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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 United States Special Operations Command **Date:** February 2015

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>
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COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	202.398	28.724	56.746	63.597	-	63.597	52.590	12.864	5.529	12.328	Continuing	Continuing
S0417: <i>Underwater Systems</i>	202.398	21.652	45.823	56.328	-	56.328	49.037	9.505	1.345	4.530	Continuing	Continuing
S1684: <i>Surface Craft</i>	0.000	7.072	10.923	7.269	-	7.269	3.553	3.359	4.184	7.798	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element provides for engineering & manufacturing development and operational development of Special Operations Forces (SOF) Surface and Undersea Mobility platforms. This program element also provides for pre-acquisition activities to quickly respond to new requirements for SOF surface and undersea mobility, looking at multiple alternatives to include cross-platform technical solutions, service common solutions, Commercial-Off-The-Shelf (COTS) technologies and new development efforts.

The Underwater Systems project provides for engineering and manufacturing development and operational systems development of combat underwater submersibles and underwater support systems and equipment. This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emergent requirements. These submersibles, systems, and equipment are used by SOF in the conduct of infiltration/extraction, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions.

The Surface Craft project provides for engineering & manufacturing development and operational systems development of light, medium, and heavy surface combatant craft and selected items of specialized equipment to meet the unique requirements of SOF. This project element also provides for pre-acquisition activities (materiel solutions analysis, advanced component development & prototypes) to quickly respond to new requirements for maritime craft and subsystems. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions.

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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>
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B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	28.724	57.905	19.624	-	19.624
Current President's Budget	28.724	56.746	63.597	-	63.597
Total Adjustments	-	-1.159	43.973	-	43.973
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-1.159			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	43.973	-	43.973

Change Summary Explanation

Funding:

FY 2014: None.

FY 2015: This program element was reduced due to a Congressional Directed Reduction of \$1.159 million to the Next Generation Surface System program.

FY 2016: Net increase of \$43.973 million. Revised program strategy for the Dry Combat Submersible, increase of \$27.277 million to support the development of technology maturation of the DCS, increase of \$10.000 million for the modernization effort for the Dry Deck Shelter in order to transition from SSGN to Virginia Class host platform and increase capacity to carry larger payloads, increase of \$7.596 million to support engineering and testing for Shallow Water Combat Submersible (SWCS), decrease of (\$0.900) million to support higher command priorities, and a decrease of (\$0.461) million is due to a Departmental economic assumption decrease.

Schedule: Revisions to the Dry Combat Submersible schedule from a combined MS B/C to MS B and MS C decisions.

Technical: Added Dry Deck Shelter Modernization effort and SOF Combat Diving.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command										Date: February 2015		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>				Project (Number/Name) S0417 / <i>Underwater Systems</i>			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
S0417: <i>Underwater Systems</i>	202.398	21.652	45.823	56.328	-	56.328	49.037	9.505	1.345	4.530	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for engineering and manufacturing development and operational systems development of small combat underwater submersibles and underwater support systems and equipment. This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emergent requirements. These submersibles, systems, and equipment are used by Special Operations Forces (SOF) in the conduct of infiltration/extraction, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions. Sub-projects include:

