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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>					R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	46.387	9.630	9.094	5.875	-	5.875	12.269	11.124	9.813	10.013	Continuing	Continuing
3326: <i>NIWO Rapid Capabilities Development for CIC</i>	10.021	3.971	4.994	2.373	-	2.373	6.763	6.308	5.381	5.493	Continuing	Continuing
4011: <i>Naval Coastal Warfare Surv and C4I Sys</i>	35.009	3.694	3.340	2.944	-	2.944	3.778	3.721	3.605	3.677	Continuing	Continuing
9C86: <i>Combatant Craft Replacement</i>	1.357	1.965	0.760	0.558	-	0.558	1.728	1.095	0.827	0.843	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Navy Expeditionary project supports the Navy Expeditionary Combat Command (NECC) mission to detect, deter or interdict potential threats to DoN assets using agile, modular and scalable technology. NECC will develop and deploy adaptive force packages (AFPs) tailored for the specific missions to achieve greater efficiency and combat readiness. NECC units have a number of current and future Command, Control, Communications, Computers & Intelligence (C4I) technological requirements for Tactical/Command Operations Center, vehicles, craft, personnel capabilities and SATCOM availability. Each NECC operation requires units to maintain effective command and control, develop and display a tactical picture, and share intelligence and current operational information with higher, adjacent, and subordinate headquarters. These capabilities must be interoperable with higher and adjacent echelons of command (to include coalition allies) as well as with supporting elements to include joint forces. Small, Medium and/or Large Scale Communication Systems (LSCS) are the C4I hub for the NECC Forces. LSCS suites are interoperable with joint systems and include communications HF, VHF, and UHF in all common modes with encrypted and clear voice and data, to include Tactical Data Link Network capability. The future of large scale communications assets such as Mobile Ashore Support Terminal (MAST), Ruggedized Deployable Satellite/Tactical Data Network (RDSAT/ TDN) and Deployable Expeditionary Network-Medium (DEXNet-M) supporting Surveillance Control Central, Expeditionary (ESCC) formerly Radar Sonar Surveillance Center (RSSC) will be converging to a common baseline, the Navy Enterprise Tactical Command and Control (NETC2). Next generation air, surface and subsurface surveillance systems, as well as enhanced C4I capabilities, are required to meet operational objectives. Future technologies are being evaluated as enabling capabilities to expand situational awareness, providing additional tactical decision aids to the local area commander. Future C4I research and development efforts will be identified within NECC's strategic Expeditionary Warfare Improvement Program (EXWIP) Integrated Priority Capability List (IPCL) priorities to increase agility, mobility and network security posture. Additional efforts will be driven by greater DoD initiatives, such as Joint Information Environment (JIE) Inc II, in order to maintain interoperability and drive down DoN enterprise costs.

