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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	82.111	19.004	9.729	8.601	-	8.601	8.148	7.640	7.380	7.528	Continuing	Continuing
3326: NSW Rapid Capabilities Development for CIEC	26.073	13.156	6.004	6.747	-	6.747	6.152	5.890	5.655	5.768	Continuing	Continuing
4011: Naval Coastal Warfare Surv and C4I Sys	48.275	3.748	3.043	0.771	-	0.771	0.792	0.808	0.821	0.838	Continuing	Continuing
9C86: Combatant Craft Replacement	7.763	2.100	0.682	1.083	-	1.083	1.204	0.942	0.904	0.922	Continuing	Continuing

Note

Funding for the following project has been realigned out of PE 0604230N into PE 0604280N as part of Program Element Consolidation starting in FY20:
Project 4011 - C4I System

A. Mission Description and Budget Item Justification

The Rapid Capabilities Development (RCD) project supports the Naval Special Warfare Branch to identify and assess available technologies that confront current and future irregular and expeditionary challenges. The program's development efforts are focused on the enhancement/advancement of existing technologies to fill urgent and emergent capability gaps for Naval Special Warfare (NSW). Program funding provides for the development, integration, testing, validation and combat demonstration of identified technologies and/or packages of technologies to meet: Overseas Contingency Operations (OCO) goals, service common and NSW program technology challenges, and technology obsolescence issues of developed capabilities. The goal of the RCD project is to develop expeditionary/operational capabilities for NSW that enable its force to conduct cross-domain special reconnaissance, counterterrorism, direct action, irregular warfare, and foreign internal defense; and fulfill urgent/emergent needs within a 6-24 month timeframe.

As part of the Naval Coastal Warfare Surveillance program, Identity Dominance System (IDS) supports the Joint Personnel Identity (JPI) program. Maritime Expeditionary Security Force (MESF) 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 Naval Coastal Warfare (NCW) is charged with protecting. The Visit, Board, 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 IDS Capability Development Document (CDD) and implemented in the IDS Capability Production Document (CPD). IDS units are used in the following environments: aboard ships, ashore at ports, the littorals, and extended inland field environments worldwide. IDS is employed in both maritime and very austere ashore environments, carried by individuals who are part of ship boarding parties and by dismounted patrols. These mission and environmental requirements demand the need for a portable, lightweight, ruggedized, 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 or engage in a more thorough search of boarded ships.

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<p>The Navy Expeditionary C4I 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 units have a number of current and future Command, Control, Communications, Computers & Intelligence (C4I) technological requirements for Tactical/Command Operations Center, tactical vehicles, combatant craft, and dismounted personnel. NECC operations require units to maintain effective command and control, develop and display a common tactical picture, and share intelligence and current operational information with higher headquarters, subordinate units, joint forces and coalition allies. Small, Medium, and Large Scale Communication Systems (LSCS) are the C4I hub for the NECC; Navy Enterprise Tactical Command and Control (NETC2) is the converged LSCS baseline. Future C4I research and development include enhanced information transport, network cyber security posture, assured communications in denied environments along with agility and mobility. Funding is required for testing and evaluation of cyber security issue associated with obsolescence of network items and if not addressed will impact the ability of the Program Office to maintain system accreditation under Risk Management Framework (RMF) revoking multiple LSCS assets authority to connectivity on the Department of Defense Information Network (DoDIN). Efforts are in alignment with NECC's strategic Expeditionary Warfare Improvement Program (EXWIP) Integrated Priority Capability List (IPCL) priorities and maintain alignment with greater DoD initiatives, such as Joint Information Environment (JIE), Mission Partner Environment (MPE) in order to maintain interoperability and drive down DoN enterprise costs.</p> <p>Combatant Craft Replacement 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 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.</p>						
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		14.167	9.729	10.689	-	10.689
Current President's Budget		19.004	9.729	8.601	-	8.601
Total Adjustments		4.837	0.000	-2.088	-	-2.088
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-0.563	0.000			
• Program Adjustments		5.400	0.000	-2.057	-	-2.057
• Rate/Misc Adjustments		0.000	0.000	-0.031	-	-0.031

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<u>Change Summary Explanation</u> The FY 2020 funding request was reduced by \$1.012 million to account for the availability of prior year execution balances. Reduction of \$1.045M due to PE consolidation.		

