture toward commo training requirements and duplicative life cycle logistics costs. Began a for incorporating automation of TacMobile system functionality to reduce Maritime Patrol and Reconnaissance Force (MPRF) Intelligence Surveit mission/function/task growth. Began design to achieve reduction and or devices and to streamline data transfer rates.	Tactical Operations Center (TOC) and n baseline to reduce platform unique inalyzing alternative courses of action e operator workload, to offset increasing Ilance and Reconnaissance (ISR)								
<b>FY 2012 Plans:</b> Conduct operational test and evaluation of maritime patrol anti-submarienvironment, Maritime Patrol weapons planning environment, and Tac Insertion Data outputs(Increment 2.1). Continue development of P-8A M and Broad Area Maritime Surveillance Unmanned Aerial System (BAM technical upgrades. Continue design for integration of modular and harmobile system architecture footprint. Continue design for convergence toward common baseline to reduce platform unique training requirement costs. Begin development of automated TacMobile system functionalit increasing MPRF Intelligence Surveillance and Reconnaissance (ISR)	Mobile systems Aircraft Pre-flight Multi Mission Aircraft (MMA) Increment 2 S UAS) mission planning interoperability rdware independent solutions to reduce of TOC and MTOC architecture hts and duplicative life cycle logistics y to reduce operator workload, to offset								

Exhibit R-2A, RDT&E Project Justif	fication: PB	2013 Navy							ATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTIVI	TY		1	R-1 ITEM NO	OMENCLAT	JRE	F	PROJECT			
1319: Research, Development, Test &		Navy	F	PE 0604231	N: Tactical C	ommand Sys	tem (	0486.: <i>Tactica</i>	al Support (	Center	
BA 5: Development & Demonstration	(SDD)										
B. Accomplishments/Planned Prog	<u>rams (\$ in N</u>	<u>/iillions, Art</u>	icle Quantit	ties in Each	)				FY 2013	FY 2013	FY 2013
							FY 2011	I FY 2012	Base	000	Total
design to achieve reduction and cons rates. Develop functionality that supp (Tech Refresh 2.1.1/Increment 3).											
FY 2013 Base Plans:											
Begin developmental testing and eva interoperability upgrades. Begin devi solutions to reduce mobile system and TOC and MTOC architecture toward duplicative life cycle logistics costs. ( reduce operator workload, to offset in achieve reduction and consolidation of Refresh 2.1.1) Develop functionality environment.(Increment 3)	elopmental te chitecture foo common bas Continue dev ocreasing MP of MPRA me	esting and ir otprint. Begin eline to reduced elopment of PRF ISR Mis dia interface	tegration of n developme uce platform automated sion/Functio devices and	modular and ental Testing unique train TacMobile s n/Task grow d to optimize	I hardware in for converge ing requirem ystem function th. Continue data transfe	ndependent ence of nents and conality to e design to er rates. (Tech	1				
<i>Title:</i> Dark Fusion						Articles	6.77	1 6.474		-	-
Description: Dark Fusion						Anticies		0 0			
EV 2011 Accomplichmenter											
FY 2011 Accomplishments: N/A											
<b>FY 2012 Plans:</b> Integrate DARK Fusion capability into Technical demonstrations, Operation											
			Accomplis	hments/Pla	nned Progra	ims Subtotal	<b>s</b> 15.73	12.985	5.24	5 -	5.24
C. Other Program Funding Summa	ry (\$ in Milli	ons)									
			<u>FY 2013</u>	<u>FY 2013</u>	<u>FY 2013</u>					<u>Cost To</u>	
Line Item	<u>FY 2011</u>	<u>FY 2012</u>	Base	000	Total	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>		Complete	
• OPN/0204271N/2246: <i>MPRF</i>	18.485	13.453	18.428	0.000	18.428	18.184	18.336	17.767	18.263	Continuing	Continuin
Mission Support • OPN/0204660N/2906: TacMobile	9.778	10.876	11.886	3.603	15.489	18.232	18.099	15.713	16.153	Continuing	Continuin
PE 0604231N: Tactical Command Sv	-4			UNCLAS							

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	PROJECT 0486.: Tactio	cal Support Center
<b>D. Acquisition Strategy</b> Evolutionary Acquisition - Increment 2.0 provided enhanced Beyond Li Situational Awareness connectivity enhancements for data exchange w It incorporates Anti Submarine Warfare (ASW) acoustical analysis impr on Global Command and Control System - Maritime (GCCS-M) version Refresh 2.1.1 will support technical engineer changes associated with the Maritime Surveillance (BAMS) Unmanned Aerial System (UAS). Increment The Dark Fusion Joint Capabilities Technical Demonstration (JCTD) aco Research Laboratory (NRL).	vith Maritime Patrol and Reconnaissance Force (I ovements and new P-3 aircraft ASW interfaces. A 4.0.3 and introduction of the P-8A Multi-mission the introduction of P-8A Multi-mission Maritime Ai nent 3 will incorporate support for other MPRF Fa	MPRF) aircra Increment 2. Maritime Airc ircraft (MMA) mily of Syste	ft and with Coalition data networks. 1 will support migration to follow craft (MMA) Increment 1. Tech Increment 2, and the Broad Area ms FOS) aircraft and systems.

#### E. Performance Metrics

The primary metrics utilized by the TacMobile program development process, include achieving/maintaining all required Interface Exchange Requirements (IER's) and successful achievement of 100% of key performance parameters for incremental upgrade threshold capabilities, as observed by Commander Operational Test Force representatives during operational evaluation. TacMobile Inc 2.1 development supports increased IER requirements of 486% from 112 to 544. Development to support these new IER's tapers off in FY-12 as Increment 2.1 enters the operational evaluation phase. Development focus then shifts to efforts required to retain fielded IER's and update IER's to comply with emerging and evolving standards associated with P-8A MMA Increment 2, and BAMS UAS, other MPRF FOS aircraft and systems, and evolving operational employment concepts.

Critical Operating Issues (COIs) and Measures of Performance (MOPs) are outlined in the Dark Fusion JCTD Implementation Directive. The JCTD will be conducting User Juries (UJs) for SME and analyst

feedback.

Exhibit R-3, RDT&E Pro	-		Navy								E: Februar	y 2012	
APPROPRIATION/BUDO 1319: Research, Develop BA 5: Development & De	oment, Tes	t & Evaluation, Navy			ITEM NON 0604231N:		-	System	<b>PROJ</b> 0486.:	ECT Tactical St	upport Cen	nter	
Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	SSC LANT; Northrop Grumman; SAIC:Charleston; SC; Pax River, MD	5.384	0.776		0.647	Oct 2012	-		0.647	Continuing		
Systems Engineering	C/CPIF	SSC LANT; Northrop Grumman, SAIC, BAH, Solute:Charleston, SC; Pax River, MD; San Diego, CA	28.274	0.480	Oct 2011	0.529	Oct 2012	-		0.529	Continuing	Continuing	Continuing
Training Development	C/CPIF	SSC LANT; SAIC; Solute:Charleston, SC; Pax River, MD; San Diego, CA	1.361	0.500	Nov 2011	0.400	Nov 2012	-		0.400	Continuing	Continuing	Continuing
Tech Mgmt, Fusion, SOA, IT, Admin,Security	Various	NRL:Washington,DC	4.159	4.197	Oct 2011	-		-		-	0.000	8.356	
ACINT w/ demo support and leave behind	Various	NRL:Washington DC	1.296	1.243	Oct 2011	-		-		-	0.000	2.539	
NTM GEOINT data sources and support	Various	NRL:Washington DC	0.791	0.287	Oct 2011	-		-		-	0.000	1.078	
		Subtotal	41.265	7.483		1.576		-		1.576			
Support (\$ in Millions)				FY 2	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	C/CPIF	SSC LANT; Northrop Grumman; SAIC:Charleston, SC; Pax River, MD	45.999	0.302	Nov 2011	0.302	Nov 2012	-		0.302	•		Continuing
Integrated Logistics Support	C/CPIF	SSC LANT; SAIC:Charleston, SC; Pax River, MD	0.350	0.225	Nov 2011	0.225	Nov 2012	-		0.225	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Pro	ject Cost	Analysis: PB 2013 N	lavy							DATI	E: Februar	y 2012	
APPROPRIATION/BUDG 1319: Research, Develop					ITEM NON 0604231N:		-	System	<b>PROJ</b>	ECT Tactical Sι	innort Cen	ter	
BA 5: Development & De					000420111.			ystem	0400				
Support (\$ in Millions)			Γ	FY 2	2012		2013 se	FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Configuration Management	WR	SSC LANT; SAIC;:Charleston, SC; Pax River, MD	0.275	0.175	Nov 2011	0.175	Nov 2012	-		0.175	•	Continuing	Continuin
Technical Data	WR	SSC LANT; Northrop Grumman; SAIC:Charleston, SC; Pax River, MD	0.380	0.220	Oct 2011	0.220	Oct 2012	-		0.220	Continuing	Continuing	Continuin
Studies & Analyses	C/CPIF	SSC LANT; Northrop Grumman; SAIC; Solute:Charleston, SC; Pax River, MD; San Diego, CA	0.425	0.100	Nov 2011	0.100	Nov 2012	-		0.100	Continuing	Continuing	Continuin
	1	Subtotal	47.429	1.022		1.022		-		1.022			
Test and Evaluation (\$ i	n Millions	)	Γ	FY 2	2012	FY 2 Ba	2013 se	FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	C/CPIF	SSC LANT; SAIC:Charleston, NC; Pax River, MD	1.400	0.250	Nov 2011	0.440	Nov 2012	-		0.440	Continuing	Continuing	Continuin
Operational Test & Evaluation	MIPR	OPTEVFOR; SSC LANT; SAIC:Jacksonville, FL	4.236	1.050	Nov 2011	0.350	Nov 2012	-		0.350	Continuing	Continuing	Continuin
		Subtotal	5.636	1.300		0.790		-		0.790			
lanagement Services (\$ in Millions)				FY 2	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPIF	Northrop Grumman; SAIC; BAH; Solute:Pax	0.680	1.522	Oct 2011	0.946	Oct 2012	-		0.946	Continuing	Continuing	Continuin

APPROPRIATION/BUDG 1319: Research, Develop BA 5: Development & Del	ment, Tes	t & Evaluation, Navy			R-1 ITEM NOMENCLATUREPROJECTPE 0604231N: Tactical Command System0486.: Tactical Support Center							oter	
Management Services (	\$ in Millio	ons)		FY 2013         FY 2013           FY 2012         Base         OCO				FY 2013 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		River, MD; Charleston, SC; San Diego, CA											
Government Engineering Support	WR	SSC LANT:Charleston, NC	1.321	0.384	Nov 2011	0.384	Nov 2012	-		0.384	Continuing	Continuing	Continuing
Program Management Support	C/CPIF	SSC LANT; PMW750; BAH; SAIC; Solute:Charleston, NC; San Diego, CA	13.060	0.494	Oct 2011	0.494	Oct 2012	-		0.494	Continuing	Continuing	Continuing
Travel	WR	PMW750:San Diego, CA	0.130	0.033	Nov 2011	0.033	Nov 2012	-		0.033	Continuing	Continuing	Continuing
CONOPS/TTPs Demos & MGMT Plan	Various	NRL:Washington DC	0.175	0.161	Oct 2011	-		-		-	0.000	0.336	
Joint Operational Utility Assess. Reports	Various	NRL:Washington DC	0.200	0.198	Oct 2011	-		-		-	0.000	0.398	
Transition system engineering support	Various	NRL:Washington DC	0.150	0.144	Oct 2011	-		-		-	0.000	0.294	
MITRE STE	Various	NRL:Washington DC	-	0.244	Oct 2011	-		-		-	0.000	0.244	
		Subtotal	15.716	3.180		1.857		-		1.857			
			Total Prior Years Cost	FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	110.046	12.985		5.245		-		5.245			

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	<b>PROJECT</b> 0486.: <i>Tactical Support Center</i>
	· · · · · · · · · · · · · · · · · · ·	
PE 0604231N: Tactical Command System	UNCLASSIFIED	

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
	 PROJECT 0486.: Tacti	ical Support Center

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 0486.L39				
Software Delivery (Quarterly)	1	2011	4	2017
Develop CONOPS/TTPS	1	2012	1	2013
Tech Refresh Delivery	1	2011	3	2017
Build and Test Fusion System & Sources	1	2012	1	2013
Conduct User Juries	3	2012	3	2012
Developmental Test (Increment 2.1)	1	2011	3	2011
Operational Assessment (Increment 2.1)	4	2011	4	2011
Technical Demonstrations	4	2012	4	2012
Operator Training	4	2012	4	2012
Milestone C (Increment 2.1)	1	2012	1	2012
Developmental Test (Increment 2.1 Tech Eval)	2	2012	2	2012
Operational Demonstrations & Assessments	4	2012	4	2012
Joint Military Utility Assessment Reports	4	2012	4	2012
Operational Test (Increment 2.1)	3	2012	3	2012
Full Rate Production (Increment 2.1)	4	2012	4	2012
Initial Operational Capability (Increment 2.1) (TOC/MTOC)	3	2013	3	2013
Developmental Test (Tech Refresh 2.1.1)	1	2013	3	2014
Combined Operational Test (Tech Refresh 2.1.1)	2	2015	2	2015
Developmental Test (Increment 3.0)	1	2015	1	2016
Operational Assessment (Increment 3.0)	2	2016	2	2016
Milestone C (Increment 3.0)	3	2016	3	2016

Ex	hibit R-4A, RDT&E Schedule Details: PB 2013 Navy					DATE: Febru	iary 2012
13	<b>PROPRIATION/BUDGET ACTIVITY</b> 19: Research, Development, Test & Evaluation, Navy 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCI PE 0604231N: Tactic			<b>PROJECT</b> 0486.: <i>Tactical Support Center</i>		
			Sta	art		E	nd
	Events by Sub Project		Quarter	Yea	ar	Quarter	Year
	Develpmental Test (Increment 3.0 Tech Eval)		4	20	6	4	2016
	Operational Test (Increment 3)		1	20	7	1	2017
	Full Rate Production (Increment 3)		3	20	7	3	2017

Exhibit R-2A, RDT&E Project Jus	Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy										
APPROPRIATION/BUDGET ACTIN 1319: Research, Development, Tes BA 5: Development & Demonstration			IOMENCLA 1N: Tactical		ystem	<b>PROJECT</b> 0709: <i>GCC</i>	<b>OJECT</b> 09: GCCS-M Maritime Applications				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0709: GCCS-M Maritime Applications	25.219	17.576	5.330	-	5.330	1.852	1.868	1.889	1.922	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### Note

In FY 2012, the Navy Command Control Air Planning Capability effort was realigned from Global Command and Control System Maritime (GCCS-M) Applications (x0709) to the Navy Air Operations Command and Control (NAOC2) program (Project Unit x3324). In FY 2013, GCCS-M Increment 2 will transition development of maritime tactical command and control capabilities to the Maritime Tactical Command and Control (MTC2) program (Project unit x3323).