The Expeditionary Warfare Decision System (EWDS) (formerly Tactically Integrated Sensors (TIS)) software constitutes an upgrade to the MAST-RSSC and is being executed as a separate Abbreviated Acquisition Program. The AAP will enable the deployment of a currently fielded Program of Record (POR) combat system (AN/ SQQ-34C) known as Tactically Integrated Sensors (TIS) to the CRF units. TIS system restores the acoustic surveillance capability that has been eroded from the current RSSC suite. Additionally, future multi-spectral technologies are being looked at as enabling capabilities to expand the situational awareness of the littoral region, providing additional tactical decision aids to the local area commander.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>		R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>
This funding supports the Identity Dominance System (IDS) as key enabler in support of the Joint Personnel Identity (JPI) program. OPNAV N957 conducted the NCW CBA and MES ICD. MESF forces have a mobile security mission that requires methodologies, procedures, equipment and the communications capacity to identify individuals who represent a potential threat as a means to deter and eliminate individuals from conducting asymmetric/non-traditional attacks upon friendly forces, high value assets and coastal areas that NCW is charged with protecting. The Vessel Boarding Search and Seizure (VBSS) teams conducting Expanded Maritime Interception Operations also have a similar requirement to identify individuals. The development of a device to support identity functions is captured in the Identity Dominance System Capability Development Document (IDS CDD). IDS will be used in the following environments: aboard ship and ashore in ports, the littorals and extended inland field environments worldwide. IDS will be employed in maritime and very austere ashore environments and carried by individuals who are part of ship boarding parties and dismounted patrols. These mission and environmental demands dictate a portable, lightweight, rugged, and reliable system with intuitive and user friendly features. IDS biometric modalities may differ by mission profile, requiring the authoritative response to the On-Scene Commander/Boarding Officer on whether to detain or further investigate an individual of interest. Coastal Riverine Force will integrate and employ a variety of surface and air assets, special vehicles, weapons and appropriately trained personnel. Mission assets needed to support the operational capabilities will vary widely dependant on the Host Nations involved. The Riverine Squadron will deploy with inherent, but limited, force protection capabilities. The Modular Unmanned Scouting Craft Littoral (MUSCL), is man-portable "X-Class" Unmanned Surface Vehicle providing enhanced surveillance and reconnaissance capability to Naval Expeditionary Combat Command (NECC) Riverine forces. This program provides efforts in support of the Navy Expeditionary Warfare Division (formerly known as Navy Irregular Warfare (IW) Office). It provides for the identification and assessment of available technologies to confront expeditionary challenges, including irregular warfare, urgent/emergent and unfulfilled needs of the warfighter. It provides for the validation and combat demonstration of identified technologies and/or packages of technologies to meet Oversea Contingency Operation (OCO) goals. It also provides funding necessary to attract additional investment and sustainment of demonstrated capabilities. The goal of the Navy Expeditionary Warfare Innovations Branch office is to: identify those requirements necessary to meet the immediate warfighter needs; integrate those existing unique and/or related capabilities that can best meet those warfighter needs; test those integrated capabilities; and then demonstrate in real time and/or during planned deployments all within an 8 month period. Combatant Craft Replacements will provide second generation Riverine Multi Mission Craft that will replace in-service Riverine Patrol Boats (RPBs) and Riverine Assault Boats (RABs). Combatant Craft replacements will: conduct inland waterway patrol and interdiction to preserve the rivers for friendly use as lines of communications; deny the use of rivers and waterways to waterborne and immediate shore sited hostile forces by barrier and interdiction operations; and, with augmentation of ground and air forces, locate and destroy hostile forces within a riparian area. Specific mission and capabilities will be identified in an NECC developed/OPNAV N95 approved Initial Capabilities Document (ICD). RDT&E funding will fund feasibility studies and procurement of mock-ups and prototype craft to demonstrate capabilities prior to production craft procurement.		

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)		PE 0604230N / Warfare Support System			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	9.725	9.094	9.351	-	9.351
Current President's Budget	9.630	9.094	5.875	-	5.875
Total Adjustments	-0.095	-	-3.476	-	-3.476
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.095	-			
• Program Adjustments	-	-	5.281	-	5.281
• Rate/Misc Adjustments	-	-	-8.757	-	-8.757
Change Summary Explanation					
The FY 2016 funding request was reduced by -\$3.9 million to account for the availability of prior year execution balances.					
Technical: Not applicable.					
Schedule: Not applicable.					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 3326 / NIWO Rapid Capabilities Development for CIC			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3326: NIWO Rapid Capabilities Development for CIC	10.021	3.971	4.994	2.373	-	2.373	6.763	6.308	5.381	5.493	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program provides efforts in support for the Navy Expeditionary Warfare Branch (formerly known as Navy Irregular Warfare (IW) Office). Funding provides for the identification and assessment of available technologies to confront expeditionary challenges, including irregular warfare, urgent/emergent and unfulfilled needs of the warfighter. It provides for the validation and combat demonstration of identified technologies and/or packages of technologies to meet Oversea Contingency Operation (OCO) goals. It also provides funding necessary to attract additional investment and sustainment of demonstrated capabilities. The goal of the Navy Expeditionary Warfare Innovations Branch office is to: identify those requirements necessary to meet the immediate warfighter needs; integrate those existing unique and/or related capabilities that can best meet those warfighter needs; test those integrated capabilities; and then demonstrate in real time and/or during planned deployments all within an 8 month period. Those areas of capability to be investigated by the Expeditionary Warfare Innovations Branch include any or all of the following:

- Persistent Intelligence Surveillance Reconnaissance (ISR)
- Close-in, expeditionary ISR
- Conventional forces support to SOF
- Rotary wing support to SOF
- All source intelligence fusion
- Littoral precision strike capability
- Unmanned Vehicles (Undersea/Air/Surface/Ground vehicles for Mine/ISR/Strike/Surveillance/Detection/IED capabilities)