- **Shallow Water Combat Submersible (SWCS)** (previously Block 1): This project provides for the engineering, manufacturing, testing, and development of one Engineering Development Model (EDM) to replace the SEAL Delivery System (SDV). The EDM is being developed due to obsolescence of the SDV system. This project will utilize mature technologies, which include electric propulsion along with upgraded navigation, communication, and sensor suites. It also provides for integration efforts with the current Dry Deck Shelter and other diving technologies to meet SOF requirements.
- **Dry Combat Submersible (DCS):** This project provides for the advanced engineering, manufacturing, testing, and development efforts for a SOF DCS System. Current efforts are using commercial dry submersible prototypes to assess submersible capabilities and reduce risk in the DCS program. The DCS is planned to operate from surface ships. Two commercially built dry submersible prototypes are being manufactured and tested, as well as evaluation of a third leased vehicle. Significant risk reduction initiatives were added in FY 2013 which allowed for validation of test processes, commercial classification processes, and the development of the SOCOM safety certification process which permits SEALs to operate the submersibles. In addition, the prototypes will be used to evaluate the capability enhancing technologies in a relevant environment. Technologies include, but are not limited to Safe Li-Ion batteries, silver zinc batteries, improved sonar systems, advanced battery management system, and a three-dimensional Electro Optical Infrared (EO/IR) Periscope.
- **Dry Deck Shelter (DDS) Modernization:** This is an FY 2016 new start. This project provides for the pre-planned product improvements, testing, and integration of specialized underwater systems to meet the unique requirements of SOF, and compatibility with the submarine fleet. The current DDS is a certified diving system which attaches to modified host submarines that provides for insertion of SOF forces and platforms. Funding supports product improvements to the current DDS, as well as associated diver equipment for in-service submarine support systems, unmanned underwater vehicles, and follow on development efforts for future SOF payloads.
- **SOF Combat Diving:** This is an FY 2016 new start. This project provides for the advanced engineering, manufacturing, testing, development and transition of SOF peculiar diving technologies for the SOF combat diver. Technologies include, but are not limited to commercial and developmental Underwater Breathing Apparatus (UBAs), diver thermal regulation systems, diver communication, tracking and monitoring systems, diver propulsion devices, diver auxiliary equipment and advance concept breathing mixture and procedure development.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command			Date: February 2015		
Appropriation/Budget Activity 0400 / 7		R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>		Project (Number/Name) S0417 / <i>Underwater Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
Title: SWCS			12.844	11.801	7.596
FY 2014 Accomplishments: Completed design and initiated manufacturing of the EDM.					
FY 2015 Plans: Begin EDM system-level development testing program phases.					
FY 2016 Plans: Completes EDM development testing, certification and government acceptance. Incorporates any necessary engineering design changes and modifications to meet key performance parameters.					
Title: Dry Combat Submersibles (DCS)			8.808	34.022	38.232
FY 2014 Accomplishments: Completed design and build of one commercial prototype submersible, Button 5.60 prototype, and continued build of the S351 prototype. Initiated developmental test planning on Button 5.60 prototype.					
FY 2015 Plans: Begin developmental testing of the two submersible prototypes.					
FY 2016 Plans: Completes developmental testing on the prototypes. Initiates refit of one prototype submersible to be used as a training vessel and award an EMD contract for a production representative article.					
Title: Dry Deck Shelter (DDS) Modernization			-	-	10.000
FY 2016 Plans: This is an FY 2016 new start. Begins development of the modernization necessary to extend useful life, transition from SSGN to Virginia Class host platform, and increase capacity to carry other larger payloads.					
Title: SOF Combat Diving			-	-	0.500
FY 2016 Plans: This is an FY 2016 new start. Begins development of SOF peculiar diving technologies for transition to the SOF combat diver to include communication needs, underwater breathing apparatus modernization and thermal protection.					
Accomplishments/Planned Programs Subtotals			21.652	45.823	56.328

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command	Date: February 2015
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Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S0417 / <i>Underwater Systems</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PROC 1: <i>Underwater Systems</i>	15.439	25.459	32.521	-	32.521	40.756	89.131	55.145	7.394	Continuing	Continuing

Remarks

D. Acquisition Strategy

- SWCS used full and open competition, with a down select to a single contractor. The full spectrum of contracting activities is being utilized for any integration and subsystem requirements, using existing contracts where appropriate, government agencies and new contracts as necessary.

- DCS used Broad Agency Announcements for Research and Development contracts leveraging commercial technologies, practices and safety classification standards to design, build, test and deliver prototypes to refine and validate potential key performance parameters and attributes for the DCS requirements baseline. The commercial classification of the prototypes will validate the technical maturity to support a milestone B decision. A competitive contract is planned in FY 2016 for an EMD contract for a production representative vessel. The full spectrum of contracting activities is being utilized for risk reduction efforts, using existing contracts where appropriate, government agencies and new contracts as necessary.

- DDS Modernization will use existing Dry Deck Shelter contracts to develop modernization efforts and execute configuration changes required to achieve performance requirements specified by the government.