#### A. Mission Description and Budget Item Justification

GCCS-M is the Maritime implementation of the Global Command and Control System (GCCS) Family of Systems (FoS). It supports decision making at all echelons of command with a single, integrated, scalable C4I system that fuses, correlates, filters, maintains and displays location and attribute information on friendly, hostile and neutral land, sea and air forces, integrated with available intelligence and environmental information. It operates in near real-time and constantly updates unit positions and other situational awareness data. GCCS-M also records data in appropriate databases and maintains a history of changes to those records. System users can then use the data to construct relevant tactical pictures using maps, charts, topography overlays, oceanographic overlays, meteorological overlays, imagery, and all-source intelligence information coordinated into a Common Operational Picture that can be shared locally and with other sites. Navy commanders review and evaluate the general tactical situation, plan actions and operations, direct forces, synchronize tactical movements, and integrate force maneuver with firepower. The system operates in a variety of environments and supports joint, coalition, and allied forces. GCCS-M is implemented Afloat and at Ashore fixed command centers. In FY 2013, the program will complete the remaining tests of GCCS-M Increment 2 for group level ships and submarines. The program will continue integration efforts with other C2 / Command, Control, Communication and Computers systems within the Navy and Joint community, and will continue planning efforts for the transition of development efforts to the Maritime Tactical Command and Control (MTC2) program in support of Fleet requirements. In FY2013 the Global Force Management - Data Initiative (GFM-DI) development will be included in the GCCS-M baseline.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	000	Total
Title: GCCS-M Increment 2	22.319	17.576	3.497	-	3.497
Articles:	0	0	0		0
FY 2011 Accomplishments:					
Continued Global Command and Control System Maritime (GCCS-M) Increment 2 development, integration					
and testing, including transitioning GCCS-M Increment 2 on Force, Group and Unit Level ships to the Common					
Computing Environment (CCE)/Consolidated Afloat Networks Enterprise Services (CANES) environment.					
Completed Force Level Operational Test Event. Conducted Initial Operational Test & Events (IOT&E) for					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			[	DATE: Febru	ary 2012	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syster</i>		PROJECT	-M Maritime	Application	s
BA 5. Development & Demonstration (SDD) B. Accomplishments/Planned Programs (\$ in Millions, Article (	Quantities in Each)			FY 2013	FY 2013	FY 2013
		FY 2011	FY 2012	Base	000	Total
Increment 2 Unit Level software builds. Continued Group Level int & Control, Multi-Award Contract (C2MAC) Delivery Orders for Com Services (CWS) and Mine Warfare Environmental Decision Aids Li and analysis of maritime tactical command and control capabilities	nbat System Interface (CSI) and C4I Web ibrary (MEDAL) development. Began planning					
<b>FY 2012 Plans:</b> Continued development, integration, and testing of GCCS-M Increater transition of GCCS-M Increment 2 on Force, Group and Unit Level Environment (CCE)/Consolidated Afloat Networks Enterprise Servic developing and testing interfaces with PEO IWS Combat Systems and systems for other Services, Agencies, and traditional and non-and adopting Service Oriented Environment (SOE) to further the constant and control capabilities.	ships to the Common Computing ices (CANES) environment. Continued (AEGIS/Ship Self Defense System (SSDS)) traditional partners. Continued investigating					
FY 2013 Base Plans: Complete development, integration, and testing of GCCS-M Increm transition of GCCS-M Increment 2 on Force, Group and Unit Level Environment (CCE)/Consolidated Afloat Networks Enterprise Servi developing and testing interfaces with PEO IWS Combat Systems and systems for other Services, Agencies, and traditional and non- and adopting Service Oriented Environment (SOE) to further the co command and control capabilities.	ships to the Common Computing ices (CANES) environment. Complete (AEGIS/Ship Self Defense System (SSDS)) traditional partners. Complete investigating					
Title: Undersea Superiority/Undersea Forcenet		2.01	0 -	-	-	_
	Articles:		0			
<i>FY 2011 Accomplishments:</i> Finalized and completed Composeable FORCEnet (CFn) migration baseline. Completed integration of additional data sources and introbjectives.						
Title: Navy C2 Air Planning Capability	Articles:	0.89	0 -	-	-	-
FY 2011 Accomplishments:						

Exhibit R-2A, RDT&E Project Justi	fication: PB	2013 Navy							DATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVI 1319: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	Navy		<b>R-1 ITEM NO</b> PE 0604231		<b>URE</b> Command Sys		PROJECT 0709: GCCS	S-M Maritime	Application	S
B. Accomplishments/Planned Prog	grams (\$ in I	<u> Millions, Art</u>	ticle Quantit	ties in Each	)		FY 201 <sup>2</sup>	1 FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
The Command and Control (C2) Air application transition to an afloat Cor support increased Joint interoperabil planning and execution processes.	nmon Comp	uting Enviror	nment (CCE	) and require	ments deve	lopment to					
Title: Global Force Management - D	ata Initiative	(GFM-DI)				Articles	s:		- 1.833 0	-	1.833 0
FY 2013 Base Plans: Vice Chairman Joint Chiefs of Staff ( accessibility/sharing of data applicab the force structure, GCCS-M will be the of GFM-DI functionality will begin in F	le to the enti the data sour	re DoD force	e structure.	For the GFM	-DI enterpris	se solution of					
			Accomplis	hments/Pla	nned Progra	ams Subtotal	<b>s</b> 25.21	17.57	6 5.330	-	5.330
C. Other Program Funding Summa	ry (\$ in Milli	<u>ons)</u>									
	-	-	<u>FY 2013</u>	<u>FY 2013</u>	<u>FY 2013</u>					Cost To	
Line Item	<u>FY 2011</u>	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016		•	Total Cost
• OPN/2618: Navy Command and Control System (GCCS-M only)	5.554	5.938	8.150	0.000	8.150	8.789	6.823	0.000	0.000	0.000	35.254

#### D. Acquisition Strategy

Increment 2 delivers two different materiel solutions: (1) Force Level, based on the Global Command and Control System-Joint (GCCS-J) 4.2 or higher software, and (2) Group and Unit Level, based on the Office of Naval Research (ONR) extensible Common Operational Picture (XCOP) software. This approach satisfies the current validated requirements, supports the accelerated retirement of legacy systems, and reduces overall risk to the program. Each solution will integrate maritime-specific capabilities and will be scalable to the ship class.

The Global Command and Control System-Maritime (GCCS-M) Program Office promotes full and open competition by competitively awarding software and Fleet support engineering services contracts. Additionally, the Program Office has awarded a Command and Control (C2) Indefinite Delivery Indefinite Quantity (IDIQ) Multi-Award Contract (MAC) from which two delivery orders were awarded to SAIC, one of the C2 IDIQ MAC awardees.

#### E. Performance Metrics

GCCS-M Increment 2 leverages software investments by Defense Information Systems Agency (DISA) and ONR to realize both the Force Level and Group/Unit Level material solutions. This greatly reduces the integration and testing costs associated with each software release. The Force Level solution will reside on Common

9: Research, Development, Test & Evaluation, Navy 5: Development & Demonstration (SDD) omputing Environment/Consolidated Afloat Networks and Enterprise Services (CCE/CANES) architecture; the Group/Unit Level solution will be implemented on the	19: Research, Development, Test & Evaluation, Navy       PE 0604231N: Tactical Command System       0709: GCCS-M Maritime Applications         5: Development & Demonstration (SDD)	19: Research, Development, Test & Evaluation, Navy       PE 0604231N: Tactical Command System       0709: GCCS-M Maritime Applications         .5: Development & Demonstration (SDD)       Computing Environment/Consolidated Afloat Networks and Enterprise Services (CCE/CANES) architecture; the Group/Unit Level solution will be implemented on the	xhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
5: Development & Demonstration (SDD) omputing Environment/Consolidated Afloat Networks and Enterprise Services (CCE/CANES) architecture; the Group/Unit Level solution will be implemented on the	5: Development & Demonstration (SDD) Computing Environment/Consolidated Afloat Networks and Enterprise Services (CCE/CANES) architecture; the Group/Unit Level solution will be implemented on the	5: Development & Demonstration (SDD) Computing Environment/Consolidated Afloat Networks and Enterprise Services (CCE/CANES) architecture; the Group/Unit Level solution will be implemented on the	PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
			19: Research, Development, Test & Evaluation, Navy A 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command System	0709: GCCS-M Maritime Applications
			Computing Environment/Consolidated Afloat Networks and Enter		

Exhibit R-3, RDT&E Pro	ject Cost	Analysis: PB 2013 N	lavy							DATI	E: Februar	y 2012	
APPROPRIATION/BUDG 1319: Research, Develop BA 5: Development & De	oment, Tes	t & Evaluation, Navy			<b>ITEM NON</b> 0604231N:		-	System	<b>PROJ</b> 0709:	GCCS-M N	/aritime Ap	oplications	
Product Development (	\$ in Millio	ns)		FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	SSC:SAN DIEGO, CA	49.704	5.746	Nov 2011	2.297	Nov 2012	-		2.297	Continuing	Continuing	Continuing
Software Development	SS/CPFF	NGMS:SAN DIEGO, CA	82.881	-		-		-		-	Continuing	Continuing	Continuing
Software Development	C/CPIF	SAIC:SAN DIEGO, CA	9.898	3.558	Sep 2012	-		-		-	Continuing	Continuing	Continuing
Software Development	WR	SSC:SAN DIEGO, CA	-	6.451	Nov 2011	2.298	Jan 2013	-		2.298	0.000	8.749	
	<u>1</u>	Subtotal	142.483	15.755		4.595		-		4.595			
Test and Evaluation (\$ i	in Millions	3)		FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	SSC:SAN DIEGO, CA	2.675	0.706	Nov 2011	0.510	Nov 2012	-		0.510	Continuing	Continuing	Continuing
Operational Test & Evaluation	C/CPIF	COTF:NORFOLK, VA	5.705	0.498	Nov 2011	0.150	Nov 2012	-		0.150	Continuing	Continuing	Continuing
	<u>1</u>	Subtotal	8.380	1.204		0.660		-		0.660			
Management Services (\$ in Millions)		ons)		FY 2012		FY 2013 Y 2012 Base		FY 2013 OCO		FY 2013 Total	]	<u> </u>	
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPFF	SeaPort:SAN DIEGO, CA	3.923	-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	SeaPort:SAN DIEGO, CA	21.239	0.617	Nov 2011	0.075	Nov 2012	-		0.075	Continuing	Continuing	Continuing
Acquisition Workforce	Various	UNKNOWN:UNKNOWN	0.101	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	25.263	0.617		0.075		-		0.075			
			Total Prior Years Cost	FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	176.126	17.576		5.330				5.330	· ·		

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 N	lavy					DATI	E: Februar	y 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)			MENCLATURE : Tactical Command	System	<b>PROJECT</b> 0709: GCC	CS-M N	/aritime Ap	oplications	
	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO		2013 otal	Cost To Complete	Total Cost	Target Value of Contract

**Remarks** 

xhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	0709: GCCS-M Maritime Applications
5: Development & Demonstration (SDD)		
0604231N: Tactical Command System	UNCLASSIFIED	

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		_	DATE: February 2012
	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	<b>PROJECT</b> 0709: GCC	S-M Maritime Applications

### Schedule Details

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 0709				
Increment 2 - Initial Operating Capability (IOC)	2	2011	2	2011
Full Deployment Decision (FDD)	2	2011	2	2011
Unit Level - Operational Test	2	2011	2	2011
Force/Unit Level - Full Decision Review (FDR)	4	2011	4	2011
Group Level - Software Delivery (FINAL)	4	2012	4	2012
Group Level - Development Test	4	2012	4	2012
Group Level - Operational Assessment	1	2013	1	2013
Group Level - Technical Evaluation	3	2013	3	2013
Group Level - Operational Test	4	2013	4	2013
Group Level - Fielding Decision Review	1	2014	1	2014
Global Force Management - Data Initiative - Engineering Drop 1	3	2014	3	2014
Global Force Management - Data Initiative - Development Test 1	2	2015	2	2015
Global Force Management - Data Initiative - Engineering Drop 2	3	2016	3	2016
Global Force Management - Data Initiative - Development Test 2	2	2017	2	2017

Exhibit R-2A, RDT&E Project Just	tification: PE	3 2013 Navy							DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Tes BA 5: Development & Demonstratio	t & Evaluation	n, Navy			IOMENCLAT		ystem	PROJECT 2213: Missi	on Planning		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2213: Mission Planning	18.098	20.468	25.195	-	25.195	15.815	11.939	16.136	15.755	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

Mission Planning: The Joint Mission Planning System (JMPS) is the designated automated mission planning system for the Navy. JMPS enables weapon system employment by providing the information, automated tools, and decision aids needed to rapidly plan aircraft, weapon, or sensor missions, load mission data into aircraft and weapons, and conduct post-mission analysis. JMPS is a mission critical system which is a co-development effort between the United States Navy (USN) and United States Air Force (USAF). Common requirements are identified and capabilities are developed and prioritized in an evolutionary approach. An individual JMPS mission-planning environment is a combination of the JMPS framework, common capabilities, and the necessary system hardware required to satisfy mission planning objectives. Most Tactical Naval Aviation platforms are dependent solely on JMPS to plan precision guided munitions, sensor systems, tactical data links, secure voice communications, and basic Safety of Flight functions. The following type/model/series (T/M/S) naval aircraft are supported by JMPS: F/A-18 A-F, E-2C, EA-6B, AV-8B, S-3, V-22, Chief of Naval Air Training (CNATRA), EA-18G, MV-22, C-2, MH-53E, Aircraft Carrier Intelligence Center (CVIC), SH-60B/F, HH-60H, CH-53D/ E, CH-46E, UH-1N and VH-3/VH-60. All of the aforementioned T/M/S are required to transition to Microsoft Windows 7 before Microsoft XP support ends April 2014 by using Framework (FW) Version 1.3.5. Future JMPS platforms include: AH-1Z/W, UH-1Y, MH-60R/S, P-3, KC-130T/J, EP-3E, Broad Area Maritime Surveillance (BAMS), follow-on version of P-8, E-2D, UH-1Y, H-53K, and C-130. The next JMPS architecture version (FW Version 1.4) will support net-centric goals by providing route "publish and subscribe" capabilities. Funding profile reflects required operating system upgrades due to emerging technology and Information Assurance (IA) requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
<i>Title:</i> JMPS Framework (FW) Version V1.3.5 , V1.4 & Common Capabilities	2.002	0.740	0.500	-	0.500
<i>Articles:</i> <i>Description:</i> Due to the end of Microsoft support for Windows XP in April 2014, there is a requirement to change to Windows Operating System (OS) 7. FW Version 1.4 will incorporate Windows OS 7 and provide additional capabilities for all naval aircraft to include Service Oriented Architecture, air drop, air refueling and enhanced installation. Funding for FW 1.4 will be used to support system engineering processes, management interface controls, software architectural analysis, requirements management and a centralized website for Mission Planning Environment (MPE) developers. A reduction to USAF Increment IV (PE 0208006F) led to a Critical Change Review in accordance with Weapon Systems Acquisition Reform Act (WSARA), causing FW Version 1.4 to be delayed. In order to accommodate the MPE and platform operational flight program (OFP) development schedules of EA-6B, V-22 and F/A-18, which also require the use and testing of Windows OS 7, the program needs to acquire FW Version 1.3.5 as an interim solution. Since MPE and platform OFP		U	U		

