Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	764.217	75.683	71.645	68.463	-	68.463	72.004	60.021	62.990	63.869	Continuing	Continuing
0486.: Tactical Support Center	111.068	12.752	5.245	5.027	-	5.027	5.032	6.260	6.403	6.514	Continuing	Continuing
0709: GCCS-M Maritime Applications	176.126	18.508	5.330	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	199.964
2213: Mission Planning	231.944	19.116	25.195	20.059	-	20.059	37.463	26.211	24.845	22.919	Continuing	Continuing
2307: Shipboard LAN/WAN	0.000	0.300	0.313	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.613
3032: NTCSS (Naval Tactical Command Spt Sys)	25.008	14.061	15.015	16.600	-	16.600	7.194	1.779	0.931	0.948	Continuing	Continuing
3320: TRIDENT Warrior	0.000	3.619	3.579	2.340	-	2.340	2.318	2.254	2.304	2.345	Continuing	Continuing
3323: Maritime Tactical Command & Control (MTC2)	0.000	0.003	7.441	17.443	-	17.443	14.410	19.304	24.238	26.778	Continuing	Continuing
3324: Navy Air Operations Command and Control (NAOC2)	0.000	2.073	4.983	4.066	-	4.066	2.165	1.131	1.157	1.176	Continuing	Continuing
9123: FORCEnet	220.071	5.251	4.544	2.928	-	2.928	3.422	3.082	3.112	3.189	Continuing	Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Project 3323 Maritime Tactical Command & Control (MTC2): In FY 2013, the development of maritime tactical command and control capabilities was realigned from Global Command and Control System Maritime (GCCS-M) Maritime Applications (Project Unit x0709) to the MTC2 program (Project Unit x3323). In FY 2014, Global Force Management - Data Intitiative efforts transitioned to the Maritime Tactical Command and Control (MTC2) program (Project unit x3323).

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

PE 0604231N: Tactical Command System

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System

BA 5: System Development & Demonstration (SDD)

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.

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 (MPE) 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: AH-1W, F/A-18 A-F, E-2C, EP-3E, EA-6B, AV-8B, S-3, V-22, Chief of Naval Air Training (CNATRA), EA-18G, MV-22, C-2, MH-53E, P-3, Aircraft Carrier Intelligence Center (CVIC), SH-60B/F, HH-60H, CH-53D/E, CH-46E, UH-1N, VH-3/VH-60, AH-1Z, UH-1Y, MH-60R/S and E-2D. 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. An extension of Windows XP is planned to allow all naval aircraft to be supported during the transition. Future JMPS platforms include: MQ-4C (Triton) and H-53K. The next JMPS architecture version will support net-centric goals by providing route "publish and subscribe" capabilities, transition to 64 bit and emerging technology and Information Assurance (IA) requirements. Funding profile includes 64 bit development which requires a complete software restructure to address memory limitations and system errors re

Shipboard Local Area Network (LAN)/Wide Area Network (WAN): Integrated Shipboard Network System (ISNS): ISNS provides Navy ships with reliable, high-speed SECRET and UNCLASSIFIED LANs, providing the network infrastructure (switches and drops to the PC), Basic Network Information Distribution Services and access to the Defense Information Systems Network WAN, Secure and Nonsecure Internet Protocol Router Network (SIPRNET and NIPRNET) which are used by other hosted applications or systems such as Naval Tactical Command Support System, 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

PE 0604231N: Tactical Command System

Navy

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System

BA 5: System Development & Demonstration (SDD)

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.

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): 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 Department of Defense (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, material solution analysis, technology development, engineering and software development of these capabilities. Global Force Management - Data Initiative (GFM-DI) is the Department-wide enterprise solution that enables visibility/accessibility/sharing of data applicable to the entire DoD force structure. GFM-DI is the enterprise solution for force structure representation and MTC2 will be the data source for the Navy's force structure representation. In FY 2014, GFM-DI will perform design and development for integration into MTC2 and will align to the joint command and control objective architecture (jC2 OA).

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 Center (CAOC) personnel to plan daily air operations including strike, airlift, offensive and defensive air, and 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, planner, and executor.

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): 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.

PE 0604231N: Tactical Command System

Navy

Page 3 of 79

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
77.245	71.645	51.697	-	51.697
75.683	71.645	68.463	-	68.463
-1.562	0.000	16.766	-	16.766
-	-			
-	-			
-	-			
-	-			
-	-			
0.424	0.000			
-1.986	0.000			
0.000	0.000	8.225	-	8.225
0.000	0.000	8.541	-	8.541
	75.683 -1.562 - - - - - 0.424 -1.986 0.000	77.245 71.645 75.683 71.645 -1.562 0.000	77.245 71.645 51.697 75.683 71.645 68.463 -1.562 0.000 16.766 0.424 0.000 -1.986 0.000 0.000 0.000 8.225	77.245 71.645 51.697 - 75.683 71.645 68.4631.562 0.000 16.766

Change Summary Explanation

Technical: Not applicable.

Schedule:

TACTICAL SUPPORT CENTER (Project 0486):

FRP is scheduled for 4th Qtr FY12.

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

In August 2011, ASN (RD&A) issued Fielding Decision Review (FDR) approval to field GCCS-M 4.1 Force Level (FL) and Unit Level (UL) configurations.

Group Level Final Engineering Drop delivered to government; Development Test, Technical Evaluation and Operational Test in FY 2013. Operational Assessment was dropped in FY 2013 as Director of Operation Test & Evaluation (DOT&E) and Command Operational Test & Evaluation Force (COTF) determined it is not needed for GL 4.1. FDR is an FY 2013 funded effort which slipped to FY 2014.

Global Force Management - Data Initiative (GFM-DI) development included in the GCCS-M baseline in FY 2012.

Mission Planning (Project 2213):

System Development:

JMPS FW 64 Bit Prototype - Details added to the schedule. Effort runs from 1Q FY13-4Q FY13 - Determine the complexity and create prototypes for the migration of components from the existing 32-bit JMPS to a 64-bit Mission Planning Environment (MPE). The transition to a 64-bit system is needed to address current and future memory and processing limitations.

PE 0604231N: Tactical Command System UNCLASSIFIED

Navy Page 4 of 79 R-1 Line #88

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System

BA 5: System Development & Demonstration (SDD)

JMPS FW 64 Bit Architecture Development- 1Q FY15-4Q FY16/ 3Q FY14-4Q FY17 - Development is required to transition from current FW 32 bit to 64 bit architecture. The transition to a 64-bit system is needed to address current and future memory and processing limitations.

JMPS FW 64 Bit Mission Planning Environment (MPE) Integration/Validation- 1Q FY17-4Q FY17/ 1Q FY18-4Q FY18 - Delay due to JMPS FW 64 Bit Architecture Development schedule. Development is required to transition from current FW 32 bit to 64 bit architecture. The transition to a 64-bit system is needed to address current and future memory and processing limitations.

JMPS V1.4 Development Test- 1Q FY12-3Q FY12/ Removed from schedule - Due to USAF Increment IV (PE 0208006F) Critical Change Review, FW V1.4 will not achieve Windows 7 transition need date. FW 1.3.5 will be utilized in lieu of FW 1.4 during Windows 7 transition.

JMPS V1.4 MPE Integration/Validation - 1Q FY12-4Q FY16/ Removed from schedule - Due to USAF Increment IV (PE 0208006F) Critical Change Review, FW V1.4 will not achieve Windows 7 transition need date. FW 1.3.5 will be utilized in lieu of FW 1.4 during Windows 7 transition.

JMPS V1.3.5 Mission Planning Environment (MPE) Integration/Validation- 1Q FY12-4Q FY13/ 1Q FY12-4Q FY15 - An extension of Windows XP is planned to allow all naval aircraft to be supported during the Windows 7 transition. Windows XP custom support contract with Microsoft to extend use of Windows XP-based JMPS MPEs including FA-/EA-18, EA-6B, E-2C, E-2D and AV-8B past April 2014 end-of-service for Windows XP.

JMPS V1.2.4 Mission Planning Environment (MPE) Integration/Validation- 1Q FY12-4Q FY13/ 1Q FY12-2Q FY14 - An extension of Windows XP is planned to allow all naval aircraft to be supported during the Windows 7 transition. Windows XP custom support contract with Microsoft to extend use of Windows XP-based JMPS MPEs including FA-/EA-18, EA-6B, E-2C, E-2D and AV-8B past April 2014 end-of-service for Windows XP.

Naval Tactical Command Support System (NTCSS) (Project 3032):

Increasing requirements in information security and functional capability have required shifts in the approach for systems design and development. The updated schedule reflects a more integrated plan to accomplish refined requirements, fact-of-life changes, and modernization of the NTCSS system. As development approaches and build requirements are solidified, changes to the schedule will reflect more accurate time frames for multiple NTCSS system builds.

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

Acquisition Milestones:

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. If subsequent decisions are made to not follow the DoD Rapid Information Technology Acquisition process, the standard DoD 5000 acquisition process will be used.

Schedule:

Build Decision Release 2 and Fielding Decision Release 1 moved to the right to reflect lessons learned from previous Program Executive Office Command, Control, Communications, Computers, & Intelligence (PEO C4I) pilot programs following the DoD Rapid Information Technology Acquisition process. The following Build Decisions, Fielding Decision Reviews, Operational Tests, and Development Tests are linked together and align to the acquisition process. Engineering Drops 2, 4, and 5 were moved to align with the Build and Fielding Decisions Reviews. The Build Decisions and Fielding Decisions were also

PE 0604231N: Tactical Command System

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	'
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	
BA 5: System Development & Demonstration (SDD)		
moved to align with the contracting process of six months from Operational Assessments to align with the Integrated Defensional Operational Assessment 4 were moved to the right to re	se Acquisition, Technology, and Logistics Life Cycle Mar	

PE 0604231N: Tactical Command System Navy

Page 6 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System
0486.: Tactical Support Center

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0486.: Tactical Support Center	111.068	12.752	5.245	5.027	-	5.027	5.032	6.260	6.403	6.514	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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 (DII) Common Operating Environment (COE) compliant.

TOCs and their equivalents provide Command, Control, Communications, Computers and Intelligence (C4I) capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MTOCs and their equivalents 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 Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems (FOS) aircraft and systems evolution including P-3C aircraft updates to sensors and weapons systems, such as the Anti-Surface Warfare Maritime Improvement Program (AMIP), and the Command Control Communications Computers for Anti-Submarine Warfare (C4 for ASW) P-3C aircraft upgrades, P-8A Multi-mission Maritime Aircraft (MMA) Increment 1, as well as development of emergent, ground C4I support capabilities for the P-8A Multi-mission Maritime Aircraft (MMA) Increment 2 and the Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS).

The Joint Mobile Ashore Support Terminal (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.

PE 0604231N: Tactical Command System

Navy Page 7 of 79

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	0486.: Tact	ical Support Center
BA 5: System Development & Demonstration (SDD)			

The TacMobile program was designated as an Acquisition Category (ACAT) III weapons system program in July 2004 and is no longer directly associated with the GCCS-M program. The TacMobile program follows an Evolutionary Acquisition approach, which provides a mechanism for adding a series of future capabilities that maintain and enhance the operational relevance of the systems provided, 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 (FOS), operational C4I integration support for new and upgraded Maritime Patrol and Reconnaissance Aircraft (MPRA) such as MMA (Multi-mission Maritime Aircraft), AIP, BAM UAS as well as other Command and Control (C2) and fighter aircraft are primary objectives.

FY14: Funding supports TacMobile systems development and prototyping to achieve interoperability with P-8A MMA Increment 2 and the BAMS UAS, increased modularity, support for additional security enclaves, and enhancing flexibility and mobility, to offset the size/weight/cube of additional required aircraft interfaces developed to support P-8A MMA operations. Network-centric Services Oriented Architecture (SOA) and airborne C4I integration efforts continue as improvements to airborne and Intelligence/Surveillance/Reconnaissance (ISR) networking technologies are matured. Will achieve interoperability with emerging MPRF Aircraft and Sensors while reducing TacMobile footprint enhancing Mobility capability.

The DARK FUSION JCTD will provide intelligence analysts, joint warfighters, Combatant Commanders (COCOM) and other interagency senior decision makers significant maritime domain awareness (MDA) improvement, aimed at increased awareness of certain vessels and "dark" targets (e.g., smaller vessels, "fast movers/go fasts", semi-submersibles, non-emitting vessels, etc.) not being detected by current means, using newly developed and under-utilized data sources. These vessels may not be emitting their normal complement of maritime signals (e.g., not participating in the electro-magnetic spectrum).

Di 71000 in prominento i i anno a i rogiano (vin miniono) 7 i anno a quantita o in Euchi,		1 1 2012	1 1 2010	1 1 2017
Title: Net Ready		0.789	0.638	0.638
	Articles:	0	0	0
FY 2012 Accomplishments: Communications: Conducted Operational Test and Evaluation of Cipher Text Routing Wide Band Beyond Line of Sight Internet Protocol (IP) capabilities (Increment 2.1). Continued to investigate Joint Tactical Radio System (JTRS) and oth software definable radio options for incorporation into TacMobile communications architecture (Tech Refresh 2.1.1). Continues tigation of requirements for Range of Warfare Command and Control (ROWC2) reach-back IP connectivity options communications continuity.	ner Continued			
FY 2013 Plans: Communications: Continue study of alternatives for identified Joint Tactical Radio System (JTRS) and/or other software radio options for incorporation into TacMobile communications architecture. Continue study for Range of Warfare Communication (ROWC2) reach-back Internet Protocol (IP) connectivity options for communications continuity. (TR 2.1.1) Community Maritime Patrol and Reconnaissance Force (MPRF)/Air Anti Submarine Warfare (ASW) Community of Interest (COI) date development (expansion of the ASW COI data model) Commence Tactical Operations Center (TOC)/Mobile Tactical Operation (MTOC) Content Management Extensible Markup Language (XML) Data Dictionary and XML Schema development in support of the MPRF/Air ASW COI data model. (TR 2.1.1) Conduct Services Oriented Architecture (SOA) instantiation	mand and nmence ata model perations nent			