- SOF Combat Diving: The full spectrum of contracting activities is planned to be utilized, using existing contracts where appropriate, government agencies, and leverage from the services. Equipment items are expected to be less than \$250 thousand and are anticipated to be purchased using Operations and Maintenance funding.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 United States Special Operations Command **Date:** February 2015

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S0417 / <i>Underwater Systems</i>
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Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Shallow Water Combat Submersible (SWCS) (previously Block 1)	C/CPIF	Teledyne Brown Engineering : Huntsville, AL	-	2.604	May 2014	10.300	Dec 2014	7.000	Jan 2016	-		7.000	3.432	23.336	-
SWCS (Block 1)	C/Various	Various : Various	-	10.000	Jul 2014	-		-		-		-	-	10.000	-
SWCS Prior Year	C/Various	Various : Various	53.670	-		-		-		-		-	-	53.670	-
Dry Combat Submersibles (DCS) (Button 5.60 prototype)	C/Various	General Dynamic-Electric Boat : Groton, CT	22.857	2.546	Jun 2014	7.045	Jun 2015	-		-		-	-	32.448	-
DCS (S351 prototype)	C/FFP	Submergence Group : Chester, CT	22.700	0.375	Aug 2014	8.281	Feb 2015	-		-		-	-	31.356	-
DCS Technologies	C/Various	Various : Various	17.148	2.404	Jan 2014	6.436	Apr 2015	8.753	Jun 2016	-		8.753	12.006	46.747	-
DCS (EMD)	C/TBD	MacDill AFB : Tampa, FL	-	-		-		27.277	Jun 2016	-		27.277	31.063	58.340	-
DCS Prior Year Funding	Various	Multiple : Multiple	55.737	-		-		-		-		-	-	55.737	-
Dry Deck Shelter (DDS) Modernization	SS/CPFF	Oceaneering International Inc. Marine Services Division : Chesapeake, VA	-	-		-		9.650	Jan 2016	-		9.650	12.800	22.450	-
SOF Combat Diving	TBD	Various : Various	-	-		-		0.500	Mar 2016	-		0.500	2.149	2.649	-
Subtotal			172.112	17.929		32.062		53.180		-		53.180	61.450	336.733	-

Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SWCS Prior Year Funding	Various	NSWC and NAVSEA : Panama City, FL and Washington, DC	4.165	-		-		-		-		-	-	4.165	-
DCS Prior Year Funding	Various	Various : Various	1.321	-		-		-		-		-	-	1.321	-
DDS Prior Year Funding	Various	Various / RAND : Various	3.608	-		-		-		-		-	-	3.608	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 United States Special Operations Command												Date: February 2015			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 1160483BB / Maritime Systems				Project (Number/Name) S0417 / Underwater Systems					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			9.094	-		-		-		-		-	-	9.094	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SWCS	Various	NSWC, NAVSEA : Panama City, FL/ Washington, DC	-	0.240	Jan 2014	1.125	Jan 2015	0.596	Jan 2016	-		0.596	-	1.961	-
DCS	C/Various	NAVSEA / CRANE : Panama City, FL	-	1.700	May 2014	10.460	Nov 2014	-		-		-	-	12.160	-
DCS Prior Year Funding	C/Various	Various : Various	9.320	-		-		-		-		-	-	9.320	-
Subtotal			9.320	1.940		11.585		0.596		-		0.596	-	23.441	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SWCS	Various	John Hopkins University : Columbia, MD	-	-		0.376	Oct 2014	-		-		-	-	0.376	-
SWCS Prior Year Funding	Various	John Hopkins University : Columbia, MD	6.200	-		-		-		-		-	-	6.200	-
DCS	Various	SRA : Tampa, FL	4.915	1.783	May 2014	1.800	May 2015	2.202	Jun 2016	-		2.202	2.195	12.895	-
DDS	MIPR	NAVSEA : Washington, DC	0.757	-		-		0.350	Jan 2016	-		0.350	0.700	1.807	-
Subtotal			11.872	1.783		2.176		2.552		-		2.552	2.895	21.278	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			202.398	21.652		45.823		56.328		-		56.328	64.345	390.546	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 United States Special Operations Command							Date: February 2015		
Appropriation/Budget Activity 0400 / 7			R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>			Project (Number/Name) S0417 / <i>Underwater Systems</i>			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 United States Special Operations Command

Date: February 2015

Appropriation/Budget Activity

0400 / 7

R-1 Program Element (Number/Name)