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY	<b>R-1 ITEM NOMENCLATURE</b>		ROJECT			
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command Syste	em 22	13: Mission	Planning		
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
development may take up to 2 years to prepare for a new OS, FW without significantly delaying the MPE and platform OFP developm environment in FW 1.4 will enable interoperability improvements the supported by the Global Information Grid-Enterprise Services. Concore mission planning capabilities across multiple aircraft.	nent and test schedules. Migration to .NET nough utilization of services and will be					
FY 2011 Accomplishments: JMPS Framework (FW) 1.3.5 Development Test and JMPS FW 1.4	4 Development.					
<i>FY 2012 Plans:</i> Complete JMPS FW 1.4 development and testing. Resolve JMPS	FW 1.3.5 deficiencies.					
<i>FY 2013 Base Plans:</i> Conduct FW 1.3.5 testing with the objective to Initial Operational C	apability (IOC) Windows 7 compatible system.					
<i>Title:</i> Joint Mission Planning System Expeditionary (JMPS-E)	Articles:	0.323	0.237 0	1.295 0	-	1.29
<b>Description:</b> JMPS Expeditionary (JMPS-E): The goal of the JMP mission planning and execution monitoring tool for Amphibious Sq this system is to provide an automated capability to assist planners development and automated creation of doctrinal orders based on expeditionary planning is done manually on paper charts. JMPS-E response times to changing plans, easier distribution of planning a the planning process. The variety and geographically separated n Maneuver amplifies the need for web-based technologies to enable situational awareness and enable the monitoring of mission execution outputs are tasking orders, route plans, battlespace geometries and incorporate modeling and simulation tools to rehearse and deconfluinitially fielded using Framework Version 1.2.4.	uadron staffs. The primary focus of s with mission analysis, course of action planning data in the system. Current will provide a digital map enabling better rtifacts and a reduction in human error during ature of forces involved with Ship to Shore e collaborative planning, improve overall tion from different locations. The primary d decision briefs. The system will also					
<b>FY 2011 Accomplishments:</b> JMPS-E Version 1.0.0 Interim fleet released for CPR-6/USS Bataa	n.					
FY 2012 Plans:						1

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012							
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syste</i>	m 2213: Mission Planning							
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total			
Full Operational Capability fielding to seven Amphibious Squadron	s (PHIBRONs).								
FY 2013 Base Plans: Develop, integrate and test JMPS-E Version 1.0.2 to satisfy Windo	ws 7 requirement.								
Title: Mission Planning Environment (MPE) Integration and Test	15.773 0		23.400 45	-	23.40				
<b>Description:</b> Mission Planning Environment (MPE) Integration and developmental testing/operational testing, integration and system of consist of integration of components provided by various developed the integrated MPE. MPE integration and testing results in a const that enables stability and reliability. Current budget supports the in Due to the end of Microsoft support for Windows XP in April 2014, Windows Operating System (OS) 7.	of system testing for MPE fielding. Efforts rs into a platform-centric MPE and testing of stent and repeatable system configuration ntegration and testing of 17 MPEs in FY11.								
<b>FY 2011 Accomplishments:</b> Integration and test of seventeen (17) MPEs : AV-8B H60 3.0, C-2 4.0, E-2D 1.0, EA-6B I2B4 3.1 and I3B5 6.0, F/A-18 H8E/2.4.0 and R/S 1.0, MH-53E 1.0, V-22 1.2, P-3 3.0.									
<b>FY 2012 Plans:</b> Integration and test of nineteen (19) MPEs planned: AV-8B H61 4. KC-130 2.0 & 3.0, E-2C 5.0, E-2D 1.0 and 2.0, EA-6B I3B6 7.0, F/ Marine Helo 3.0, MH-60 R/S 2.0, MPRF 2.0, NLH 2.0, V-22 2.0, VI	A-18 H8E/2.4.0 and 25X/2.4.X and H10E/27X,								
<i>FY 2013 Base Plans:</i> Due to the end of Microsoft support for Windows XP in April 2014, Windows Operating System (OS) 7. Additional test and requirement product stability to satisfy all platforms. Continue integration and te C-130 1.0 and 2.0, C-2A 3.0, CH-53K 1.0, CNATRA 1.0, E-2C 4.0 and I3B6 7.0, F/A-18 H8E/2.4.0, 25X/2.5.0, H10E/27X/3.0 and 27X S 1.0 and 2.0, NLH 2.0, P-3 3.0, P-8 1.0 and 2.0, TacMobile 1.0 and	nt verifications will be required to ensure est of 32 MPEs : AV-8B H61 4.0, BAMS 1.0, and 5.0, E-2D 1.0 and 2.0, EA-6B I3B5 6.0 (/3.1, Marine Helo 2.1, 3.0 and 4.0, MH-60R/								
			+			1			

Exhibit R-2A, RDT&E Project Justif	DATE: Febr	DATE: February 2012									
<b>APPROPRIATION/BUDGET ACTIVI</b> 1319: Research, Development, Test & BA 5: Development & Demonstration	<b>R-1 ITEM NC</b> PE 06042311			PROJECT 2213: Missi							
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2013</u>	FY 2013	FY 2013					Cost To	
Line Item	<u>FY 2011</u>	<u>FY 2012</u>	Base	000	<u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	FY 2017	<b>Complete</b>	Total Cost
OPN/287600: Naval Mission Plng	7.756	8.941	9.958	0.000	9.958	10.070	14.376	10.641	10.613	Continuing	Continuing
System											
RDTE/3858: Mission Plng	83.555	69.918	72.037	0.000	72.037	78.534	90.995	92.164	0.000	Continuing	Continuing
Systems											

#### D. Acquisition Strategy

Engineering Manufacturing Development efforts. The strategy entails a two-phased evolutionary approach to acquire the initial JMPS development effort. Phase I was a combined United States Air Force (USAF) / United States Navy (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 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. 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 focus, where framework and common components are integrated as bundled packages 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. 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.

#### E. Performance Metrics

Average time to plan a flight: Threshold value is < 1 hour average time to plan a flight that includes a Military Training Route (MTR), routing to and from the MTR, kneeboard card production, Instrument Flight Rules (IFR) flight planning materials and a Data Transfer Device (DTD) Load. Objective value is < 30 minutes average time to plan a flight that includes a MTR, routing to and from the MTR, kneeboard card production, IFR flight planning materials and a DTR and from the MTR, kneeboard card production, IFR flight planning materials and a DTD Load.

Interoperability: Threshold value is 100% of top level Interoperability Exchange Requirements (IERs) designated critical will be satisfied. Objective value is 100% of top level IERs will be satisfied.

Exhibit R-3, RDT&E Pro	oject Cost	Analysis: PB 2013 N	lavy							DAT	E: Februar	y 2012	
APPROPRIATION/BUD 1319: Research, Develo BA 5: Development & De		ITEM NON 0604231N:		ECT Mission Pla	anning								
Product Development (\$ in Millions)					FY 2012		FY 2013 Base		013 O	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete Total Cost		Target Value of Contract
Primary Software Development/Common Capabilities(CCs)	MIPR	USAF:Hanscom AFB, MA	0.003	0.001	Mar 2012	-		-		-	Continuing	Continuing	Continuing
Primary Software Development/Framework (FW)	MIPR	USAF:Hanscom AFB, MA	21.318	0.739	Feb 2012	0.439	Feb 2013	-		0.439	Continuing	Continuing	Continuing
Primary Software Development/Joint Mission Planning System Expeditionary (JMPS-E)	MIPR	USAF:Hanscom AFB, MA	4.624	0.150	Feb 2012	0.488	Feb 2013	-		0.488	Continuing	Continuing	Continuing
Award Fees 8%	MIPR	USAF:Hanscom AFB, MA	1.670	0.074	Feb 2012	0.103	Feb 2013	-		0.103	Continuing	Continuing	Continuing
Primary Software Development	Various	Various:Various	19.603	2.325	Jan 2012	2.396	Jan 2013	-		2.396	Continuing	Continuing	Continuing
No Longer Funded in FYDP	Various	Various:Various	83.882	-		-		-		-	0.000	83.882	
		Subtotal	131.100	3.289		3.426		-		3.426			

#### Remarks

PB11 was incorrectly titled Primary Hardware Development. Correction made to Primary Software Development. 6% award fees based on actual awards placed on various Hanscom AFB contracts.

Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	C/FFP	Lockheed Martin:Marlton, NJ	1.346	0.962	Jan 2012	-		-		-	0.000	2.308	2.308
Integrated Logistics Support	WR	NAWCWD:Point Mugu, CA	0.500	0.453	Nov 2011	0.447	Nov 2012	-		0.447	Continuing	Continuing	Continuing
No Longer Funded FYDP	WR	SPAWAR:Philadelphia, PA	11.538	-		-		-		-	0.000	11.538	
	-	Subtotal	13.384	1.415		0.447		-		0.447			

Exhibit R-3, RDT&E Pro	ject Cost	Analysis: PB 2013 N	lavy							DAT	E: Februar	y 2012	
APPROPRIATION/BUDO 1319: Research, Develop BA 5: Development & De	oment, Tes	t & Evaluation, Navy			0604231N:			<b>PROJECT</b> 2213: <i>Mission Planning</i>					
Support (\$ in Millions)			ſ	FY	2012	FY 2013 Base		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Award Cost Date		Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks Integrated Logistics Support I	Lockheed Ma	artin was changed to the co	brrect Contrac	t Method C/	FFP.		11			I		I	I
Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		:013 :O	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Eng Integration & Test	WR	NAWCWD:Point Mugu, CA	58.647	13.214	Nov 2011	16.739	Nov 2012	-		16.739	Continuing	Continuing	Continuing
Test & Evaluation	WR	COMOPTEVFOR:Norfoll VA	<sup>k,</sup> 1.001	0.350	Nov 2011	1.815	Nov 2012	-		1.815	Continuing	Continuing	Continuing
	1	Subtotal	59.648	13.564	•	18.554		-		18.554			
Remarks         System Eng Integration & Test (NAWCWD) increase in FY12 and FY2 in FY13 due to independent Operational Test events for MPEs during         Management Services (\$ in Millions)				ransition.	irement for Op 2012	FY	tem update (V 2013 ase	Vindows 7). FY 2 OC	013	aluation (COT FY 2013 Total	F) increase		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	NAWCAD:Patuxent River, MD	30.151	2.200	Nov 2011	2.768	Nov 2012	-		2.768	Continuing	Continuing	Continuing
		Subtotal	30.151	2.200	)	2.768		-		2.768			
			Total Prior Years Cost	FY 2012			2013 Ise	FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	234.283	20.468	6	25.195		-		25.195			
<u>Remarks</u>													

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	<b>PROJECT</b> 2213: <i>Mission Planning</i>
	·	
PE 0604231N: Tactical Command System	UNCLASSIFIED	

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
	 PROJECT 2213: Missi	on Planning

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Mission Planning	·			
Acquisition Milestones: JMPS V1.3.5 Initial Operational Capability (IOC)	4	2013	4	2013
System Development: Software Development: JMPS V1.4 Software Development	2	2011	1	2012
System Development: Software Development: JMPS FW 64 Bit Architecture Development	1	2015	4	2016
System Development: Reviews: JMPS V1.3.5 Operational Test Readiness Review (OTRR)	1	2013	1	2013
Test and Evaluation: Technical Evaluation: JMPS V1.2.4 MPE Integration/Validation	1	2011	4	2013
Test and Evaluation: Technical Evaluation: JMPS V1.3.5 Development Test	2	2011	3	2011
Test and Evaluation: Technical Evaluation: JMPS V1.3.5 Mission-Planning Environment (MPE) Integration/Validation	4	2011	4	2013
Test and Evaluation: Technical Evaluation: JMPS V1.4 Functional Qualification Test (FQT)	1	2012	1	2012
Test and Evaluation: Technical Evaluation: JMPS V1.4 Development Test	1	2012	2	2012
Test and Evaluation: Technical Evaluation: JMPS V1.4 MPE Integration/Validation	1	2012	4	2016
Test and Evaluation: Technical Evaluation: JMPS FW 64 Bit Integration/Validation	1	2017	4	2017
Test and Evaluation: Operational Evaluation: JMPS V1.3.5 Operational Test (OT)	2	2013	3	2013

Exhibit R-2A, RDT&E Project Just	tification: PE	3 2013 Navy							DATE: Febr	ruary 2012	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstratio	t & Evaluation	n, Navy			OMENCLA	-	ystem	PROJECT 2307: Shipt	ooard LAN/W		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2307: Shipboard LAN/WAN	0.433	0.308	0.313	-	0.313	-	-	-	-	0.000	1.054
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

The Shipboard LAN / WAN / Integrated Shipboard Network System (ISNS) provides Navy ships, including submarines, and Ashore sites with reliable, high-speed SECRET and UNCLASSIFIED Local Area Networks (LAN)s and wireless network technologies. 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, shore sites, and SubLAN for submarines.

The ISNS program maximizes the use of both Commercial off the Shelf (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, access points, 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 endto-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 Afloat Core Services (ACS) which is the mechanism to deliver the FORCEnet interface to the warfighter. ACS 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. ACS also provides the common core enterprise services and technical framework to allow organizations ubiquitous access to reliable, decision-guality information through a netbased services infrastructure and applications to bridge real-time and near-real-time communities of interest (COI). ACS 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. ACS will utilize a spiral process for delivering capability to the warfighter.

Exhibit R-2A, RDT&E Project Just	ification: PB	2013 Navy						D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	, Navy		<b>R-1 ITEM NO</b> PE 0604231		URE Command Syst		ROJECT 807: Shipboa	ard LAN/WA	٩N	
The ISNS Inc 1, Sensitive Compar began migration to ISNS Inc 2/Cor to a single, adaptive, available, see Computing Environment (CCE); A	solidated Afle	oat Network	s and Enterp	rise Service while delive	s (CANES). ring enhance	ISNS Inc 2/C/ ed technologie	ANES will se	erve to trans	ition numer	ous Fleet ne	etworks
B. Accomplishments/Planned Pro	g <u>rams (\$ in I</u>	<u>Millions, Ar</u>	ticle Quantit	ties in Each	)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Integrated Shipboard Network	System (ISN	S)				Articles	0.433 : 0				0.313
<b>FY 2011 Accomplishments:</b> Continued transition support from IS LANs and Enterprise Services aboa for End of Life (EOL) equipment as I equipment/software as EOS occurs.	rd ships and <i>i</i> EOL occurs.	Ashore sites	. Continued	developmer	nt of replace	ment solutions					
FY 2012 Plans: Continue development of replacement replacement solutions for End of Sa Accreditation activities for efforts une	le (EOS) equi	pment/softw	are as EOS	occurs. Sup	oport Certific						
FY 2013 Base Plans: Continue development of replacement replacement solutions for End of Sa Accreditation efforts for ISNS varian	le (EOS) equi										
			Accomplis	hments/Pla	nned Progra	ams Subtotals	<b>s</b> 0.433	0.308	0.313	-	0.313
C. Other Program Funding Summa	ary (\$ in Milli	ons <u>)</u>	FY 2013	FY 2013	FY 2013					Cost To	
Line Item • OPN/3050/ISNS: /SNS	<u>FY 2011</u> 113.307	<u>FY 2012</u> 98.755	<u>Base</u> 0.000	000 0.000	<u>Total</u> 0.000	<u>FY 2014</u> 0.000	FY 2015 0.000	FY 2016 0.000	FY 2017 0.000	<u>Complete</u> 0.000	Total Cost 483.276
<b>D. Acquisition Strategy</b> This program will transition fully to	CANES in F	(13.									

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
		PROJECT	
	PE 0604231N: Tactical Command System	2307: Shipt	board LAN/WAN
BA 5: Development & Demonstration (SDD)			

#### E. Performance Metrics

The Shipboard LAN/WAN/Integrated Shipboard Network System (ISNS) development efforts are nearing completion and are currently 99.1% completed. The ISNS program will fully transition to CANES in FY 2013. ISNS development and testing against ISNS variants as well as Early Adopter Common Computing Envrionment (CCE) testing on the Lincoln Strike Group met and exceeded all measures of effectiveness and suitability of the system.

