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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0604030N / Rapid Prototyping, Experimentation and Demonstrati							
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	0.000	0.000	0.000	48.796	-	48.796	36.197	41.977	42.358	43.266	Continuing	Continuing
0385: Rapid Prototype Development	0.000	0.000	0.000	48.796	-	48.796	36.197	41.977	42.358	43.266	Continuing	Continuing

Note

Efforts in this Program Element (PE) and Project Unit (PU) 0385 were previously funded in PE 0603382N Advanced Combat Systems Tech; PU 0385 Rapid Prototype Development, and PU 0399 Unmanned Rapid Prototype Development. Funds are transferred to this PU effective FY2019.

A. Mission Description and Budget Item Justification

Department of Navy (DON) leadership has acknowledged that maintaining maritime superiority depends in part on our ability to accelerate the speed of warfighting and technological innovations in order to extend our advantage to offset our adversaries' growing capabilities. It is fundamental to the DON's efforts to improve our acquisition outcomes. This program element is aligned with, and in direct response to, calls for increased prototyping and experimentation in USD(AT&L)'s Better Buying Power 3.0, Secretary of the Navy's (SECNAV) Task Force Innovation direction, and the CNO direction to achieve High Velocity Learning at Every Level. These efforts will reinvigorate and increase the use of prototyping to rapidly field new warfighting capabilities, concepts and technologies, and engineering solutions.

The Rapid Prototype Development program funds a strategic focus on rapid prototyping of innovative combat system technologies and engineering innovations to explore Fleet-proposed capability concepts and needs, as well as foster advancements in naval warfighting capabilities. With an emphasis on rapidly prototyping mature technologies, the program is intended to expedite the development, exploration and fielding of technology and engineering prototypes to provide advanced warfighting capabilities, new technologies and engineering innovations across all Naval warfighting domains. Concepts and enabling technologies include but are not limited to; directed energy weapons, hypersonics, unmanned systems, artificial intelligence, machine learning, and multi-domain operations.

Specific projects under this program will be selected and executed in accordance with the Department of the Navy (DoN) Accelerated Acquisition Process as described in SECNAVINST 5000.42. The Secretary of the Navy will notify Congress prior to initiation of a project under this program in accordance with the requirements established in Section 216 of the FY2017 National Defense Authorization Act.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)		PE 0604030N I Rapid Prototyping, Experimentation and Demonstrati			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	48.796	-	48.796
Total Adjustments	0.000	0.000	48.796	-	48.796
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Rate/Misc Adjustments	0.000	0.000	48.796	-	48.796
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604030N / <i>Rapid Prototyping, Experimentation and Demonstrati</i>				Project (Number/Name) 0385 / <i>Rapid Prototype Development</i>			
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
0385: <i>Rapid Prototype Development</i>	0.000	0.000	0.000	48.796	-	48.796	36.197	41.977	42.358	43.266	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

Efforts in this Project Unit (PU) 0385 were previously funded in PE 0603382N Advanced Combat Systems Tech; PU 0385 Rapid Prototype Development and PU 0399 Unmanned Rapid Prototype Development. Funds are transferred to this PU effective FY2019.

A. Mission Description and Budget Item Justification

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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
Title: Rapid Prototype Development, Experimentation and Demonstration	0.000	0.000	48.796	0.000	48.796
Articles:	-	-	-	-	-
FY 2018 Plans:					
Plans and associated resources in this project support the SURTASS-E Rapid Prototyping, Experimentation and Demonstration (RPED) effort which will provide a modular, flexible, and rapidly deployable mobile acoustic					

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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
<p>wide-area surveillance capability for installation aboard a vessel of opportunity (VOO). The project will deliver and demonstrate one system consisting of International Organization for Standardization containerized mission system ship set, installed on a VOO. Specific FY18 activities include: design and development of the SURTASS-E winch and handling system; procurement of long lead sub-systems for the command, control, communications, computers and intelligence (C4I) van; mission system hardware and software development and integration; VOO assessment, leasing and platform evaluation; VOO installation hardware; towed array towing hardware; acoustic processing development; and system level ship integration and performance assessment.</p> <p>Additionally, Project 0385 will support other FY2018 RPED initiatives, as designated by the Accelerated Acquisition Board of Directors (AABoD) in accordance with SECNAVINST 5000.42 to expedite the development, exploration and fielding of technology and engineering prototypes to provide advanced warfighting capabilities, new technologies and engineering innovations across all Naval warfighting domains.</p> <p>FY 2019 Base Plans: Complete SURTASS-E RDT&E activities to support initial fielding of capability in FY2019.</p> <p>Continue to fund RPED projects designated by the AABoD. Potential RPED projects may include, but are not limited to; directed energy weapons, hypersonics, unmanned systems, artificial intelligence, machine learning, and multi-domain operations.</p> <p>FY 2019 OCO Plans: N/A</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: The increase from FY2018 and FY2019 in this project reflect increased investment in RPED projects designated by the AABoD and planned for execution in FY2019.</p>						
Accomplishments/Planned Programs Subtotals		0.000	0.000	48.796	0.000	48.796
C. Other Program Funding Summary (\$ in Millions)						
N/A						
Remarks						

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D. Acquisition Strategy Projects identified for execution under this project number are non-acquisition programs. Each project will develop a project plan to support project execution. Project plans will include a project schedule and technical requirements and objectives to measure project performance. The selected technical solutions will be demonstrated in operationally relevant environments to assess their ability to meet warfighter requirements. Project deliverables include actual integrated hardware/software prototype systems, CONOPS, requirements, test reports, technical data, and associated doctrine, organization, training, leadership and education, and personnel aspects necessary to support decision making. These deliverables will be used to support project disposition decisions to include transition of technologies to acquisition, further refinement of the technology, or termination and reinvestment of remaining funds to other technologies that add military value.		
E. Performance Metrics Performance metrics are specific to each of the projects funded. All will include measures identified in the Statement of Objectives (SOO), including completions, successes, terminations, and iterative prototype cycle times reported against schedules and deliverables stated in the requirement documents.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604030N / Rapid Prototyping, Experimentation and Demonstrati				Project (Number/Name) 0385 / Rapid Prototype Development					
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
Common Support Modules Dev Integration	MIPR	PMS 420 : Washington, DC	0.000	0.000		0.000		0.900	Dec 2018	-		0.900	5.000	5.900	-
Towed Army Towing	C/CPFF	Lockheed Martin : Manassas, Va	0.000	0.000		0.000		3.700	Dec 2018	-		3.700	3.700	7.400	-
Prototype Dev, Experiemt & Demonstration	Various	Various : Various	0.000	0.000		0.000		44.196	Mar 2019	-		44.196	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		48.796		-		48.796	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			0.000	0.000		0.000		48.796		-		48.796	Continuing	Continuing	N/A
Remarks															
Support and Test and Evaluation costs are directly associated with the delivery of the primary product and included in the product development cost category for rapid prototype development, experimentation and demonstration cost categories.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy																Date: February 2018			
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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / <i>Rapid Prototyping, Experimentation and Demonstrati</i>	Project (Number/Name) 0385 / <i>Rapid Prototype Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0385				
Prototype Development, Experimentation and Demonstration	1	2019	4	2020