PE 0604231N: Tactical Command System

Navy

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

Page 8 of 79 R-1 Line #88

FY 2012 FY 2013

FY 2014

xhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: /	April 2013	
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJE	СТ		
19: Research, Development, Test & Evaluation, Navy A 5: System Development & Demonstration (SDD) PE 0604231N: Tactical Command System 0480				port Center	
. Accomplishments/Planned Programs (\$ in Millions, Article Q	<u>Quantities in Each)</u>		FY 2012	FY 2013	FY 2014
acMobile prototype system for refinement of design implementatio lbs. Commence update of Concept of Operations (CONOPS)/ Concluding capabilities for higher than secret operations. (Inc rement	ncept of Employment (CONEMP)/ Concept of Use (CON				
Y 2014 Plans:					
continue Services oriented Architecture (SOA) design refinement. Ind Reconnaissance Force (MPRF)/Air Anti Submarine Warfare (Astronoment Soand environment with Extensible Markup Language (XM) actical Operations Center (MTOC) Content Management XML Dat	SW) Community of Interest (COI) data model developme IL) schema and Tactical Operations Center (TOC)/Mobile	ent			
itle: Tactical Mobile Acoustic Support System (TACMASS)			0.736	0.736	0.736
	Ar	ticles:	0	0	0
conducted Operational Test and Evaluation of capabilities to support ircraft (MMA) Increment 1 Intelligence/Surveillance/reconnaissance increment 2.1). Continued development of enhanced broadband patercept System updated screeners. Continued Integration of analysterfaces for Maritime Patrol Aircraft Intelligence/Surveillance/recorgustems. Continued development and integration of Improved and a support fielding of P-8A Multi mission Aircraft (MMA) Increment 2 Tech Refresh 2.1.1).	e (ISR) and Anti Submarine Warfare (ASW) sensor system processing capabilities. Continued Integration of Acoustic ysis capabilities to support evolving data standards and remaissance (ISR) and Anti Submarine Warfare (ASW) see Advanced Multi-Static Acoustic Analysis capabilities requ	ems c media nsor uired			
Y 2013 Plans: conduct development testing of selected enhanced broadband procesting of Acoustic Intercept System updated screeners. Continue of aupport evolving data standards and media interfaces for Maritime Find Anti Submarine Warfare (ASW) sensor systems. Continue interdayanced Multi-Static Acoustic Analysis capabilities required to support integration and begin developmental testing of High Altitud Iternatives for expeditionary post flight analysis capability. Begin increment 3)	development and integration of analysis capabilities to Patrol Aircraft Intelligence/Surveillance/Reconnaissance egration and begin developmental testing of Improved and oport fielding of P-8A Multi mission Aircraft (MMA) Incremode ASW capabilities.(Tech Refresh 2.1.1) Establish Analy	(ISR) d ent 2. ysis Of			
Y 2014 Plans:					
		l l			

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED Page 9 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DA	TE: A	pril 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System	PROJECT 0486.: Tactica	l Supp	oort Center	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	in Each)	FY 20	12	FY 2013	FY 2014
Continue Multistatic Active Coherent (MAC), High Altitude Anti Submarine W. Warfare (ASW) Weapons Capability (HAAWC), and Automatic Identification fielding of P-8A Increment 2. Down select alternative on expeditionary post f	System (AIS) integration system testing to sup	port			
Title: Aircraft Interfaces	Ar	0 ticles:	.583	0.583 0	0.58
FY 2012 Accomplishments: Media: Conducted Operational Test and Evaluation of new ground support ca developed for Maritime Patrol and Reconnaissance Aircraft (MPRA) incorpor Increment 1 (Increment 2.1). Continued to evaluate interface requirements to Unmanned Aerial System (BAMS UAS) to ensure platform Warfighting whole centric interfaces. Continued analysis of integration requirements for P-8A M those interfaces required to support P-8A MMA Increment 2 (Tech Refresh 2)	ating P-8A Multi-mission Maritime Aircraft (MMA o support Broad Area Maritime Surveillance eness. Continued to evaluate and assess netwo IMA Increment 2. Began planning for developm	rk-			
FY 2013 Plans: Media: Continue to evaluate interfaces required to support Broad Area Maritin UAS) to ensure platform Warfighting wholeness. Continue to evaluate and a 2.1.1). Begin development of those interfaces required to support P-8A Increasing Systems (AAS). Begin analysis of integration requirements for P-8A	ssess network-centric interfaces.(Tech Refresh ement 2. Begin requirements analysis for Advar				
FY 2014 Plans: Media: Complete development of those interfaces required to support P-8A In requirements analysis for Advanced Airborne Systems (AAS). Continue analysis (Increment 3)		ent 3.			
Title: Tactical Data Links	Ar	0 ticles:	.158	0.158 0	0.16
FY 2012 Accomplishments: Conducted Operational Test and Evaluation of TADIL capabilities to support mission Aircraft (MMA) Increment 1 and legacy P-3C Orion Intelligence/Surv Warfare (ASW) tactical data exchange (Increment 2.1). Began assessment in Analysis of Alternatives (AoA) options for development of TacMobile TADIL to	reillance/reconnaissance (ISR) and Anti Submai preparation for prioritization and down select				
FY 2013 Plans:					

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 10 of 79

	UNCLASSII ILD				
Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System	PROJECT 0486.: Tactical Support Center			
B. Accomplishments/Planned Programs (\$ in Millions, Article Qual	ntities in Each)		FY 2012	FY 2013	FY 2014
Continue assessment in preparation for prioritization and down select A TacMobile TADIL transition roadmap. (Increment 3)	Analysis of Alternatives (AoA) options for developmen	t of			
FY 2014 Plans: Study LINK-11 sundown plan, impacts on TacMobile, and potential add Assess implementation of LINK-16 Concurrent Multi-Netting (CMN), add Joint Tactical Radio System (MIDS JTRS), and adoption of Tactical Ta	doption of Multifunctional Information Distribution System				
Title: Enterprise Solutions	Ar	ticles:	0.586 0	0.581 0	0.580 0
FY 2012 Accomplishments: Conducted Operational Test and Evaluation of network infrastructure to back-up and disaster recovery QOS. Conduct operational testing and Intelligence Surveillance Reconnaissance (ISR) data volume, provide r (QOS), and architectural updates to maintain evolving information assudevelopment of tactical and mobile architectural networking infrastructus systems Agency (DISA) and Navy Net-Centric Operating standards the Architecture with Cross Domain accessibility. Began study and desig management and security requirements for P-8A Increment 2.0 and Brimission data (Tech Refresh 2.1.1). Assessed current available options Ground System Navy (DCGS-N) capabilities (Increment 3).	evaluation of network infrastructure to meet increased redundant back-up and disaster recovery Quality of Seurance standards. (Increment 2.1). Began design for the ure that complies with net ready, Defense Information at support evolutionary transition to a Services Orienter of the formation of development of data at rest storage, data conterport of Area Maritime Surveillance Unmanned Aircraft Systems	ervice ed nt ystem			
FY 2013 Plans: Conduct integration and developmental testing of tactical mobile networ Navy Net-Centric Operating standards that support evolutionary transit (CANES) compatible Services Oriented Architecture (SOA) with Multi-letesting of data at rest storage, data content management, and security options for incorporation of appropriate Distributed Common Ground Security	ion to a Consolidated Afloat Network Enterprise Servi evel Enclaves (MLE) accessibility. Begin developmer requirements for P-8A Increment 2. Assess available	ces ntal			
FY 2014 Plans: Develop requirements for assessed option preference of appropriate D capabilities. Continue development of Mature Multi Level Enclave (ML Storage requirements for TacMobile including P8 Inc 3 and Advanced A	E) design. Conduct Analysis of Alternatives on Mass				
Title: Command and Control (C2)	Ar	ticles:	0.408 0	0.402 0	0.402 0

PE 0604231N: Tactical Command System

Navy

UNCLASSIFIED
Page 11 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	PROJECT 0486.: Tactical Sup	pport Center		
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	uantities in Each)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Conducted Operational Test and evaluation of Global Command and Intelligence Preparation of the Battle Space capabilities, access to Singerial Military Intelligence database products, and COP managem assurance standards and maintain interoperability (Increment 2.1). (C2) prototype. Developed Analysis of Alternatives (AoA) for capabil (MPRF) Commander Task Force (CTF) C2 requirements an C2 track Increment 3.0)	ignal Intelligence (SIGINT), Electronic Warfare (EW), an ent, display, and processing capabilities that meet inforr Continued integration of follow on Command and Contro lities to support Maritime Patrol and Reconnaissance Fo	nd mation ol orce		
FY 2013 Plans: Identify Global Command and Control System - Maritime (GCCS-M) of the Battle Space capabilities, access to Signal Intelligence (SIGIN database products, and COP management, display, and processing maintains interoperability. Continue integration of follow on Commandevelopmental test and integration of a correlator, to support Maritim Task Force (CTF) C2 requirements an C2 track data correlation and	T), Electronic Warfare (EW), and General Military Intelliq capabilities that meet information assurance standards and and Control (C2) prototype.(Tech refresh 2.1.1) Beg e Patrol and Reconnaissance Force (MPRF) Command	gence and in		
FY 2014 Plans: Begin requirements analysis for AAS as part of Multi Level Enclave (Control System - Maritime (GCCS-M) replacement option design an		d and		
Title: Maritime Patrol and Reconnaissance Force (MPRF) Interopera		3.238 ticles: 0	2.147 0	1.928 0
FY 2012 Accomplishments: Conducted operational test and evaluation of Maritime Patrol ASW melanning environment, and TacMobile systems Aircraft Pre-flight Insective study for development of P-8A Multi mission Aircraft (MMA) Increment Continued design for integration of modular and hardware independent Continued design for convergence of Tactical Operations Center and common baseline to reduce platform unique training requirements are of automated TacMobile system functionality to reduce operator works.	ertion Data outputs(Increment 2.1). Continued design nt 2 mission planning interoperability technical upgrades nt solutions to reduce mobile system architecture footpr d Mobile Tactical Operations Center architecture toward nd duplicative life cycle logistics costs. Began developm	s. int.		

PE 0604231N: Tactical Command System

Navy

UNCLASSIFIED
Page 12 of 79

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PRO		•		
1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD) PE 0604231N: Tactical Command System 048	OJECT 6.: Tactical Sup	JECT : Tactical Support Center		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014	
reduction and consolidation of MPRA media interface devices and to streamline data transfer rates. Began development of functionality that supports multiple security enclaves in an expeditionary operating environment (Tech Refresh 2.1.1/Increment 3)				
FY 2013 Plans: Conduct developmental testing and evaluation of P-8A Multi mission Aircraft Increment 2 and Broad Area Maritime Surveillance Unmanned Aerial System (BAMS UAS) mission planning interoperability upgrades. Begin developmental testing and integration of modular and hardware independent solutions to reduce mobile system architecture footprint. Continue developmental Testing for convergence of Tactical Operations Center and Mobile Tactical Operations Center architecture toward common baseline to reduce platform unique training requirements and duplicative life cycle logistics costs. Conduct Analysis of Alternatives of automated TacMobile system functionality to reduce operator workload, to offset increasing MPRF Intelligence Surveillance and Reconnaissance (ISR) Mission/Function/Task growth. Continue design to achieve reduction and consolidation of MPRA media interface devices and to optimize data transfer rates. (Tech Refresh 2.1.1) Develop functionality that supports multiple security enclaves in an expeditionary operating environment. (Increment 3)				
FY 2014 Plans: Conduct full system integration of P-8A Multi mission Aircraft Increment 2 mission planning interoperability upgrades. Continue full system testing and integration of modular and hardware independent solutions to reduce mobile system architecture footprint. Complete developmental Testing for convergence of Tactical Operations Center and Mobile Tactical Operations Center architecture toward common baseline to reduce platform unique training requirements and duplicative life cycle logistics costs. Downselect Analysis of Alternatives of automated TacMobile system functionality to reduce operator workload, to offset increasin MPRF Intelligence Surveillance and Reconnaissance (ISR) Mission/Function/Task growth and develop an engineering design model. Complete implementing all hardware design optimizations which reduce and consolidate TM footprint and any MPRA media changes. Utilize technology that best optimizes data transfer rates. Continue with development of Multi Level Enclaves. (Increment 3)				
Title: Dark Fusion Article:	6.254 c: 0	0.000	0.000	
Description: Dark Fusion				
FY 2012 Accomplishments: Integrate DARK Fusion capability into the Office of Naval Intelligence S2A system Technical demonstrations, Operational demonstrations and formal assessments				
Accomplishments/Planned Programs Subtotal	s 12.752	5.245	5.027	

PE 0604231N: Tactical Command System

Navy

UNCLASSIFIED
Page 13 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		,	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	0486.: <i>Tac</i>	tical Support Center
BA 5: System Development & Demonstration (SDD)			

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

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPN/0204271N/2246: MPRF Mission Support	11.926	18.428	18.130		18.130	18.318	17.733	18.283	18.607	Continuing	Continuing
• OPN/0204660N/2906: <i>TacMobile</i>	10.876	15.489	18.189		18.189	18.069	15.676	16.158	16.444	Continuing	Continuing

Remarks

D. Acquisition Strategy

Evolutionary Acquisition - Increment 2.0 provided enhanced Beyond Line of Sight (BLOS) Global Information Grid (GIG) reach back capability, and supports Maritime Situational Awareness connectivity enhancements for data exchange with Maritime Patrol and Reconnaissance Force (MPRF) aircraft and with Coalition data networks. It incorporates Anti Submarine Warfare (ASW) acoustical analysis improvements and new P-3 aircraft ASW interfaces. Increment 2.1 will support migration to follow on Global Command and Control System - Maritime (GCCS-M) version 4.0.3 and introduction of the P-8A Multi-mission Maritime Aircraft (MMA) Increment 1. Tech Refresh 2.1.1 will support technical engineer changes associated with the introduction of P-8A Multi-mission Maritime Aircraft (MMA) Increment 2, and the Broad Area Maritime Surveillance (BAMS) Unmanned Aerial System (UAS). Increment 3 will incorporate support for other Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems (FOS) Aircraft and Systems.

The Dark Fusion Joint Capabilities Technical Demonstration (JCTD) acquisitions will be executed by the JCTD Technical Manager (TM). The TM is the Naval Research Laboratory (NRL).

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 the Increment 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 Multi-mission Maritime Aircraft (MMA) Increment 2, and the Broad Area Maritime Surveillance (BAMS) Unmanned Aerial System (UAS), other Maritime Patrol and Reconaissance Force (MPRF) Family of Systems (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.