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Navy							DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstratior	& Evaluation	n, Navy			IOMENCLA 1N: Tactical	<b>TURE</b> Command S	System	<b>PROJECT</b> 2351: <i>MDA</i>	1		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2351: <i>MDA</i>	18.752	-	-	-	-	-	-	-	-	0.000	18.752
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
In FY 2012 MDA RDTEN funding v A. Mission Description and Budge Maritime Domain Awareness (MDA economy or environment. MDA ob and the ability to collect, fuse, anal transition data fusion and mining, r	t Item Justi A): MDA is the inclusion of	fication he effective ude the pers seminate inf	understandi istent monit ormation to	ng of anythin oring of and decision mal	ability to acc kers to facilit	cess and ma tate effective	intain data c understand	n vessels, c ing. This init	argo, people iative will ide	, and infrast ntify, develo	ructures;
B. Accomplishments/Planned Pro	<u>grams (\$ in</u>	Millions, Ar	ticle Quant	tities in Eacl	<u>h)</u>		FY 20	11 FY 201	FY 2013 2 Base	B FY 2013 OCO	FY 2013 Total
Title: MDA						Artic	12.2 les:	286 0		-	-
<b>FY 2011 Accomplishments:</b> MDA Spiral 1: Supported initial Inter Enterprise Node in Q3FY11.	roperability t	esting for fie	lded capabil	lities followin	g the introdu	uction of the					
Maritime Fusion and Analysis Servi and Dissemination (I2ADSD) Increm support DCGS-N Increment 2 Activit that will allow the development and a analytical capabilities to address key DCGS Enterprise ICD, and the DCG of Alternatives, developed a DCGS- activities. Began requirements analy	ient: Transit ies. Comple assessment gaps identi iS-N Increme N Capabilitie	ioned the Mi eted a DCGS of prototype fied in the M ent 2 Gap Ar es Descriptio	FAS and I2A S-N Material MFAS and FAS ICD, M nalysis. Cor n Document	ADSD pre-ac Developmer multi-intellige IFAS Analysi mpleted a DC t and conduc	equisition effo nt Decision i ent ISR fusio is of Alternat CGS-N MFA cted initial pr	orts to n Q3 FY201 on and tives, the S Analysis					
Title: DLB						Artic		166 0		-	-
<b>FY 2011 Accomplishments:</b> Deep Lightning Bolt/Rapid Capability	y Developme	ent (DLB/RC	D):								

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy				DATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	F	ROJECT			
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command Syste	m 2	351: MDA			
BA 5: Development & Demonstration (SDD)						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	itios in Each)			FY 2013	FY 2013	FY 2013
D. Accomplishments/rialmed riograms (\$ in Minions, Article & dam		<b>FY 201</b> 1	FY 2012		000	Total
Navy transformational initiative focused on the introduction of technologie	•					
21 objectives and support network centric warfare & operations. The low						
immediately to newly discovered technology(s), enemy threat(s) or to res	pond to significant & urgent safety					
situations through special, tailored procedures which:						
- Integrated and demonstrated hardware/software solutions for immediat						
- Expedited technical, programmatic & financial decisions in order to make	te emergent technologies available to					
the Fleet in a timely manner						
- Expedited, within statutory limitations, the procurement & contracting pl						
- Developed and installed an integrated hardware/software prototype at 0						
and Commander Sixth Fleet Headquarter in support of network centric w	artare operations.					
Accompli	shments/Planned Programs Subtotals	18.75	2	_	-	-

### C. Other Program Funding Summary (\$ in Millions)

N/A

#### D. Acquisition Strategy

The Maritime Domain Awareness (MDA) Spiral 1 Fielded Project (also known as Spiral 1 Prototype) entered the sustainment phase based on direction by Assistant Secretary of the Navy, Research, Development and Acquisition (ASN RDA) in 4QFY09. MDA Spiral 1 will be maintained and sustained until it can transition or be replaced by a Program of Record capability.

#### E. Performance Metrics

Maritime Domain Awareness (MDA): MDA Spiral 1 Fielded is in compliance with Net-Centric Enterprise Solutions for Interoperability guidance and conforms to the Net-Centric Enterprise Services standards; fuses multiple disparate data sources, analyzes MDA activity to identify potential threats to security of the United States and US interests and forces around the world.

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Navy							DATE: Feb	uary 2012	
APPROPRIATION/BUDGET ACTI 1319: Research, Development, Tes BA 5: Development & Demonstration	st & Evaluatio	n, Navy		<b>R-1 ITEM N</b> PE 0604231	-	<b>TURE</b> Command Sy	ystem	PROJECT 3032: NTC Sys)	SS (Naval Ta	ctical Comn	and Spt
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cos
3032: NTCSS (Naval Tactical Command Spt Sys)	3.483	14.524	15.015	-	15.015	9.502	6.303	1.174	0.931	Continuing	Continuin
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<ul> <li>(2) Supports design, developmen Identification Code), which will pro- database management system as</li> <li>(3) Provides for the design, devel applications into a single applicat</li> <li>(4) Provides for the transition of the to bring Navy systems into a com- system platform with greater respination</li> </ul>	ovide a consc shore with bi- lopment and t tion baseline. he current, cli mon computi	lidated logist directional re esting of the ent-server ar ng environme	tics manage plication and Single Supp chitecture to ent afloat, in	ment system d transaction bly Baseline ( o a service-or terface with l	i by combinin al capabilitie (SSB), which riented archi Navy Enterp	ng logistics d es. n will integrat tecture (SOA rise Resourc	e the function ) and web-the Planning	Iltiple fleet o onality provid based servid (ERP) asho	perational pl ded by sever ces. This will re, and provi	atforms into al legacy log align with th de a more fle	a single istics e initiative
B. Accomplishments/Planned Pr	<u>ograms (\$ in</u>	Millions, Ar	ticle Quant	ities in Each	<u>1)</u>		FY 201	1 FY 201	FY 2013 2 Base	FY 2013 OCO	FY 2013
Title: NTCSS (Naval Tactical Com	imand Spt Sys	6)				Articl	3.4 es:	83 14.5 0		5 - 0	Total
Description: Maintenance and Su	pply Manager	ment Capabil	lity								<b>Total</b> 15.01
							1				
<b>FY 2011 Accomplishments:</b> Continued design, development, au (UIC), and enterprise database syst improvements of service-oriented a	stem. Continu	ed design, de	evelopment,	and testing			ot				_

Exhibit R-2A, RDT&E Project Ju	stification: PB	2013 Navy							DATE: Febru	ary 2012		
<b>APPROPRIATION/BUDGET ACT</b> 1319: <i>Research, Development, Te</i> BA 5: <i>Development &amp; Demonstrat</i>	est & Evaluation,	Navy	1-	<b>R-1 ITEM NC</b> PE 0604231I		URE Command Sys	ystem PROJECT 3032: NTCSS (Naval Tactical Com Sys)				mand Spt	
B. Accomplishments/Planned P							FY 201 <sup>2</sup>	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
Continue design, development, au database system. Continue desig SOA and web-based service. Be with upgrades to Ships Store (Re Management (FSM)) products.	ın, development gin design, deve	, and testing lopment and	efforts for N testing effo	NTCSS produ orts for Single	uct improver e Supply Bas	nents of seline (SSB)						
FY 2013 Base Plans: Continue design, development, au Command/Management Informati system. Continue design, develo based service.	on System), Sin	gle Supply E	Baseline, mu	ulti-UIC, and	enterprise d	atabase						
			Accomplis	hments/Plar	nned Progra	ams Subtota	<b>Is</b> 3.48	14.52	15.015	-	15.015	
C. Other Program Funding Sum	<u>mary (\$ in Milli</u>	<u>ons)</u>	EV 2042	EV 2042	EV 2042							
<u>Line Item</u> • OPN/2611: Naval Tactical Command Support System	<u>FY 2011</u> 33.176	<u>FY 2012</u> 33.017	FY 2013 Base 35.732	FY 2013 OCO 0.000	<u>FY 2013</u> <u>Total</u> 35.732	<u>FY 2014</u> 30.323	<u>FY 2015</u> 33.851	<u>FY 2016</u> 19.856	<u>FY 2017</u> 19.334	Cost To Complete 81.147	<u>Total Cost</u> 742.783	

#### D. Acquisition Strategy

The NTCSS Acquisition Strategy is defined in its Single Acquisition Management Plan (SAMP) dated February 2004. This SAMP provides the acquisition strategy and implementation plans for all NTCSS applications and is based on the following six tenants: Migration to Optimized Software Architecture, Migration to Personal Computer (PC) Workstations and UNIX/NT Servers, Migration to the Common Operating Environment (COE), Business Process Improvements, Focused Logistics, and Streamlined Acquisition Process. The SAMP provides a single point of focus and presents these efforts in an integrated and coordinated fashion.

### E. Performance Metrics

One NALCOMIS reduces NTCSS Aviation software baseline configuration management support by 50%. Additionally, the NTCSS Aviation system hardware requirement realizes a 50% reduction at Fleet Readiness Centers (ashore) and Aircraft Intermediate Maintenance Departments (afloat). Over the Future Years Defense Plan (FYDP), Service-Oriented Architecture (SOA) for NTCSS will lower system maintenance costs by \$15.7M when compared to maintaining the current, client-server architecture.

,	ject Cost	Analysis: PB 2013 N	lavy							DATE	E: Februar	y 2012	
APPROPRIATION/BUDO 1319: Research, Develop BA 5: Development & De	oment, Tes	t & Evaluation, Navy			<b>ITEM NON</b> 0604231N:		<b>URE</b> Command S	System	<b>PROJ</b> 3032: <i>Sys)</i>		aval Tactic	al Commai	nd Spt
Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 Ise	FY 20 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	SSC:North Charleston, SC	0.668	-		-		-		-	0.000	0.668	0.668
Systems Engineering	C/CPFF	SeaPort:San Diego, CA	1.451	0.500	Nov 2011	0.406	Nov 2012	-		0.406	Continuing	Continuing	Continuing
Licenses	Various	SSC:San Diego, CA	0.700	-		-		-		-	0.000	0.700	0.700
Software Development	WR	SSC:Norfolk, VA	18.537	12.960	Nov 2011	13.746	Nov 2012	-		13.746	Continuing	Continuing	Continuing
Integrated Logistics Support	C/CPFF	SeaPort:San Diego, CA	0.200	0.300	Nov 2011	0.243	Nov 2012	-		0.243	Continuing	Continuing	Continuing
Configuration Management	WR	SSC:San Diego, CA	0.460	-		-		-		-	0.000	0.460	
Technical Data	WR	SSC:San Diego, CA	0.200	-		-		-		-	0.000	0.200	
		Subtotal	22.216	13.760		14.395		-		14.395			
Test and Evaluation (\$ i	n Millions	)		FY 2	2012		2013 se	FY 20 OC		FY 2013 Total			
	Contract Method	Performing	Total Prior Years		Award		Award		Award		Cost To		Target Value of
Cost Category Item	& Type	Activity & Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Complete	Total Cost	Contract
Cost Category Item Developmental Test & Evaluation		Activity & Location NAWC:Patuxent River, MD	<b>Cost</b> 0.400	<b>Cost</b> 0.250	Date Nov 2011	<b>Cost</b> 0.203	Date Nov 2012	Cost -	Date	Cost 0.203	Complete Continuing		Contract
Developmental Test &	& Type	NAWC:Patuxent River,						Cost - -	Date		•		
Developmental Test & Evaluation	& Type WR	NAWC:Patuxent River, MD	0.400	0.250		0.203		-	Date	0.203	Continuing	Continuing	Contract
Developmental Test & Evaluation	& Type WR C/CPIF	NAWC:Patuxent River, MD COTF:Norfolk, VA Subtotal	0.400 0.785	0.250	Nov 2011	0.203 - 0.203 FY 2		-	013	0.203	Continuing	Continuing	Contract
Developmental Test & Evaluation Operational Test & Evaluation	& Type WR C/CPIF	NAWC:Patuxent River, MD COTF:Norfolk, VA Subtotal	0.400 0.785	0.250 - 0.250	Nov 2011	0.203 - 0.203 FY 2	Nov 2012	- - - FY 20	013	0.203 - 0.203 FY 2013	Continuing	Continuing	Contract
Developmental Test & Evaluation Operational Test & Evaluation Management Services (	& Type WR C/CPIF \$ in Millio Contract Method	NAWC:Patuxent River, MD COTF:Norfolk, VA Subtotal	0.400 0.785 1.185 Total Prior Years	0.250 - 0.250 FY 2	Nov 2011	0.203 - 0.203 FY 2 Ba	Nov 2012 2013 se Award	- - FY 20 OC	013 O Award	0.203 - 0.203 FY 2013 Total	Continuing 0.000 Cost To	Continuing 0.785	Contract Continuing Target Value of Contract
Developmental Test & Evaluation Operational Test & Evaluation Management Services ( Cost Category Item Contractor Engineering	& Type WR C/CPIF \$ in Millio Contract Method & Type	NAWC:Patuxent River, MD COTF:Norfolk, VA Subtotal ons) Performing Activity & Location	0.400 0.785 1.185 Total Prior Years Cost	0.250 - 0.250 FY 2 Cost	Nov 2011	0.203 - 0.203 FY 2 Ba Cost	Nov 2012 2013 se Award	- - FY 20 OC	013 O Award	0.203 - 0.203 FY 2013 Total	Continuing 0.000 Cost To Complete	Continuing 0.785 Total Cost	Contract Continuing Target Value of Contract
Developmental Test & Evaluation Operational Test & Evaluation Management Services ( Cost Category Item Contractor Engineering Support Government Engineering	& Type WR C/CPIF \$ in Millio Contract Method & Type C/CPFF	NAWC:Patuxent River, MD COTF:Norfolk, VA Subtotal ms) Performing Activity & Location SeaPort:San Diego, CA	0.400 0.785 1.185 <b>Total Prior</b> Years Cost 0.896	0.250 - 0.250 FY 2 Cost	Nov 2011	0.203 - 0.203 FY 2 Ba Cost	Nov 2012 2013 se Award	- - FY 20 OC	013 O Award	0.203 - 0.203 FY 2013 Total	Continuing 0.000 Cost To Complete 0.000	Continuing 0.785 70tal Cost 0.896 0.279	Contract Continuing Target Value of

Exhibit R-3, RDT&E Project Cos	<b>t Analysis:</b> PB 2013 N	avy				DAT	E: Februar	y 2012	
APPROPRIATION/BUDGET ACT	IVITY		R-1 ITEM NO	DMENCLATURE	PR	PROJECT			
1319: Research, Development, Te BA 5: Development & Demonstrat	est & Evaluation, Navy			N: Tactical Command	System 303	3032: NTCSS (Naval Tactical Command Spt Sys)			
		Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value o Contrac
	Project Cost Totals	25.008	14.524	15.015	-	15.015			
<u>Remarks</u>									

hibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012				
PROPRIATION/BUDGET ACTIVITY						
19: Research, Development, Test & Evaluation, Navy 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command System	3032: NTCSS (Naval Tactical Command Spt Sys)				
		393/				

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
	 <b>PROJECT</b> 3032: NTCS Sys)	SS (Naval Tactical Command Spt

