Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy											Date: February 2018	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*						**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*						
COST ($ in Millions)	**Prior Years**	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**Cost To Complete**	**Total Cost**
Total Program Element	70.807	11.404	19.567	9.729	-	9.729	10.689	10.563	10.091	10.304	Continuing	Continuing
3326: *NSW Rapid Capabilities Development for CIEC*	21.245	4.928	13.573	6.004	-	6.004	5.619	5.629	5.541	5.655	Continuing	Continuing
4011: *Naval Coastal Warfare Surv and C4I Sys*	44.922	3.353	3.886	3.043	-	3.043	3.847	3.814	3.664	3.745	Continuing	Continuing
9C86: *Combatant Craft Replacement*	4.640	3.123	2.108	0.682	-	0.682	1.223	1.120	0.886	0.904	Continuing	Continuing

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.

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy	Date: February 2018
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*

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.

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.

B. Program Change Summary ($ in Millions)	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**
Previous President's Budget	13.237	14.167	11.699	-	11.699
Current President's Budget	11.404	19.567	9.729	-	9.729
Total Adjustments	-1.833	5.400	-1.970	-	-1.970
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.133	0.000			
• Program Adjustments	0.000	5.400	0.000	-	0.000
• Rate/Misc Adjustments	0.000	0.000	-1.970	-	-1.970
• Congressional Directed Reductions Adjustments	-1.700	-	-	-	-

Change Summary Explanation
FY2017 -1.833 program reduction due to congressional reductions and SBIR assessments.
FY2018 +5.400 to identify, assess, integrate and test prototype technologies focused on Counter Unmanned Aerial Systems (CUAS).

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2019 Navy		**Date:** February 2018
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	

FY2019 funding request was reduced by $1.127 million to account for the availability of prior year execution balances. The balance of $.843M due to misc rate adjustments.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018	

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3326: *NSW Rapid Capabilities Development for CIEC*	21.245	4.928	13.573	6.004	-	6.004	5.619	5.629	5.541	5.655	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY2019 funding request was reduced by $0.494 million to account for the availability of prior year execution balances.

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Navy Irregular Warfare	4.928	13.573	6.004	0.000	6.004
Articles:	-	-	-	-	-

FY 2018 Plans:
The RCD program, PB18 budgeted value of $13.573, will utilize;

$7.3M for Counter Unmanned Aerial Systems (CUAS) 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 near term NSW OCONUS requirements that leverage existing efforts across DoD to accelerate a solution to the field. Development emphasis will be on the discover/detect/ID portion of the engagement sequence for more robust dismounted solutions in a cluttered environment

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
as well as implementation of modular capabilities using standardized architectural interconnects that will allow for tightly integrated system of systems. $2.0M of FY18 funding will center on rapid innovation to solve emerging gaps within ongoing operations. The most notable effort in FY18 is Maritime Precision Engagement (MPE). These funds provide for acceleration of a fielded MPE capability that will address two operational gaps: precision strike from a small surface craft within a contested environment; and a land-based, organic stand-off weapon launched from a light, tactical vehicle with considerable range, precision, terminal control, and loiter capability. Such capabilities would counter multiple documented threats associated with both peer adversaries and Violent Extremist Organizations (VEOs). $4.2M of FY2018 funding supports the identification, assessment, integration and testing technologies that will focus on close-in expeditionary ISR, power and energy, sensor integration (EO/IR, Acoustic, RF), signature management, and navigation and communications in denied environments. Some of these efforts are continuations of prior year work, totaling an estimated $1.7M, including Sea Stalker and Critical Battery Management Software. ***FY 2019 Base 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. $2.0M 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.					

Exhibit R-2A, **RDT&E Project Justification:** PB 2019 Navy		**Date:** February 2018
Appropriation/Budget Activity 1319 *I* 5	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	**Project (Number/Name)** 3326 *I NSW Rapid Capabilities Development for CIEC*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**
$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. *FY 2019 OCO Plans:* N/A *FY 2018 to FY 2019 Increase/Decrease Statement:* Decrease from FY18 to FY19 is in accordance with planned program profile and is not due to a negative action against this effort.					
Accomplishments/Planned Programs Subtotals	4.928	13.573	6.004	0.000	6.004

C. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

D. Acquisition Strategy

 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.