PE 0604231N: Tactical Command System

Navy

Page 14 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

0486.: Tactical Support Center

Product Developmen	t (\$ in M	illions)		FY 2	2012	FY:	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
Primary Hardware Development	C/CPFF	SSC LANT; Northrop Grumman; SAIC:Charleston; SC; Pax River, MD	5.384	0.614	Oct 2011	0.646	Dec 2012	0.646	Dec 2013	-		0.646	Continuing	Continuing	Continuin
Systems Engineering	C/CPFF	SSC LANT; Northrop Grumman, SAIC, BAH, Solute:Charleston, SC; Pax River, MD; San Diego, CA	28.274	0.622	Oct 2011	0.530	Dec 2012	0.531	Dec 2013	-		0.531	Continuing	Continuing	Continuin
Training Development	C/CPFF	SSC LANT; SAIC; Solute:Charleston, SC; Pax River, MD; San Diego, CA	1.361	0.400	Nov 2011	0.400	Dec 2012	0.400	Dec 2013	-		0.400	Continuing	Continuing	Continuin
Software Development	C/CPFF	SSC LANT, Northrop Grumman, SAIC, BAh, Solute:Charleston, SC; Pax River, MD; San Diego, CA	46.301	0.297	Nov 2011	0.302	Dec 2012	0.302	Dec 2013	-		0.302	Continuing	Continuing	Continuin
Integrated Logistics Support	C/CPFF	SSC LANT, SAIC:Charleston, SC; Pax River, MD	0.575	0.225	Nov 2011	0.225	Dec 2012	0.225	Dec 2013	-		0.225	Continuing	Continuing	Continuin
Configuration Management	C/CPFF	SSC LANT, SAIC:Charleston, SC; Pax River, MD	0.450	0.175	Nov 2011	0.175	Dec 2012	0.175	Dec 2013	-		0.175	Continuing	Continuing	Continuin
Technical Data	C/CPFF	SSC LANT, Northrop Grumman, SAIC:Charleston, SC; Pax River, MD	0.600	0.220	Nov 2011	0.220	Dec 2012	0.220	Dec 2013	-		0.220	Continuing	Continuing	Continuin
Studies & Analyses	C/CPFF	SSC LANT, Northrop Grumman, SAIC, Solute:Pax River, MD; San Diego CA	0.525	0.100	Nov 2011	0.100	Dec 2012	0.100	Dec 2013	-		0.100	Continuing	Continuing	Continuin

PE 0604231N: Tactical Command System

UNCLASSIFIED
Page 15 of 79

R-1 Line #88

Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

PE 0604231N: Tactical Command System

0486.: Tactical Support Center

DATE: April 2013

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

Product Developmer	nt (\$ in Mi	illions)		FY 2	2012	FY 2	013	FY 2 Ba		FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Tech Mgmt, Fusion, SOA, IT, Admin,Security	Various	NRL:Washington,DC	4.159	3.977	Oct 2011	0.000		0.000		-		0.000	0.000	8.136	
ACINT w/ demo support and leave behind	Various	NRL:Washington DC	1.296	1.243	Oct 2011	0.000		0.000		-		0.000	0.000	2.539	
NTM GEOINT data sources and support	Various	NRL:Washington DC	0.791	0.287	Oct 2011	0.000		0.000		-		0.000	0.000	1.078	
	•	Subtotal	89.716	8.160		2.598		2.599		0.000		2.599			

Remarks

During FMB14 it was determined that the Software Development, Integrated Logistics Support, Configuration Management, Technical Data, and Studies Analyses cost categories were best aligned under Product Development rather than Support.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental Test & Evaluation	C/CPIF	SSC LANT; SAIC:Charleston, NC; Pax River, MD	1.400	0.256	Nov 2011	0.440	Dec 2012	0.440	Dec 2013	-		0.440	Continuing	Continuing	Continuing
Operational Test & Evaluation	MIPR	OPTEVFOR; SSC LANT; SAIC:Jacksonville, FL	4.236	1.156	Nov 2011	0.350	Mar 2013	0.157	Mar 2014	-		0.157	Continuing	Continuing	Continuing
		Subtotal	5.636	1.412		0.790		0.597		0.000		0.597			

Management Servic	es (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 se	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPIF	Northrop Grumman; SAIC; BAH; Solute:Pax River,	0.680	1.522	Oct 2011	0.946	Dec 2012	0.920	Dec 2013	-		0.920	Continuing	Continuing	Continuing

PE 0604231N: Tactical Command System

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

Years

111.068

Project Cost Totals

FY 2012

12.752

PE 0604231N: Tactical Command System

0486.: Tactical Support Center

Complete

Cost

Contract

Total

5.027

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location MD; Charleston, SC; San Diego, CA	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Support	WR	SSC LANT:Charleston, NC	1.321	0.384	Nov 2011	0.384	Dec 2012	0.384	Dec 2013	-		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	Dec 2012	0.494	Dec 2013	-		0.494	Continuing	Continuing	Continuing
Travel	WR	PMW750:San Diego, CA	0.130	0.033	Nov 2011	0.033	Dec 2012	0.033	Dec 2013	-		0.033	Continuing	Continuing	Continuing
CONOPS/TTPs Demos & MGMT Plan	Various	NRL:Washington DC	0.175	0.161	Oct 2011	0.000		0.000		-		0.000	0.000	0.336	
Joint Operational Utility Assess. Reports	Various	NRL:Washington DC	0.200	0.198	Oct 2011	0.000		0.000		-		0.000	0.000	0.398	
Transition system engineering support	Various	NRL:Washington DC	0.150	0.144	Oct 2011	0.000		0.000		-		0.000	0.000	0.294	
MITRE STE	Various	NRL:Washington DC	0.000	0.244	Oct 2011	0.000		0.000		-		0.000	0.000	0.244	
		Subtotal	15.716	3.180		1.857		1.831		0.000		1.831			
			All Prior					FY :	2014	FY 2	2014	FY 2014	Cost To	Total	Target Value of

Remarks

PE 0604231N: Tactical Command System

Navy

UNCLASSIFIED
Page 17 of 79

FY 2013

5.245

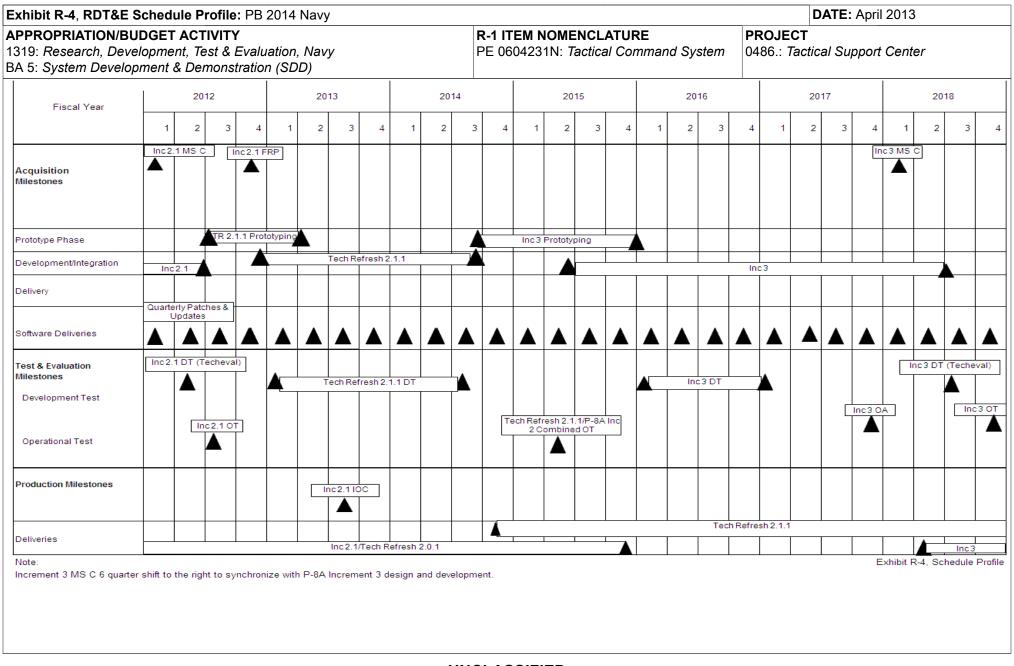
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0.000

Base

5.027



PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 18 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System
0486.: Tactical Support Center

Schedule Details

	Sta	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 0486.L39				
Milestone C (Increment 2.1)	1	2012	1	2012
Full Rate Production (Increment 2.1)	4	2012	4	2012
Milestone C (Increment 3.0)	1	2018	1	2018
TR 2.1.1 Prototyping	3	2012	2	2013
Inc 3 Prototyping	3	2014	4	2015
Development/Integration - Inc 2.1	1	2012	2	2012
Development/Integration - Tech Refresh 2.1.1	4	2012	3	2014
Development/Integration - Inc 3	2	2015	2	2018
Software Delivery (Quarterly)	1	2012	4	2018
Developmental Test (Increment 2.1 Tech Eval)	2	2012	2	2012
Operational Test (Increment 2.1)	3	2012	3	2012
Developmental Test (Tech Refresh 2.1.1)	1	2013	3	2014
Tech Refresh 2.1.1/P-8A Inc 2 Combined OT	2	2015	2	2015
Developmental Test (Increment 3.0)	1	2016	1	2017
Operational Assessment (Increment 3.0)	4	2017	4	2017
Developmental Test (Increment 3.0 Tech Eval)	3	2018	3	2018
Operational Test (Increment 3)	4	2018	4	2018
Initial Operational Capability (Increment 2.1) (TOC/MTOC)	3	2013	3	2013
Deliveries - Inc 2.1/Tech Refresh 2.0.1	1	2012	4	2015
Deliveries - Tech Refresh 2.1.1	4	2014	4	2018
Deliveries - Inc 3	1	2018	4	2018

DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 0486.: Tactical Support Center

BA 5: System Development & Demonstration (SDD)

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Develop CONOPS/TTPS	1	2012	1	2013
Build and Test Fusion System & Sources	1	2012	1	2013
Conduct User Juries	3	2012	3	2012
Technical Demonstrations	4	2012	4	2012
Operator Training	4	2012	4	2012
Operational Demonstrations & Assessments	4	2012	4	2012
Joint Military Utility Assessment Reports	4	2012	4	2012

R-1 ITEM NOMENCLATURE APPROPRIATION/BUDGET ACTIVITY **PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 0709: GCCS-M Maritime Applications BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0709: GCCS-M Maritime Applications	176.126	18.508	5.330	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	199.964
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

Note

In FY 2013, GCCS-M Increment 2 transitioned development of maritime tactical command and control capabilities to the Maritime Tactical Command and Control (MTC2) program (Project unit x3323).

In FY 2014, Global Force Management - Data Intitiative efforts transitioned 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 allsource 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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: GCCS-M Increment 2	16.724	3.497	0.000
Articles:	0	0	
FY 2012 Accomplishments: Continued development, integration, and testing of GCCS-M Increment 2 for Group Level ships. Continued transition of GCCS-M Increment 2 on Force, Group and Unit Level ships to the Common Computing Environment (CCE)/Consolidated Afloat Networks Enterprise Services (CANES) environment. Continued developing and testing interfaces with combat and weapon systems (AEGIS, Tomahawk and BMD) and systems for other Services and Agencies. Continued investigating and adopting Service Oriented Environment (SOE) to further the continued development of maritime tactical command and control capabilities.			
FY 2013 Plans:			

PE 0604231N: Tactical Command System

UNCLASSIFIED Page 21 of 79

R-1 Line #88

DATE: April 2013

^{##} The FY 2014 OCO Request will be submitted at a later date

APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)		PROJECT 0709: GCCS-M	Maritime Applic	ations
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Complete development, integration, and testing of GCCS-M Increment 2 for G	·	FY 2012	FY 2013	FY 2014
Increment 2 on Force, Group and Unit Level ships to the Common Computing Enterprise Services (CANES) environment. Complete assimilation of requirem Combat Systems (AEGIS) and systems for other Services, Agencies, and trad and adopt Service Oriented Environment (SOE) to further the continued development capabilities.	Environment (CCE)/Consolidated Afloat Netwo nents for developing new interfaces with PEO I itional and non-traditional partners. Investigate	orks WS		
Title: Global Force Management - Data Initiative (GFM-DI)	A6	1.7	1.833	0.000
FY 2012 Accomplishments:	Art	icles:	0	
Began requirements analysis and evaluation necessary prior to the design, de Management - Data Initiative (GFM-DI) beginning in FY 2013.	velopment and implementation of Global Force			

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

order to support Naval integration and extension of enterprise force structure data.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPN/2618: Navy Command and	5.938	8.150	5.515		5.515	5.910	3.428	2.206	2.136	4.873	43.710
Control System (GCCS-M only)											

Accomplishments/Planned Programs Subtotals

Perform systems engineering and architecture efforts to analyze GFM-DI requirements and begin architecture development in

Remarks

FY 2013 Plans:

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.

PE 0604231N: Tactical Command System

UNCLASSIFIED
Page 22 of 79

R-1 Line #88

DATE: April 2013

18.508

5.330

0.000

Navy

UNCLASSIFIED								
Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013					
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	-					
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	0709: GC	CS-M Maritime Applications					
BA 5: System Development & Demonstration (SDD)								
E. Performance Metrics GCCS-M Increment 2 leverages software investments by Defense Informaterial solutions. This greatly reduces the integration and testing costs a Computing Environment/Consolidated Afloat Networks and Enterprise Securrent/future infrastructure. These Increment 2 software-only solutions expressions.	associated with each software release. The Forcivices (CCE/CANES) architecture; the Group/Un	e Level solu it Level solut	tion will reside on Common tion will be implemented on the					

PE 0604231N: *Tactical Command System* Navy

Page 23 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604231N: Tactical Command System

DATE: April 2013
PROJECT

0709: GCCS-M Maritime Applications

Product Developme	roduct Development (\$ in Millions)		FY 2	2012	FY 2	2013	FY 2 Ba		FY 2						
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	6.051	Nov 2011	2.297	Nov 2012	0.000		-		0.000	0.000	58.052	
Software Development	SS/CPFF	NGMS:SAN DIEGO, CA	82.881	0.000		0.000		0.000		-		0.000	0.000	82.881	
Software Development	C/CPIF	SAIC:SAN DIEGO, CA	9.898	3.747	Sep 2012	0.000		0.000		-		0.000	0.000	13.645	
Software Development	WR	SSC:SAN DIEGO, CA	0.000	6.793	Nov 2011	2.298	Jan 2013	0.000		-		0.000	0.000	9.091	
Systems Engineering	C/CPFF	MITRE:SAN DIEGO, CA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	
	Subtotal 142.483					4.595		0.000		0.000		0.000	0.000	163.669	

Test and Evaluation	est and Evaluation (\$ in Millions)			FY	2012	FY	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	SSC:SAN DIEGO, CA	2.675	0.743	Nov 2011	0.510	Nov 2012	0.000		-		0.000	0.000	3.928	
Operational Test & Evaluation	C/CPIF	COTF:NORFOLK, VA	5.705	0.524	Nov 2011	0.150	Nov 2012	0.000		-		0.000	0.000	6.379	
	Subtotal 8.380			1.267		0.660		0.000		0.000		0.000	0.000	10.307	

Management Services (\$ in Millions)				FY 2012 FY 2013		FY 2 Ba	2014 ise	FY 2		FY 2014 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPFF	SeaPort:SAN DIEGO, CA	3.923	0.000		0.000		0.000		-		0.000	0.000	3.923	
Program Management Support	C/CPFF	SeaPort:SAN DIEGO, CA	21.239	0.650	Nov 2011	0.075	Nov 2012	0.000		-		0.000	0.000	21.964	
Acquisition Workforce	Various	UNKNOWN:UNKNOW	N 0.101	0.000		0.000		0.000		-		0.000	0.000	0.101	

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 24 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