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3032				
NTCSS Open Architecture Build 1- Test Readiness Review (TRR)	1	2014	1	2014
NTCSS Open Architecture Build 1- Production Readiness Review (PRR)	2	2014	2	2014
NTCSS Open Architecture Build 1- Operational Test (OT)	4	2014	4	2014
NTCSS Open Architecture Build 1- Delivery	2	2015	2	2015
NTCSS Open Architecture Build 2- System Requirements Review (SRR)	4	2011	4	2011
NTCSS Open Architecture Build 2- Critical Design Review (CDR)	4	2012	4	2012
NTCSS Open Architecture Build 2- Test Readiness Review (TRR)	3	2014	3	2014
NTCSS Open Architecture Build 2- Production Readiness Review (PRR)	4	2014	4	2014
NTCSS Open Architecture Build 2- Operational Test (OT)	1	2015	1	2015
NTCSS Open Architecture Build 2- Delivery	3	2015	3	2015
NTCSS Open Architecture Build 3- System Requirements Review (SRR)	4	2013	4	2013
NTCSS Open Architecture Build 3- Critical Design Review (CDR)	1	2014	1	2014
NTCSS Open Architecture Build 3- Test Readiness Review (TRR)	4	2014	4	2014
NTCSS Open Architecture Build 3- Production Readiness Review (PRR)	2	2015	2	2015
NTCSS Open Architecture Build 3- Operational Test (OT)	4	2015	4	2015
NTCSS Open Architecture Build 3- Delivery	2	2016	2	2016
NTCSS Open Architecture Build 4- System Requirements Review (SRR)	4	2014	4	2014
NTCSS Open Architecture Build 4- Critical Design Review (CDR)	1	2015	1	2015
NTCSS Open Architecture Build 4- Test Readiness Review (TRR)	1	2016	1	2016
NTCSS Open Architecture Build 4- Production Readiness Review (PRR)	2	2016	2	2016
NTCSS Open Architecture Build 4- Operational Test (OT)	4	2016	4	2016

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy				DATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy 3A 5: Development & Demonstration (SDD)	n, Navy PE 0604231N: Tactical Command System			PROJECT 3032: NTCSS (Naval Tactical Comman Sys)		
		Star	t	E	nd	
Events by Sub Project		Quarter	Year	Quarter	Year	
NTCSS Open Architecture Build 4- Delivery		2	2017	2	2017	
NTCSS Open Architecture Build 5- System Requirements R	leview (SRR)	1	2015	1	2015	
NTCSS Open Architecture Build 5- Critical Design Review (	CDR)	2	2015	2	2015	
NTCSS Open Architecture Build 5- Test Readiness Review	(TRR)	1	2016	1	2016	
NTCSS Open Architecture Build 5- Production Readiness R	eview (PRR)	2	2016	2	2016	
NTCSS Open Architecture Build 5- Operational Test (OT)		4	2016	4	2016	
NTCSS Open Architecture Build 5- Delivery		2	2017	2	2017	
NTCSS Open Architecture Build 6- System Requirements R	eview (SRR)	3	2016	3	2016	
NTCSS Open Architecture Build 6- Critical Design Review (CDR)		4	2016	4	2016	
NTCSS Open Architecture Build 6- Test Readiness Review	(TRR)	3	2017	3	2017	
NTCSS Open Architecture Build 6- Production Readiness R	eview (PRR)	4	2017	4	2017	

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Navy							DATE: Feb	ruary 2012	
				R-1 ITEM NOMENCLATURE         PROJECT           PE 0604231N: Tactical Command System         3320: TRIDENT Warrior							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3320: TRIDENT Warrior	-	3.712	3.579	-	3.579	3.020	3.047	2.265	2.303	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### <u>Note</u>

Trident Warrior was transferred from Project 9123 into Project 3320 beginning in FY12.

#### A. Mission Description and Budget Item Justification

Trident Warrior enables early delivery of Net-Centric Operation/Warfare capabilities to the warfighter via Fleet-directed Trident Warrior operational events with a strong emphasis on delivering Maritime Domain Awareness with Maritime Operations Center 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 and Concept of Operations to improve warfighting effectiveness. Coordinates FORCEnet efforts with other Service/Joint/Department of Defense/National efforts to ensure Joint/Interagency/Allied/Coalition applicability and interoperability.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Trident Warrior	-	3.712	3.579	-	3.579
Articles:		0	0		0
FY 2012 Plans:					
<ul> <li>-Focuses on operational experimentation of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance technologies during the Navy's premier annual Fleet Experimentation (FLEX) events. The primary goal is to validate information dominance capabilities, maritime warfighting policy and procedures, and interoperability between United State and Coalition partners.</li> <li>-Provide systems engineering and analysis to rapidly identify emergent fleet needs and capability shortfall, assessing risk, validating cost and delivering capability. Find solutions for the Office of the Chief of Naval Operations/Commander, U.S. Fleet Forces Command selected capability gaps and package them for operational use, favoring cost effective, disruptive technologies. Facilitate the successful transition of identified technology capabilities into Programs of Record. This process will deliver Program Objective Memorandum recommendations and supporting roadmaps based on assessments of capability gaps with a focus on technologies that respond to irregular, catastrophic and disruptive technology insertion.</li> <li>-The majority of Trident Warrior experimentation occurs during operational at-sea venues where new and emerging capabilities are integrated with current fleet units and either demonstrated or evaluated on their potential military utility. The Sea-based venue works on an 18-month cycle and focuses on the readiness of</li> </ul>					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY	<b>R-1 ITEM NOMENCLATURE</b>		ROJECT			
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604231N: Tactical Command Syste	<i>m</i> 33	20: TRIDEI	NT Warrior		
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	antities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
higher Technology Readiness Level technologies in a Maritime-based Warrior will be executed in two phases: phase one will be executed in exercise in Third Fleet by both US and coalition participants, and pha the VALIANT SHIELD exercise by US participants. -Continue to develop FY13 Trident Warrior FLEX plan and begin to de	a conjunction with the Rim of the Pacific se two will be executed in conjunction with			Dusc		Total
-Continue to focus on operational experimentation of Command, Com Intelligence, Surveillance, and Reconnaissance (C4ISR) technologies Experimentation (FLEX)events. The primary goal is to validate inform warfighting policy and procedures, and interoperability between the U -Continue to provide systems engineering and analysis to rapidly ider shortfall, assessing risk, validating cost and delivering capability. Find Naval Operations/Commander, U.S. Fleet Force Command selected operational use, favoring cost effective, disruptive technologies. Faci technology capabilities into Programs of Record. This process will del recommendations and supporting roadmaps based on assessments of technologies that respond to irregular, catastrophic and disruptive tec -The majority of Trident Warrior experimentation occurs during operate emerging capabilities are integrated with current fleet units and either potential military utility. The Sea-based venue works on an 18-month higher Technology Readiness Level technologies in a Maritime-based Trident Warrior will be executed in two phases. The venues to be deter support the experimental objectives of information dominance. -Continue to develop FY14 Trident Warrior FLEX plan and begin to de	a during the Navy's premier, annual Fleet nation dominance capabilities, maritime nited States (U.S.) and Coalition partners. https emergent fleet needs and capability d solutions for the Office of the Chief of capability gaps and package them for litate the successful transition of identified liver Program Objective Memorandum of capability gaps with a focus on hnology insertion. tional at-sea venues where new and demonstrated or evaluated on their cycle and focuses on the readiness of d environment. The at-sea portion of ermined, will be operational venues which					
Accom	plishments/Planned Programs Subtotals	-	3.712	3.579	-	3.579
<ul> <li><u>C. Other Program Funding Summary (\$ in Millions)</u></li> <li>N/A</li> <li><u>D. Acquisition Strategy</u></li> <li>Trident Warrior is an annual operational experiment and is not associated by the second structure of the second s</li></ul>	ciated with acquisition efforts.					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy 3A 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	PROJECT 3320: TRIDENT Warrior
E. Performance Metrics Confirmation of Fleet and Joint Interoperability with technology ca Technology Roadmaps as well as related Program Executive Offi		Accreditation, and alignment with current C4ISR

Exhibit R-3, RDT&E Pr	roject Cost	Analysis: PB 2013 P	Navy							DAI	E: Februar	y 2012	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					1 ITEM NON 0604231N:		-	System	<b>PROJ</b> 3320:	ECT TRIDENT	Warrior		
Test and Evaluation (\$	in Millions	3)	ſ	FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Trident Warrior (TW)	WR	Fleet Forces Command:San Diego, CA	-	0.10 <sup>-</sup>	Dec 2011	0.097	Dec 2012	-		0.097	Continuing	Continuing	Continuing
Trident Warrior (TW)	WR	Naval Postgraduate School:Monterey, CA	-	1.032	2 Nov 2011	0.996	Nov 2012	-		0.996	Continuing	Continuing	Continuing
Trident Warrior (TW)	WR	SSC Atlantic:Charleston, SC	-	0.469	) Jan 2012	0.453	Jan 2013	-		0.453	Continuing	Continuing	Continuin
Trident Warrior (TW)	WR	SSC Pacific:San Diego, CA	-	0.550	0 Nov 2011	0.528	Nov 2012	-		0.528	Continuing	Continuing	Continuin
Trident Warrior (TW)	C/CPFF	AUSGAR Technolgies Inc.:San Diego, CA	-	1.560	Dec 2011	1.505	Dec 2012	-		1.505	Continuing	Continuing	Continuing
		Subtotal	-	3.712	2	3.579		-		3.579			
			Total Prior Years Cost	FY	2012	FY 2 Ba		FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	-	3.712	2	3.579		-		3.579			

**Remarks** 

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	PROJECT 3320: <i>TRID</i>	ENT Warrior
PE 0604231N: Tactical Command System	UNCLASSIFIED		

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
	 PROJECT 3320: TRID	ENT Warrior

## Schedule Details

	Sta	nrt	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 3320					
Trident Warrior (TW) Execution 2012	2	2012	3	2012	
Trident Warrior (TW) Execution 2013	2	2013	3	2013	
Trident Warrior (TW) Execution 2014	2	2014	3	2014	
Trident Warrior (TW) Execution 2015	2	2015	3	2015	
Trident Warrior (TW) Execution 2016	2	2016	3	2016	
Trident Warrior (TW) Execution 2017	2	2017	3	2017	
TW Lab Based E2C Experiments 2012 Q1	1	2012	1	2012	
TW Lab Based E2C Experiments 2012 Q3	3	2012	3	2012	
TW Lab Based E2C Experiments 2013 Q1	1	2013	1	2013	
TW Lab Based E2C Experiments 2013 Q3	3	2013	3	2013	
TW Lab Based E2C Experiments 2014 Q1	1	2014	1	2014	
TW Lab Based E2C Experiments 2014 Q3	3	2014	3	2014	
TW Lab Based E2C Experiments 2015 Q1	1	2015	1	2015	
TW Lab Based E2C Experiments 2015 Q3	3	2015	3	2015	
TW Lab Based E2C Experiments 2016 Q1	1	2016	1	2016	
TW Lab Based E2C Experiments 2016 Q3	3	2016	3	2016	
TW Lab Based E2C Experiments 2017 Q1	1	2017	1	2017	
TW Lab Based E2C Experiments 2017 Q3	3	2017	3	2017	
TW Concept Development Conferences 2012	2	2012	2	2012	
TW Concept Development Conferences 2013	2	2013	2	2013	
TW Concept Development Conferences 2014	2	2014	2	2014	

it R-4A, RDT&E Schedule Details: PB 2013 Navy OPRIATION/BUDGET ACTIVITY Research, Development, Test & Evaluation, Navy Development & Demonstration (SDD)	<b>R-1 ITEM NOMEN</b> PE 0604231N: <i>Tac</i>	CLATURE stical Command System		PROJECT 3320: TRIDENT Warrior			
	I	Sta	nrt	Er	d		
Events by Sub Project		Quarter	Year	Quarter	Year		
TW Concept Development Conferences 2015		2	2015	2	2015		
TW Concept Development Conferences 2016		2	2016	2	2016		
TW Concept Development Conferences 2017		2	2017	2	2017		
TW Data Calls & CAA 2012		2	2012	2	2012		
TW Data Calls & CAA 2013		2	2013	2	2013		
TW Data Calls & CAA 2014		2	2014	2	2014		
TW Data Calls & CAA 2015		2	2015	2	2015		
TW Data Calls & CAA 2016		2	2016	2	2016		
TW Data Calls & CAA 2017		2	2017	2	2017		
TW Initial Planning Conferences 2012		4	2012	4	2012		
TW Initial Planning Conferences 2013		4	2013	4	2013		
TW Initial Planning Conferences 2014		4	2014	4	2014		
TW Initial Planning Conferences 2015		4	2015	4	2015		
TW Initial Planning Conferences 2016		4	2016	4	2016		
TW Initial Planning Conferences 2017		4	2017	4	2017		
TW Mid-Term Planning Conferences 2012		1	2012	1	2012		
TW Mid-Term Planning Conferences 2013		1	2013	1	2013		
TW Mid-Term Planning Conferences 2014		1	2014	1	2014		
TW Mid-Term Planning Conferences 2015		1	2015	1	2015		
TW Mid-Term Planning Conferences 2016		1	2016	1	2016		
TW Mid-Term Planning Conferences 2017		1	2017	1	2017		
TW Final Planning Conferences 2012		2	2012	2	2012		
TW Final Planning Conferences 2013		2	2013	2	2013		
TW Final Planning Conferences 2014		2 2014		2	2014		
TW Final Planning Conferences 2015		2	2015	2	2015		

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy				DATE: Februa	ary 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy 3A 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENC</b> PE 0604231N: <i>Tactic</i>		em <b>PROJE</b> 3320: 7	CT TRIDENT Warrior	
		Sta	art	Er	nd
Events by Sub Project		Quarter	Year	Quarter	Year
TW Final Planning Conferences 2016		2	2016	2	2016
TW Final Planning Conferences 2017		2	2017	2	2017
TW Military Utility Assessment 2012		4	2012	4	2012
TW Military Utility Assessment 2013		4	2013	4	2013
TW Military Utility Assessment 2014		4	2014	4	2014
TW Military Utility Assessment 2015		4	2015	4	2015
TW Military Utility Assessment 2016		4	2016	4	2016
TW Military Utility Assessment 2017		4	2017	4	2017