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

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Navy Irregular Warfare	3.971	4.994	2.373	-	2.373
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Identify, assess, integrate and test available close-in expeditionary ISR and littoral precision strike technologies in support of the Navy Expeditionary Warfare missions, including Irregular Warfare, supporting the warfighter. Additional efforts to validate and demonstrate identified ISR and littoral precision strike technologies including payloads and platforms. Other technologies assessed/demonstrated in support of Confronting Expeditionary Warfare Challenges as available.					
FY 2015 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: February 2015		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>		Project (Number/Name) 3326 / <i>NIWO Rapid Capabilities Development for CIC</i>		
<u>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</u>						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Identify, assess, integrate and test available close-in expeditionary ISR and littoral precision strike technologies in support of the Navy Expeditionary Warfare missions,including Irregular Warfare, supporting the warfighter. Additional efforts to validate and demonstrate identified ISR and littoral precision strike technologies including payloads and platforms. Other technologies assessed/demonstrated in support of Confronting Expeditionary Warfare Challenges as available. <i>FY 2016 Base Plans:</i> Identify, assess, integrate and test available close-in expeditionary ISR and littoral precision strike technologies in support of the Navy Expeditionary Warfare missions,including Irregular Warfare, supporting the warfighter. Additional efforts to validate and demonstrate identified ISR and littoral precision strike technologies including payloads and platforms. Other technologies assessed/demonstrated in support of Confronting Expeditionary Warfare Challenges as available. <i>FY 2016 OCO Plans:</i> N/A						
Accomplishments/Planned Programs Subtotals		3.971	4.994	2.373	-	2.373
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A						
<u>Remarks</u>						
<u>D. Acquisition Strategy</u> Identify, integrate, test then demonstrate capabilities to meet the warfighter needs.						
<u>E. Performance Metrics</u> To successfully conduct technology reviews to confront expeditionary warfare challenges and successfully identify and validate identified technologies.						