E. Performance Metrics

 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy													Date: February 2018	
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
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	0.060	0.156	Feb 2017	0.100	Feb 2018	0.150	Feb 2019	-		0.150	0.000	0.466	-
Travel	WR	NAVSEA/HQ : Washington, DC	0.240	0.059	Dec 2016	0.060	Dec 2017	0.050	Dec 2018	-		0.050	Continuing	Continuing	Continuing
Program Management Spt	WR	NAVSEA/HQ : Washington, DC	0.039	0.000		0.217	Jun 2018	0.000		-		0.000	0.000	0.256	-
Program Management Spt	WR	NSWC : Crane, IN	0.000	0.000		0.300	Oct 2017	0.000		-		0.000	0.000	0.300	-
Program Management Spt	WR	NSWC : Dahlgren, VA	0.000	0.000		0.050	Oct 2017	0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NSWC : Panama City, FL	0.000	0.000		0.050	Oct 2017	0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NSWC : Carderock, MD	0.000	0.000		0.050	Oct 2017	0.000		-		0.000	0.000	0.050	-
Program Management Spt	WR	NUWC : Newport, RI	0.000	0.000		0.050	Oct 2017	0.000		-		0.000	0.000	0.050	-
Subtotal			0.964	0.215		0.877		0.200		-		0.200	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test and Evaluation	WR	NUWC : Newport, RI	1.811	0.000		2.050	Oct 2017	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	0.639	0.250	Mar 2017	0.050	Oct 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	SS/CPFF	ARL/UT : Austin, TX	0.447	0.000		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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy													Date: February 2018	
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		

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test and Evaluation	WR	SPAWAR : Charleston, SC	1.050	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	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	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	WR	NRL : Washington, DC	0.400	0.000		0.300	Oct 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Test and Evaluation	WR	NSWC : Indian Head, MD	1.156	0.706	Nov 2016	0.000		4.304	Apr 2019	-		4.304	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	0.000		0.525	Oct 2017	0.000		-		0.000	0.000	0.794	-
Test and Evaluation	WR	NSWC : Dahlgren, VA	0.575	0.225	May 2017	0.000		1.500	Dec 2018	-		1.500	0.000	2.300	-
Test and Evaluatioin	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	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy													Date: February 2018

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

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total 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	1.299	0.300	Nov 2016	0.000		0.000		-		0.000	0.000	1.599	-
Test and Evaluation	C/CPFF	Advaned 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		0.000		-		0.000	0.000	0.750	-
Test and Evaluation	WR	NSWC : Crane, IN	0.200	0.271	Jun 2017	0.225	Feb 2018	0.000		-		0.000	0.000	0.696	-
Test and Evaluation	Reqn	ANL : Chicago, IL	0.114	0.000		0.000		0.000		-		0.000	0.000	0.114	-
Test and Evaluation	WR	NUWC : Keyport, RI	0.115	0.174	May 2017	0.030	Feb 2018	0.000		-		0.000	0.000	0.319	-
Test and Evaluation	SS/CPFF	General Atomics : San Diego, CA	0.000	1.299	Jul 2017	0.624	Oct 2017	0.000		-		0.000	0.000	1.923	-
Test and Evaluation	SS/CPFF	ASSETT : Manassas, VA	0.000	0.385	Jul 2017	0.545	Oct 2017	0.000		-		0.000	0.000	0.930	-
Test and Evaluation	SS/CPFF	Battelle : Columbus, OH	0.000	0.734	Jul 2017	0.400	Oct 2017	0.000		-		0.000	0.000	1.134	-
Test and Evaluation	SS/CPFF	WHOI : Woods Hole, MA	0.000	0.000		0.225	Oct 2017	0.000		-		0.000	0.000	0.225	-
Test and Evaluation	SS/CPFF	Boeing : Seattle, WA	0.000	0.000		0.300	Oct 2017	0.000		-		0.000	0.000	0.300	-
Test and Evaluation	SS/CPFF	AeroVironment : Monrovia, CA	0.000	0.000		0.525	Oct 2017	0.000		-		0.000	0.000	0.525	-
Test and Evaluation	SS/CPFF	Northrup Grumman : Falls Church, VA	0.000	0.000		6.697	Jan 2018	0.000		-		0.000	0.000	6.697	-
Test and Evaluation	C/CPFF	IN POWER : Morrisville, NC	0.000	0.292	Jun 2017	0.000		0.000		-		0.000	0.000	0.292	-
Test and Evalualtion	WR	NSWC : Panama City, FL	0.000	0.077	May 2017	0.200	Feb 2018	0.000		-		0.000	0.000	0.277	-
Subtotal			20.281	4.713		12.696		5.804		-		5.804	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy						Date: February 2018			
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			