0709: GCCS-M Maritime Applications

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013	1	2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	25.263	0.650		0.075		0.000		0.000		0.000	0.000	25.988	
			All Prior Years	FY 2	2012	FY 2	2013		2014 ase	FY 2	2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	176.126	18.508		5.330		0.000		0.000		0.000	0.000	199.964	

Remarks

PE 0604231N: *Tactical Command System* Navy

Page 25 of 79

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 0709: GCCS-M Maritime Applications BA 5: System Development & Demonstration (SDD) 2012 2013 2014 2015 2016 2017 2018 Fiscal Year 2 3 4 2 3 2 3 4 2 3 4 2 3 4 2 3 4 2 3 Acquisition Milestones

GLFDR Software Deliveries GCCS-M 4.1 (Increment 2) GL (FINAL) Test & Evaluation Milestones GLDT Developmental Test GL TECHEVAL Technical Evaluation GL OT

Legend:

GL - Group Level

Operational Test

DT - Developmental Test

GCCS-M 4.1 (Increment 2)

TECHEVAL - Technical Evaluation

PE 0604231N: Tactical Command System

OT - Operational Test

FDR - Fielding Decision Review

UNCLASSIFIED

Page 26 of 79

Navy

EXHIBIT R-4, Schedule Profile

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604231N: Tactical Command System
0709: GCCS-M Maritime Applications

Schedule Details

	St	Start		nd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 0709		-		
Group Level - Software Delivery (FINAL)	3	2012	3	2012
Group Level - Development Test	3	2013	3	2013
Group Level - Technical Evaluation	4	2013	4	2013
Group Level - Operational Test	1	2014	1	2014
Group Level - Fielding Decision Review	2	2014	2	2014

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

All Prior

All Prior

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604231N: Tactical Command System
2213: Mission Planning
Cost To Total

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
2213: Mission Planning	231.944	19.116	25.195	20.059	-	20.059	37.463	26.211	24.845	22.919	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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 (MPE) 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: AH-1W, F/A-18 A-F, E-2C, EP-3E, EA-6B, AV-8B, S-3, V-22, Chief of Naval Air Training (CNATRA), EA-18G, MV-22, C-2, MH-53E, P-3, Aircraft Carrier Intelligence Center (CVIC), SH-60B/F, HH-60H, CH-53D/E, CH-46E, UH-1N, VH-3/VH-60, AH-1Z, UH-1Y, MH-60R/S and E-2D. 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. An extension of Windows XP is planned to allow all naval aircraft to be supported during the transition. Future JMPS platforms include: MQ-4C (Triton) and H-53K. The next JMPS architecture version will support net-centric goals by providing route "publish and subscribe" capabilities, transition to 64 bit and emerging technology and Information Assurance (IA) requirements. Funding profile includes 64 bit development which requires a complete software restructure to address memory limitations and system errors re

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: JMPS Framework (FW) & Common Capabilities Development	1.727	0.500	1.400
Articles:	0	0	0
Description: 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 1.3.5 incorporates Windows OS 7 and provides additional capabilities for all naval aircraft to include air drop, air refueling and enhanced installation. Funding for FW 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. FW 1.4 will be incorporated in future FW versions to address migration to .NET environment and to enable interoperability improvements through utilization of services. FW 64 bit development efforts will start in FY14. Common Capabilities software updates augment core mission planning capabilities across multiple aircraft.			

PE 0604231N: Tactical Command System

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			ATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	PROJECT 2213: Missio	n Plan	ning		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	es in Each)	FY 2	012	FY 2013	FY 2014
FY 2012 Accomplishments: Completed JMPS FW development and testing. Development of Common (Components to support Windows 7 migration.				
FY 2013 Plans: Conduct FW 1.3.5 testing with the objective to Initial Operational Capability	(IOC) Windows 7 compatible system.				
FY 2014 Plans: Start Framework 64 bit transition.					
Title: Joint Mission Planning System Expeditionary (JMPS-E)	Ar	ticles:	0.231	1.295	1.260
Description: JMPS Expeditionary (JMPS-E): The goal of the JMPS-E team and execution monitoring tool for Amphibious Squadron staffs. The primary capability to assist planners with mission analysis, course of action develop on planning data in the system. Current expeditionary planning is done ma map enabling better response times to changing plans, easier distribution of during the planning process. The variety and geographically separated nat amplifies the need for web-based technologies to enable collaborative plant the monitoring of mission execution from different locations. The primary of geometries and decision briefs. The system will also incorporate modeling plans. This capability will be initially fielded using Framework Version 1.2.4 transition efforts in FY13.	y focus of this system is to provide an automated ment and automated creation of doctrinal orders nually on paper charts. JMPS-E will provide a dig f planning artifacts and a reduction in human erroure of forces involved with Ship to Shore Maneuv ning, improve overall situational awareness and eutputs are tasking orders, route plans, battlespace and simulation tools to rehearse and deconflict means.	pased pital r er nable e ission			
FY 2012 Accomplishments: Full Operational Capability fielding to seven Amphibious Squadrons (PHIBF	RONs).				
FY 2013 Plans: Develop, integrate and test JMPS-E Version 1.0.2 to satisfy Windows 7 req	uirement.				
FY 2014 Plans: Complete development and intermediate testing of JMPS-E Version 1.0.2 to	o satisfy Windows 7 requirement.				
Title: Mission Planning Environment (MPE) Integration and Test	Ar	ticles:	7.158 0	23.400 45	17.399 0
Description: Mission Planning Environment (MPE) Integration and Test eff operational testing, integration and system of system testing for MPE fielding					

PE 0604231N: Tactical Command System

Navy

UNCLASSIFIED
Page 29 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE:	April 2013					
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System							
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	<u>Quantities in Each)</u>	FY 2012	FY 2013	FY 2014				
provided by various developers into a platform-centric MPE and tes in a consistent and repeatable system configuration that enables sta Windows XP in April 2014, there is a Mission Planning Environment (OS) 7.	ability and reliability. Due to the end of Microsoft support	for						
FY 2012 Accomplishments: Integration and test of nineteen (19) MPEs: AV-8B H61 4.0 and H70 E-2D 1.0 and 2.0, EA-6B I3B6 7.0, F/A-18 H8E/2.4.0 and 25X/2.4.X NLH 2.0, V-22 2.0, VH-3/VH-60 2.0.								
FY 2013 Plans: Due to the end of Microsoft support for Windows XP in April 2014, to System (OS) 7. Additional test and requirement verifications will be Continue integration and test of 32 MPEs: AV-8B H61 4.0, BAMS 1 E-2C 4.0 and 5.0, E-2D 1.0 and 2.0, EA-6B I3B5 6.0 and I3B6 7.0, I Marine Helo 2.1, 3.0 and 4.0, MH-60R/S 1.0 and 2.0, NLH 2.0, P-3 3.0, VH-3/VH-60 2.0.	required to ensure product stability to satisfy all platform I.0, C-130 1.0 and 2.0, C-2A 3.0, CH-53K 1.0, CNATRA F/A-18 H8E/2.4.0, 25X/2.5.0, H10E/27X/3.0 and 27X/3.1	s. 1.0,						
FY 2014 Plans: Integration and test of MPEs in support of 36 aircraft T/M/S.								
	Accomplishments/Planned Programs Sul	ototals 19.116	25.195	20.059				

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

			FY 2014	FY 2014	FY 2014					Cost To	
Line Item	FY 2012	FY 2013	Base	oco	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPN/287600: Naval Mission Plng	8.941	9.958	14.131		14.131	14.353	14.808	11.398	11.352	Continuing	Continuing
System											
• RDTE/3858,5302,5380: Air Force	63.009	69.377	70.332		70.332	82.164	84.284	84.542	0.000	Continuing	Continuing
Mission Plng Systems											

Remarks

Navy

D. Acquisition Strategy

Engineering Manufacturing Development efforts: The strategy entails a two-phased evolutionary approach to acquire the initial Joint Mission Planning System (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

PE 0604231N: Tactical Command System

UNCLASSIFIED

Page 30 of 79 R-1 Line #88

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	2213: Mission Planning
BA 5: System Development & Demonstration (SDD)		

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 Joint Mission Planning System (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 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.

PE 0604231N: Tactical Command System

Navy

Page 31 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

1310: Persearch, Development, Test & Evaluation, Nat

PE 0604231N: Tactical Command System

2213: Mission Planning

DATE: April 2013

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

Product Developmen	nt (\$ in Mi	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	-	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Software Development/Common Capabilities(CCs)	MIPR	USAF:Hanscom AFB, MA	0.003	0.001	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Primary Software Development/Framework (FW)	MIPR	USAF:Hanscom AFB, MA	21.318	0.227	Feb 2012	0.439	Feb 2013	1.400	Feb 2014	-		1.400	Continuing	Continuing	Continuing
Primary Software Development/Framework (FW)	C/CPFF	American Electronic Warfare Associates:California, MD	0.000	1.499	Oct 2012	0.000		0.000		-		0.000	0.000	1.499	1.499
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	0.500	Feb 2014	-		0.500	Continuing	Continuing	Continuing
Award Fees 8%	MIPR	USAF:Hanscom AFB, MA	1.670	0.074	Feb 2012	0.103	Feb 2013	0.152	Feb 2014	-		0.152	Continuing	Continuing	Continuing
Primary Software Development	Various	Various:Various	19.103	2.325	Jan 2012	2.396	Jan 2013	2.281	Jan 2014	-		2.281	Continuing	Continuing	Continuing
No Longer Funded in FYDP	Various	Various:Various	83.882	0.000		0.000		0.000		-		0.000	0.000	83.882	
		Subtotal	130.600	4.276		3.426		4.333		0.000		4.333			

Remarks

6% award fees based on actual awards placed on various Hanscom AFB contracts. FY14 Primary Software Development/Framework (FW) contract in preparation for 32 to 64 bit transition.

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba	-	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	0.630	Jan 2012	0.000		0.000		-		0.000	0.000	1.976	1.976

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 32 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

PE 0604231N: Tactical Command System

2213: Mission Planning

DATE: April 2013

Support (\$ in Million	s)			FY	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Integrated Logistics Support	WR	NAWCWD:Point Mugu, CA	0.500	0.453	Nov 2011	0.447	Nov 2012	0.452	Nov 2013	-		0.452	Continuing	Continuing	Continuing
No Longer Funded FYDP	WR	SPAWAR:Philadelphia	1, 11.538	0.000		0.000		0.000		-		0.000	0.000	11.538	
		Subtotal	13.384	1.083		0.447		0.452		0.000		0.452			

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013		2014 ise	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
System Eng Integration & Test	WR	NAWCWD:Point Mugu, CA	56.808	11.207	Nov 2011	16.739	Nov 2012	11.500	Nov 2013	-		11.500	Continuing	Continuing	Continuing
Test & Evaluation	WR	COMOPTEVFOR:Nor	folk, 1.001	0.350	Nov 2011	1.815	Nov 2012	1.397	Nov 2013	-		1.397	Continuing	Continuing	Continuing
		Subtotal	57.809	11.557		18.554		12.897		0.000		12.897			

Remarks

System Eng Integration & Test (NAWCWD) increase in FY12 and FY13 due to new MPE requirement for Operating System update (Windows 7). Test and Evaluation (COTF) increase in FY13 due to independent Operational Test events for MPEs during Windows 7 transition.

Management Servic	es (\$ in M	illions)		FY:	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Management Support	WR	NAWCAD:Patuxent River, MD	30.151	2.200	Nov 2011	2.768	Nov 2012	2.377	Nov 2013	-		2.377	Continuing	Continuing	Continuing
		Subtotal	30.151	2.200		2.768		2.377		0.000		2.377			
			All Prior Years	FY:	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	231.944	19.116		25.195		20.059		0.000		20.059			

PE 0604231N: Tactical Command System Navy

UNCLASSIFIED Page 33 of 79

		OI.	IOLAGOII ILD							
Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2014 Navy						DATE	: April 201	13	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, BA 5: System Development & Demonstration (SDI	•		R-1 ITEM NOM PE 0604231N:	ENCLATURE Tactical Command S	System	PROJEC 2213: <i>Mis</i>	_	anning		
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks										

PE 0604231N: Tactical Command System

Navy

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604231N: Tactical Command System

PROJECT

2213: Mission Planning

Mission Planning	FY 20	112				FY 2	2013		<u> </u>	FY 2	2014	<u> </u>		FY 2	201	5		FY	201	6	┸	F	Y 2	017			FY 2	2018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	10	20	30	40	2 10	2 2	2Q	3Q	4Q	1Q	2Q	3Q	4
Acquisition Milestones								V1.3.5 IOC																					
Milestones																													
System Development												\neg						I^-	Τ	7	7	7	\neg		\Box				Π
Software Development	V1.4 Software Development				FW 6	4 Bit	Prof	otype					FV	V 64	Bit	Arc	chite	ectu	re C)evl	еор	me	∍nt						
Reviews					V1.3.5 OTRR																								
Test and Evaluation		İ	İ	İΠ						İ		\neg				İ	İ	İ	İ	1	1	1	T						İ
Technical Evaluation	V1	.2.4	ME	PE In	tegrati	on/V	alida	tion		_		ĺ							ĺ				-						
				V1	.3.5 MF	PE Ir	ntegr	ation/V	alid	atio	1				_			İ	İ	İ	İ	İ	j		İ				İ
	V1.4 FQT ▲																									Integ	FW 6		atio
Operational Evaluation							.3.5 T																						
Production Milestones Contract Awards																													
Deliveries		İ	İ	İΠ					İ	i	ı	T			İ	İ	İ	1	Ť	İ	Τ	Ť	寸		İ				İ

2014PB - 0604231N - 2213

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 2213: Mission Planning

BA 5: System Development & Demonstration (SDD)

Schedule Details

	Sta	art	Er	nd
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 FW 64 Bit Prototype	1	2013	4	2013
System Development: Software Development: JMPS V1.4 Software Development	1	2012	1	2012
System Development: Software Development: JMPS FW 64 Bit Architecture Development	3	2014	4	2017
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	2012	2	2014
Test and Evaluation: Technical Evaluation: JMPS V1.3.5 Mission-Planning Environment (MPE) Integration/Validation	1	2012	4	2015
Test and Evaluation: Technical Evaluation: JMPS V1.4 Functional Qualification Test (FQT)	1	2012	1	2012
Test and Evaluation: Technical Evaluation: JMPS FW 64 Bit Integration/Validation	1	2018	4	2018
Test and Evaluation: Operational Evaluation: JMPS V1.3.5 Operational Test (OT)	2	2013	3	2013

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 2307: Shipboard LAN/WAN

BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
2307: Shipboard LAN/WAN	0.000	0.300	0.313	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.613
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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-quality 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)

PE 0604231N: Tactical Command System

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	2307: Ship	board LAN/WAN
BA 5: System Development & Demonstration (SDD)			

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 Information Exchange System (CENTRIXS) programs began migration to ISNS Inc 2/Consolidated Afloat Networks and Enterprise Services (CANES). ISNS Inc 2/CANES will serve to transition numerous Fleet networks to a single, adaptive, available, secure computing network infrastructure while delivering enhanced technologies in: Integrated Voice, Video and Data; Common Computing Environment (CCE); ACS; and Multi-Level Security (MLS)/Cross Domain Solutions (CDS).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014	
Title: Integrated Shipboard Network System (ISNS)	0.300	0.313	0.000	
Articles:	0	0		
FY 2012 Accomplishments: Continued development of replacement solutions for End of Life (EOL) equipment as EOL occurs. Developed replacement solutions for End of Sale (EOS) equipment/software as EOS occurs. Supported Certification and Accreditation activities for efforts under development. Continued support of at sea demonstrations.				
FY 2013 Plans: Continue development of replacement solutions for End of Life (EOL) equipment as EOL occurs. Develop replacement solutions for End of Sale (EOS) equipment/software as EOS occurs. Complete Certification and Accreditation efforts for ISNS variants.				
Accomplishments/Planned Programs Subtotals	0.300	0.313	0.000	

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

olichmente/Dianned Dregreme (f. in Millians, Article Quentities in Each)

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
• OPN/3050/ISNS: <i>ISNS</i>	115.259	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	499.780

Remarks

D. Acquisition Strategy

This program will transition fully to CANES in FY13.

