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

Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603261N / Tactical Airborne Reconnaissance							
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	58.744	5.257	5.270	3.087	-	3.087	3.652	3.600	3.563	3.617	Continuing	Continuing
2467: UAV Conops	58.744	5.257	5.270	3.087	-	3.087	3.652	3.600	3.563	3.617	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element funds efforts to develop Concept of Operations in support of the Navy's overall Unmanned Aircraft Systems (UAS) Strategy integrating UAS into the Chief of Naval Operations Navy Vision of Sea Power 21 (Sea Shield, Sea Strike, Sea Basing and FORCEnet). Also funds Navy's contribution supporting the Joint Technology Center/System Integration Laboratory providing experimentation for Unmanned Aerial Vehicle technology assessment, insertion, demonstration, transfer as well as simulation and exercise support.

This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

The FY 2016 funding request was reduced by \$337 thousand to account for the availability of prior year execution balances.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	5.257	5.275	3.451	-	3.451
Current President's Budget	5.257	5.270	3.087	-	3.087
Total Adjustments	-	-0.005	-0.364	-	-0.364
• Congressional General Reductions	-	-0.005			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	-3.451	-	-3.451
• Rate/Misc Adjustments	-	-	3.087	-	3.087

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603261N / Tactical Airborne Reconnaissance				Project (Number/Name) 2467 / UAV Conops			
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
2467: UAV Conops	58.744	5.257	5.270	3.087	-	3.087	3.652	3.600	3.563	3.617	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The Naval Unmanned Aircraft Systems (UAS) Strategy employs a family of UAS to perform tactical, persistent and penetrating Intelligence, Surveillance, and Reconnaissance in support of Naval and Joint missions from forward bases/platforms and naval ships.												
In support of the Navy's overall UAS strategy, this program develops Concept of Operations (CONOPS) that integrate UAS into the Chief of Naval Operations Navy Vision of Sea Power 21 (Sea Shield, Sea Strike, Sea Basing and FORCEnet). By providing fleet input based on current operations with UAS in a simulated combat environment, this CONOPS development investment is the foundation of how the Carrier Strike Group and the Expeditionary Strike Group will operate a combined Manned and Unmanned Naval Air Force. This program establishes the common architecture, including Command & Control, for all unmanned systems to support and inform CONOPS development. This effort provides for a cross-program view of Naval Unmanned Systems and is the entry point for OSD and other services for commonality and interoperability. Specifically:												
- Provides studies and demonstrations in support of the Naval UAS Family of Systems (FoS) CONOPS development.												
- Horizontally integrates across the Naval UAS FoS for the Naval Aviation Enterprise through interoperability and common system solutions.												
- Develops the Naval UAS FoS Architecture to support integration into the Naval Unmanned Systems Cross Functional Team.												
- Provides Naval support for development of Standards across Department of Defense (DoD) UAS and North Atlantic Treaty Organization, emphasizing standardization and interoperability.												
- Conducts CONOPS studies, demonstrations, and exercises for Vehicle Control, Targeting, and Weapons, Sensor and Payload Employment.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Studies and Demonstrations								1.031	1.253	1.530	-	1.530
								Articles: -	-	-	-	-
Description: Studies and demonstrations to develop CONOPS for manned-unmanned integration of UAS and aircraft systems. Build a UAS simulation environment for Modeling and Simulation of common UAS components in representative battlespace architectures.												
FY 2014 Accomplishments: Conducted a study and developed an approach to demonstrate the capabilities of existing Visual Information (VI) Programs of Record, and emerging VI systems to meet current Navy Operational tasking (OPTASK) orders												