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 3326 / NSW Rapid Capabilities Development for CIEC			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
3326: NSW Rapid Capabilities Development for CIEC	26.073	13.156	6.004	6.747	-	6.747	6.152	5.890	5.655	5.768	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Rapid Capabilities Development (RCD) project supports the Naval Special Warfare Branch to identify and assess available technologies that confront current and future irregular and expeditionary challenges. The program's development efforts are focused on the enhancement/advancement of existing technologies to fill urgent and emergent capability gaps for Naval Special Warfare (NSW). Program funding provides for the development, integration, testing, validation and combat demonstration of identified technologies and/or packages of technologies to meet: Contingency Operations goals, service common and NSW program technology challenges, and technology obsolescence issues of developed capabilities.

The goal of the RCD project is to develop expeditionary/operational capabilities for NSW that enable its force to conduct cross-domain special reconnaissance, counterterrorism, direct action, irregular warfare, and foreign internal defense; and fulfill urgent/emergent needs within a 6-24 month timeframe.

In addition to supporting NSW the program also provides support for irregular warfare and expeditionary related urgent/emergent technology requirements as outlined in Joint Urgent Operational Needs (JUON), Navy Urgent Operational Needs (UON), and/or support rapid insertion into a Department of Navy (DoN) Program of Record (PoR) or other acquisition programs.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Navy Irregular Warfare	13.156	6.004	6.747	0.000	6.747
Articles:	-	-	-	-	-
FY 2019 Plans:					
The RCD program, PB19 budgeted value of \$6.004M, will utilize;					
\$1.3M for CUAS Joint Urgent Operational Need (JUON) to identify, assess, integrate and test prototype technologies supporting NSW deployed forces encountering the proliferation of unconventional, unmanned system threats by non-state actors. Efforts will focus on continuing advancement of FY18 prototyping efforts and field evaluation of developed technologies.					
\$1.5M for MPE integration and field testing of the developed land and maritime variants to further refine the operational gaps associated to precision strike from a light, tactical vehicle; and small surface craft.					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p>\$1.404M for sensor integration (Electro-Optic(EO)/Infrared(IR), Acoustic, Radio Frequency (RF)), payload development, signature management, navigation and communications in denied environments, and technologies that will support improvements to human performance on the battlefield.</p> <p>\$1.8M to support the Broad Area Announcement process for the identification of technologies that enhance and/or accelerate expeditionary and irregular capabilities in support of NSW capability challenges; which remains open. Proposals received via this process will be reviewed for potential award in FY 2019, selected and submitted to contracting for execution.</p> <p>FY 2020 Base Plans: The RCD program, PB20 budgeted value of \$6.747M, will utilize; \$2.0M for communications and navigation in denied environments; and integration of these systems aboard Naval Special Warfare undersea and surface mobility assets. \$3.347M for sensor integration (EO/IR, Acoustic, RF), payload development, signature management, and technologies that will support improvements to human performance on the battlefield; and continuing advancement of FY19 prototyping efforts and field evaluation of developed technologies. \$1.4M to support various Broad Area Announcement processes for the identification of technologies that enhance and/or accelerate expeditionary and irregular capabilities in support of NSW capability challenges.</p> <p>FY 2020 OCO Plans: N/A</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: The FY2020 funding increased by \$0.743 million for continued prototyping efforts and field evaluation of developed technologies.</p>					
Accomplishments/Planned Programs Subtotals	13.156	6.004	6.747	0.000	6.747
C. Other Program Funding Summary (\$ in Millions)					
N/A					
Remarks					