E. Performance Metrics

The Shipboard LAN/WAN/Integrated Shipboard Network System (ISNS) development efforts will end in FY13 and are currently 99.3% completed. The ISNS OPN program will fully transition to CANES in FY 2013. ISNS development and testing against ISNS variants as well as Early Adopter Common Computing Environment (CCE) testing on the Lincoln Strike Group met and exceeded all measures of effectiveness and suitability of the system.

PE 0604231N: Tactical Command System

UNCLASSIFIED
Page 38 of 79

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 2307: Shipboard LAN/WAN BA 5: System Development & Demonstration (SDD) FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost Integration - Development WR SSC1 ANT 0.000 0.042 Mar 2012 0.000 0.000 0.000 0.000 0.042 Subtotal 0.000 0.042 0.000 0.000 0.000 0.000 0.000 0.042 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2013 oco Total FY 2012 Base Contract Target Method All Prior **Cost To** Value of Performing Award Award Award Award Total **Activity & Location Cost Category Item** & Type Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Developmental Test & JITC:Fort Huachuca, **MIPR** 0.000 0.059 Feb 2012 0.313 Nov 2012 0.000 0.000 0.000 0.372 Evaluation-ISNS Subtotal 0.000 0.059 0.313 0.000 0.000 0.000 0.000 0.372 FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Value of Total Complete **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Cost Contract Program Management C/CPFF SRA:San Diego, CA 0.000 0.121 Mar 2012 0.000 0.000 0.000 0.000 0.121 Support Program Management C/CPFF 0.000 0.078 Sep 2012 0.000 0.000 0.078 TBD:TBD 0.000 0.000 Support Subtotal 0.000 0.199 0.000 0.000 0.000 0.000 0.000 0.199 Target All Prior FY 2014 FY 2014 FY 2014 Cost To Total Value of

Remarks

PE 0604231N: Tactical Command System

Navy

FY 2013

0.313

Base

0.000

Years

0.000

Project Cost Totals

FY 2012

0.300

R-1 Line #88

oco

0.000

Total

0.000

Complete

0.000

Contract

Cost

0.613

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APPROPRIATION/BUDGET ACT	ΓΙVΙΤΥ				R-1 ITEM I	NOMENCL	ATURE		PROJECT	PROJECT					
1319: Research, Development, To	est & Evalua	ation, Navy			PE 060423	31N: <i>Tactica</i>	al Command	d System	3032: <i>NTC</i>	CSS (Naval Tactical Command Spt					
BA 5: System Development & De	monstration	(SDD)							Sys)						
COST (\$ in Millions)	FY 2014	FY 2014		->//	->//-		Cost To	Total							

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3032: NTCSS (Naval Tactical Command Spt Sys)	25.008	14.061	15.015	16.600	-	16.600	7.194	1.779	0.931	0.948	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navv

A. Mission Description and Budget Item Justification

The Naval Tactical Command Support System (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. FY2014 funding:

- (1) Supports the design, development, and testing of NTCSS Open Architecture (OA) (formerly One NALCOMIS & Single Supply Baseline) which integrates the functionality provided by several legacy logistics applications into a single application baseline to include, multi-UIC (Unit Identification Code), and the consolidation of organizational and intermediate level NALCOMIS (Naval Aviation Logistics Command/Management Information System) maintenance applications.
- (2) Provides for the design, development, and testing of the Relational Administration (RADM) application upgrade providing personnel management capability to unit and force level activities.
- (3) Provides for the transition of the current, client-server architecture to a service-oriented architecture (SOA) and web-based services (NTCSS OA). This will align with the initiative to bring Navy systems into a common computing environment afloat, interface with Navy Enterprise Resource Planning (ERP) ashore, and provide a more flexible system platform with greater responsiveness to security, information assurance, functional, and system requirements and with greater speed to capability.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: NTCSS (Naval Tactical Command Spt Sys)	14.061	15.015	16.600
Articles:	0	0	0
Description: Maintenance and Supply Management Capability			
FY 2012 Accomplishments: Designed, developed, and tested efforts for NTCSS One NALCOMIS, multi-UIC, and enterprise database system. Continued design, development, and testing efforts for NTCSS product improvements of SOA and web-based service. Began design, development and testing efforts for Single Supply Baseline (SSB) with upgrades to Ships Store (Retail Operations Management (ROM)) and Food Services (Food Services Management (FSM)) products.			
FY 2013 Plans:			

PE 0604231N: Tactical Command System

Page 40 of 79

R-1 Line #88

DATE: April 2013

Navy

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	3032: NTC	SS (Nava	al Tactical C	ommand Spt
BA 5: System Development & Demonstration (SDD)		Sys)			
B Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	n Fach)	EV	2012	EV 2012	EV 2014

b. Accomplishments/r lanned r rograms (\$\psi\$ in lannons, Article &dantates in Each)	1 1 2012	1 1 2013	1 1 2014
Continue design, development, and testing efforts for NTCSS Open Architecture (OA), to include consolidation of organizational and intermediate level NALCOMIS maintenance applications, multi-UIC capability, upgrades to Ships Store (Retail Operations Management (ROM)), Food Services Management (FSM)) products, Relational Administration, and an enterprise database system.			
FY 2014 Plans: Continue design, development, and testing efforts for NTCSS Open Architecture (OA), to include consolidation of organizational and intermediate level NALCOMIS maintenance applications, multi-UIC capability, upgrades to Ships Store (Retail Operations Management (ROM)), Food Services Management (FSM)) products, Relational Administration, and an enterprise database system. Accelerate software development efforts for NTCSS Open Architecture (OA) by increasing the number of software development teams by three for a total of twenty-one teams.			
Accomplishments/Planned Programs Subtotals	14.061	15.015	16.600

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

			FY 2014	FY 2014	FY 2014					Cost To	
Line Item	FY 2012	FY 2013	Base	000	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPN/2611: Naval Tactical	32.778	35.732	15.703		15.703	29.009	13.476	18.497	19.294	72.202	755.607
Command Support System											

Remarks

D. Acquisition Strategy

NTCSS Open Architecture (OA) migrates existing NTCSS-Optimized to web-enabled technology, which separates server computing from end-user computing. NTCSS OA supports the DoD IT Enterprise Strategy and Roadmap (ITESR) through security architecture standardization and optimization. In addition to eliminating current IA vulnerabilities through an enhanced security posture, NTCSS OA promotes data sharing with other systems, such as Navy Enterprise Resource Program (N-ERP) and aligns with the Navy's Consolidated Afloat Network Enterprise Services (CANES). NTCSS OA utilizes the Navy Data Centers, incorporates current Information Technology (IT) best practices, and accelerates reduction of applications performing a similar function. This strategy supports the Navy's server consolidation initiatives with the elimination of NTCSS-specific servers in the Fleet.

E. Performance Metrics

NTCSS Open Architecture (OA) reduces NTCSS Aviation software baseline configuration management support by 50% by collapsing organizational and intermediate level maintenance applications into one baseline. Additionally, the NTCSS Aviation system hardware requirement realizes a 100% reduction at Fleet Readiness Centers (ashore) and Aircraft Intermediate Maintenance Departments (afloat) by leveraging utilization of Navy Data Centers (ashore) and the Navy's Consolidated Afloat Network Enterprise Services (CANES) afloat. Over the Future Years Defense Plan (FYDP), Service-Oriented Architecture (SOA) for NTCSS will lower system maintenance costs when compared to maintaining the current, client-server architecture.

PE 0604231N: Tactical Command System

UNCLASSIFIED
Page 41 of 79

R-1 Line #88

Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604231N: Tactical Command System

PROJECT

3032: NTCSS (Naval Tactical Command Spt

DATE: April 2013

Sys)

Product Developmen	t (\$ in M	llions)		FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Hardware Development	WR	SSC:North Charleston, SC	0.668	0.000		0.000		0.000		-		0.000	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	Nov 2013	-		0.406	Continuing	Continuing	Continuing
Licenses	Various	SSC:San Diego, CA	0.700	0.000		0.000		0.000		-		0.000	0.000	0.700	0.700
Software Development	WR	SSC:Norfolk, VA	18.537	12.497	Nov 2011	13.746	Nov 2012	15.384	Nov 2013	-		15.384	Continuing	Continuing	Continuing
Integrated Logistics Support	C/CPFF	SeaPort:San Diego, CA	0.200	0.300	Nov 2011	0.243	Nov 2012	0.243	Nov 2013	-		0.243	Continuing	Continuing	Continuing
Configuration Management	WR	SSC:San Diego, CA	0.460	0.000		0.000		0.000		-		0.000	0.000	0.460	
Technical Data	WR	SSC:San Diego, CA	0.200	0.000		0.000		0.000		-		0.000	0.000	0.200	
		Subtotal	22.216	13.297		14.395		16.033		0.000		16.033			

Test and Evaluation	est and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NAWC:Patuxent River, MD	0.400	0.250	Nov 2011	0.203	Nov 2012	0.150	Nov 2013	-		0.150	Continuing	Continuing	Continuing
Operational Test & Evaluation	C/CPIF	COTF:Norfolk, VA	0.785	0.000		0.000		0.150	Nov 2013	-		0.150	0.000	0.935	
		Subtotal	1.185	0.250		0.203		0.300		0.000		0.300			

Management Service	s (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Award Cost Date		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	0.896	0.000		0.000		0.000		-		0.000	0.000	0.896	0.896
Government Engineering Support	WR	SSC:San Diego, CA	0.279	0.000		0.000		0.000		-		0.000	0.000	0.279	0.279

PE 0604231N: *Tactical Command System* Navy

Page 42 of 79

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

Project Cost Totals

25.008

14.061

PE 0604231N: Tactical Command System

16.600

3032: NTCSS (Naval Tactical Command Spt

16.600

Sys)

0.000

Management Service	es (\$ in M	illions)		FY 2	2012	FY :	2013	_	2014 ase		2014 CO	FY 2014 Total	Total					
Cost Category Item	Contract Method & Type	& Type Activity & Location Y		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract			
Program Management Support	C/CPFF	SeaPort:San Diego, CA	0.432	.432 0.514 Nov 2011		0.417	Nov 2012	0.267	Nov 2013	-		0.267	Continuing	Continuing	Continuing			
	Subtotal					0.417		0.267		0.000		0.267						
			All Prior Years	FY	2012	FY:	2013		2014 ase		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract			

15.015

Remarks

PE 0604231N: *Tactical Command System* Navy

Page 43 of 79

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604231N: Tactical Command System

PROJECT

3032: NTCSS (Naval Tactical Command Spt

Sys)

Fiscal Year		20	012			20	013			201	14			20	15			20)16			20	017			20	018	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																												\top
ITCSS Open Architecture (OA)																												
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															A .													
ITCSS OA 1.6 (Single Supply Baseline Release 3)														Δ	Δ			Δ	Δ									\perp
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Ailestones													1.1 OT			1.2 OT	1.3 OT		1.4 OT	1.5 OT	1.6 OT							
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ITCSS OA													Δ			Δ	Δ		Δ	Δ	4							\bot
oftware Deliveries																												
															1.1			1.2	1.3		1.4	1.5	1.6					
															٨			٨	A		٨	٨						

CDR: Critical Design Review PRR: Production Readiness Review SRR: System Requirements Review TRR: Test Readiness Review

Exhibit R-4, Schedule Profile

UNCLASSIFIED

DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy R-1 ITEM NOMENCLATURE **PROJECT**

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 3032: NTCSS (Naval Tactical Command Spt BA 5: System Development & Demonstration (SDD) Sys)

Schedule Details

	Sta	art	Er	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3032				
NTCSS Open Architecture (OA) Build 1.1 - Test Readiness Review (TRR)	2	2014	2	2014
NTCSS OA Build 1.1 - Production Readiness Review (PRR)	3	2014	3	2014
NTCSS OA Build 1.1 - Operational Test (OT)	1	2015	1	2015
NTCSS OA Build 1.1 - Delivery	3	2015	3	2015
NTCSS OA Build 1.2 - System Requirements Review (SRR)	2	2013	2	2013
NTCSS OA Build 1.2 - Critical Design Review (CDR)	4	2013	4	2013
NTCSS OA Build 1.2 - Test Readiness Review (TRR)	1	2015	1	2015
NTCSS OA Build 1.2 - Production Readiness Review (PRR)	2	2015	2	2015
NTCSS OA Build 1.2 - Operational Test (OT)	4	2015	4	2015
NTCSS OA Build 1.2 - Delivery	2	2016	2	2016
NTCSS OA Build 1.3 - System Requirements Review (SRR)	2	2014	2	2014
NTCSS OA Build 1.3 - Critical Design Review (CDR)	3	2014	3	2014
NTCSS OA Build 1.3 - Test Readiness Review (TRR)	2	2015	2	2015
NTCSS OA Build 1.3 - Production Readiness Review (PRR)	3	2015	3	2015
NTCSS OA Build 1.3 - Operational Test (OT)	1	2016	1	2016
NTCSS OA Build 1.3 - Delivery	3	2016	3	2016
NTCSS OA Build 1.4 - System Requirements Review (SRR)	4	2014	4	2014
NTCSS OA Build 1.4 - Critical Design Review (CDR)	1	2015	1	2015
NTCSS OA Build 1.4 - Test Readiness Review (TRR)	3	2015	3	2015
NTCSS OA Build 1.4 - Production Readiness Review (PRR)	4	2015	4	2015
NTCSS OA Build 1.4 - Operational Test (OT)	3	2016	3	2016

PE 0604231N: Tactical Command System Navy

UNCLASSIFIED Page 45 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System 3032: NTCSS (Naval Tactical Command Spt

BA 5: System Development & Demonstration (SDD)

Sys)

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
NTCSS OA Build 1.4 - Delivery	1	2017	1	2017
NTCSS OA Build 1.5 - System Requirements Review (SRR)	4	2014	4	2014
NTCSS OA Build 1.5 - Critical Design Review (CDR)	1	2015	1	2015
NTCSS OA Build 1.5 - Test Readiness Review (TRR)	4	2015	4	2015
NTCSS OA Build 1.5 - Production Readiness Review (PRR)	1	2016	1	2016
NTCSS OA Build 1.5 - Operational Test (OT)	4	2016	4	2016
NTCSS OA Build 1.5 - Delivery	2	2017	2	2017
NTCSS OA Build 1.6 - System Requirements Review (SRR)	2	2015	2	2015
NTCSS OA Build 1.6 - Critical Design Review (CDR)	3	2015	3	2015
NTCSS OA Build 1.6 - Test Readiness Review (TRR)	2	2016	2	2016
NTCSS OA Build 1.6 - Production Readiness Review (PRR)	3	2016	3	2016
NTCSS OA Build 1.6 - Operational Test (OT)	1	2017	1	2017
NTCSS OA Build 1.6 - Delivery	3	2017	3	2017

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)

All Prior

Years

EV 2013

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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3320: TRIDENT Warrior	0.000	3.619	3.579	2.340	-	2.340	2.318	2.254	2.304	2.345	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

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

B Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

A. Mission Description and Budget Item Justification

Trident Warrior enables early delivery of Information Dominance (ID) capabilities to the warfighter via Fleet-directed Trident Warrior operational events. Integrates stand-alone systems and efforts to achieve substantially enhanced capability, demonstrates/tests these capabilities in both laboratory and operational environments, and evaluates their effectiveness. Develops supporting concepts and Concept of Operations to improve warfighting effectiveness. Coordinates ID efforts with other Service/Joint/Department of Defense/National efforts to ensure Joint/Interagency/Allied/Coalition applicability and interoperability.