Exhibit R-2A, RDT&E Project Just		3 2013 Navy		1					DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV					OMENCLAT	-		PROJECT		- · ·	
1319: Research, Development, Test 3A 5: Development & Demonstration		n, Navy		PE 0604231	IN: Tactical (	Command Sy	rstem	3323: Mariti (MTC2)	me Tactical	Command 8	Control
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cos
3323: Maritime Tactical Command & Control (MTC2)	-	0.003	7.441	-	7.441	7.305	10.908	21.651	22.016	Continuing	Continuin
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
• •			mand and (	Control (C2)	canabilities /	and Maritime		erational Lev	al of War ca	nahilities no	ŧ
A. Mission Description and Budge MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exercise	n will provide ITC2 fields to sonnel and e uirements.	tactical Con all echelon: equipment th	s of commai at enables t	nd within the he Navy com	Navy. The mand struct	goal is to prov ure enhance	vide a suite d situationa	of maritime I awareness	applications planning, e	notionally as xecution, mo	s part of an onitoring,
supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission requ	n will provide ITC2 fields to sonnel and e uirements. Mecution.	tactical Con all echelons equipment th /ITC2 will fiel	s of commai at enables t d maritime a	nd within the he Navy com applications o	Navy. The mand struct designed to	goal is to prov ure enhance	vide a suite d situationa nated and s	of maritime Il awareness structured su	applications planning, e oport for tac FY 2013	notionally as xecution, motionally as the first second sec	s part of an onitoring, erational FY 2013
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and ex B. Accomplishments/Planned Pro	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in	tactical Con o all echelon: equipment th /ITC2 will fiel Millions, Ar	s of commai at enables t d maritime a	nd within the he Navy com applications o	Navy. The mand struct designed to	goal is to prov ure enhance	vide a suite d situationa	of maritime al awareness structured su 11 FY 2012	applications planning, e pport for tac FY 2013 Base	notionally as xecution, mo tical and ope	s part of an onitoring, erational
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and ex <b>B. Accomplishments/Planned Pro</b>	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in	tactical Con o all echelon: equipment th /ITC2 will fiel Millions, Ar	s of commai at enables t d maritime a	nd within the he Navy com applications o	Navy. The mand struct designed to	goal is to prov ure enhance provide autor	vide a suite d situationa nated and s FY 20	of maritime Il awareness structured su	applications planning, e pport for tac FY 2013 Base 3 -	notionally as xecution, motionally as the first second sec	s part of an onitoring, erational FY 2013
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and ex <b>B. Accomplishments/Planned Pro</b> <b>Title:</b> Navy Working Capital Fund R	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in	tactical Con o all echelon: equipment th /ITC2 will fiel Millions, Ar	s of commai at enables t d maritime a	nd within the he Navy com applications o	Navy. The mand struct designed to	goal is to prov ure enhance	vide a suite d situationa nated and s FY 20	of maritime al awareness structured su 11 FY 2012	applications planning, e pport for tac FY 2013 Base	notionally as xecution, motionally as the first second sec	s part of an onitoring, erational FY 2013
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exe B. Accomplishments/Planned Pro Title: Navy Working Capital Fund R FY 2012 Plans:	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in ate Adjustme	tactical Con o all echelon: equipment th /ITC2 will fiel Millions, Ar	s of comman at enables t d maritime a <u>ticle Quant</u>	nd within the he Navy com applications o ities in Eact	Navy. The mand struct designed to	goal is to prov ure enhance provide autor	vide a suite d situationa nated and s	of maritime al awareness structured su 11 FY 2012	applications planning, e pport for tac FY 2013 Base 3 -	notionally as xecution, motionally as the first second sec	s part of an onitoring, erational FY 2013
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and ex <b>B. Accomplishments/Planned Pro</b> <b>Title:</b> Navy Working Capital Fund R	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in ate Adjustment ljustment - th	tactical Con o all echelons equipment th ATC2 will fiel Millions, Ar ent	s of comman at enables t d maritime a <u>ticle Quant</u>	nd within the he Navy com applications o ities in Eact	Navy. The mand struct designed to	goal is to prov ure enhance provide autor	vide a suite d situationa nated and s FY 20 es:	of maritime al awareness structured su 11 FY 2012	applications planning, e pport for tac FY 2013 Base 3 -	notionally as xecution, motionally as xecution, motical and ope	s part of an onitoring, erational FY 2013
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exe <b>B. Accomplishments/Planned Pro</b> <b>Title:</b> Navy Working Capital Fund R <b>FY 2012 Plans:</b> Navy Working Capital Fund Rate Act <b>Title:</b> Maritime Tactical Command a	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in ate Adjustment ljustment - th	tactical Con o all echelons equipment th ATC2 will fiel Millions, Ar ent	s of comman at enables t d maritime a <u>ticle Quant</u>	nd within the he Navy com applications o ities in Eact	Navy. The mand struct designed to	goal is to prov ure enhance provide autor <i>Article</i>	vide a suite d situationa nated and s FY 20 es:	of maritime al awareness structured su 11 FY 2012	applications planning, e oport for tac FY 2013 Base 3 - 0	notionally as xecution, motionally as xecution, motical and ope	s part of an ponitoring, erational FY 2013 Total
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exe <b>B. Accomplishments/Planned Pro</b> <b>Title:</b> Navy Working Capital Fund Rate <b>FY 2012 Plans:</b> Navy Working Capital Fund Rate Act <b>Title:</b> Maritime Tactical Command a <b>FY 2013 Base Plans:</b> Begin initial development of Maritime	n will provide ITC2 fields to sonnel and e uirements. M ecution. grams (\$ in ate Adjustment ljustment - th nd Control (I e Tactical Co	tactical Con o all echelons equipment th ATC2 will fiel Millions, Ar ent his issue adju MTC2)	s of commar at enables t d maritime a ticle Quant ists WCF ra Control (M <sup>-</sup>	nd within the he Navy com applications of ities in Each tes.	Navy. The nmand struct designed to <u>n)</u> ities. Analyz	goal is to prov ure enhanced provide autor Article Article e, integrate	vide a suite d situationa nated and s FY 20 es:	of maritime al awareness structured su 11 FY 2012	applications planning, e oport for tac FY 2013 Base 3 - 0	notionally as xecution, motionally as xecution, motical and ope	s part of an ponitoring, erational FY 2013 Total
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exe <b>3. Accomplishments/Planned Pro</b> <b>7. Title:</b> Navy Working Capital Fund Rate <b>FY 2012 Plans:</b> Navy Working Capital Fund Rate Act <b>7. Title:</b> Maritime Tactical Command a <b>FY 2013 Base Plans:</b> Begin initial development of Maritime and test software transitioning from	n will provide ITC2 fields to sonnel and e uirements. Mecution. grams (\$ in ate Adjustment ljustment - th nd Control (I e Tactical Co Science & T	tactical Con o all echelons equipment th ATC2 will fiel Millions, Ar ent his issue adju MTC2)	s of comman at enables t d maritime a ticle Quant ists WCF ra Control (M <sup>-</sup> &T) efforts	nd within the he Navy com applications of ities in Each tes. TC2) capabil into the MTC	Navy. The mand struct designed to <u>n)</u> ities. Analyz 2 Program c	goal is to prov ure enhanced provide autor Article Article ie, integrate of Record.	vide a suite d situationa nated and s FY 20 es:	of maritime al awareness structured su 11 FY 2012	applications planning, e oport for tac FY 2013 Base 3 - 0	notionally as xecution, motionally as xecution, motical and ope	s part of an ponitoring, erational FY 2013 Total
MTC2 is a software program which supported by the joint C2 effort. M "Application Store" concept for per and assessment of its mission required planning, decision-making, and exe <b>B. Accomplishments/Planned Pro</b> <b>Title:</b> Navy Working Capital Fund Rate <b>FY 2012 Plans:</b> Navy Working Capital Fund Rate Act <b>Title:</b> Maritime Tactical Command a <b>FY 2013 Base Plans:</b>	n will provide ITC2 fields to sonnel and e uirements. Mecution. grams (\$ in ate Adjustment ljustment - th nd Control (I e Tactical Co Science & T	tactical Con o all echelons equipment th ATC2 will fiel Millions, Ar ent his issue adju MTC2)	s of comman at enables t d maritime a ticle Quant ists WCF ra Control (M <sup>-</sup> &T) efforts	nd within the he Navy com applications of ities in Each tes. TC2) capabil into the MTC	Navy. The mand struct designed to <u>n)</u> ities. Analyz 2 Program c	goal is to prov ure enhanced provide autor Article Article ie, integrate of Record.	vide a suite d situationa nated and s FY 20 es:	of maritime al awareness structured su 11 FY 2012	applications planning, e oport for tac FY 2013 Base 3 - 0	notionally as xecution, motionally as xecution, motical and ope	s part of an ponitoring, erational FY 2013 Total

Exhibit R-2A, RDT&E Project Justif	fication: PB	2013 Navy							DATE: Feb	ruary 2012	
<b>APPROPRIATION/BUDGET ACTIVI</b> 1319: Research, Development, Test & BA 5: Development & Demonstration		<b>R-1 ITEM NC</b> PE 0604231I			rstem	PROJECT 3323: Maritin (MTC2)	me Tactical	Command &	Control		
C. Other Program Funding Summa	ry (\$ in Milli	ons <u>)</u>									
			<u>FY 2013</u>	FY 2013	<u>FY 2013</u>					<u>Cost To</u>	
Line Item	FY 2011	FY 2012	Base	000	<u>Total</u>	<u>FY 2014</u>	FY 2015	<u>FY 2016</u>	<u>FY 2017</u>	<u>Complete</u>	Total Cost
• RDTEN/0604231N/0709: GCCS- M	25.219	17.576	5.330	0.000	5.330	1.852	1.868	1.889	1.922	Continuing	Continuing

### D. Acquisition Strategy

MTC2 is planning to execute a rapid software development acquisition strategy that is responsive to the fleet needs. Software development will be comprised of multiple releases of increasing levels of net-centric services capability. MTC2 will be software only, and require the Navy Common Computing Enterprise (CCE) provided by other network centric programs to serve as the underlying information technology infrastructure of network and hardware for MTC2 software. MTC2's primary contracting method for software development utilizes Indefinite Delivery, Indefinite Quantity (IDIQ) task orders on the Command and Control Multiple Award Contract (C2 MAC) and other task orders.

### E. Performance Metrics

Successfully complete initial engineering and design analysis, and acquisition documentation to achieve five Build Decisions.

Exhibit R-3, RDT&E Pro	oject Cost	Analysis: PB 2013 N	lavy							DATI	E: Februar	y 2012		
APPROPRIATION/BUD 1319: Research, Develo BA 5: Development & De	pment, Tes	t & Evaluation, Navy		<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>					3323:	<b>PROJECT</b> 3323: <i>Maritime Tactical Command &amp; Control</i> ( <i>MTC2</i> )				
Product Development	(\$ in Millio	ns)		FY 2	2012		2013 Ise	FY 2 OC		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Systems Engineering	WR	SSC:San Diego, CA	-	-		2.791	Nov 2012	-		2.791	Continuing	Continuing	Continuing	
Training Development	Various	Unknown:Unknown	-	-		0.070	Nov 2012	-		0.070	Continuing	Continuing	Continuing	
Software Development	WR	SSC:San Diego, CA	-	-		3.825	Nov 2012	-		3.825	Continuing	Continuing	Continuing	
		Subtotal	-	-		6.686		-		6.686				
Management Services	(\$ in Millio	ns)		FY 2012		FY 2013 FY 20 <sup>7</sup> Base OCO			FY 2013 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Navy Working Capital Fund Rate Adjustment	WR	WCF:TBD	-	0.003	Sep 2012	-		-		-	Continuing	Continuing	Continuing	
Government Engineering Support	WR	SSC:San Diego, CA	-	-		0.200	Nov 2012	-		0.200	Continuing	Continuing	Continuing	
Contractor Engineering Support	C/CPFF	SeaPort:San Diego, CA	-	-		0.200	Nov 2012	-		0.200	Continuing	Continuing	Continuing	
Program Management Support	C/CPFF	SeaPort:San Diego, CA	-	-		0.355	Nov 2012	-		0.355	Continuing	Continuing	Continuing	
		Subtotal	-	0.003		0.755		-		0.755				
			Total Prior Years Cost	FY 2	2012		2013 Ise	FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	

**Remarks** 

xhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
<b>PPROPRIATION/BUDGET ACTIVITY</b> 319: Research, Development, Test & Evaluation, Navy A 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	PROJECT 3323: Maritime Tactical Command & Control (MTC2)

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
	PE 0604231N: Tactical Command System	PROJECT 3323: Mariti (MTC2)	me Tactical Command & Control

### Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3323				
Acquisition Decision Memorandum	3	2011	3	2011
Material Development Decision	1	2013	1	2013
Engineering Drop 1	3	2013	3	2013
Build Decision / Release 1	1	2014	1	2014
Engineering Drop 2	3	2014	3	2014
Operational Assessment 1	3	2014	3	2014
Developmental Test 1	4	2014	4	2014
Build Decision / Release 2	1	2015	1	2015
Operational Test	1	2015	1	2015
Fielding Decision Review / Release 1	2	2015	2	2015
Engineering Drop 3	3	2015	3	2015
Operational Assessment 2	4	2015	4	2015
Developmental Test 2	1	2016	1	2016
Build Decision / Release 3	1	2016	1	2016
Fielding Decision Review / Release 2	2	2016	2	2016
Engineering Drop 4	3	2016	3	2016
Operational Assessment 3	4	2016	4	2016
Developmental Test 3	1	2017	1	2017
Build Decision / Release 4	1	2017	1	2017
Fielding Decision Review / Release 3	2	2017	2	2017
Operational Assessment 4	3	2017	3	2017

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy       DATE: February 2012								
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENC PE 0604231N: Tactio			PROJECT 3323: Maritime Tactical Command & C (MTC2)				
		Sta	art		E	nd		
Events by Sub Project		Quarter	Yea	ar	Quarter	Year		
Engineering Drop 5		3	20	17	3	2017		
Developmental Test 4		4	20	17	4	2017		

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy										
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstration	esearch, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 3324: Navy					Air Operations Command and					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3324: Navy Air Operations Command and Control (NAOC2)	-	2.283	4.983	-	4.983	4.281	2.174	1.136	1.156	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### Note

Beginning in fiscal year 2012, the Navy Command and Control Air Planning Capability effort will be realigned from Theater Battle Management Core System (TBMCS), project unit 0709, to the Navy Air Operations Command and Control (NAOC2) program under project unit 3324.

### A. Mission Description and Budget Item Justification

Navy Air Operations Command and Control (NAOC2) integrates and tests Air Force program of record systems that provide an integrated and scalable planning system for standardized, secure, and automated decision support for Air Force, Joint, and Allied commanders worldwide. These programs provide automated air operations planning, execution management and intelligence capabilities at the Force level to include fleet commanders, numbered fleet commanders, commander carrier strike group, Commander Expeditionary Strike Group, Commander Landing Force, and Joint Task Force Commanders. NAOC2 includes Theater Battle Management Core System (TBMCS), Command and Control Air and Space Operations Suite (C2AOS), plus Command, Control and Information Services (C2IS). C2AOS and C2IS are being developed as Service Oriented Architecture (SOA) services to allow for scalability and integration with Common Computing Environments (CCE). Continuation of these efforts will significantly enhance the Joint Force Air Component Commander and Combined Air Operations Center personnel to plan daily air operations including strike, airlift, offensive and defensive air, tanker missions in support of combat operations, addressing the requirement of war fighter of distributed planning and execution processes and significantly improving Joint interoperability. TBMCS continues a hardware transition to CCEs such as Consolidated Afloat Networks and Enterprise Services (CANES). Currently, TBMCS is the key system that is used to conduct real world air planning in the Joint and Navy environment. C2AOS and C2IS will replace TBMCS in a SOA environment while bringing more flexibility to the war fighter. In FY2012, the program will continue efforts previously funded by Global Command and Control System Maritime (GCCS-M) to migrate Air Force delivered TBMCS software to the Navy unique CANES environment. Additionally in FY2012, the program will conduct integration and testing in support of Air Force development of C2AOS and C2IS.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: TBMCS CANES Migration	-	1.424	1.359	-	1.359
Articles		0	0		0
FY 2012 Plans: Conduct migration of Air Force design, development, and delivery of Theater Battle Management Core System (TBMCS) software to the Navy unique Consolidated Afloat Networks and Enterprise Services (CANES) Common					

Exhibit R-2A, RDT&E Project Justi	fication: PB	2013 Navy						D	ATE: Febru	uary 2012	
<b>APPROPRIATION/BUDGET ACTIVI</b> 1319: Research, Development, Test of BA 5: Development & Demonstration	& Evaluation,	Navy		<b>R-1 ITEM NO</b> PE 0604231		URE Command Syst	tem 🗄	<b>PROJECT</b> 3324: Navy A Control (NAO		ns Commar	nd and
B. Accomplishments/Planned Proc	grams (\$ in N	lillions, Art	ticle Quantit	ties in Each	)		FY 201	1 FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Computing Environment. Conduct int Test.	tegrated TBM	ICS/CANES	S Developme	ental Tests ar	nd prepare fo	or Operational	-				
FY 2013 Base Plans:											
Complete migration of Air Force desi (TBMCS) software to the Navy uniqu Computing Environment. Conduct int and Operational Test.	e Consolidate	ed Afloat Ne	etworks and	Enterprise S	ervices (CAI	NES) Commo	n				
<i>Title:</i> Command and Control Air and Services (C2IS) Integration and Test		ations Suite	(C2AOS) / (	Command, C	Control and Ir	nformation Articles		- 0.859 0			3.624
<b>FY 2012 Plans:</b> Conduct integration and testing in su functionality on Navy unique systems including theater level planning plus of	to support ir	ncreased Jo	int interoper	ability and e							
FY 2013 Base Plans: Continue integration and testing in su ensure full functionality on Navy uniq to support increased Joint interopera distributed planning and execution pr	ue systems t bility and enh	to include N	lavy impleme	entation of se	ervice oriente	ed architecture	9				
			Accomplis	hments/Plai	nned Progra	ams Subtotal	S	- 2.283	4.983	-	4.983
C. Other Program Funding Summa	ry (\$ in Millio	ons)	FY 2013	FY 2013	FY 2013					Cost To	
Line Item	FY 2011	FY 2012	Base	0CO	Total	FY 2014	FY 2015	FY 2016	FY 2017		Total Cos
• OPN 0204660N/2618 : Navy Command and Control System	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
• RDTE 0604231N / 0709: GCCS- M Maritime Applications	1.729	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.729
PE 0604231N: Tactical Command Sy	stem			UNCLAS	SIFIED						

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
	PE 0604231N: Tactical Command System	PROJECT 3324: Navy Control (NA	Air Operations Command and OC2)

#### D. Acquisition Strategy

TBMCS is designed, developed, and delivered by the Air Force and will be integrated for a Navy Common Computing Environment (CCE) such as CANES. As a Joint interest program, this approach satisfies the current validated requirements, supports the accelerated retirement of legacy hardware, and reduces overall risk to the program.