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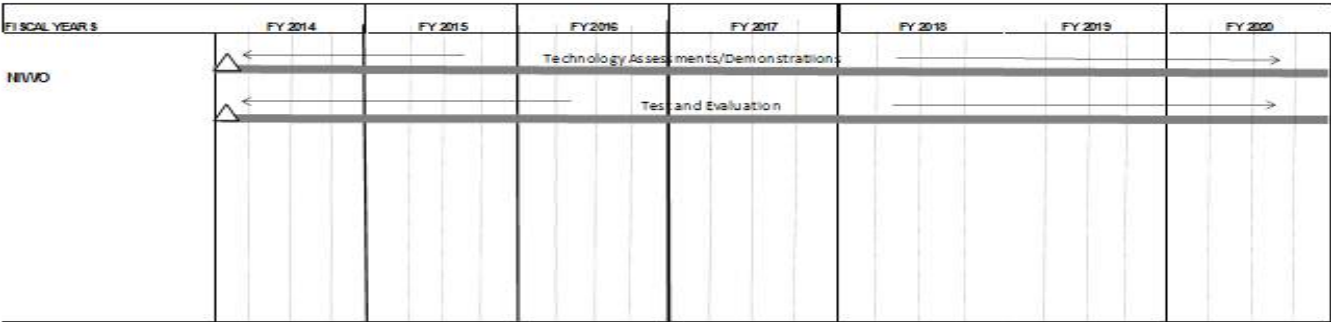
Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 3326 / NIWO Rapid Capabilities Development for CIC					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 Spt	C/CPFF	Dell : Washington, DC	0.400	0.100	Jun 2014	0.100	Feb 2015	0.100	Jan 2016	-		0.100	Continuing	Continuing	Continuing
Travel	WR	NAVSEA/HQ : Washington, DC	0.100	0.060	Nov 2013	0.060	Dec 2014	0.060	Dec 2015	-		0.060	Continuing	Continuing	Continuing
Subtotal			0.500	0.160		0.160		0.160		-		0.160	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	WR	NUWC : Newport, RI	1.346	0.450	Jan 2014	0.600	Dec 2014	-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	NAWC : China Lake, CA	0.595	-		-		-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	NSWC : Carderock, MD	0.239	-		-		-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	SS/CPFF	ARL/UT : Austin, TX	0.327	-		-		-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	SS/CPFF	SPAWAR : San Diego, CA	0.700	0.495	May 2014	0.550	Feb 2015	-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	SPAWAR : Charleston, SC	1.050	-		0.359	Jan 2015	-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	SPAWAR : San Diego, CA	0.875	0.029	Jan 2014	0.400	Feb 2015	-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	SS/FFP	ARL/PSU : State College, PA	0.240	-		0.300	Apr 2015	-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	NRL : Washington, DC	0.400	-		-		-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	WR	NSWC : Indian Head, MD	1.156	-		-		-		-		-	Continuing	Continuing	Continuing
Test and Evaluation	Various	Various : Various	1.577	0.250	Apr 2014	0.105	Apr 2015	0.506	Apr 2016	-		0.506	Continuing	Continuing	Continuing
Test and Evaluation	SS/FFP	NSWC : Panama City, FL	0.264	-		-		-		-		-	-	0.264	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 3326 / NIWO Rapid Capabilities Development for CIC					
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	WR	NSWC : Dahlgren, VA	0.100	0.135	Jun 2014	0.200	Jan 2015	-		-		-	-	0.435	-
Test and Evaluation	SS/FFP	NSWC : Dahlgren, VA	0.150	0.362	Jun 2014	0.200	Mar 2015	-		-		-	-	0.712	-
Test and Evaluation	SS/CPFF	APL/JHU : Laurel, MD	0.125	-		-		-		-		-	-	0.125	-
Test and Evaluation	SS/CPFF	Army Research Lab. : Adelphia, MD	0.247	-		-		-		-		-	-	0.247	-
Test and Evaluation	SS/CPFF	PNNL : Richland, WA	0.130	-		-		-		-		-	-	0.130	-
Test and Evaluation	C/CPFF	Georgia Tech : Atlanta, GA	0.000	0.515	Jul 2014	0.600	Feb 2015	0.200	Feb 2016	-		0.200	-	1.315	-
Test and Evaluation	C/CPFF	Charles River : Cambridge, MA	0.000	0.100	Sep 2014	0.300	Feb 2015	-		-		-	-	0.400	-
Test and Evaluation	C/CPFF	L3 Comm : Burlington, MA	0.000	0.621	Sep 2014	0.450	Feb 2015	-		-		-	-	1.071	-
Test and Evaluation	C/CPFF	QinetiQ NA : Waltham, MA	0.000	0.704	Aug 2014	0.600	Feb 2015	0.500	Feb 2016	-		0.500	-	1.804	-
Test and Evaluation	C/CPFF	TBD : TBD	0.000	-		-		1.007	Apr 2016	-		1.007	-	1.007	-
Test and Evaluation	SS/CPFF	Strategos Consulting : Coronado, Ca	0.000	-		0.170	Mar 2015	-		-		-	-	0.170	-
Test and Evaluation	WR	NAVAIR : San Diego, CA	0.000	0.150	Apr 2014	-		-		-		-	-	0.150	-
Subtotal			9.521	3.811		4.834		2.213		-		2.213	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			10.021	3.971		4.994		2.373		-		2.373	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System	Project (Number/Name) 3326 / NIWO Rapid Capabilities Development for CIC



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>	Project (Number/Name) 3326 / <i>NIWO Rapid Capabilities Development for CIC</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3326</i>				
System Development: Technology Assessments/Demonstrations	1	2014	4	2020
System Development: Test and Evaluations	1	2014	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
4011: Naval Coastal Warfare Surv and C4I Sys	35.009	3.694	3.340	2.944	-	2.944	3.778	3.721	3.605	3.677	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Navy Expeditionary project supports the Navy Expeditionary Combat Command (NECC) mission to detect, deter or interdict potential threats to DoN assets using agile, modular and scalable technology. NECC will develop and deploy adaptive force packages (AFPs) tailored for the specific missions to achieve greater efficiency and combat readiness. NECC units have a number of current and future Command, Control, Communications, Computers & Intelligence (C4I) technological requirements for Tactical/Command Operations Center, vehicles, craft, personnel capabilities and SATCOM availability. Each NECC operation requires units to maintain effective command and Control, develop and display a tactical picture, and share intelligence and current operational information with higher, adjacent, and subordinate headquarters. These capabilities must be interoperable with higher and adjacent echelons of command (to include coalition allies) as well as with supporting elements to include joint forces. Small, Medium and/or Large Scale Communication Systems (LSCS) are the C4I hub for the NECC Forces. LSCS suites are interoperable with joint systems and include communications HF, VHF, and UHF in all common modes with encrypted and clear voice and data, to include Tactical Data Link Network capability. The future of large scale communications assets such as Mobile Ashore Support Terminal (MAST), Ruggedized Deployable Satellite/Tactical Data Network (RDSAT/ TDN) and Deployable Expeditionary Network-Medium (DEXNet-M) supporting Surveillance Control Central, Expeditionary (ESCC) formerly Radar Sonar Surveillance Center (RSSC) will be converging to a common baseline, the Navy Enterprise Tactical Command and Control (NETC2). Next generation air, surface and subsurface surveillance systems, as well as enhanced C4I capabilities, are required to meet operational objectives. Future technologies are being evaluated as enabling capabilities to expand situational awareness, providing additional tactical decision aids to the local area commander. Future C4I research and development efforts will be identified within NECC strategic Expeditionary Warfare Improvement Program (EXWIP) Integrated Priority Capability List (IPCL) priorities to increase agility, mobility and network security posture. Additional efforts will be driven by greater DoD initiatives, such as Joint Information Environment (JIE) Inc II, in order to maintain interoperability and drive down DoN enterprise costs.