B. Accomplishments/Flanned Frograms (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Trident Warrior	3.619	3.579	2.340
Articles:	0	0	0
FY 2012 Accomplishments:			
-Focused on operational experimentation of Command, Control, Communications, Computers, Intelligence, Surveillance, and			
Reconnaissance (C4ISR) technologies during the Navy's premier, annual Fleet Experimentation (FLEX) events. The primary goal			
was to validate information dominance capabilities, maritime warfighting policy and procedures, and interoperability between the			
United States (U.S.) and Coalition partners.			
-Provided systems engineering and analysis to rapidly identify emergent fleet needs and capability shortfall, assessing risk,			
validating cost and delivering capability. Sought solutions for the Office of the Chief of Naval Operations/Commander, U.S. Fleet			
Force Command selected capability gaps and packaged them for operational use, favoring cost effective, disruptive technologies.			
Facilitated the successful transition of identified technology capabilities into Programs of Record. This process delivered 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.			
-The majority of Trident Warrior experimentation occurred during operational at-sea venues where new and emerging capabilities			
were integrated with current fleet units and either demonstrated or evaluated on their potential military utility. The Sea-based			
venue worked on an 18-month cycle and focused on the readiness of higher Technology Readiness Level technologies in a			

PE 0604231N: Tactical Command System

Page 47 of 79

R-1 Line #88

EV 2012

EV 2012

EV 2014

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System	PROJE 3320: <i>T</i>	CT RIDENT W	arrior	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	tities in Each)		FY 2012	FY 2013	FY 2014
Maritime-based environment. The at-sea portion of Trident Warrior was venues which support the experimental objectives of information domina -Developed FY14 Trident Warrior Fleet Experiment (FLEX) plan and beg	nce.	nal			
FY 2013 Plans: -Continue to focus on operational experimentation of Command, Control and Reconnaissance (C4ISR) technologies during the Navy's premier, a information dominance capabilities, maritime warfighting policy and proc (U.S.) and Coalition partners. -Continue to provide systems engineering and analysis to rapidly identify risk, validating cost and delivering capability. Find solutions for the Office Fleet Force Command selected capability gaps and package them for one technologies. Facilitate the successful transition of identified technology deliver Program Objective Memorandum recommendations and supporti with a focus on technologies that respond to irregular, catastrophic and country-the majority of Trident Warrior experimentation occurs during operation are integrated with current fleet units and either demonstrated or evaluate works on an 18-month cycle and focuses on the readiness of higher Techased environment. The at-sea portion of Trident Warrior will be executed operational venues which support the experimental objectives of information -Continue to develop FY14 Trident Warrior FLEX plan and FY15 Trident	nnual FLEX events. The primary goal is to validate edures, and interoperability between the United State of the Chief of Naval Operations/Commander, U.S. perational use, favoring cost effective, disruptive capabilities into Programs of Record. This process and roadmaps based on assessments of capability goal at-sea venues where new and emerging capabilitied on their potential military utility. The Sea-based whology Readiness Level technologies in a Maritime ed in two phases. The venues to be determined, will attion dominance.	ssing b. will aps ies venue			
FY 2014 Plans: -Finalize analysis of Trident Warrior (TW) 13 experiment to result recomme (USFFC) on experiment initiativesExplore Trident Warrior 14 in Commander Third Fleet (C3F)/Commander Carrier Strike Group/Expeditionary Strike Group (CSG/ESG) units with polirect, coordinate, assist and supervise primarily non-Systems Commander as able with specific goal identification, risk identification, and experiment schedule and in accordance with standardized procedures derived from Assist participants to achieve required installation and security certification-Provide subject matter experts (SMEs) to maintain core ship services desired independent experts in experimentation to coordinate the estable to lead analysis effort and provide unbiased assessment to decision makes	using				

PE 0604231N: Tactical Command System

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	3320: TRIE	DENT Warrior
BA 5: System Development & Demonstration (SDD)			

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
-Provide results to government sponsors to support the program's Planning, Programming, Budgeting, and Execution Process			
(PPBE) and engineering decisions.			
-Plan and execute TW14 operational events to accelerate the transition of Information Dominance capability to the Fleet.			
-Solicit participation for Trident Warrior 15 of government sponsored and industry sponsored technologies responsive to identified			
Naval capability gaps. Select technologies for participation in numbers supportable within resources.			
Accomplishments/Planned Programs Subtotals	3.619	3.579	2.340

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

N/A

Remarks

D. Acquisition Strategy

Trident Warrior is an annual operational experiment covering an 18-month process and is not associated with acquisition efforts.

E. Performance Metrics

Confirmation of Fleet and Joint Interoperability with technology candidates, Information Assurance Certification and Accreditation, and alignment with United States Fleet Forces (USFF) Commander's Guidance, and Systems Command (SYSCOM) Chief Engineer as well as related Program Executive Office objectives and projected architectures.

PE 0604231N: *Tactical Command System* Navy

Page 49 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

3320: TRIDENT Warrior

DATE: April 2013

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013		2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Trident Warrior (TW)	WR	Fleet Forces Command:San Diego, CA	0.000	0.025	Dec 2011	0.097	Dec 2012	0.000		-		0.000	Continuing	Continuing	Continuin
Trident Warrior (TW)	WR	Naval Postgraduate School:Monterey, CA	0.000	1.100	Nov 2011	1.393	Nov 2012	0.972	Nov 2013	-		0.972	Continuing	Continuing	Continuin
Trident Warrior (TW)	WR	SSC Atlantic:Charleston, SC	0.000	0.638	Jan 2012	0.056	Jan 2013	0.043	Jan 2014	-		0.043	Continuing	Continuing	Continuin
Trident Warrior (TW)	WR	SSC Pacific:San Diego, CA	0.000	0.473	Nov 2011	0.528	Nov 2012	0.347	Nov 2013	-		0.347	Continuing	Continuing	Continuin
Trident Warrior (TW)	C/CPFF	AUSGAR Technolgies Inc.:San Diego, CA	0.000	1.383	Dec 2011	1.505	Dec 2012	0.978	Dec 2013	-		0.978	Continuing	Continuing	Continuin
		Subtotal	0.000	3.619		3.579		2.340		0.000		2.340			
			All Prior Years	FY 2	2012	FY 2	2013		2014 ase	FY 2	2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals			0.000	3.619		3.579		2.340		0.000		2.340	<u> </u>		

Remarks

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 50 of 79

Exhibit R-4, RDT&E Schedule Profile:	ibit R-4, RDT&E Schedule Profile: PB 2014 Navy																				[DATE	:: Ар	ril 20	13		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Ev BA 5: System Development & Demonstra				У						1 ITE 5 060						and	Syste	еm		OJE 20: <i>T</i>		ENT I	Warr	ior			
Fiscal Year		20	12			20	13			20	14			20)15			20	16			20:	17			2018	
QTR	1	2	3	4	1	2	3	4	1	. 2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3 4
Trident Warrior (TW)																											
TW [CFY] Execution TW Land Based E2C Experiments TW [CFY+1] Concept Development Conferences TW [CFY+1] Data Calls & CAA TW [CFY+1] Initial Planning Conferences TW [CFY] Mid Term Planning Conferences TW [CFY] Final Planning Conferences TW [CFY] Military Utility Assessment	Δ			Δ Δ	Δ			Δ	Δ			Δ	Δ			\triangle	Δ			Δ	Δ			\triangle			

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 51 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System

3320: TRIDENT Warrior

DATE: April 2013

Schedule Details

	Sta	art	En	d		
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		
Trident Warrior (TW) Execution 2018	2	2018	3	2018		
TW Land Based E2C Experiments 2012 Q1	1	2012	1	2012		
TW Land Based E2C Experiments 2012 Q3	3	2012	3	2012		
TW Land Based E2C Experiments 2013 Q1	1	2013	1	2013		
TW Land Based E2C Experiments 2013 Q3	3	2013	3	2013		
TW Land Based E2C Experiments 2014 Q1	1	2014	1	2014		
TW Land Based E2C Experiments 2014 Q3	3	2014	3	2014		
TW Land Based E2C Experiments 2015 Q1	1	2015	1	2015		
TW Land Based E2C Experiments 2015 Q3	3	2015	3	2015		
TW Land Based E2C Experiments 2016 Q1	1	2016	1	2016		
TW Land Based E2C Experiments 2016 Q3	3	2016	3	2016		
TW Land Based E2C Experiments 2017 Q1	1	2017	1	2017		
TW Land Based E2C Experiments 2017 Q3	3	2017	3	2017		
TW Land Based E2C Experiments 2018 Q1	1	2018	1	2018		
TW Land Based E2C Experiments 2018 Q3	3	2018	3	2018		

PE 0604231N: *Tactical Command System* Navy

APPROPRIATION/BUDGET ACTIVITY

BA 5: System Development & Demonstration (SDD)

UNCLASSIFIED
Page 52 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System

3320: TRIDENT Warrior

BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

	Sta	Start						
Events by Sub Project	Quarter	Year	Quarter	Year				
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				
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 Concept Development Conferences 2018	2	2018	2	2018				
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 Data Calls & CAA 2018	2	2018	2	2018				
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 Initial Planning Conferences 2018	4	2018	4	2018				
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				

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

3320: TRIDENT Warrior

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
TW Mid-Term Planning Conferences 2016	1	2016	1	2016
TW Mid-Term Planning Conferences 2017	1	2017	1	2017
TW Mid-Term Planning Conferences 2018	1	2018	1	2018
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
TW Final Planning Conferences 2016	2	2016	2	2016
TW Final Planning Conferences 2017	2	2017	2	2017
TW Final Planning Conferences 2018	2	2018	2	2018
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
TW Military Utility Assessment 2018	4	2018	4	2018

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	3323: Maritime Tactical Command & Control

BA 5: System Development & Demonstration (SDD) (MTC2) FY 2014 FY 2014 **All Prior** FY 2014 **Cost To Total** COST (\$ in Millions) OCO ## FY 2012 | FY 2013# Total FY 2015 FY 2016 FY 2017 FY 2018 | Complete Years Base Cost 26.778 Continuing Continuing 3323: Maritime Tactical 0.000 0.003 7.441 17.443 17.443 14.410 19.304 24.238 Command & Control (MTC2) Quantity of RDT&E Articles 0 0 0 0 0 0 0 0 0

Note

In FY 2013, the development of maritime tactical command and control capabilities was realigned from Global Command and Control System Maritime (GCCS-M) Maritime Applications (Project Unit x0709) to the Maritime Tactical Command and Control (MTC2) program (Project Unit x3323).

In FY 2014, Global Force Management - Data Intitiative efforts transitions from GCCS-M Maritime Applications (Project Unit x0709) to the MTC2 program (Project unit x3323).

A. Mission Description and Budget Item Justification

MTC2 is a software program which will provide tactical Command and Control (C2) capabilities and Maritime unique Operational Level of War capabilities not supported by the joint C2 effort. MTC2 fields to all echelons of command within the Navy. The goal is to provide a suite of maritime applications notionally as part of an "Application Store" concept for personnel and equipment that enables the Navy command structure enhanced situational awareness, planning, execution, monitoring, and assessment of its mission requirements. MTC2 will field maritime applications designed to provide automated and structured support for tactical and operational planning, decision-making, and execution.

Global Force Management - Data Initiative (GFM-DI) is the Department-wide enterprise solution that enables visibility/accessibility/sharing of data applicable to the entire DoD force structure. GFM-DI is the enterprise solution for force structure representation and MTC2 will be the data source for the Navy's force structure representation. In FY 2014, GFM-DI will perform design and development for integration into MTC2 and will align to the joint command and control objective architecture.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Navy Working Capital Fund Rate Adjustment	0.003	0.000	0.000
Articles:	0		
FY 2012 Accomplishments:			
Navy Working Capital Fund Rate Adjustment - this issue adjusts WCF rates.			
Title: Maritime Tactical Command and Control (MTC2)	0.000	7.441	15.600

PE 0604231N: Tactical Command System

UNCLASSIFIED Page 55 of 79

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

		DAIE:	: April 2013									
PROPRIATION/BUDGET ACTIVITY 9: Research, Development, Test & Evaluation, Navy 5: System Development & Demonstration (SDD) R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System												
		FY 2012	FY 2013	FY 2014								
Ar	rticles:	:	0) (
est softwa into the n support	e MTC2	!										
Program c) capabil er coordin abilities w es suppo ame MT0	ilities ination within porting											
		0.000	0.000	1.843								
Ar	rticles:	:										
t efforts i	in											
ams Sub	btotals	0.003	7.441	17.443								
			Cost T									
2016 0.000	FY 20 0.0			<u>te</u> <u>Total Cos</u> 0 199.964								
0.0	00	00 0.0	00 0.000 0.0	0.000 0.000 0.000								

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

PE 0604231N: Tactical Command System

Fyhihit R-24 RDT&F Project Justification: PB 2014 Navy

UNCLASSIFIED
Page 56 of 79

R-1 Line #88

DATE: April 2013

Navy

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD) primary contracting method for software development utilizes SPAWAR Systems (IDIQ) task orders.	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System as Center - Pacific (SSC-PAC), San Diego, 0	PROJECT 3323: Maritime Tactical Command & Control
1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD) primary contracting method for software development utilizes SPAWAR Systems (IDIQ) task orders.	PE 0604231N: Tactical Command System	3323: Maritime Tactical Command & Control
BA 5: System Development & Demonstration (SDD) primary contracting method for software development utilizes SPAWAR Systems (IDIQ) task orders.	·	
primary contracting method for software development utilizes SPAWAR Systems (IDIQ) task orders.	s Center - Pacific (SSC-PAC), San Diego, ((MATC2)
(IDIQ) task orders.	is Center - Pacific (SSC-PAC), San Diego, ((MTC2)
- Daufaurana Matria		CA and Indefinite Delivery, Indefinite Quantity
E. Performance Metrics		
MTC2 leverages software investments by the Office of Naval Research (ONR) to (ICD) for meeting Capability Package 1 (CP1) Operational Level of Warfare (OLY CCE/Consolidated Afloat Networks and Enterprise Services (CANES) hardware MTC2 Release 1 software-only solution eliminates the hardware procurement, in analysis, and acquisition documentation to achieve five Build Decisions.	LW) capability needs within a Maritime Oper e infrastructure and the CANES Agile Core S	ation Center (MOC). MTC2 will reside on Services (ACS) technology architecture.