PE 1160483BB / Maritime Systems

Project (Number/Name)

S0417 / Underwater Systems

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Shallow Water Combat Submersible																												
Engineering & Manufacturing Development																												
Developmental Test																												
Milestone C																												
Operational Test																												
Dry Combat Submersibles																												
Analysis, Component and Development Prototype, and Test																												
Milestone B																												
Acquisition Planning, Request for Proposals, and Source Selection																												
Engineering and Manufacturing Development Phase																												
Milestone C																												
Dry Deck Shelter Modernization																												
Preliminary Design Review																												
Critical Design Review																												
Engineering and Manufacturing Development																												
Test and Evaluation																												
SOF Combat Diving																												
Risk Reduction Activities																												
Integration/Demo/Test																												
Technology Development																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 United States Special Operations Command			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S0417 / <i>Underwater Systems</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Shallow Water Combat Submersible</i>				
Engineering & Manufacturing Development	1	2014	3	2016
Developmental Test	2	2014	3	2016
Milestone C	4	2015	4	2015
Operational Test	3	2016	4	2016
<i>Dry Combat Submersibles</i>				
Analysis, Component and Development Prototype, and Test	1	2014	2	2016
Milestone B	3	2015	3	2015
Acquisition Planning, Request for Proposals, and Source Selection	3	2015	2	2016
Engineering and Manufacturing Development Phase	3	2016	1	2019
Milestone C	4	2018	4	2018
<i>Dry Deck Shelter Modernization</i>				
Preliminary Design Review	2	2016	2	2016
Critical Design Review	4	2016	4	2016
Engineering and Manufacturing Development	3	2016	2	2018
Test and Evaluation	1	2018	4	2018
<i>SOF Combat Diving</i>				
Risk Reduction Activities	2	2016	4	2020
Integration/Demo/Test	2	2016	4	2020
Technology Development	3	2016	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command										Date: February 2015		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160483BB / Maritime Systems				Project (Number/Name) S1684 / Surface Craft			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
S1684: Surface Craft	-	7.072	10.923	7.269	-	7.269	3.553	3.359	4.184	7.798	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for engineering and manufacturing development, and operational systems development of light, medium, and heavy surface combatant craft and selected items of specialized equipment to meet the unique requirements of Special Operations Forces (SOF). This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for surface craft and equipment. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions. Sub-projects include:

The Combatant Craft Medium (CCM) provides SOF with a versatile, multi-mission surface maritime platform supporting the clandestine tactical movement of four crew and 19 combat equipped SOF in low to medium threat environments. It will incorporate additional performance capabilities above current platform capabilities such as shock mitigation, improved maneuverability and survivability characteristics.

The Combatant Craft Heavy (CCH) sub-project represents a family of solutions that will provide engineering support for design and specification of a development combatant craft for movement and maneuver of SOF personnel. Requirements include maneuverability, reduced detectability with enhanced shock mitigation, and human systems integration. The current solution for Combatant Craft Heavy is the Sea, Air, and Land Insertion, Observation and Neutralization (SEALION) that was developed as an advanced technology demonstrator by the United States Navy and has been modified and tested for transition to SOF operations. The CCH will provide medium range insertion capability for SOF personnel in a low to high threat environment.

The Next Generation Combatant Craft Forward Looking Infrared Radar (CCFLIR) Program provides SOF with day/night, high resolution, and additional spectrum imaging capabilities to augment existing optical and radar sensors. Technology insertion is needed to reduce the signature properties of the system and to enhance the detection, recognition, identification, and tracking of small and near surface targets and ships.

The Next Generation Surface Systems (NGSRF) sub-project provides a rapid response capability to support SOF Combatant Craft Systems and subsystems. The NGSRF will explore solutions to support emerging requirements in support of SOF missions. It provides technology refresh efforts to correct system deficiencies, improve asset life, and enhance mission capability through the means of feasibility studies, analyses of alternatives, pre-developmental risk reduction, and engineering analyses. Demonstrations and modifications may be made to support emerging capability enhancements such as but not limited to conformal antennas, Identification Friend-or-Foe capabilities, enhanced communications and navigation subsystems, and other minor modifications to craft in support of future missions. Solutions may be Commercial-Off-The-Shelf (COTS) solutions, leveraged from other agency solutions, or new solutions.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Combatant Craft Medium (CCM)	5.255	4.898	1.308