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<p>D. Acquisition Strategy</p> <p>Identify the requirements necessary to meet immediate and future warfighter needs; integrate 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 within a 6-24 month period. Endeavor to leverage existing mature technologies to take advantage of investments already made to reduce cost and time to market; and seek out cost-sharing opportunities with other resource sponsors to make program funding more effective for the expeditionary end-user.</p> <p>E. Performance Metrics</p> <p>Test, verify and validate developed system parameters against approved threshold and objective operational requirements established by the intended expeditionary end-user within the established budget and schedule. Transition the developed technologies to the respective Program Managers or end-users for operational evaluation.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy													Date: March 2019		
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System				Project (Number/Name) 3326 / NSW Rapid Capabilities Development for CIEC					
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 Spt	C/CPFF	Dell : Washington, DC	0.625	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Spt	C/CPAF	Cydecor : Arlington, VA	0.216	0.100	Feb 2018	0.150	Feb 2019	0.150	Feb 2020	-		0.150	0.000	0.616	-
Travel	WR	NAVSEA/HQ : Washington, DC	0.299	0.060	Dec 2017	0.050	Dec 2018	0.050	Dec 2019	-		0.050	Continuing	Continuing	Continuing
Program Management Spt	WR	NAVSEA/HQ : Washington, DC	0.039	0.217	Jun 2018	0.000		0.000		-		0.000	0.000	0.256	-
Program Management Spt	WR	NSWC : Crane, IN	0.000	0.300	Oct 2017	0.000		0.000		-		0.000	0.000	0.300	-
Program Management Spt	WR	NSWC : Dahlgren, VA	0.000	0.050	Oct 2017	0.000		0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NSWC : Panama City, FL	0.000	0.050	Oct 2017	0.000		0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NSWC : Carderock, MD	0.000	0.050	Oct 2017	0.000		0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NUWC : Newport, RI	0.000	0.050	Oct 2017	0.000		0.000		-		0.000	0.000	0.050	-
Subtotal			1.179	0.877		0.200		0.200		-		0.200	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	1.811	0.240	Oct 2017	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	WR	NAWC : China Lake, CA	0.595	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	WR	NSWC : Carderock, MD	0.889	0.177	Oct 2017	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	SS/CPFF	ARL/UT : Austin, TX	0.447	0.250	Mar 2018	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	SS/CPFF	SPAWAR : San Diego, CA	1.195	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing

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Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	SPAWAR : Charleston, SC	1.050	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation -WR	WR	SPAWAR : San Diego, CA	1.254	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	SS/FFP	ARL/PSU : State College, PA	0.540	1.000	May 2018	0.000		0.300	Oct 2019	-		0.300	Continuing	Continuing	Continuing
Test and Evaluation	WR	NRL : Washington, DC	0.300	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	WR	NSWC : Indian Head, MD	1.862	0.000		4.304	Apr 2019	0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	Various	Various : Various	2.274	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	SS/FFP	NSWC : Panama City, FL	0.269	0.270	Oct 2017	0.000		0.000		-		0.000	0.000	0.539	-
Test and Evaluation-WR	WR	NSWC : Dahlgren, VA	0.800	0.517	May 2018	1.500	Dec 2018	0.500	Dec 2019	-		0.500	0.000	3.317	-
Test and Evaluation	SS/FFP	NSWC : Dahlgren, VA	0.512	0.000		0.000		0.000		-		0.000	0.000	0.512	-
Test and Evaluation	SS/CPFF	APL/JHU : Laurel, MD	0.125	0.000		0.000		0.000		-		0.000	0.000	0.125	-
Test and Evaluation	SS/CPFF	Army Research Lab. : Adelphia, MD	0.247	0.000		0.000		0.000		-		0.000	0.000	0.247	-
Test and Evaluation	SS/CPFF	PNNL : Richland, WA	0.130	0.000		0.000		0.000		-		0.000	0.000	0.130	-
Test and Evaluation	C/CPFF	Georgia Tech : Atlanta, GA	1.634	0.000		0.000		0.000		-		0.000	0.000	1.634	-
Test and Evaluation	C/CPFF	Charles River : Cambridge, MA	0.521	0.000		0.000		0.000		-		0.000	0.000	0.521	-
Test and Evaluation	C/CPFF	L3 Comm : Burlington, MA	0.972	0.000		0.000		0.000		-		0.000	0.000	0.972	-
Test and Evaluation	C/CPFF	QinetiQ NA : Waltham, MA	0.704	0.000		0.000		0.000		-		0.000	0.000	0.704	-
Test and Evaluation	C/CPFF	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-