PE 0604231N: Tactical Command System

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604231N: Tactical Command System

DATE: April 2013 **PROJECT**

3323: Maritime Tactical Command & Control

(MTC2)

Product Developmen	Product Development (\$ in Millions)						2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Systems Engineering	WR	SSC:San Diego, CA	0.000	0.000		2.791	Nov 2012	4.038	Nov 2013	-		4.038	Continuing	Continuing	Continuing
Training Development	WR	SSC:San Diego, CA	0.000	0.000		0.070	Nov 2012	1.114	Nov 2013	-		1.114	Continuing	Continuing	Continuing
Software Development	WR	SSC:San Diego, CA	0.000	0.000		3.825	Nov 2012	9.305	Nov 2013	-		9.305	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		6.686		14.457		0.000		14.457			

Test and Evaluation	est and Evaluation (\$ in Millions)				2012	FY 2	2013	FY 2 Ba	2014 ase	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	0.000	0.000		0.000		0.891	Nov 2013	-		0.891	0.000	0.891	
Operational Test & Evaluation	C/CPIF	COTF:Norfolk, VA	0.000	0.000		0.000		0.669	Nov 2013	-		0.669	0.000	0.669	
	Subtotal 0.0					0.000		1.560		0.000		1.560	0.000	1.560	

Management Service	nt Services (\$ in Millions)				2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Navy Working Capital Fund Rate Adjustment	WR	WCF:TBD	0.000	0.003	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Government Engineering Support	WR	SSC:San Diego, CA	0.000	0.000		0.200	Nov 2012	0.379	Nov 2013	-		0.379	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPFF	SeaPort:San Diego, CA	0.000	0.000		0.200	Nov 2012	0.379	Nov 2013	-		0.379	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	SeaPort:San Diego, CA	0.000	0.000		0.355	Nov 2012	0.668	Nov 2013	-		0.668	Continuing	Continuing	Continuing
		Subtotal	0.000	0.003		0.755		1.426		0.000		1.426			

PE 0604231N: Tactical Command System Navy

UNCLASSIFIED Page 58 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB	2014 Navy	/				DATE: April 2013						
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, BA 5: System Development & Demonstration (SD	•			MENCLATURE Tactical Command	d System	PROJECT 3323: Maritime (MTC2)	mmand	& Control				
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2		Cost To	Total Cost	Target Value of Contract			
Project Cost Totals	0.000	0.003	7 441	17 443	0.000	17 44	3					

Remarks

PE 0604231N: Tactical Command System

Navy

R-1 Line #88

DATE: April 2013

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Exhibit R-4, RDT&E So	ched	ule P	rofile	e: PB	2014	4 Nav	у																DATE	: Apri	1 2013	3		
APPROPRIATION/BUI 1319: Research, Developr BA 5: System Developr	OGE1	r AC	FIVIT	Y Eval	uatio	n, Na									ENCL Tactic			nd S	ystem	3	PROJ 3323: MTC2	Marit	ime T	actica	l Com	mand	d & Co	ontrol
Fiscal Year		20	12			20	013			20	14			20	15		2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones MTC2					MDD				BD R1					BD R2	FDR R1]		[BD R3	DR R2				BD R4	FDR R3]		
Software Deliveries MTC2										ED1	GFM-DI (ED1)				R1 Δ				GFM-DI (ED2)	R2					R3 A			
Test & Evaluation Milestones Integrated Test Developmental Test Operational Test												2	\ \ _	GFM-DI (DT1)			_ <u> </u>	2 Z	2		G	GFM-DI (DT2)	DT3	ĬŢ3			[3FM-DI (OT)
Legend: BD - Build Decision DT - Developmental Test ED - Engineering Drop FDR - Fielding Decision Review GFM-DI - Global Force Mgt - Data	Initiative	е	MDD -	peratio			Decision														Notes:				EXHIBI	ΓR-4, S	chedule	Profile

PE 0604231N: Tactical Command System Navy

Page 60 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PROJECT

PE 0604231N: Tactical Command System 3323: Maritime Tactical Command & Control

(MTC2)

Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3323				
Material Development Decision	1	2013	1	2013
Build Decision/Release 1	1	2014	1	2014
Engineering Drop 1	2	2014	2	2014
Global Force Management - Data Initiative - Engineering Drop 1	3	2014	3	2014
Developmental Test 1	4	2014	4	2014
Integrated Test 1	1	2015	1	2015
Operational Test	1	2015	1	2015
Build Decision / Release 2	2	2015	2	2015
Global Force Management - Data Initiative - Development Test 1	2	2015	2	2015
Fielding Decision Review/Release 1	3	2015	3	2015
Release 1	3	2015	3	2015
Developmental Test 2	2	2016	2	2016
Integrated Test 2	3	2016	3	2016
Global Force Management - Data Initiative - Engineering Drop 2	3	2016	3	2016
Build Decision/Release 3	3	2016	3	2016
Fielding Decision Review/Release 2	4	2016	4	2016
Release 2	4	2016	4	2016
Global Force Management - Data Initiative - Development Test 2	2	2017	2	2017
Developmental Test 3	3	2017	3	2017
Integrated Test 3	4	2017	4	2017
Build Decision/Release 4	4	2017	4	2017

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 61 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604231N: Tactical Command System 3323: Maritime Tactical Command & Control

BA 5: System Development & Demonstration (SDD) (MTC2)

Start End **Events by Sub Project** Year Quarter Year Quarter Fielding Decision Review/Release 3 2018 2018 Release 3 2018 2018 Global Force Management - Data Initiative - Operational Test 4 4 2018 2018 Developmental Test 4 2018 4 2018

PE 0604231N: *Tactical Command System* Navy

Page 62 of 79

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 3324: Navy Air Operations Command and BA 5: System Development & Demonstration (SDD) Control (NAOC2)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3324: Navy Air Operations Command and Control (NAOC2)	0.000	2.073	4.983	4.066	-	4.066	2.165	1.131	1.157	1.176	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Navy

Beginning in fiscal year 2012, the Navy Command and Control Air Planning Capability effort was 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 FY2014, the program will continue Navy integration and testing for Air Force developed C2AOS and C2IS, with focus on two of the currently planned four Capability Packages.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: TBMCS CANES Migration	1.367	1.359	1.383
Articles:	0	0	0
FY 2012 Accomplishments:			

PE 0604231N: Tactical Command System

Page 63 of 79

R-1 Line #88

DATE: April 2013

^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System	PROJECT 3324: Navy Control (NA		erations Comi	mand and
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	ities in Each)	FY	2012	FY 2013	FY 2014
Conducted migration of Air Force design, development, and delivery of T software to the Navy unique Consolidated Afloat Networks and Enterprise Conducted integrated TBMCS/CANES Developmental Tests and prepare	e Services (CANES) Common Computing Environm	ent.			
FY 2013 Plans: Continue migration of Air Force designed, developed, and delivered Theato the Navy unique Consolidated Afloat Networks and Enterprise Service integrated TBMCS/CANES Developmental Tests.					
FY 2014 Plans: Complete migration of Air Force designed, developed, and delivered The to the Navy unique Consolidated Afloat Networks and Enterprise Service Operational Assessment and Operational Test.					
Title: Command and Control Air and Space Operations Suite (C2AOS) / Integration and Testing	•	ticles:	0.706 0	3.624 0	2.683 0
FY 2012 Accomplishments: Conducted requirements definition and acquisition planning in support of and Control Air and Space Operations Suite (C2AOS) and Command, C functionality on Navy unique systems to support increased Joint interope planning plus distributed planning and execution processes.	ontrol and Information Services (C2IS) to ensure fu	I			
FY 2013 Plans: Conduct integration and testing of one Capability Package in support of A Space Operations Suite (C2AOS) and Command, Control and Informatio unique systems to include Navy implementation of Service Oriented Arclenhanced capability including theater level planning plus distributed plans	n Services (C2IS) to ensure full functionality on Nav hitecture to support increased Joint interoperability	y			
FY 2014 Plans: Continue integration and testing of two Capability Packages in support of and Space Operations Suite (C2AOS)and Command, Control and Inform unique systems to include Navy implementation of Service Oriented Arch enhanced capability including theater level planning plus distributed plans	ation Services (C2IS) to ensure full functionality on itecture to support increased Joint interoperability a	Navy			
	Accomplishments/Planned Programs Sub	totals	2.073	4.983	4.066

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 64 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	3324: Navy Air Operations Command and
BA 5: System Development & Demonstration (SDD)		Control (NAOC2)

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

N/A

Remarks

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.

PE 0604231N: Tactical Command System

Navy

Page 65 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System

3324: Navy Air Operations Command and

Control (NAOC2)

Product Developmen	t (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	0.000	1.018	Nov 2011	1.276	Apr 2013	0.761	Apr 2014	-		0.761	Continuing	Continuing	Continuing
Licenses	WR	SSC Pacific:San Diego, CA	0.000	0.059	Nov 2011	0.063	Nov 2012	0.366	Jan 2014	-		0.366	0.000	0.488	
Government Furnished Equipment (GFE)	WR	SSC Pacific:San Diego, CA	0.000	0.657	Nov 2011	0.259	Nov 2012	0.395	Nov 2013	-		0.395	0.000	1.311	
Training DevelopmentText	WR	SSC Pacific:San Diego, CA	0.000	0.000		0.419	Nov 2012	0.150	Apr 2014	-		0.150	0.000	0.569	
Configuration Management	TBD	Unknown:San Diego, CA	0.000	0.000		0.126	Apr 2013	0.128	Apr 2014	-		0.128	0.000	0.254	
Technical Data	WR	SSC LANT:Charleston, SC	0.000	0.000		0.299	Nov 2012	0.244	Nov 2013	-		0.244	0.000	0.543	
		Subtotal	0.000	1.734		2.442		2.044		0.000		2.044			

Remarks

GFE supports integration efforts, not for fielding.

Support (\$ in Million	ns)			FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Development Support	TBD	Unknown:Unknown	0.000	0.059	Nov 2011	0.060	Apr 2013	0.061	Apr 2014	-		0.061	0.000	0.180	
Integrated Logistics Support	WR	SSC LANT:Charleston, SC	0.000	0.000		0.358	Nov 2012	0.366	Nov 2013	-		0.366	0.000	0.724	
		Subtotal	0.000	0.059		0.418		0.427		0.000		0.427	0.000	0.904	

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 66 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013
PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System 332

3324: Navy Air Operations Command and

Control (NAOC2)

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY:	2013	FY 2 Ba		FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation	MIPR	COMOPTEVFOR:Nor	folk, 0.000	0.138	Nov 2011	0.140	Jul 2013	0.143	Jul 2014	-		0.143	0.000	0.421	
Developmental Test & Evaluation	WR	SSC PAC:San Diego, CA	0.000	0.000		1.604	Apr 2013	1.068	Jul 2014	-		1.068	0.000	2.672	
		Subtotal	0.000	0.138		1.744		1.211		0.000		1.211	0.000	3.093	

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	0.000	0.142	Nov 2011	0.253	Nov 2012	0.256	Apr 2014	-		0.256	0.000	0.651	
Program Management Support	TBD	Unknown:San Diego, CA	0.000	0.000		0.126	Nov 2012	0.128	Apr 2014	-		0.128	0.000	0.254	
		Subtotal	0.000	0.142		0.379		0.384		0.000		0.384	0.000	0.905	

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	0.000	2.073	4.983	4.066	0.000	4.066			

Remarks

PE 0604231N: Tactical Command System

Navy Page 67 of 79

E	xhibit R-4, RDT&E So	chedu	ıle P	rofile	e: PB	2014	Navy	′															D	ATE:	April	2013	3		
1	PPROPRIATION/BUD 319: <i>Research, Devel</i> o A 5: <i>System Developr</i>	ортег	nt, Te	est &	Evalu			у							_	NCL. actica	_		d Sys	stem	33				perati	ons C	omm	and a	and
	Fiscal Year		20	012			20)13			20	14			20)15			20	16			20	17			20	18	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
-					C2AOS (Air	/C2IS M Force)	SB								OS/C2I ling De				OS/C2I ding De										
	Acquisition Milestones				,											C2AOS Fielding		-	•			2IS CP Decision							
SICOIS	Capability Package 1 (CP1)								Inte	gration	and Te	sting of	f Air For	ce CP1	on Nav	y Syster	ns												
C2AOS/C2	Capability Package 2 (CP2)												esting o																
	Capability Package 3 (CP3)															nd Testir Navy S													
	Capability Package 4 (CP4)																		g of Air ystems										
SO	Test & Evaluation Milestones					CANES	5																						
TBMCS	Development Test Operational Test	Force	TBMCS se 2 on	S Main	ing of Air tenance Systems				CANES																				
 																													

Note: Navy schedule is for integration and fielding only. Command and Control Air and Space Operations Suite (C2AOS) & Command, Control and Information Services (C2IS) are being developed in a series of Capability Packages that will be fielded as available. Both C2AOS and C2IS are Air Force ACAT III PORs. Theater Battle Management Core Systems (TBMCS) migration will support Consolidated Afloat Networks and Enterprise Services (CANES) testing events. Air Force milestones were taken from Air Force PB13 R-1 Line Item #146, PE 0207410F, Project 675218.