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
<i>FY 2014 Accomplishments:</i> Integrated sensor technologies into the CCM craft. Refurbished test article and began integration of sensor technology onto the craft. <i>FY 2015 Plans:</i> Complete Operational Testing and continue development and integration of sub-systems including weapons and situational awareness systems. <i>FY 2016 Plans:</i> Continues development and integration of advanced technologies including situational awareness, survivability, weapons, navigation and communication.					
<i>Title:</i> Combatant Craft Heavy (CCH) <i>FY 2014 Accomplishments:</i> Continued studies with craft design, development, and testing. Continued to test SEALION and perform modifications necessary to field an operational craft, received fielding and deployment release. <i>FY 2015 Plans:</i> Continue development and integration of advanced technologies including situational awareness, survivability, weapons, navigation, and communication. <i>FY 2016 Plans:</i> Continues development and integration of advanced technologies including situational awareness, survivability, weapons, navigation, and communication. Initiates studies and analysis for upgraded CCH craft.			0.250	2.215	2.245
<i>Title:</i> Next Generation Combatant Craft Forward Looking Infrared Radar (CCFLIR) <i>FY 2014 Accomplishments:</i> Completed market research and initiated plans to develop, test, and evaluate solutions for Next Generation CCFLIR systems. Developed acquisition strategy, initiated risk reduction activities, and prepared solicitation. <i>FY 2015 Plans:</i> Complete source selection for prototype units for development testing. Develop and test Next Generation CCFLIR. <i>FY 2016 Plans:</i> Completes testing and integrating with combatant craft systems.			1.256	1.799	1.500
<i>Title:</i> Next Generation Surface System (NGSRF) <i>FY 2014 Accomplishments:</i>			0.311	2.011	2.216

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command			Date: February 2015
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Developed and started testing of a 360-degree persistent surveillance capability for Combatant Craft.			
<i>FY 2015 Plans:</i> Identify and evaluate candidate solutions for capability enhancements and insertion across Combatant Craft Systems. Conduct technology demonstration and development for integration across SOF Combatant Craft Systems, subsystems, and technologies such as, weapons integration, survivability, shock and vibration systems, situational awareness, and conduct technology demonstrations on other emerging SOF technologies.			
<i>FY 2016 Plans:</i> Identifies and evaluates candidate solutions for capability enhancements and insertion across Combatant Craft Systems. Technology development includes, but not limited to conformal antennas, communications, weapons integration, survivability, shock and vibration systems, and situational awareness.			
Accomplishments/Planned Programs Subtotals	7.072	10.923	7.269

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

<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PROC 1: <i>Combatant Craft Systems</i>	26.253	50.337	33.362	-	33.362	52.783	9.593	15.238	35.335	Continuing	Continuing