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Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	SS/CPFF	Strategos Consulting : Coronado, Ca	0.178	0.000		0.000		0.000		-		0.000	0.000	0.178	-
Test and Evaluation	WR	NAVAIR : San Diego, CA	0.425	0.000		0.000		0.000		-		0.000	0.000	0.425	-
Test and Evaluation	SS/CPFF	NSMA : Wash, DC	1.599	1.470	Feb 2018	0.000		0.500	Jan 2020	-		0.500	0.000	3.569	-
Test and Evaluation	C/CPFF	Advanced Systems : Manassas, VA	0.150	0.000		0.000		0.000		-		0.000	0.000	0.150	-
Test and Evaluation	SS/CPFF	NAVSEA : Washington, DC	0.750	0.000		0.000		4.000	Nov 2019	-		4.000	0.000	4.750	-
Test and Evaluation	WR	NSWC : Crane, IN	0.471	0.665	Feb 2018	0.000		0.250	Oct 2019	-		0.250	0.000	1.386	-
Test and Evaluation	Reqn	ANL : Chicago, IL	0.114	0.000		0.000		0.100	Oct 2019	-		0.100	0.000	0.214	-
Test and Evaluation	WR	NUWC : Keyport, RI	0.289	0.059	Feb 2018	0.000		0.000		-		0.000	0.000	0.348	-
Test and Evaluation	SS/CPFF	General Atomics : San Diego, CA	1.299	0.624	Oct 2017	0.000		0.000		-		0.000	0.000	1.923	-
Test and Evaluation	SS/CPFF	ASSETT : Manassas, VA	0.385	0.545	Oct 2017	0.000		0.000		-		0.000	0.000	0.930	-
Test and Evaluation	SS/CPFF	Battelle : Columbus, OH	0.734	1.135	Oct 2017	0.000		0.000		-		0.000	0.000	1.869	-
Test and Evaluation	SS/CPFF	WHOI : Woods Hole, MA	0.000	0.225	Oct 2017	0.000		0.000		-		0.000	0.000	0.225	-
Test and Evaluation	SS/CPFF	Boeing : Seattle, WA	0.000	0.300	Oct 2017	0.000		0.000		-		0.000	0.000	0.300	-
Test and Evaluation	SS/CPFF	AeroVironment : Monrovia, CA	0.000	0.525	Oct 2017	0.000		0.000		-		0.000	0.000	0.525	-
Test and Evaluation	SS/CPFF	Northrup Grumman : Falls Church, VA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Test and Evaluation	C/CPFF	IN POWER : Morrisville, NC	0.292	0.000		0.000		0.000		-		0.000	0.000	0.292	-
Test and Evaluation-WR	WR	NSWC : Panama City, FL	0.077	0.320	Feb 2018	0.000		0.269	Oct 2019	-		0.269	0.000	0.666	-
Test adn Evaluation	WR	NSWC : Corona, CA	0.000	0.094	Apr 2018	0.000		0.000		-		0.000	0.000	0.094	-

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Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	MIPR	Army : Ft Belvoir Va	0.000	0.870	Jan 2018	0.000		0.628	Jan 2020	-		0.628	0.000	1.498	-
Test and Evaluation	Reqn	NPS : Dayton OH	0.000	0.500	Mar 2018	0.000		0.000		-		0.000	0.000	0.500	-
Test and Evaluation	MIPR	DTIC : Ft Belvoir Va	0.000	0.220	Jun 2018	0.000		0.000		-		0.000	0.000	0.220	-
Test and Evaluation	MIPR	DLA : Ft Belvoir Va	0.000	2.273	Jul 2018	0.000		0.000		-		0.000	0.000	2.273	-
Subtotal			24.894	12.279		5.804		6.547		-		6.547	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			26.073	13.156		6.004		6.747		-		6.747	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy										Date: March 2019																			
Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System										Project (Number/Name) 3326 / NSW Rapid Capabilities Development for CIEC									

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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 3326																												
System Development: Technology Assessments/Demonstrations																												
System Development: Test and Evaluations																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604230N / Warfare Support System	Project (Number/Name) 3326 / NSW Rapid Capabilities Development for CIEC

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 3326				
System Development: Technology Assessments/Demonstrations	1	2018	4	2024
System Development: Test and Evaluations	1	2018	4	2024

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COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
4011: Naval Coastal Warfare Surv and C4I Sys	48.275	3.748	3.043	0.771	-	0.771	0.792	0.808	0.821	0.838	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 units have a number of current and future Command, Control, Communications, Computers & Intelligence (C4I) technological requirements for Tactical/Command Operations Center, tactical vehicles, combatant craft, and dismounted personnel. NECC operations require units to maintain effective command and control, develop and display a common tactical picture, and share intelligence and current operational information with higher headquarters, subordinate units, joint forces and coalition allies. Small, Medium and Large Scale Communication Systems (LSCS) are the C4I hub for the NECC; Navy Enterprise Tactical Command and Control (NETC2) is the converged LSCS baseline. Future C4I research and development include enhanced information transport, network cyber security posture, cloud-based architecture, assured communications in denied environments along with agility and mobility. Funding also supports testing and evaluation of cyber security issue associated with obsolescence of network items and if not addressed will impact the ability of the Program Office to maintain system accreditation under Risk Management Framework (RMF) revoking multiple LSCS assets authority to connectivity on the Department of Defense Information Network (DoDIN). Efforts are in alignment with NECC's strategic Expeditionary Warfare Improvement Program (EXWIP) Integrated Priority Capability List (IPCL) priorities and maintain alignment with greater DoD initiatives, such as Joint Information Environment (JIE), Mission Partner Environment (MPE) in order to maintain interoperability and drive down DoN enterprise costs.