Command and Control Air and Space Operations Suite (C2AOS) and Command, Control and Information Services (C2IS) are designed, developed, and delivered by the Air Force and will be integrated for a Navy CCE and service oriented architecture environment such as CANES. This approach satisfies the current validated requirements and reduces overall risk to the program.

### E. Performance Metrics

TBMCS, C2AOS, and C2IS are designed, developed, and delivered by the Air Force. This leverage greatly reduces the integration and testing costs associated with each software release. The solutions will reside on CCE/CANES architecture. These software-only solutions eliminate hardware procurement, installation, and sustainment costs.

<b>APPROPRIATION/BUD</b> 1319: <i>Research, Develo</i> BA 5: <i>Development &amp; D</i>	GET ACTIN	t & Evaluation, Navy	,		<b>ITEM NON</b> 0604231N:		<b>URE</b> Command S	System			•	-	and
Product Development		. ,		FY 2	2012	FY 2 Ba	2013 Ise	FY 2 OC	013	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	SSC Pacific:San Diego, CA	-	1.123	Nov 2011	2.880	Nov 2012	-		2.880	0.000	4.003	
Licenses	WR	SSC Pacific:San Diego, CA	-	0.059	Nov 2011	0.063	Nov 2012	-		0.063	0.000	0.122	
Government Furnished Equipment (GFE)	WR	SSC Pacific:San Diego, CA	-	0.657	Nov 2011	0.259	Nov 2012	-		0.259	0.000	0.916	
		SSC Pacific:San Diego,				0.419	Nov 2012	-		0.419	0.000	0.419	
Training DevelopmentText	WR	CA	-	-		0.410							
Training DevelopmentText Remarks	WR		-	- 1.839		3.621		-		3.621	0.000	5.460	
	forts, not for fi	CA	-		2012	3.621		- FY 2 OC			0.000	5.460	
Remarks GFE supports integration eff	forts, not for fi	CA	- - Total Prior Years Cost		2012 Award Date	3.621	2013			3.621	0.000 Cost To Complete	5.460 Total Cost	Target Value of Contract
Remarks GFE supports integration eff Support (\$ in Millions)	forts, not for fi	CA Subtotal elding. Performing	Total Prior Years	FY 2	Award	3.621 FY 2 Ba	2013 se Award Date	00	O Award	3.621	Cost To		Value of
Remarks GFE supports integration eff Support (\$ in Millions) Cost Category Item	forts, not for fi Contract Method & Type	CA Subtotal elding. Performing Activity & Location	Total Prior Years	FY 2 Cost	Award Date	3.621 FY 2 Ba Cost	2013 Ise Award Date Nov 2012	00	O Award	3.621 FY 2013 Total Cost	Cost To Complete	Total Cost	Value of
Remarks GFE supports integration eff Support (\$ in Millions) Cost Category Item Development Support	forts, not for fi Contract Method & Type TBD	CA Subtotal elding. Performing Activity & Location Unknown:Unknown SSC LANT:Charleston,	Total Prior Years Cost -	<b>FY 2</b> <b>Cost</b> 0.059	Award Date	3.621 FY 2 Ba Cost 0.060	2013 ise Award Date Nov 2012 Nov 2012	Cost -	O Award	3.621 FY 2013 Total Cost 0.060	Cost To Complete 0.000	Total Cost 0.119	Value of
Remarks GFE supports integration eff Support (\$ in Millions) Cost Category Item Development Support Integrated Logistics Support	forts, not for fir Contract Method & Type TBD WR	CA Subtotal elding. Performing Activity & Location Unknown:Unknown SSC LANT:Charleston, SC Unknown:San Diego,	Total Prior Years Cost - -	<b>FY 2</b> <b>Cost</b> 0.059	Award Date	3.621 FY 2 Ba Cost 0.060 0.358	2013 se Award Date Nov 2012 Nov 2012 Nov 2012	00 Cost - -	O Award	3.621 FY 2013 Total Cost 0.060 0.358	Cost To Complete 0.000 0.000	<b>Total Cost</b> 0.119 0.358	Value of

Exhibit R-3, RDT&E Pr	oject Cost	Analysis: PB 2013 N	lavy							DATI	E: Februar	y 2012	
<b>APPROPRIATION/BUD</b> 1319: <i>Research, Develo</i> BA 5: <i>Development &amp; D</i>	opment, Tes	t & Evaluation, Navy			<b>ITEM NON</b> 0604231N:		<b>URE</b> Command S	System	3324:	<b>PROJECT</b> 3324: Navy Air Operations Command ar Control (NAOC2)			and
Test and Evaluation (\$	nd Evaluation (\$ in Millions)		FY 2	2012	FY 2 Ba	2013 Ise	FY 2 OC		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	COMOPTEVFOR:Norfolk		0.138		0.140		-	Duto	0.140	0.000	0.278	
		Subtotal	-	0.138		0.140		-		0.140	0.000	0.278	
Management Services	s (\$ in Millio	ns)	[	FY 2	2012	FY 2 Ba	2013 Ise	FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	TBD	Unknown:San Diego, CA	-	0.247	Nov 2011	0.253	Nov 2012	-		0.253	0.000	0.500	
Program Management Support	TBD	Unknown:San Diego, CA	-	-		0.126	Nov 2012	-		0.126	0.000	0.126	
		Subtotal	-	0.247		0.379		-		0.379	0.000	0.626	
			Total Prior Years Cost	FY 2	2012		2013 Ise	FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	-	2.283		4.983		-		4.983	0.000	7.266	

**Remarks** 

xhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
<b>PPROPRIATION/BUDGET ACTIVITY</b> 319: Research, Development, Test & Evaluation, Navy A 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	<b>PROJECT</b> 3324: Navy Air Operations Command and Control (NAOC2)
0604231N: Tactical Command System	UNCLASSIFIED	

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy	DATE: February 2012
	 <b>PROJECT</b> 3324: Navy Air Operations Command and Control (NAOC2)

### Schedule Details

	St	Start			
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 3324					
Air Force C2AOS/C2IS ASIS/ASMA/AQIS Milestone B	3	2012	3	2012	
Air Force C2AOS/C2IS ASIS/ASMA Milestone C	2	2014	2	2014	
Air Force C2AOS/C2IS ARIS Milestone B	4	2014	4	2014	
Air Force C2AOS/C2IS AQIS Milestone C	2	2015	2	2015	
Air Force C2AOS/C2IS ARIS Milestone C	3	2016	3	2016	
Software Delivery (C2AOS/C2IS)	2	2014	3	2016	
Developmental Test (TBMCS/CANES)	3	2012	3	2012	
Operational Test (TBMCS/CANES)	1	2013	1	2013	
Developmental/Operational Test (C2AOS/C2IS)	3	2012	3	2016	

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Navy							DATE: Feb	ruary 2012	
<b>APPROPRIATION/BUDGET ACTI</b> 1319: <i>Research, Development, Tes</i> BA 5: <i>Development &amp; Demonstratio</i>	t & Evaluatio	n, Navy			IOMENCLA 1N: Tactical	-	ystem	<b>PROJECT</b> 9123: <i>FOR</i> (	CEnet		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
9123: FORCEnet	5.552	5.386	4.544	-	4.544	4.871	4.830	5.004	5.088	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### <u>Note</u>

Trident Warrior was transferred from Project 9123 into Project 3320 beginning in FY12.

#### A. Mission Description and Budget Item Justification

FORCEnet is the Navy and Marine Corps initiative to deliver Information Dominance and 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). Chief of Naval Operations Information Dominance effort escalates prioritization and organizational responsibility resulting in increased scope of systems, platforms and mission areas. FORCEnet is the driver of Sea Power 21, Naval Power 21, the Naval Operating Concept for Joint Operations, and the DoN's Naval Transformation Roadmap.

The FORCEnet project line funds the following efforts:

(1) DoN Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Transformation/Strategic Planning within DoN/ Joint/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 MDA capability, Maritime Operations Centers (MOC), and enterprise network efforts.

(2) 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 Command, Control, Communications, and Computers (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.

(3)Information Dominance Roadmaps and Analysis: Funding supports Portfolio Health Assessments on Navy mission areas and identifies gaps in Information Dominance capabilities provided to the missions. Funds support development of Information Dominance Roadmaps by providing analytical and architectural support to each roadmap owner.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: FORCEnet	5.552	5.386	4.544	-	4.544

	DATE: February 2012					
<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>			Enet			
·	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
Articles: ns, and Computers Surveillance, and n DoN/Joint/Department of Defense (DoD) der management of Joint Capability Portfolios, environments, developed integration plans, accelerated innovation, technology insertion, ced Joint operational capabilities in Net- (MDA), Standing Joint Force Headquarters, ns. At-Sea experiment venue focused on t platforms across a range of Technology ad Technology Innovations and higher TRL a Military Utility Assessment to Naval Network Sea Trial Expeditionary Strike Group (ESG). nd Fleet/Commander Sixth Fleet Area of ontinued coalition presence. er compliance with specific goal identification, on requirements. Directed and ensured oprovals for all technologies. Conducted Risk nsure systems will not have a negative impact			Base	000		
	PE 0604231N: <i>Tactical Command Syste</i> Quantities in Each)	PE 0604231N: Tactical Command System       91         Quantities in Each)       FY 2011         Articles:       0         ns, and Computers Surveillance, and n DoN/Joint/Department of Defense (DoD) der management of Joint Capability Portfolios, environments, developed integration plans, accelerated innovation, technology insertion, ced Joint operational capabilities in Net-       0         (MDA), Standing Joint Force Headquarters, ns.       n.         At-Sea experiment venue focused on t platforms across a range of Technology nd Technology Innovations and higher TRL       a Military Utility Assessment to Naval Network Sea Trial Expeditionary Strike Group (ESG). nd Fleet/Commander Sixth Fleet Area of ontinued coalition presence. ler compliance with specific goal identification, on requirements. Directed and ensured oprovals for all technologies. Conducted Risk nsure systems will not have a negative impact upport analysis and subsequent acquisition	PE 0604231N: Tactical Command System       9123: FORCE         Quantities in Each)       FY 2011       FY 2012         Articles:       0       0         ns, and Computers Surveillance, and n DoN/Joint/Department of Defense (DoD) der management of Joint Capability Portfolios, environments, developed integration plans, accelerated innovation, technology insertion, ced Joint operational capabilities in Net-       0         (MDA), Standing Joint Force Headquarters, ns.       Net-         At-Sea experiment venue focused on t platforms across a range of Technology nd Technology Innovations and higher TRL       a Military Utility Assessment to Naval Network Sea Trial Expeditionary Strike Group (ESG). nd Fleet/Commander Sixth Fleet Area of ontinued coalition presence. ler compliance with specific goal identification, on requirements. Directed and ensured oprovals for all technologies. Conducted Risk nsure systems will not have a negative impact upport analysis and subsequent acquisition	PE 0604231N: Tactical Command System       9123: FORCEnet         Quantities in Each)       FY 2011       FY 2012       Base         Articles:       0       0       0         ns, and Computers Surveillance, and n DoN/Joint/Department of Defense (DoD) der management of Joint Capability Portfolios, environments, developed integration plans, accelerated innovation, technology insertion, ced Joint operational capabilities in Net-       Image: Command System       Image: Command System         (MDA), Standing Joint Force Headquarters, ns.       At-Sea experiment venue focused on t platforms across a range of Technology nd Technology Innovations and higher TRL       Image: Command System       Image: Command System         a Military Utility Assessment to Naval Network Sea Trial Expeditionary Strike Group (ESG). nd Fleet/Commander Sixth Fleet Area of ontinued coalition presence.       Image: Command System       Image: Command System         er compliance with specific goal identification, on requirements. Directed and ensured oprovals for all technologies. Conducted Risk nsure systems will not have a negative impact upport analysis and subsequent acquisition       Image: Command System       Image: Command System	PE 0604231N: Tactical Command System       9123: FORCEnet         Quantities in Each)       FY 2011       FY 2012       FY 2013 Base       FY 2013 OCO         Articles:       0       0       0       0         ns, and Computers Surveillance, and n DoN/Joint/Department of Defense (DoD) der management of Joint Capability Portfolios, environments, developed integration plans, accelerated innovation, technology insertion, ced Joint operational capabilities in Net-       Image: Command System       Image: Command System         (MDA), Standing Joint Force Headquarters, ns.       At-Sea experiment venue focused on t platforms across a range of Technology nd Technology Innovations and higher TRL       Image: Compliance with Specific goal identification, on requirements. Directed and ensured oprovals for all technologies. Conducted Risk nsure systems will not have a negative impact       Image: Compliance with specific goal identification, on requirements. Directed and ensured	

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			C	ATE: Febru	ary 2012	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syste</i>		PROJECT 9123: FORCE	Enet		
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	antities in Each)	FY 201	1 FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
practices to coordinate experiment and test plans; lead the Data Colle provided unbiased assessment to Fleet and Acquisition key decision -Provided results to government sponsors to support the program's P Execution System and engineering decisions. Areas of investigation of Operational Warfare Command and Control, operational level implem Information Grid and Network Centric Enterprise Services technologie Procedures and Concept of Operations. -Planned and executed Trident Warrior 11 operational events to access to the Fleet. Provided leave-behind capability for one deployment cyclo operational assessment. -Began planning for Trident Warrior 12: Solicited participation of gover technologies responsive to identified naval capability gaps. Selected supportable within resources, approximately 90 initiatives. Began dev Plan.	makers. Planning, Programming, Budgeting, and were in the following categories: Range of nentation of MDA, MOCs, Coalition, Global es and associated Tactics, Techniques, and elerate transition of FORCEnet capability cle of successful technologies for extended ernment sponsored and industry sponsored technologies for participation in numbers					
Systems Requirements Analysis/Systems Engineering (formerly Osp analysis and systems engineering of systems under development by of Defense (DoD). -Provided technical and systems engineering expertise required for C Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) and tracking, architecture development, systems analysis to evaluate infrastructure, resources and other existing/developing systems. -Provided systems engineering for the synthesis of current net-centric emerging C4ISR systems.	Department of the Navy (DoN)/Department Command, Control, Communications, systems technical requirements generation a alignment and synchronization of					
<b>FY 2012 Plans:</b> DoN C4ISR Transformation/Strategic Planning within DoN/Joint/DoD and Combatant Commander management of Joint Capability Portfoli emerging capabilities in selected operating environments, develop in reviews and investment strategies, accelerate innovation, technology non-material solutions for enhanced Joint operational capabilities in N -Continue to support Navy implementation of Maritime Domain Aware Maritime Operations Centers and coalition/allied operations.	os, continue to assess existing and tegration plans, execute system engineering insertion, and incorporation of material and Net-Centric Operations/Warfare.					