Remarks

N/A

D. Acquisition Strategy

- CCM acquisition strategy is a competition using a two-phase source selection process. Phase I involved a Small Business Set-Aside competition for two vendors to design, build and deliver test articles. Phase II selected a single vendor to provide a fully integrated baseline craft system for test and evaluation with options for production, engineering support and contractor logistic support.
- CCH acquisition strategy was to transition the two advanced technology craft from Navy to SOF operations. Feasibility studies will continue in-house with support from other government agencies or existing contract services to pursue SOF-peculiar requirements for CCH. Sole source contract was awarded with original equipment manufacturer for developmental modification to SEALION. Developing long term strategy to procure additional craft in future years.
- Next Generation CCFLIR acquisition strategy will conduct full and open competition for next generation systems to support the Combatant Craft Assault, CCM and CCH systems.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command		Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S1684 / <i>Surface Craft</i>
• NGSRF will evaluate COTS solutions to provide technologies for insertion across craft systems, subsystems, and future craft acquisition planning. This effort will consider all acquisition strategies available while applying Better Buying Power practices.		
<u>E. Performance Metrics</u> N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 United States Special Operations Command												Date: February 2015			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>				Project (Number/Name) S1684 / <i>Surface Craft</i>					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combatant Craft Medium (CCM)	C/Various	Oregon Iron Works : Clackamas, OR	-	4.374	Feb 2014	2.298	Jan 2015	1.308	Jan 2016	-		1.308	Continuing	Continuing	-
Combatant Craft Heavy (CCH)	C/Various	Various : Various	-	0.250	Dec 2013	2.032	Nov 2014	2.245	Apr 2016	-		2.245	Continuing	Continuing	-
Next Generation Combatant Craft Forward Looking Infrared (CCFLIR)	C/Various	Various : Various	-	1.256	Apr 2014	1.369	Apr 2015	0.600	Nov 2016	-		0.600	-	3.225	-
Next Generation Surface Systems (NGSRF)	C/Various	Various : Various	-	0.311	Apr 2014	1.399	Apr 2015	1.891	Jan 2016	-		1.891	Continuing	Continuing	-
Subtotal			-	6.191		7.098		6.044		-		6.044	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CCM	MIPR	NSWC : Norfolk, VA	-	0.281	Aug 2014	1.100	Dec 2014	-		-		-	-	1.381	-
CCH	C/Various	Various : Various	-	-		0.183	Nov 2014	-		-		-	-	0.183	-
Next Generation CCFLIR	C/Various	NSWC : Crane, IN	-	-		0.430	Dec 2014	0.900	Apr 2016	-		0.900	-	1.330	-
NGSRF	C/Various	Various : Various	-	-		0.296	Jan 2015	0.325	Apr 2016	-		0.325	-	0.621	-
Subtotal			-	0.281		2.009		1.225		-		1.225	-	3.515	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CCM	C/Various	NSWC : Norfolk, VA	-	-		0.375	Mar 2015	-		-		-	-	0.375	-
CCM	C/Various	NSWC : Crane, IN	-	-		0.225	Mar 2015	-		-		-	-	0.225	-
CCM	C/Various	SRA : Tampa, FL	-	0.600	May 2014	0.900	May 2015	-		-		-	-	1.500	-
NGSRF	C/Various	Various : Various	-	-		0.316	Mar 2015	-		-		-	-	0.316	-
Subtotal			-	0.600		1.816		-		-		-	-	2.416	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 United States Special Operations Command										Date: February 2015			
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>				Project (Number/Name) S1684 / <i>Surface Craft</i>				
	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	7.072		10.923		7.269		-		7.269	-	-	-
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 United States Special Operations Command **Date:** February 2015

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S1684 / <i>Surface Craft</i>
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	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Combatant Craft Medium																												
Test Article Refurbishment																												
Acceptance and Operational Testing																												
Weapons, Survivability, C4ISR Integration																												
Combatant Craft Heavy																												
Fielding & Deployment Release																												
C4I and Weapons Integration																												
Next Generation CCFLIR																												
Risk Reduction Activities																												
Program Planning & Documentation																												
Market Research																												
Request for Proposal																												
Development Down Select/Test																												
Next Generation Surface Systems																												
360 Development, Test, Integration																												
Test Magnetic Antenna, Test, Integration																												
Shock/Vibration																												
Situational Awareness																												
SATCOM on the Move Test, Integration																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 United States Special Operations Command			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / <i>Maritime Systems</i>	Project (Number/Name) S1684 / <i>Surface Craft</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Combatant Craft Medium</i>				
Test Article Refurbishment	2	2014	1	2015
Acceptance and Operational Testing	4	2014	3	2015
Weapons, Survivability, C4ISR Integration	2	2015	4	2020
<i>Combatant Craft Heavy</i>				
Fielding & Deployment Release	1	2014	2	2014
C4I and Weapons Integration	1	2014	4	2020
<i>Next Generation CCFLIR</i>				
Risk Reduction Activities	3	2014	1	2015
Program Planning & Documentation	3	2014	3	2016
Market Research	3	2014	3	2014
Request for Proposal	3	2015	3	2015
Development Down Select/Test	1	2015	3	2016
<i>Next Generation Surface Systems</i>				
360 Development, Test, Integration	3	2014	4	2015
Test Magnetic Antenna, Test, Integration	2	2015	2	2016
Shock/Vibration	2	2015	4	2020
Situational Awareness	3	2015	4	2020
SATCOM on the Move Test, Integration	2	2016	1	2018