The future of large scale communications assets such as Navy Enterprise Tactical Command and Control (NETC2) (V) 1 and 2, Expeditionary Mine Countermeasures (ExMCM), Assured Command and Control (AC2), will be converging to a Common Expeditionary and Shore Baseline (CESB) culminating in a single RMF Authority to Operate (ATO). 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. Funding has been realigned out of PE 0604230N Project 0411, into PE 0604280N as part of RDTEN PE Consolidation starting in FY20.

Identity Dominance System (IDS) supports the Navy's Visit, Board, Search and Seizure (VBSS) teams conducting Expanded Maritime Interception Operations (MIO) with a biometric capability. IDS provides the Navy with a means to collect and process identity information in the conduct of maritime and expeditionary operations. There are three key aspects of this capability: 1) Enable forces to rapidly identify unknown individuals encountered in the conduct of operations. 2) Verify an unknown individual's claimed identity. 3) Enable forces to update, manage, and share identity information on friendly, neutral, and enemy individuals in support of identity

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy			Date: March 2019					
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				
operations (IdOps). To support IdOps and achieve identity dominance for expeditionary and naval forces, the future biometrics collection and processing equipment needs to be smaller, lighter, and more efficient with respect to computing power and speed when compared against the current system. The equipment needs to take advantage of enhanced communications capabilities, be able to store the appropriate amount of data to collect biometric samples, match the samples against an internal database and reach near real time operations with connectivity to the DoD biometrics database. In addition to Navy VBSS MIO, IDS also supports the Expeditionary Exploitation Unit One (EXU-1) expeditionary missions. IDS must continue to mature and adapt to the changing threat environment and emerging requirements to support these missions.								
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Identity Dominance System				1.247	0.748	0.771	0.000	0.771
Articles:				-	-	-	-	-
Description: The Identity Dominance System (IDS) is facing obsolescence and is scheduled for a technology refresh in FY19 to field a sustainable system, reduce maintenance and sustainment costs, improve system capabilities, and eliminate performance shortfalls.								
FY 2019 Plans: IDS will integrate the government-developed software for technology refresh into a hardware prototype. Tests and evaluations will be conducted to assure compatibility with the software and hardware. Environmental tests will be conducted along with operational tests by users. Software development will continue in order to incorporate different hardware devices and future enhanced modules, peripherals, and newer/cheaper hardware devices. Windows 7 baseline will continue to be updated via Engineering Change Proposals for enhancements and Information Assurance until the Windows 7 baseline system is completely replaced by the tech refresh system. IDS will increase and support the Counter Improvised Explosive Devices (IEDs) and Force Protection efforts to those individuals deployed. The continued efforts of building a database of suspected enemies to the United States will allow potential threats to be identified at foreign access control points and in international waters. Research, Development, Testing and Evaluation efforts will continue to develop and assess upgrades and modifications to keep IDS relevant and effective through follow-on support of Counter-IEDs and Force Protection efforts to those deployed. US Central Command Urgent Operational Needs (UONs) currently exist for biometrics collection capabilities, and requirements continue to grow. Biometrics was highly ranked at both the 2018 Anti-Terrorism Warfare Improvement Program and 2018 Expeditionary Warfare Improvement Program as a Fleet need for future years. Due to the changing threat environment, the need for an enhanced capability has increased. The ability to rapidly collect and identify persons of interest has become a high priority in order to								