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	21.245	4.928	13.573	6.004	-	6.004	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2019 Navy		**Date:** February 2018
Appropriation/Budget Activity 1319 *I* 5	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	**Project (Number/Name)** 3326 *I NSW Rapid Capabilities Development for CIEC*

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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																												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2019 Navy		**Date:** February 2018
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

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3326				
System Development: Technology Assessments/Demonstrations	1	2017	4	2023
System Development: Test and Evaluations	1	2017	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018	
Appropriation/Budget Activity 1319 *I* 5				**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*					**Project (Number/Name)** 4011 *I Naval Coastal Warfare Surv and C4I Sys*		

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
4011: *Naval Coastal Warfare Surv and C4I Sys*	44.922	3.353	3.886	3.043	-	3.043	3.847	3.814	3.664	3.745	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY2019 funding request was reduced by $0.563 million to account for the availability of prior year execution balances.

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, 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.

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.

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

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Identity Dominance System	1.029	1.247	0.748	0.000	0.748
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 2018 Plans:
IDS will complete fielding and retrofit of the Windows 7 baseline. Request for Proposal will be released for technology refresh hardware procurement in Q1. IDS will continue technology refresh software development, which will be government-owned. IDS will continue to conduct quarterly Engineering Change Proposals to maintain Informational Assurance compliance along with all other testing that will be needed for technology refresh. 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 Improvised Explosive Devices (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 2017 Anti-Terrorism Warfare Improvement Program and 2017 Expeditionary Warfare Improvement Program as a Fleet need for future years. All documentation necessary for technology refresh will begin to be updated. 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 effectively identify threats, increase the security presence at both foreign and domestic access and entry control points, and enhance combat operations.

FY 2019 Base 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

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
hardware devices. Windows 7 baseline will continue to be updated via Engineering Change Proposals for enhancements and Informational 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 2019 OCO Plans:** N/A **FY 2018 to FY 2019 Increase/Decrease Statement:** The FY2018 to FY 2019 reduction funding is in accordance with planned program profile but also includes reductions due to the availability of prior year execution balances.					
Title: NECC C4ISR Modernization *Articles:*	2.324 -	2.639 -	2.295 -	0.000 -	2.295 -
FY 2018 Plans: Enhancing Assured Command and Control (AC2) in a compromised communication environments encompassing Joint Information Environment (JIE), Coalition, and Mission Partner Environment (MPE) data integration, and on-the-move tactical data exfiltration and sharing. As well as enabling Tactical Hosting Environment Security Enhancements by adopting Virtual Secure Enclave (VSE) hosting and data protection/ prioritization concepts, and expansion of Mission Support Center (MSC) capabilities. **FY 2019 Base 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 capabilites. **FY 2019 OCO Plans:** N/A **FY 2018 to FY 2019 Increase/Decrease Statement:** No significant change from FY 2018 to FY 2019.					
Accomplishments/Planned Programs Subtotals	3.353	3.886	3.043	0.000	3.043

Exhibit R-2A, **RDT&E Project Justification:** PB 2019 Navy		**Date:** February 2018
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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPN/8120: *Maritime Expeditionary Security Force*	9.073	4.010	3.576	-	3.576	6.003	3.345	3.522	3.600	0.000	135.989

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 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.