Beginning in FY15 funding for CRF Modernization was moved to NECC C4ISR Modernization

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

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: CRF (formerly MESF) Modernization	2.881	-	-	-	-
Articles:	-	-	-	-	-
FY 2014 Accomplishments:					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Maritime Expeditionary Security Force (MESF) Upgrades - Provided management support and developed new Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities for Naval Coastal Warfare forces including Navy Enterprise Tactical Command & Control (NETC2). FY 2015 Plans: Beginning in FY15 funding for Coastal Riverine (CRF) Modernization was moved to Navy Expeditionary Combat Command (NECC) C4ISR Modernization. FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A						
Title: NECC C4ISR Modernization FY 2014 Accomplishments: N/A FY 2015 Plans: Continue development of Navy Enterprise Tactical Command & Control (NETC2) capability sets to replace legacy Mobile Ashore Support Terminal (MAST), Deployable Expeditionary Network, Light (DEXNET-L), Deployable Expeditionary Network, Medium (DEXNET-M) in Coastal Riverine Force (CRF) inventory. Efforts will include development of capabilities based on emergent requirements and operational feedback, to include reach back for tactical vehicles and craft in the coastal, littoral and riverine environments, tactical data link capability, and develop sensor technologies in support of harbor defense, littoral surveillance, and reconnaissance missions. Beginning in FY15 funding for CRF Modernization was moved to Navy Expeditionary Combat Command (NECC) Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Modernization FY 2016 Base Plans: Continue to align NETC2 efforts to emerging DOD technologies in order to enhance capabilities provided to the warfighter and continue to incorporate technologies in NETC2 test efforts in order to facilitate virtualization. Move		Articles: - - - -	2.619 - -	2.699 - -	- - -	2.699 - -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Expeditionary common services to a Joint Information Environment (JIE) Core Data Center node using cloud infrastructure and inclusion of unique requirements into cloud generation. FY 2016 OCO Plans: N/A													
Title: Identity Dominance System Articles: FY 2014 Accomplishments: Resolved critical issues identified during operational use and implemented required capabilities not implemented in initial fielding. Also, supported hardware development, requirements validation and operational demonstration of Navy Expeditionary Tactical Command and Control (NETC2) v2. FY 2015 Plans: Objective is to complete Engineering Change Proposal (ECP) 0003 for Windows 7 compliance. FY 2016 Base Plans: Objectives include conducting research and developing prioritized enhancement plan. FY 2016 OCO Plans: N/A									0.813 -	0.721 -	0.245 -	- -	0.245 -
Accomplishments/Planned Programs Subtotals									3.694	3.340	2.944	-	2.944
C. Other Program Funding Summary (\$ in Millions)													
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost		
• OPN/8120: Maritime Expeditionary Security Force	-	9.638	10.032	-	10.032	9.782	10.012	10.239	10.453	Continuing	Continuing		
• OPN/8128: Physical Security Equipment	2.585	3.000	1.800	-	1.800	0.500	0.500	0.500	-	-	15.253		
Remarks													
D. Acquisition Strategy													
Funding supports an evolutionary acquisition strategy supporting the dynamically evolving rapid action mission of Navy Expeditionary Forces. Large Scale Communication Systems (LSCS) funding will align LSCS to the Deployable Joint Command and Control (DJC2) product baseline. The project will continuously analyze													