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy			Date: March 2019			
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		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
effectively identify threats, increase the security presence at both foreign and domestic access and entry control points, and enhance combat operations. FY 2020 Base Plans: IDS will continue to develop Software (S/W) for technology refresh. IDS will support the Hardware (H/W) vendor with First Article Delivery tests to verify delivery is what is needed by the warfighter. IDS will continue to integrate S/W onto H/W. Environmental tests will be completed to confirm that the new device will function in the harsh operational environment. Verification and System tests will be completed to ensure the new device works as intended. Vulnerability tests will continue to be conducted to ensure that both current system and tech refresh system is not vulnerable to cyber attacks. Windows 7 baseline will continue to be updated via Engineering Change Proposals for enhancements and Information Assurance until the Windows 7 baseline system is completely replaced by the tech refresh system. IDS will increase and support the Counter-IED and Force Protection efforts to those individuals deployed. The continued efforts of building a database of suspected enemies to the United States will allow potential threats to be identified at foreign access control points and in international waters. FY 2020 OCO Plans: N/A FY 2019 to FY 2020 Increase/Decrease Statement: No significant change from FY 2019 to FY 2020.						
Title: NECC C4ISR Modernization Articles:		2.501 -	2.295 -	0.000 -	0.000 -	0.000 -
FY 2019 Plans: Further enhance common baseline via development of Expeditionary Cloud Service Automated Patching/Cloud services and Commercial Solution For Classified Multi-Tenant Environment Replacing Type 1 Encryption. Also, enhance satellite communication Unified Net centric System Modernizing Teleport Step Sites as well as disconnected, intermittent and latent available cloud capabilities. FY 2020 Base Plans: FY20 funding has been realigned to PE 0604280N Project 0411 as part of PE Consolidation FY 2020 OCO Plans:						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy								Date: March 2019				
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				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
N/A												
FY 2019 to FY 2020 Increase/Decrease Statement: Program decrease is due to realigning funds as part of PE Consolidation. FY20 justification and change explanation is provided under PE 0604280N Project 0411.												
Accomplishments/Planned Programs Subtotals								3.748	3.043	0.771	0.000	0.771
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost	
• OPN/8120: Maritime Expeditionary Security Force	4.010	3.576	9.503	-	9.503	6.845	7.022	7.100	7.173	0.000	157.162	
• OPN/8128: Biometrics	0.940	2.883	2.914	-	2.914	0.250	0.250	0.250	0.250	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
<p>Funding supports an evolutionary acquisition strategy supporting the dynamically evolving rapid action mission of Navy Expeditionary Forces. Small, Medium and Large Scale Communication Systems (LSCS) funding will align LSCS to the Deployable Joint Command and Control (DJC2) product baseline. The project will continuously analyze operational utilization of the systems and will roll analysis results into periodic system upgrades to address cyber security vulnerabilities, 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 baseline configuration for Large Scale Communication Systems (LSCS) is the Navy Enterprise Tactical Command and Control (NETC2), a system scalable to Adaptive Force Package (AFP) levels. Efforts include development of capabilities based on emergent requirements, operational feedback, alignment with Dept. of Defense initiatives such as Joint Information Environment (JIE) / Mission Partner Environment, 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, blue force tracking, tactical data link capability, and sensor technologies in support of surveillance and reconnaissance missions.</p> <p>Identity Dominance System (IDS) will continue to provide a biometric capability to the Navy's expeditionary/forward deployed forces through system upgrades and further collaboration with other biometric stakeholders. The funding supports development and integration of new capabilities designed to enhance the overall performance of IDS and improve our Nation's security posture abroad and in CONUS. The program continually assesses the threat environment, security posture, operational requirements, and DoD and Navy policies related to Identity Operations and Force Protection. As DOD biometrics requirements continue to grow, new lower cost, more capable technologies are emerging. The program will evaluate, integrate, and field these new capabilities to Maritime and Expeditionary Forces.</p>												

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
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

E. Performance Metrics

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 2020 Navy												Date: March 2019			
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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 - Expeditionary	WR	SSC CH : CHARLESTON, SC	1.985	0.387	Nov 2017	0.401	Nov 2018	0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering - Expeditionary	WR	NSWC : PANAMA CITY, FL	3.542	0.832	Nov 2017	0.762	Nov 2018	0.000		-		0.000	0.000	5.136	Continuing
Hardware/Software Development	WR	NSWC DAHLGREN : DAHLGREN	4.016	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC CRANE : CRANE	1.450	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering - IDS	WR	NSWC : DAHLGREN	6.564	0.584	Oct 2017	0.261	Jan 2019	0.000		-		0.000	Continuing	Continuing	Continuing
Hardware/Software Development - IDS	WR	NSWC : DAHLGREN	0.000	0.232	Oct 2017	0.245	Jan 2019	0.471	Mar 2020	-		0.471	Continuing	Continuing	Continuing
Hardware/Software Development	C/CPAF	GTRI : ATLANTA, GA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Product Development Prior Years	Various	Various : Various	10.174	0.000		0.000		0.000		-		0.000	0.000	10.174	10.174
Subtotal			27.731	2.035		1.669		0.471		-		0.471	Continuing	Continuing	N/A