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 INCONUS. 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.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering - Expeditionary	WR	SSC CH : CHARLESTON	1.580	0.405	Nov 2016	0.455	Nov 2017	0.401	Nov 2018	-		0.401	Continuing	Continuing	Continuing
Systems Engineering - Expeditionary	WR	NSWC : PANAMA CITY	2.711	0.831	Nov 2016	0.882	Nov 2017	0.762	Nov 2018	-		0.762	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC DAHLGREN : DAHLGREN	3.816	0.200	Nov 2016	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	6.059	0.505	Nov 2016	0.584	Oct 2017	0.261	Jan 2019	-		0.261	Continuing	Continuing	Continuing
Hardware/Software Development - IDS	WR	NSWC : DAHLGREN	0.000	0.000		0.232	Oct 2017	0.245	Jan 2019	-		0.245	Continuing	Continuing	Continuing
Product Development Prior Years	Various	Various : Various	10.174	0.000		0.000		0.000		-		0.000	0.000	10.174	10.174
Subtotal			25.790	1.941		2.153		1.669		-		1.669	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Data	WR	NSWC : CRANE	0.250	0.010	Nov 2016	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Technical Data	WR	NSWC : DAHLGREN	0.175	0.012	Nov 2016	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			5.631	0.022		0.000		0.000		-		0.000	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation - IDS	WR	NSWC : DAHLGREN	0.000	0.000		0.331	Jan 2018	0.242	Jan 2019	-		0.242	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation - Expeditionary	WR	NSWC : PANAMA CITY	0.680	0.670	Nov 2016	0.808	Nov 2017	0.614	Nov 2018	-		0.614	Continuing	Continuing	Continuing
Subtotal			0.680	0.670		1.139		0.856		-		0.856	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total 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	0.330	0.220	Nov 2016	0.244	Nov 2017	0.264	Nov 2018	-		0.264	Continuing	Continuing	Continuing
Program Management Support - Expeditionary	WR	SSC SD : SSC SAN DIEGO	1.091	0.200	Nov 2016	0.250	Nov 2017	0.254	Nov 2018	-		0.254	Continuing	Continuing	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	4.675	0.300	Jul 2017	0.100	Jan 2018	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			12.821	0.720		0.594		0.518		-		0.518	Continuing	Continuing	N/A

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	44.922	3.353	3.886	3.043	-	3.043	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2019 Navy		**Date:** February 2018
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	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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 FOC

Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh RFP release

Acquisition Milestones: Identity Dominance System (IDS): IDS Tech Refresh Contract Award

System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY17

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: Navy C4I Test and Certification Events FY20

System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY21

System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY22

System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY23

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
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 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
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																												
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 Hardware Integration																												
Production: Identity Dominance System (IDS): IDS Tech Refresh Software Production																												
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh RFI Review																												

Exhibit R-4, **RDT&E Schedule Profile:** PB 2019 Navy		**Date:** February 2018
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	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Technology Evaluation	███	███																										
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Technology Maturation													███	███	███	███												
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Program Documentation Review/Update	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2019 Navy			**Date:** February 2018	
Appropriation/Budget Activity 1319 *I* 5		**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	**Project (Number/Name)** 4011 *I Naval Coastal Warfare Surv and C4I Sys*	

Schedule Details

	Start		**End**	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 4011				
Acquisition Milestones: Identity Dominance System (IDS): IDS FOC	1	2017	1	2017
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	4	2018	4	2018
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: Navy C4I Test and Certification Events FY21	3	2021	3	2021
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY22	3	2022	3	2022
System Development: NECC C4ISR Development: Navy C4I Test and Certification Events FY23	3	2023	3	2023
System Development: NECC C4ISR Development: NETC2 Capability Development	1	2017	4	2023
System Development: Identity Dominance System (IDS): IDS Tech Refresh Development and Testing	3	2017	4	2020
Production: NECC C4ISR Procurement: LSCS Upgrades/Refresh	1	2017	4	2023

Exhibit R-4A, **RDT&E Schedule Details:** PB 2019 Navy					**Date:** February 2018	
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	Start		**End**	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Production: NECC C4ISR Procurement: Tactical Vehicles and Combatant Crafts PR/TR	1	2017	4	2023
Production: NECC C4ISR Procurement: Expeditionary VHF/UHF/SATCOM (EVUS) UHF TACSAT Upgrade	1	2017	4	2023
Production: NECC C4ISR Procurement: Expeditionary SIPR/NIPR Network Upgrades/Refresh	1	2017	4	2023
Production: NECC C4ISR Procurement: Converged IP	1	2017	4	2023
Production: NECC C4ISR Procurement: VoISP	1	2017	4	2023
Production: Identity Dominance System (IDS): IDS Tech Refresh Hardware Integration	4	2018	4	2020
Production: Identity Dominance System (IDS): IDS Tech Refresh Software Production	3	2017	4	2020
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh RFI Review	1	2017	1	2017
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Technology Evaluation	1	2017	2	2017
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Technology Maturation	4	2019	4	2020
Technology Roadmap: Identity Dominance System (IDS): IDS Tech Refresh Program Documentation Review/Update	1	2017	4	2020