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>	Project (Number/Name) 4011 / <i>Naval Coastal Warfare Surv and C4I Sys</i>
operational utilization of the systems and will roll analysis results into periodic system upgrades to prevent obsolescence and maximize operational effectiveness. The intent of this strategy is to: drive down development, production, and logistics costs, while leveraging technologies developed for other agencies to increase the capabilities of Navy Expeditionary Forces. The future baseline configuration for Large Scale Communication Systems (LSCS) will be the NETC2, a system scalable to Adaptive Force Package (AFP) levels. Efforts include development of capabilities based on emergent requirements, operational feedback, alignment with DoD initiatives such as Joint Information Environment (JIE) Inc II, and identification through strategic Expeditionary and Warfare Improvement Program (EXWIP) Integrated Priority Capability List (IPCL) priorities to include reach back for tactical vehicles and craft, tactical data link capability, and sensor technologies in support of surveillance and reconnaissance missions. <u>E. Performance Metrics</u> The Navy Expeditionary program continues to identify, evaluate and test a minimum of 3-5 new technologies or configurations per year for potential insertion into the Technical Refresh Plan, to be demonstrated at Fleet Demonstrations		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 CH : CHARLESTON	0.750	-		0.380	Feb 2015	0.450	Nov 2015	-		0.450	Continuing	Continuing	Continuing
Systems Engineering	WR	NSWC : PANAMA CITY	0.000	-		1.800	Feb 2015	1.648	Nov 2015	-		1.648	-	3.448	-
Hardware/Software Development	C/CPFF	SSC CH : SSC SAN DIEGO	0.100	-		-		-		-		-	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC DAHLGREN : DAHLGREN	3.816	-		-		-		-		-	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC CRANE : CRANE	1.450	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering1	C/CPFF	SSC CH : SSC SAN DIEGO	0.547	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering3	WR	NUWC : KEYPORT	0.850	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering4	WR	NSMRL : Not Specified	0.100	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering5	C/CPFF	SSC SD : SAN DIEGO	6.647	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering6	WR	NSWC : DAHLGREN	3.350	2.709	Feb 2014	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering7	WR	NUWC : NEWPORT	0.510	-		-		-		-		-	Continuing	Continuing	Continuing
Training Development	WR	SSC CH : SSC SAN DIEGO	0.401	-		-		-		-		-	Continuing	Continuing	Continuing
Test Integration	WR	NUWC : KEYPORT	0.819	-		-		-		-		-	Continuing	Continuing	Continuing
Test Integration	WR	NSWC : CRANE	0.200	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			19.540	2.709		2.180		2.098		-		2.098	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 Data	WR	SSC CH/SSC SD : SSC SAN DIEGO	0.541	-		-		-		-		-	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 Data	WR	NSWC : CRANE	0.250	-		-		-		-		-	Continuing	Continuing	Continuing
Technical Data	WR	NUWC : KEYPORT	0.530	-		-		-		-		-	Continuing	Continuing	Continuing
Technical Data	MIPR	Coast Guard : Not Specified	0.175	-		-		-		-		-	Continuing	Continuing	Continuing
Technical Data	WR	NSWC : DAHLGREN	0.175	-		-		-		-		-	Continuing	Continuing	Continuing
Test Planning	WR	NUWC : KEYPORT	0.350	-		-		-		-		-	Continuing	Continuing	Continuing
Test Planning	WR	NSWC : CRANE	0.590	-		-		-		-		-	Continuing	Continuing	Continuing
Test Planning	WR	SSC CH/ : SSC SAN DIEGO	0.710	-		-		-		-		-	Continuing	Continuing	Continuing
Test Planning - Non-Lethal	WR	NSWC : DAHLGREN	1.200	-		-		-		-		-	Continuing	Continuing	Continuing
Test Planning - IDS	WR	NSWC : DAHLGREN	1.110	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			5.631	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	SSC CH : CHARLESTON, SC	0.000	-		0.211	Feb 2015	0.119	Nov 2015	-		0.119	-	0.330	-
Program Management Support	WR	SSC SD : SSC SAN DIEGO	0.641	-		0.250	Feb 2015	0.200	Nov 2015	-		0.200	Continuing	Continuing	Continuing
Program Management Support	Various	Various : Various	3.685	0.485	Feb 2014	0.699	Feb 2015	0.527	Feb 2016	-		0.527	Continuing	Continuing	Continuing
Program Management Support	WR	NUWC : KEYPORT	0.100	-		-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	WR	NSWC : DAHLGREN	4.175	0.500	Feb 2014	-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	WR	NSWC : CRANE	1.062	-		-		-		-		-	Continuing	Continuing	Continuing
Travel	Various	Various : Various	0.135	-		-		-		-		-	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DAWDF	Various	Not Specified : Not Specified	0.040	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			9.838	0.985		1.160		0.846		-		0.846	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			35.009	3.694		3.340		2.944		-		2.944	-	-	-
Remarks															