Exhibit R-4, Schedule Profile

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 68 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PROJECT

PE 0604231N: Tactical Command System

3324: Navy Air Operations Command and

Control (NAOC2)

Schedule Details

	Sta	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3324				
Air Force C2AOS/C2IS Milestone B	1	2013	1	2013
Air Force C2AOS/C2IS CP1 Fielding Decision	2	2016	2	2016
Air Force C2AOS/C2IS CP2 Fielding Decision	2	2015	2	2015
Air Force C2AOS/C2IS CP3 Fielding Decision	1	2016	1	2016
Air Force C2AOS/C2IS CP4 Fielding Decision	3	2016	3	2016
Air Force C2AOS/C2IS CP1 Integration and Testing on Navy Systems	3	2013	1	2016
Air Force C2AOS/C2IS CP2 Integration and Testing on Navy Systems	1	2014	1	2015
Air Force C2AOS/C2IS CP3 Integration and Testing on Navy Systems	1	2015	4	2015
Air Force C2AOS/C2IS CP4 Integration and Testing on Navy Systems	3	2015	2	2016
Air Force TBMCS MR2 Integration and Testing on Navy Systems (CANES)	1	2012	4	2012
Developmental Test (TBMCS/CANES)	1	2013	1	2013
Operational Test (TBMCS/CANES)	4	2013	4	2013

DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy **R-1 ITEM NOMENCLATURE**

APPROPRIATION/BUDGET ACTIVITY **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604231N: Tactical Command System 9123: FORCEnet BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
9123: FORCEnet	220.071	5.251	4.544	2.928	-	2.928	3.422	3.082	3.112	3.189	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Navy

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 the 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 focuses prioritization and organizational responsibility for information dominance, cyber, intelligence and sensors resulting in increased scope of systems, platforms and mission areas. FORCEnet is a foundation 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: 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.

PE 0604231N: Tactical Command System

Page 70 of 79

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJ	ECT		
1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	PE 0604231N: Tactical Command System	9123:	FORCEnet		
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	Quantities in Each)		FY 2012	FY 2013	FY 2014
Title: FORCEnet	Ar	ticles:	5.251 0	4.544 0	2.928 0
FY 2012 Accomplishments:					
Department of the Navy (DoN) Command, Control, Communications Transformation/Strategic Planning within DoN/Joint/Department of I Combatant Commander management of Joint Capability Portfolios, selected operating environments, developed integration plans, executed accelerated innovation, technology insertion, and incorporated material capabilities in Net-Centric Operations/Warfare. -Continued to support Navy implementation of Maritime Domain Aw Operations Centers and coalition/allied operations.	Defense (DoD) Framework: Within the DoD, Joint Staff, a continued to assess existing and emerging capabilities is cuted system engineering reviews and investment strategerial and non-material solutions for enhanced Joint opera	ind n jies,			
Systems Requirements Analysis/Systems Engineering: Continued to systems under development by DoN/DoD. -Continued to provide technical and systems engineering expertise and tracking, architecture development, systems analysis to evaluate and other existing/ developing systems. -Continued to support systems engineering for the synthesis of curre C4ISR systems.	required for C4ISR systems technical requirements gene te alignment and synchronization of infrastructure, resou	eration			
Information Dominance Roadmaps and Analysis: Continued to rese between programs for budget tradeoffs and mission impacts of thos -Identified Navy mission area gaps in Information Dominance capable budget decisionsEvaluated Navy mission areas for linkages to roadmap action items development of Information Dominance RoadmapsEnsured Information Dominance roadmaps objectives providing states.	se tradeoffs. bilities to prioritize Science and Technology efforts for future sets and provided analytical and architectural support in the				
FY 2013 Plans: DoN C4ISR Transformation/Strategic Planning within DoN/Joint/Dol Commander management of Joint Capability Portfolios, continue to operating environments, develop integration plans, execute system innovation, technology insertion, and incorporation of material and r capabilities in Net-Centric Operations/Warfare.	assess existing and emerging capabilities in selected engineering reviews and investment strategies, accelera				

PE 0604231N: Tactical Command System

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604231N: Tactical Command System	PROJE 9123: <i>F</i>	CT ORCEnet		
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)	Г	FY 2012	FY 2013	FY 2014
-Continue to support Navy implementation of Maritime Domain Awa Operations Centers and Coalition/Allied operations.	reness, Standing Joint Force Headquarters, Maritime				
Systems Requirements Analysis/Systems Engineering: Continue to systems under development by DoN/DoD. -Continue to provide technical and systems engineering expertise resurveillance, and Reconnaissance (C4ISR) systems technical requirement and systems analysis to evaluate alignment and synchronization of systems. -Continue to support systems engineering for the synthesis of current C4ISR systems.	equired for Command, Control, Communications, Compurements generation and tracking, architecture developm infrastructure, resources and other existing/developing	iters, ent,			
Information Dominance Roadmaps and Analysis: Continue to resea programs for budget tradeoffs and mission impacts of those tradeoffs-Continue to identify Navy mission area gaps in Information Domina for future budget decisions. -Continue to evaluate Navy mission areas for linkages to roadmap at the development of Information Dominance Roadmaps. -Continue to ensure Information Dominance Roadmaps objectives programs.	fs. nce capabilities to prioritize Science and Technology efforts action items and provide analytical and architectural supp	orts			
FY 2014 Plans: Department of the Navy (DoN) C4ISR Transformation/Strategic Plan Framework: Within the DoD, Joint Staff, and Combatant Commande to assess existing and emerging capabilities in selected operating e engineering reviews and investment strategies, accelerate innovation material solutions for enhanced Joint operational capabilities in Net-Continue to support Navy implementation of Maritime Domain Awa Operations Centers and Coalition/Allied operations.	er management of Joint Capability Portfolios, continue nvironments, develop integration plans, execute system on, technology insertion, and incorporation of material an Centric Operations/Warfare.	d non-			
Information Dominance Roadmaps and Analysis: Continue to resea programs for budget tradeoffs and mission impacts of those tradeoffs-Continue to identify Navy mission area gaps in Information Domina for future budget decisions.	fs.				

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 72 of 79

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604231N: Tactical Command System	9123: FOR	RCEnet
BA 5: System Development & Demonstration (SDD)			

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
-Continue to evaluate Navy mission areas for linkages to roadmap action items and provide analytical and architectural support in			
the development of Information Dominance Roadmaps.			
-Continue to ensure Information Dominance Roadmaps objectives provide stated capabilities to the warfighters.			
Accomplishments/Planned Programs Subtotals	5.251	4.544	2.928

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

N/A

Remarks

D. Acquisition Strategy

FORCEnet is a non-acquisition effort that informs and matures Navy decisions, which in turn impacts acquisition programs. Activities include acquiring intellectual capital in emerging technical areas through contracts providing technical engineering expertise and surge capacity for emerging tasks.

E. Performance Metrics

FORCEnet Performance Metrics: Goal: Chief of Naval Operations (CNO) strategic planning and supporting acquisition of classified efforts. Metric: Echelon 1 response to emergent strategic needs and classified warfighting capability.

PE 0604231N: *Tactical Command System* Navy

Page 73 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

PE 0604231N: Tactical Command System

9123: FORCEnet

DATE: April 2013

Product Developmen	ıt (\$ in Mi	illions)		FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	1.196	
Systems Engineering-DLB/RCD	Various	Various:Various	0.600	0.000		0.000		0.000		-		0.000	0.000	0.600	
Ship Integration	Various	Various:Various	0.935	0.000		0.000		0.000		-		0.000	0.000	0.935	
Systems Engineering	Various	Various:Various	1.600	0.000		0.000		0.000		-		0.000	0.000	1.600	
		Subtotal	4.331	0.000		0.000		0.000		0.000		0.000	0.000	4.331	

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba		FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Integrated Logistics Support DLB/RCD	Various	Various:Various	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	
Configuration Management DLB/RCD	Various	Various:Various	0.115	0.000		0.000		0.000		-		0.000	0.000	0.115	
Development Support DLB/RCD	Various	Various:Various	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	
Software Development DLB/RCD	Various	Various:Various	1.971	0.000		0.000		0.000		-		0.000	0.000	1.971	
Development Support	Various	Various:Various	2.700	0.000		0.000		0.000		-		0.000	0.000	2.700	
Software Support	Various	Various:Various	2.900	0.000		0.000		0.000		-		0.000	0.000	2.900	
Sys Req Analysis/Sys Eng	Various	Various:Various	15.094	0.000		0.000		0.000		-		0.000	0.000	15.094	
S/W Develop,Integ,Demo, Field - MDA Prototypes	Various	Various:Various	108.910	0.000		0.000		0.000		-		0.000	0.000	108.910	
Sys Req Analysis/Sys Eng	WR	SSC PAC:San Diego, CA	0.356	0.801	Jan 2012	0.544	Jan 2013	0.000		-		0.000	Continuing	Continuing	Continuing
Sys Req Analysis/Sys Eng	WR	SSC LANT:Charleston, SC	0.356	0.950	Jan 2012	0.656	Jan 2013	0.000		-		0.000	Continuing	Continuing	Continuing

PE 0604231N: Tactical Command System Navy

UNCLASSIFIED Page 74 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

PE 0604231N: Tactical Command System

9123: FORCEnet

DATE: April 2013

ı	1319: Research, Development, Test & Evaluation, Navy
Į	BA 5: System Development & Demonstration (SDD)

Support (\$ in Million	s)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
DoN Transformation (Strategic Planning)	WR	NSWC Dahlgren:Dahlgren, MD	0.000	0.359	Jan 2012	0.274	Jan 2013	0.163	Jan 2014	-		0.163	0.000	0.796	
Information Dominance Roadmaps and Analysis	C/CPFF	METRON:Reston, VA	0.000	0.541	Jan 2012	0.541	Jan 2013	0.000		-		0.000	Continuing	Continuing	Continuing
Information Dominance Roadmaps and Analysis	C/CPFF	SAIC:San Diego, CA	0.000	1.499	Jan 2012	1.499	Jan 2013	1.980	Jan 2014	-		1.980	Continuing	Continuing	Continuing
Information Dominance Roadmaps and Analysis	WR	SSC LANT:Charleston, NC	0.000	0.460	Jan 2012	0.460	Jan 2013	0.447	Jan 2014	-		0.447	Continuing	Continuing	Continuing
		Subtotal	132.902	4.610		3.974		2.590		0.000		2.590			

Test and Evaluation	(\$ in Milli	ons)		FY 2	FY 2012		FY 2013		2014 se	FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	1.300	
Accelerating Joint Warfighting Capability (TW)	Various	Various:Various	30.736	0.000		0.000		0.000		-		0.000	0.000	30.736	
Accelerating Joint Warfighting Capability (TW)	WR	Fleet Forces Command:San Diego, CA	0.095	0.000		0.000		0.000		-		0.000	0.000	0.095	
Accelerating Joint Warfighting Capability (TW)	WR	Naval Postgraduate School:Monterey, CA	0.978	0.000		0.000		0.000		-		0.000	0.000	0.978	
Accelerating Joint Warfighting Capability (TW)	WR	SSC Atlantic:Charleston, SC	0.445	0.000		0.000		0.000		-		0.000	0.000	0.445	
Accelerating Joint Warfighting Capability (TW)	WR	SSC Pacific:San Diego, CA	1.069	0.000		0.000		0.000		-		0.000	0.000	1.069	

PE 0604231N: Tactical Command System Navy

UNCLASSIFIED Page 75 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

PE 0604231N: Tactical Command System

9123: FORCEnet

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Accelerating Joint Warfighting Capability (TW)	C/CPFF	AUSGAR Technologies Inc.:San Diego, CA	1.489	0.000		0.000		0.000		-		0.000	0.000	1.489	
Imp FORCEnet Req (Fn Comp)	Various	Various:Various	17.144	0.000		0.000		0.000		-		0.000	0.000	17.144	
Developmental Test & Evaluation DLB/RCD	Various	Various:Various	0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	
DoN Transformation (Strategic Planning)	Various	Various:Various	20.521	0.000		0.000		0.000		-		0.000	0.000	20.521	
DoN Transformation (Strategic Planning)	WR	NUWC:Newport, RI	0.240	0.200	Jan 2012	0.200	Jan 2013	0.119	Jan 2014	-		0.119	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)	WR	NPGS:Monterey, CA	0.290	0.441	Jan 2012	0.370	Jan 2013	0.219	Jan 2014	-		0.219	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)	C/CPFF	NGIT:Herndon, VA	0.349	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
DoN Transformation (Strategic Planning)	C/CPFF	Unknown:Unknown	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	
Need Item Text	C/BA	Not Specified:Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	
		Subtotal	75.156	0.641		0.570		0.338		0.000		0.338			

Remarks

Accelerating Joint Warfighting Capability (Trident Warrior) (TW), was transferred from Project 9123 into new Project 3320 from FY12 forward.

Management Service	nagement Services (\$ in Millions)				2012	FY 2	013	FY 2 Ba	-	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	2.124	
Government Engineering Support	Various	Various:Various	3.899	0.000		0.000		0.000		-		0.000	0.000	3.899	

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 76 of 79

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604231N: Tactical Command System

PROJECT

9123: FORCEnet

Management Services (\$ in Millions)				FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Management Support DLB/RCD	Various	Various:Various	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	
Travel DLB/RCD	Various	Various:Various	0.145	0.000		0.000		0.000		-		0.000	0.000	0.145	
Program Management Support	Various	Various:Various	0.800	0.000		0.000		0.000		-		0.000	0.000	0.800	
Travel	Various	Various:Various	0.299	0.000		0.000		0.000		-		0.000	0.000	0.299	
Acquisition Workforce	Various	Various:Various	0.165	0.000		0.000		0.000		-		0.000	0.000	0.165	
		Subtotal	7.682	0.000		0.000		0.000		0.000		0.000	0.000	7.682	
	,														T4
															Target

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	All Prior Years	FY 2	012	FY 2	013	FY 2 Ba		FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	220.071	5.251		4.544		2.928	0.000	2.928			

Remarks

PE 0604231N: *Tactical Command System* Navy

Page 77 of 79

Exhibit R-4, RDT&E Schedule Profile:	PB 20	014 1	Navy	,																		D	ATE	: Ap	ril 20)13				
APPROPRIATION/BUDGET ACTIVITY 319: Research, Development, Test & Ev BA 5: System Development & Demonstra	valua etion	tion, (SDF	Nav _.	у						1 ITE 5 060							d Sy	stem		PRO. 9123			Enet	.						
Fiscal Year			012			2	013			2	014				2015				2016	6			20	17			2018			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	1 2	2	3	4	5	6	7	8	
aval Information Dominance Enterprise				R	10			R .		114		R.		4		K		- 0		- 12					_	_	_		_	
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PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 78 of 79

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PE 0604231N: Tactical Command System
9123: FORCEnet

Schedule Details

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 9123				
Naval Information Dominance Enterprise	1	2012	4	2018

PE 0604231N: *Tactical Command System* Navy

UNCLASSIFIED
Page 79 of 79