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018	

Appropriation/Budget Activity 1319 I 5				R-1 Program Element (Number/Name) PE 0604230N I *Warfare Support System*				Project (Number/Name) 9C86 I *Combatant Craft Replacement*			

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
9C86: *Combatant Craft Replacement*	4.640	3.123	2.108	0.682	-	0.682	1.223	1.120	0.886	0.904	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY2019 funding request was reduced by $0.633 million to account for the availability of prior year execution balances.

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Combatant Craft Replacement	3.123	2.108	0.682	0.000	0.682
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 2018 Plans:
Commence phased approach to recapitalize EOD Craft and other NECC Craft through material solution analysis, engineering analysis and advanced technology development studies to include training technologies. Continue science and technology development work to optimize material solutions to fill critical NECC capability gaps.

FY 2019 Base 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

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
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 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** The FY2018 to FY 2019 reduction funding is in accordance with planned program profile but also includes $0.633 million reduction to account for the availability of prior year execution balances					
Accomplishments/Planned Programs Subtotals	3.123	2.108	0.682	0.000	0.682

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPN/1210: *Standard Boats (NECC)*	27.450	9.482	11.192	18.360	29.552	11.304	11.412	11.640	11.872	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).

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2019 Navy			**Date:** February 2018
Appropriation/Budget Activity 1319 *I* 5	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	**Project (Number/Name)** 9C86 *I Combatant Craft Replacement*	

Product Development ($ in Millions)				**FY 2017**		**FY 2018**		**FY 2019 Base**		**FY 2019 OCO**		**FY 2019 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	1.319	0.593	Feb 2017	0.400	Mar 2018	0.130	Mar 2019	-		0.130	Continuing	Continuing	Continuing
Craft Material Solution & Design Development	WR	NSWC : Carderock, MD	1.984	1.937	May 2017	1.308	Mar 2018	0.422	Mar 2019	-		0.422	Continuing	Continuing	Continuing
Craft Study Report	WR	NSWC : Carderock, MD	1.337	0.593	May 2017	0.400	Mar 2018	0.130	Mar 2019	-		0.130	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	4.640	3.123		2.108		0.682		-		0.682	Continuing	Continuing	N/A

			Prior Years	**FY 2017**		**FY 2018**		**FY 2019 Base**		**FY 2019 OCO**		**FY 2019 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
		Project Cost Totals	4.640	3.123		2.108		0.682		-		0.682	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2019 Navy		**Date:** February 2018
Appropriation/Budget Activity 1319 *I* 5	**R-1 Program Element (Number/Name)** PE 0604230N *I Warfare Support System*	**Project (Number/Name)** 9C86 *I Combatant Craft Replacement*

Proj 9C86

FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023

Combatant & Fleet Expeditionary Craft Design Studies

Combatant & Fleet Expeditionary Craft Awards

Combatant & Fleet Expeditionary Craft Deliveries

Craft Test and Evaluation

Selection of Craft/Systems for Production

Selection of Lethal and Non-Lethal Sensors/Effectors | Integration of Lethal and Non-Lethal Sensors/Effectors

2019PB - 0604230N - 9C86

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604230N / *Warfare Support System*	**Project (Number/Name)** 9C86 / *Combatant Craft Replacement*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Proj 9C86				
Combatant & Fleet Expeditionary Craft Design Studies	1	2017	2	2021
Combatant & Fleet Expeditionary Craft Awards	1	2017	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	2017	4	2022
Selection of Lethal and Non-Lethal Sensors/Effectors	1	2017	4	2019
Integration of Lethal and Non-Lethal Sensors/Effectors	1	2020	4	2022