Remarks

FY20 Navy Expeditionary cost data is provided under PE 0604280N Project 0411

Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	0.260	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Technical Data	WR	NSWC : DAHLGREN	0.187	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Support Prior Years	Various	Various : Various	5.206	0.000		0.000		0.000		-		0.000	0.000	5.206	5.206
Subtotal			5.653	0.000		0.000		0.000		-		0.000	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
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					
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 & Evaluation - IDS	WR	NSWC : DAHLGREN	0.000	0.331	Jan 2018	0.242	Jan 2019	0.300	Mar 2020	-		0.300	Continuing	Continuing	Continuing
Test & Evaluation - Expeditionary	WR	NSWC : PANAMA CITY, FL	1.350	0.808	Nov 2017	0.614	Nov 2018	0.000		-		0.000	0.000	2.772	-
Subtotal			1.350	1.139		0.856		0.300		-		0.300	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Management Services Prior Years	Various	Various : Various	0.275	0.000		0.000		0.000		-		0.000	0.000	0.275	0.275
Program Management Support - Expeditionary	WR	SSC CH : CHARLESTON, SC	0.550	0.244	Nov 2017	0.264	Nov 2018	0.000		-		0.000	0.000	1.058	Continuing
Program Management Support - Expeditionary	WR	SSC SD : SSC SAN DIEGO	1.291	0.230	Nov 2017	0.254	Nov 2018	0.000		-		0.000	0.000	1.775	Continuing
Program Management Support	Various	Various : Various	5.388	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support - IDS	WR	NSWC : DAHLGREN	4.975	0.100	Jan 2018	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support - IDS	WR	NSWC : CRANE	1.062	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			13.541	0.574		0.518		0.000		-		0.000	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			48.275	3.748		3.043		0.771		-		0.771	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy			Date: March 2019		
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

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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 4011																												
Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh RFP release																												
Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh Contract Award																												
Acquisition Milestones: Identity Dominance System (IDS): IDS ECP 0022 CCB																												
Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh Fielding																												
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY24																												
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY18																												
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY19																												
System Development: NECC C4ISR Development: NETC2 Capability Development																												
System Development: Identity Dominance System (IDS): IDS Tech Refresh Development and Testing																												
Production: NECC C4ISR Procurement: LSCS Upgrades/Refresh																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy										Date: March 2019																											
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																	
										FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
										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
Production: NECC C4ISR Procurement: Tactical Vehicles and Combatant Crafts PR/TR																																					
Production: NECC C4ISR Procurement: Expeditionary VHF/UHF/SATCOM (EVUS) UHF TACSAT Upgrade																																					
Production: NECC C4ISR Procurement: Expeditionary SIPR/NIPR Network Upgrades/Refresh																																					
Production: NECC C4ISR Procurement: Converged IP																																					
Production: NECC C4ISR Procurement: VoISP																																					
Production: Identity Dominance System (IDS): IDS Tech Refresh Production																																					
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Program Documentation Review/Update																																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
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 Tech Refresh RFP release	2	2018	2	2018
Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh Contract Award	2	2019	2	2019
Acquisition Milestones: Identity Dominance System (IDS): IDS ECP 0022 CCB	2	2021	2	2021
Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh Fielding	2	2021	4	2022
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY24	3	2024	3	2024
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: NETC2 Capability Development	1	2018	4	2019
System Development: Identity Dominance System (IDS): IDS Tech Refresh Development and Testing	1	2018	2	2021
Production: NECC C4ISR Procurement: LSCS Upgrades/Refresh	1	2018	4	2019
Production: NECC C4ISR Procurement: Tactical Vehicles and Combatant Crafts PR/ TR	1	2018	4	2019
Production: NECC C4ISR Procurement: Expeditionary VHF/UHF/SATCOM (EVUS) UHF TACSAT Upgrade	1	2018	4	2019
Production: NECC C4ISR Procurement: Expeditionary SIPR/NIPR Network Upgrades/ Refresh	1	2018	4	2019
Production: NECC C4ISR Procurement: Converged IP	1	2018	4	2019

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019		
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: VoISP		1	2018	4	2019
Production: Identity Dominance System (IDS): IDS Tech Refresh Production		2	2021	2	2022
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Program Documentation Review/Update		1	2018	4	2022