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PE 0604230N: *Warfare Support System*
Navy

R-1 Line #94

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>
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R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>	Project (Number/Name) 4011 / <i>Naval Coastal Warfare Surv and C4I Sys</i>
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Project (Number/Name)
4011 / Naval Coastal Warfare Surv and C4I Sys

[illegible]

2016PB - 0604230N - 4011

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System	Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 4011				
Acquisition Milestones: Identity Dominance System (IDS): IDS FOC	2	2017	2	2017
System Development: Coastal Riverine Force (CRF) Modernization: Expeditionary Workstation, ADP & Peripherals (EWAP) ADP Refresh	1	2014	4	2014
System Development: Coastal Riverine Force (CRF) Modernization: Expeditionary VTC Upgrade	1	2014	4	2015
System Development: Trailer Senso Platform EO/IR, Image Tracking,Radar Upgrades	1	2014	4	2015
System Development: SHF Comm System, Medium (SCSM) Ka Band Upgrade	1	2014	4	2015
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY15	3	2015	3	2015
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY16	3	2016	3	2016
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY17	3	2017	3	2017
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY18	3	2018	3	2018
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY19	3	2019	3	2019
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY20	3	2020	3	2020
System Development: NECC C4ISR Development: NETC2 Capability Development	1	2015	4	2020
Production: NECC C4ISR Procurement: LSCS Upgrades/Refresh	1	2015	4	2020
Production: NECC C4ISR Procurement: Tactical Vehicles and Combatant Crafts PR/ TR	1	2015	4	2020

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System		Project (Number/Name) 4011 / Naval Coastal Warfare Surv and C4I Sys	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Production: NECC C4ISR Procurement: Expeditionary VHF/UHF/SATCOM (EVUS) UHF TACSAT Upgrade		1	2015	4	2020
Production: NECC C4ISR Procurement: Expeditionary SIPR/NIPR Network Upgrades/Refresh		1	2016	4	2020
Production: NECC C4ISR Procurement: Converged IP		1	2016	4	2020
Production: NECC C4ISR Procurement: VoISP		1	2016	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy									Date: February 2015			
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 9C86 / Combatant Craft Replacement			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
9C86: Combatant Craft Replacement	1.357	1.965	0.760	0.558	-	0.558	1.728	1.095	0.827	0.843	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Combatant Craft Replacements will provide second generation Riverine Multi Mission Craft that will replace in-service Riverine Patrol Boats (RPBs) and Riverine Assault Boats (RABs). Combatant Craft replacements will: conduct inland waterway patrol and interdiction to preserve the rivers for friendly use as lines of communications; deny the use of rivers and waterways to waterborne and immediate shore sited hostile forces by barrier and interdiction operations; and, with augmentation of ground and air forces, locate and destroy hostile forces within a riparian area. Specific mission and capabilities will be identified in an NECC developed/OPNAV N95 approved Initial Capabilities Document (ICD). RDT&E funding will fund feasibility studies and procurement of mock-ups and prototype craft to demonstrate capabilities prior to production craft procurement.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Combatant Craft Replacement								1.965	0.760	0.558	-	0.558
								Articles:				
FY 2014 Accomplishments:												
Convene workshops and increase design efforts with the goal being to posture for replacement of legacy 33' Riverine Assault Boats, 33' Special Operations Craft Riverine, 34' Patrol Boats, and 39' Riverine Patrol Boats with a common combatant craft hull, mechanical, and electrical (HME) package. Ensure the Stabilized Small Arms Mount (SSAM) Abbreviated Acquisition Program (AAP) completes developmental testing, demonstrates operational suitability, and gains WSESRB concurrence coincidental with delivery of and installation on MK VI Patrol Boats. Evaluate, through modeling and simulation, effectiveness of a MK 38 25mm Machine Gun System when mounted on the forward foundation of a MK VI Patrol Boat during operations in high sea states (3+) and wind conditions. Develop a MK VI Patrol Boat load plan that supports sustained craft high performance abilities and stability. Conduct preliminary evaluation of next generation Environmental Protection Agency Tier III-Compliant marine engines when used in combatant craft. Continue Future Combatant Craft feasibility design study(ies). Evaluate transition potential of the Riverine Patrol Boat (RPB) Advance Weapon Systems to interface with the Riverine Assault Boat (RAB), Riverine Command Boat (RCB) and Force Protection-Coastal (FP-C).												
FY 2015 Plans:												
Continue Future Combatant Craft design efforts including replacement program of legacy 33' Riverine Assault Boats, 33' Special Operations Craft Riverine, 34' Patrol Boats, and 39' Riverine Patrol Boats with a												