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy				DATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command Syste</i>	System PROJECT 9123: FORCEnet				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	tities in Each)	FY 201	1 FY 201	FY 2013 2 Base	FY 2013 OCO	FY 2013 Total
Systems Requirements Analysis/Systems Engineering (formerly Osprey requirements analysis and systems engineering of systems under devel -Continue to provide technical and systems engineering expertise requir requirements generation and tracking, architecture development, system synchronization of infrastructure, resources and other existing/developir -Continue to support systems engineering for the synthesis of current Na and emerging C4ISR systems. Larger number of systems, platforms an of effort.	opment by DoN/DoD. ed for C4ISR systems technical ns analysis to evaluate alignment and ng systems. et-Centric C4ISR systems with existing					
Information Dominance Roadmaps and Analysis: Research Navy missic between programs for budget tradeoffs and mission impacts of those tra -Identify Navy mission area gaps in Information Dominance capabilities efforts for future budget decisions. -Evaluate Navy mission areas for linkages to roadmap action items and support in the development of Information Dominance Roadmaps. - Ensure Information Dominance roadmaps objectives provide stated ca	ideoffs. to prioritize Science and Technology provide analytical and architectural					
<b>FY 2013 Base Plans:</b> DoN Command, Control, Communications, Computers, Intelligence, Sur (C4ISR) Transformation/Strategic Planning within Department of Navy( Framework: Within the DoD, Joint Staff, and Combatant Commander ma continue to assess existing and emerging capabilities in selected operate plans, execute system engineering reviews and investment strategies, a insertion, and incorporation of material and non-material solutions for en Net-Centric Operations/Warfare. -Continue to support Navy implementation of Maritime Domain Awarene Maritime Operations Centers and coalition/allied operations. Systems Requirements Analysis/Systems Engineering (formerly Osprey	DoN)/Joint/Department of Defense(DoD) anagement of Joint Capability Portfolios, ing environments, develop integration accelerate innovation, technology ahanced Joint operational capabilities in ess, Standing Joint Force Headquarters,					
requirements analysis and systems engineering of systems under devel						

		D	ATE: Febru	ary 2012	
<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>			inet		
Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
ystems analysis to evaluate alignment and eloping systems. ent Net-Centric C4ISR systems with existing ns and mission areas will increase the scope arch the Navy mission areas for ision impacts of those tradeoffs. ance capabilities to prioritize Science and action items and provide analytical and Roadmaps.					
	5.552	5.386	4.544		4.54
avy decisions, which in turn impact acquisition p and supporting acquisition of classified efforts.	-	helon 1 res	ponse to en	nergent stra	ategic
and supporting acquisition of classified enorts.					-
	PE 0604231N: Tactical Command Syste Quantities in Each) required for C4ISR systems technical ystems analysis to evaluate alignment and eloping systems. ent Net-Centric C4ISR systems with existing ns and mission areas will increase the scope arch the Navy mission areas for ision impacts of those tradeoffs. ance capabilities to prioritize Science and action items and provide analytical and e Roadmaps. provide stated capabilities to the warfighters. omplishments/Planned Programs Subtotals avy decisions, which in turn impact acquisition provide analytical and prove the states of the stat	PE 0604231N: Tactical Command System       91         Quantities in Each)       FY 2011         required for C4ISR systems technical ystems analysis to evaluate alignment and eloping systems.       FY 2011         ent Net-Centric C4ISR systems with existing ins and mission areas will increase the scope       arch the Navy mission areas for sion impacts of those tradeoffs.         ance capabilities to prioritize Science and action items and provide analytical and Roadmaps.       provide stated capabilities to the warfighters.         omplishments/Planned Programs Subtotals       5.552	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System       PROJECT 9123: FORCE         Quantities in Each)       FY 2011         required for C4ISR systems technical ystems analysis to evaluate alignment and eloping systems. ent Net-Centric C4ISR systems with existing ns and mission areas will increase the scope       FY 2011         arch the Navy mission areas for ision impacts of those tradeoffs. ance capabilities to prioritize Science and e Roadmaps. provide stated capabilities to the warfighters.       5.552         omplishments/Planned Programs Subtotals       5.552       5.386	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System       PROJECT 9123: FORCEnet         Quantities in Each)       FY 2011       FY 2012       FY 2013 Base         required for C4ISR systems technical ystems analysis to evaluate alignment and eloping systems. ent Net-Centric C4ISR systems with existing ms and mission areas will increase the scope       FY 2011       FY 2012       FY 2013 Base         arch the Navy mission areas for ision impacts of those tradeoffs. ance capabilities to prioritize Science and action items and provide analytical and Roadmaps. provide stated capabilities to the warfighters.       5.552       5.386       4.544         avy decisions, which in turn impact acquisition programs.       5.552       5.386       4.544	PE 0604231N: Tactical Command System       9123: FORCEnet         Quantities in Each)       FY 2011       FY 2012       FY 2013       FY 2013         required for C4ISR systems technical ystems analysis to evaluate alignment and eloping systems.       FY 2011       FY 2012       Base       OCO         and Net-Centric C4ISR systems with existing ns and mission areas will increase the scope       Image: Comparison of the second sign of the second sign of the second sign of the second sign of the second seco

Exhibit R-3, RDT&E Pro	ject Cost	Analysis: PB 2013 N	lavy							DAT	E: Februar	y 2012	
APPROPRIATION/BUDG		VITY		R-1	ITEM NO	MENCLAT	URE		PROJ	ЕСТ			
1319: Research, Develop	ment, Tes	t & Evaluation, Navy		PE	0604231N	: Tactical C	command .	System	9123:	FORCEnet	1		
BA 5: Development & Del	monstratio	on (SDD)											
Product Development (	\$ in Millio	ns)	Γ	FY 2012		FY 2013 Base		FY 20 OCC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development DLB/RCD	Various	Various:Various	1.196	-		-		-		-	0.000	1.196	
Systems Engineering-DLB/ RCD	Various	Various:Various	0.600	-		-		-		-	0.000	0.600	
Ship Integration	Various	Various:Various	0.935	-		-		-		-	0.000	0.935	
Systems Engineering	Various	Various:Various	1.600	-		-		-		-	0.000	1.600	
		Subtotal	4.331	-		-		-		-	0.000	4.331	
Support (\$ in Millions)				FY	2012	FY 2 Ba		FY 20 OCC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support DLB/RCD	Various	Various:Various	0.250	-		-		-		-	0.000	0.250	
Configuration Management DLB/RCD	Various	Various:Various	0.115	-		-		-		-	0.000	0.115	
Development Support DLB/ RCD	Various	Various:Various	0.250	-		-		-		-	0.000	0.250	
Software Development DLB/ RCD	Various	Various:Various	1.971	-		-		-		-	0.000	1.971	
Development Support	Various	Various:Various	2.700	-		-		-		-	0.000	2.700	
Software Support	Various	Various:Various	2.900	-		-		-		-	0.000	2.900	
Sys Req Analysis/Sys Eng	Various	Various:Various	15.094	-		-		-		-	0.000	15.094	
S/W Develop,Integ,Demo, Field - MDA Prototypes	Various	Various:Various	108.910	-		-		-		-	0.000	108.910	
Sys Req Analysis/Sys Eng	WR	SSC PAC:San Diego, CA	0.356	0.936	Jan 2012	0.544	Jan 2013	-		0.544	Continuing	Continuing	Continuing
Sys Req Analysis/Sys Eng	WR	SSC LANT:Charleston, SC	0.356	0.950	Jan 2012	0.656	Jan 2013	-		0.656	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)	WR	NSWC Dahlgren:Dahlgren, MD	-	0.359	Jan 2012	0.274	Jan 2013	-		0.274	0.000	0.633	

			lavy								E: Februar	y 2012	
1319: Research, Develop	ment, Tes	t & Evaluation, Navy			ITEM NOM 0604231N:			System	<b>PROJE</b> 9123: <i>F</i>	E <b>CT</b> FORCEnet			
Information Dominance Roadmaps and Analysis     C/CPFF     METRON:Reston, W       Information Dominance Roadmaps and Analysis     C/CPFF     SAIC:San Diego, C/       Information Dominance Roadmaps and Analysis     WR     SSC LANT:Charlest NC       Information Dominance Roadmaps and Analysis     Various     Performing Activity & Location       Information Dominance Roadmaps and Analysis     Various     Various:Various       Information Dominance Roadmaps and Analysis     Various     Various:Various       Information Dominance Roadmaps and Analysis     Var			FY 2	2012	FY 2013 Base		FY 20 OC		FY 2013 Total				
Cost Category Item	Method	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Information Dominance Roadmaps and Analysis	C/CPFF	METRON:Reston, VA	-	0.541	Jan 2012	0.541	Jan 2013	-		0.541	Continuing	Continuing	Continuin
Information Dominance Roadmaps and Analysis	C/CPFF	SAIC:San Diego, CA	-	1.499	Jan 2012	1.499	Jan 2013	-		1.499	Continuing	Continuing	Continuin
Information Dominance Roadmaps and Analysis	WR	SSC LANT:Charleston, NC	-	0.460	Jan 2012	0.460	Jan 2013	-		0.460	Continuing	Continuing	Continuin
		Subtotal	132.902	4.745		3.974		-		3.974			
Test and Evaluation (\$ i	n Millions	5)		FY 2	2012	FY 2 Ba		FY 20 OC		FY 2013 Total			
Cost Category Item	Method	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various:Various	1.300	-		-		-		-	0.000	1.300	
Accelerating Joint Warfighting Capability (TW)	Various	Various:Various	30.736	-		-		-		-	0.000	30.736	
Accelerating Joint Warfighting Capability (TW)	WR	Fleet Forces Command:San Diego, CA	0.095	-		-		-		-	0.000	0.095	
Accelerating Joint Warfighting Capability (TW)	WR	Naval Postgraduate School:Monterey, CA	0.978	-		-		-		-	0.000	0.978	
Accelerating Joint Warfighting Capability (TW)	WR	SSC Atlantic:Charleston, SC	0.445	-		-		-		-	0.000	0.445	
Accelerating Joint Warfighting Capability (TW)	WR	SSC Pacific:San Diego, CA	1.069	-		-		-		-	0.000	1.069	
Accelerating Joint Warfighting Capability (TW)	C/CPFF	AUSGAR Technologies Inc.:San Diego, CA	1.489	-		-		-		-	0.000	1.489	
Imp FORCEnet Req (Fn Comp)	Various	Various:Various	17.144	-		-		-		-	0.000	17.144	
Developmental Test & Evaluation DLB/RCD	Various	Various:Various	0.500	-		-		-		-	0.000	0.500	

Exhibit R-3, RDT&E Pro	ject Cost	Analysis: PB 2013 N	lavy							DAT	E: Februar	y 2012	
<b>APPROPRIATION/BUDG</b> 1319: <i>Research, Develop</i> BA 5: <i>Development &amp; De</i>	ment, Tes	t & Evaluation, Navy			<b>ITEM NON</b> 0604231N:			System	<b>PROJ</b> 9123:	ECT FORCEnet	t		
Test and Evaluation (\$ i	n Millions	5)		FY	2012	FY 2 Ba	2013 Ise	FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DoN Transformation (Strategic Planning)	Various	Various:Various	20.521	-		-		-		-	0.000	20.521	
DoN Transformation (Strategic Planning)	WR	NUWC:Newport, RI	0.240	0.200	Jan 2012	0.200	Jan 2013	-		0.200	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)	WR	NPGS:Monterey, CA	0.290	0.441	Jan 2012	0.370	Jan 2013	-		0.370	Continuing	Continuing	Continuin
DoN Transformation (Strategic Planning)	C/CPFF	NGIT:Herndon, VA	0.349	-		-		-		-	Continuing	Continuing	Continuin
DoN Transformation (Strategic Planning)	C/CPFF	Unknown:Unknown	-	-		-		-		-	0.000	0.000	
Need Item Text	C/BA	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
		Subtotal	75.156	0.641		0.570		-		0.570			
Remarks Accelerating Joint Warfighting Management Services (	\$ in Millic	·, · · ·			9123 into new 2012	FY 2	0 from FY12 f 2013 Ise	orward. FY 2 OC		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Support	Various	Various:Various	2.124	-		-		-		-	0.000	2.124	
Government Engineering Support	Various	Various:Various	3.899	-		-		-		-	0.000	3.899	
Program Management Support DLB/RCD	Various	Various:Various	0.250	-		-		-		-	0.000	0.250	
Travel DLB/RCD	Various	Various:Various	0.145	-		-		-		-	0.000	0.145	
Program Management Support	Various	Various:Various	0.800	-		-		-		-	0.000	0.800	
	i	1					1			1	i .	1	

Travel

Acquisition Workforce

Various

Various

Various:Various

Various:Various

-

-

0.299

0.165

-

-

-

-

0.299

0.165

0.000

0.000

-

-

Exhibit R-3, RDT&E Pr	oject Cost /	Analysis: PB 2013 N	lavy							DAT	E: Februar	y 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command SystemPROJECT 9123: FOR						t		
Management Services	(\$ in Millio	ns)		FY 2	2012		2013 ase	FY 2 O(		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	7.682	-		-		-		-	0.000	7.682	
			Total Prior Years Cost	FY 2	2012		2013 ase	FY 2 OC		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	220.071	5.386		4.544		-		4.544			

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604231N: <i>Tactical Command System</i>	<b>PROJECT</b> 9123: <i>FOR</i> (	CEnet
PE 0604231N: Tactical Command System			

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
	<b>PROJECT</b> 9123: <i>FOR</i> (	CEnet

## Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 9123					
Trident Warrior (TW) Execution	2	2011	3	2011	
TW Lab Based E2C Experiments	1	2011	3	2011	
TW Concept Development Conferences	2	2011	2	2011	
TW Data Calls & CAA	2	2011	2	2011	
TW Initial Planning Conferences	4	2011	4	2011	
TW Mid-Term Planning Conferences	1	2011	1	2011	
TW Final Planning Conferences	2	2011	2	2011	
TW Military Utility Assessment	4	2011	4	2011	
Naval Information Dominance Enterprise	1	2011	4	2017	