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
9C86: <i>Combatant Craft Replacement</i>	7.763	2.100	0.682	1.083	-	1.083	1.204	0.942	0.904	0.922	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Navy Expeditionary Combat patrol boat, Fleet Expeditionary Security combatant craft, Underwater Construction Team (UCT) and Explosive Ordnance Disposal (EOD) replacements will provide second generation Multi Mission Craft that will replace in-service Force Protection Large, Force Protection Small, Riverine Patrol Boats (RPBs), Riverine Assault Boats (RABs), Underwater Construction and EOD craft. Boat and craft replacements will: conduct Maritime Security Operations across the full spectrum of naval, joint, and combined operations enabling access and freedom of action throughout the sea-to-shore and inland operating environments as well as conduct maritime Mine Countermeasures (MCM), counter Improvised Explosive Devices (IEDs), Weapons of Mass Destruction (WMD), and all other types of weaponry, for protection of naval and joint assets required for sea control and power projection. Specific mission and capabilities will be identified in an Initial Capabilities Document (ICD), Analysis of Alternatives (AoA), Capabilities Production Document (CPD) and required milestone documentation. RDT&E funding will fund procurement and material solution studies, advanced technology development and studies, design development and test and evaluation.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Combatant Craft Replacement								2.100	0.682	1.083	0.000	1.083
								Articles:				
Description: The boats and craft in the Navy Expeditionary Combat Command (NECC) fleet are reaching the end of their service lives and will create a capability gap if not replaced. Funding supports design/development and testing of NECC's next generation Expeditionary Combat Patrol Boat or 40 Patrol Boat (40PB) and other NECC craft.												
FY 2019 Plans: Conduct developmental testing and operational test development for 40PB in support of NECC craft recapitalization. Continuing material solution development and advanced technology development as well as beginning planning, research, analysis, design and development to recapitalize other NECC craft. Continue science and technology development work to optimize material solutions to fill critical NECC capability gaps.												
FY 2020 Base Plans: Continuing material solution development and advanced technology development as well as beginning planning, research, analysis, design and development to recapitalize other NECC craft. Continue science and technology												

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy				Date: March 2019	
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
development work to optimize material solutions to fill critical NECC capability gaps. Begin development of lethal and non-lethal sensors/effectors.					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 funding increase in support of Combatant Craft Replacement.					
Accomplishments/Planned Programs Subtotals	2.100	0.682	1.083	0.000	1.083

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• OPN/1210: Standard Boats (NECC)	29.131	29.479	29.220	-	29.220	11.320	11.546	11.776	12.012	Continuing	Continuing

Remarks

D. Acquisition Strategy
Acquisition of RDT&E developed craft material solution and technology to be accomplished using "tailored" commercial procurements in accordance with a PMS325G approved/OPNAV N95 endorsed NECC Craft Replacement Acquisition Strategy.

E. Performance Metrics
Successfully demonstrate system functionality to support approved requirements and Initial Capabilities Document (ICD).

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	1.912	0.399	Mar 2018	0.130	Mar 2019	0.206	Mar 2020	-		0.206	Continuing	Continuing	Continuing
Craft Material Solution & Design Development	WR	NSWC : Carderock, MD	3.921	1.302	Mar 2018	0.422	Mar 2019	0.671	Mar 2020	-		0.671	Continuing	Continuing	Continuing
Craft Study Report	WR	NSWC : Carderock, MD	1.930	0.399	Mar 2018	0.130	Mar 2019	0.206	Mar 2020	-		0.206	Continuing	Continuing	Continuing
Craft Test and Evaluation	WR	NSWC : Carderock, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Subtotal			7.763	2.100		0.682		1.083		-		1.083	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			7.763	2.100		0.682		1.083		-		1.083	Continuing	Continuing	N/A
Remarks															

UNCLASSIFIED

PE 0604230N: *Warfare Support System*
Navy

R-1 Line #104

Project (Number/Name)	9C86 / <i>Combatant Craft Replacement</i>
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2020DON - 0604230N - 9C86

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019
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 & Fleet Expeditionary Craft Design Studies	1	2018	2	2021
Combatant & Fleet Expeditionary Craft Awards	1	2018	4	2022
Combatant & Fleet Expeditionary Craft Deliveries	1	2019	4	2022
Craft Test and Evaluation	1	2019	4	2022
Selection of Craft/Systems for Production	1	2018	4	2022
Selection of Lethal and Non-Lethal Sensors/Effectors	1	2020	4	2021
Integration of Lethal and Non-Lethal Sensors/Effectors	1	2021	4	2022