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: February 2015		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System		Project (Number/Name) 9C86 / Combatant Craft Replacement		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
common combatant craft hull, mechanical, and electrical (HME) package. Continue to support MK VI PB Fleet Introduction Team boat and boat system familiarization support and training efforts. Begin Combatant Craft System Development and Demonstration.						
FY 2016 Base Plans: Continue Future Combatant Craft design efforts including replacement program of legacy 33' Riverine Assault Boats, 33' Special Operations Craft Riverine, 34' Patrol Boats, and 39' Riverine Patrol Boats with a common combatant craft hull, mechanical, and electrical (HME) package. Continue to support MK VI PB Fleet Introduction Team boat and boat system familiarization support and training efforts. Continue Combatant Craft System Development and Demonstration.						
FY 2016 OCO Plans: N/A						
Accomplishments/Planned Programs Subtotals		1.965	0.760	0.558	-	0.558
C. Other Program Funding Summary (\$ in Millions)						
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete Total Cost
• OPN/1210: Standard Boats	28.876	129.784	37.372	-	37.372	30.871 34.926 36.676 37.420 Continuing Continuing
Remarks						
D. Acquisition Strategy						
Acquisition of RDT&E funded mockup and prototype craft for testing to be accomplished using "tailored" GSA procurements in accordance with a PMS325G approved/ OPNAV N95 endorsed Riverine Combatant Craft Replacement Acquisition Strategy.						
E. Performance Metrics						
Successfully demonstrate system and prototype functionality to support approved Initial Capabilities Document (ICD).						

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 9C86 / Combatant Craft Replacement					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Craft Feasibility Study	WR	NSWC : Carderock, MD	0.177	0.655	Jan 2014	0.380	Jan 2015	0.107	Jan 2016	-		0.107	Continuing	Continuing	Continuing
Craft Mockup Award	WR	NSWC : Carderock, MD	0.985	0.655	Jan 2014	-		0.344	Jan 2016	-		0.344	Continuing	Continuing	Continuing
Craft Study Report	WR	NSWC : Carderock, MD	0.195	0.655	Jan 2014	0.380	Jan 2015	0.107	Jan 2016	-		0.107	Continuing	Continuing	Continuing
Craft Test and Evaluation	WR	NSWC : Carderock, MD	0.000	-		-		-		-		-	-	-	-
Subtotal			1.357	1.965		0.760		0.558		-		0.558	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1.357	1.965		0.760		0.558		-		0.558	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy	Date: February 2015
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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>	Project (Number/Name) 9C86 / <i>Combatant Craft Replacement</i>
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	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Proj 9C86																												
Combatant Craft Mockup Delivery																												
Combatant Craft Prototype Awards																												
Combatant Craft Prototype Deliveries																												
Craft Test and Evaluation																												
Selection of Craft for Production																												
Selection of Lethal effectors																												
Integration of Lethal effectors																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015	
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604230N / <i>Warfare Support System</i>		Project (Number/Name) 9C86 / <i>Combatant Craft Replacement</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 9C86</i>				
Combatant Craft Mockup Delivery	2	2014	2	2020
Combatant Craft Prototype Awards	3	2014	3	2020
Combatant Craft Prototype Deliveries	3	2014	1	2020
Craft Test and Evaluation	4	2015	2	2020
Selection of Craft for Production	2	2015	4	2020
Selection of Lethal effectors	2	2015	3	2017
Integration of Lethal effectors	1	2017	1	2018