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Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603261N / Tactical Airborne Reconnaissance	Project (Number/Name) 2467 / UAV Conops				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
and Joint Urgent Operational Needs (JUONS) for tactical VI to the fleet. This approach has been approved by Fleet Forces Command to be demonstrated as part of Trident Warrior 15.						
FY 2015 Plans: Continue development of the UAS modeling and simulation of Fleet Concept of Operations scenarios. Demonstrate Manned/Unmanned interoperability.						
FY 2016 Base Plans: Continue to conduct studies, demonstrations, and testing to validate the Naval Interoperability profiles within the context of Integrated Warfare Capabilities.						
FY 2016 OCO Plans: N/A						
Title: Architecture Support/Common Ground Station		2.000	1.824	-	-	-
Articles:		-	-	-	-	-
Description: Develop a Joint Service revision and configuration management of UAS interoperability profiles and Joint Common Ground Station Architecture and related government engineering support.						
FY 2014 Accomplishments: Continue to develop a Joint Service revision and configuration management of UAS interoperability profiles and Joint Common Ground Station Architecture and related government engineering support.						
FY 2015 Plans: Continue to develop a Joint Service revision and configuration management of UAS interoperability profiles and Joint Common Ground Station Architecture and related government engineering support.						
FY 2016 Base Plans: N/A						
FY 2016 OCO Plans: N/A						
Title: Naval Interoperability & Standardization		2.226	2.193	1.557	-	1.557
Articles:		-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Description: Increase Naval Unmanned Systems interoperability emphasizing Naval, Joint Service, and international standardization. FY 2014 Accomplishments: Developed and released the following Naval Interoperability Profiles (NIOPs) documentation: Vehicle Management Advanced Command & Control, Payload Management Advanced Command & Control, Motion Imagery, Full Motion Video, and Standard Common Data Link. FY 2015 Plans: Continue to develop Unmanned Systems Interoperability profiles and Navy implementation conventions for Naval UAS FoS Architecture. Support OSD Joint Service and NATO coalition interoperability efforts. Provide government engineering support, program office travel, and contract support services. FY 2016 Base Plans: Continue to develop Unmanned Systems Naval Interoperability Profiles in support of Integrated Warfare Capability Packages. Support OSD Joint Service and NATO coalition interoperability efforts. Provide government engineering support, program office travel, and contract support services. FY 2016 OCO Plans: N/A						
Accomplishments/Planned Programs Subtotals		5.257	5.270	3.087	-	3.087
C. Other Program Funding Summary (\$ in Millions)						
N/A						
Remarks						
D. Acquisition Strategy						
The program office will leverage existing Government facilities (e.g., Joint Technology Center/System Integration Laboratory and Naval Unmanned Aircraft Systems (UAS) Program of Record assets as available) to develop and demonstrate Naval UAS Concept of Operations. Government engineering support will be used for Standards Development, Architectural Analysis, Modeling and Simulation efforts and testing.						
E. Performance Metrics						
UAS operations and interoperability for systems delivered to the warfighter are continually improved upon increasing the level of integration, standardization and effective employment in maritime battle space dominance.						

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603261N / <i>Tactical Airborne Reconnaissance</i>				Project (Number/Name) 2467 / <i>UAV Conops</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
Ship Integration	C/CPFF	L-3 Titan : Marlton, NJ	8.777	0.919	Jan 2014	0.856	Jan 2015	-		-		-	-	10.552	10.552
Systems Engineering	WR	NAWCAD : Pax River, MD	2.935	0.551	Dec 2013	0.243	Dec 2014	-		-		-	-	3.729	-
Prior year Prod Dev no longer funded in the FYDP	Various	Various : Various	3.350	-		-		-		-		-	-	3.350	-
Subtotal			15.062	1.470		1.099		-		-		-	-	17.631	-
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
Development Support	Various	Various : Various	13.894	0.191	Dec 2013	0.145	Dec 2014	-		-		-	-	14.230	14.230
Software Development	MIPR	JTC/SIL : Redstone Arsenal, AL	9.531	-		1.824	Jan 2015	-		-		-	-	11.355	11.355
Software Development	MIPR	TACOM : Warren, MI	0.000	1.745	Jan 2014	-		-		-		-	-	1.745	1.745
Studies & Demonstrations	WR	NAWCAD : Pax River, MD	3.646	0.574	Dec 2013	0.234	Dec 2014	0.234	Dec 2015	-		0.234	Continuing	Continuing	Continuing
Standards Development	C/CPFF	Engility : Lexington Park, MD	0.000	-		-		1.235	Jan 2016	-		1.235	-	1.235	1.235
Prior year Support no longer funded in the FYDP	Various	Various : Various	2.830	-		-		-		-		-	-	2.830	-
Subtotal			29.901	2.510		2.203		1.469		-		1.469	-	-	-
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
Prior year Test & Eval no longer funded in the FYDP	Various	Various : Various	2.627	-		-		-		-		-	-	2.627	-
Subtotal			2.627	-		-		-		-		-	-	2.627	-

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Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Various : Various	3.503	0.540	Dec 2013	0.540	Dec 2014	0.322	Jan 2016	-		0.322	-	4.905	4.905
Government Engineering Support	WR	NAWCAD : Pax River, MD	6.105	0.687	Dec 2013	1.423	Dec 2014	1.291	Dec 2015	-		1.291	Continuing	Continuing	Continuing
Travel	WR	NAVAIR HQ : Pax River, MD	0.496	0.050	Nov 2013	0.005	Nov 2014	0.005	Nov 2015	-		0.005	Continuing	Continuing	Continuing
Prior year Mgmt Services no loner funded in the FYDP	Various	Various : Various	1.050	-		-		-		-		-	-	1.050	-
Subtotal			11.154	1.277		1.968		1.618		-		1.618	-	-	-

Remarks Travel contract type is TO.															
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	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	58.744	5.257		5.270		3.087		-		3.087	-	-	-

Remarks															
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Appropriation/Budget Activity
1319 / 4

R-1 Program Element (Number/Name)
PE 0603261N / *Tactical Airborne*
Reconnaissance

2016PB - 0603261N - 2467

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603261N / <i>Tactical Airborne Reconnaissance</i>	Project (Number/Name) 2467 / <i>UAV Conops</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
UAV CONOPS				
Naval Interoperability and Standardization: Naval UASs interoperability on Joint Service and International Standardization	1	2014	4	2020