

# UNCLASSIFIED

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 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305242M I (U)Unmanned Aerial Systems (UAS) Payloads							
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	9.246	11.181	18.578	5.956	-	5.956	5.955	8.631	5.952	6.097	Continuing	Continuing
2052: RQ-21 Payload Development	0.000	0.000	0.000	5.956	-	5.956	5.955	8.631	5.952	6.097	Continuing	Continuing
5501: Signals Intelligence (SIGINT)	3.564	6.062	5.618	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.244
5502: Synthetic Aperture Radar/ Motion Target Indicator (SAR/ MTI)	5.682	5.119	5.860	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.661
5504: Wide Area Persistent Surveillance (TNWAS)	0.000	0.000	7.100	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.100

## A. Mission Description and Budget Item Justification

This is not a new start. In FY19 this effort consolidates PU's 5501, 5502, and 5504 into PU 2052.

The Unmanned Aerial Systems (UAS) Payloads integration program will alleviate Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) capability gaps caused by rapidly changing missions, threats and technologies. It will provide responsive capability to integrate and support rapid fielding of ISR payloads for all UAS within the Marine Corps. Sensor payloads will increase the effectiveness and versatility of the Marine Corps UAS currently planned to have Electro-Optic(EO) / Infrared (IR) collection, communications relay, and automatic identification capabilities. Upgrades include, but are not limited to, Signals Intelligence (SIGINT)/ Electronic Warfare Support (ES), Synthetic Aperture Radar (SAR) / Moving Target Indicator (MTI), Wide Area and Hyperspectral Imagery collection.

These payloads provide the Marine Expeditionary Unit (MEU) organic capabilities that facilitate the six functions of Marine Corps Aviation and the Marine Corps Intelligence Surveillance, and Reconnaissance Enterprise across the range of military operations.

The payload development process will follow a Hybrid Acquisition Model of Incremental/Spiral approach while leveraging work conducted by various government laboratories such as the Office of Naval Research (ONR), Defense Advanced Research Projects Agency (DARPA), Air Force Research Lab (AFRL), Joint Improvised Threat Defeat Agency (JIDA), the National Security Agency (NSA), and the National Geospatial Agency (NGA). All payloads will follow similar acquisition paths but on independent time schedules. These acquisition paths will be defined by three (3) phases, each marked by a decision gate. Phase I establishes the preliminary integration design concept and conduct of technology demonstration with validation of a Technology Readiness Level (TRL) 5/6 as the decision gate for Phase II. Phase II establishes full payload-to-Unmanned Aircraft System (UAS) integration during which time all necessary program management, engineering, fabrication, test, and evaluations activities are conducted to achieve Test Article Fabrication, System Test and Evaluation, Integrated Logistics Support (ILS) and Training Concept development, and Data Management and Documentation. Validation of funding, derived requirements, project risks, cost and schedule estimates, contracting strategy

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2019 Navy	<b>Date:</b> February 2018
---	----------------------------

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0305242M I (U) <i>Unmanned Aerial Systems (UAS) Payloads</i>
---	---

and achievement of TRL 7 or higher constitute the decision gate for Phase III. Phase III is program of record transition which supports a production decision based on the exit criteria from Phase II.

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2017</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2019 Base</u></b>	<b><u>FY 2019 OCO</u></b>	<b><u>FY 2019 Total</u></b>
Previous President's Budget	11.181	18.578	10.029	-	10.029
Current President's Budget	11.181	18.578	5.956	-	5.956
Total Adjustments	0.000	0.000	-4.073	-	-4.073
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	-10.029	-	-10.029
• Rate/Misc Adjustments	0.000	0.000	5.956	-	5.956

**Change Summary Explanation**

In FY19 this effort consolidates PU's 5501, 5502, and 5504 into PU 2052.

# UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 2052 / RQ-21 Payload Development			
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
2052: RQ-21 Payload Development	0.000	0.000	0.000	5.956	-	5.956	5.955	8.631	5.952	6.097	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

In FY19 this effort will transition from PE 0305242M/PU 5501, 5502, 5504 to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).

The UAS Payloads program will develop and integrate a Signals Intelligence (SIGINT)/ Electronic Warfare Support (ES) payloads for Marine Corps small tactical UASs. SIGINT/ES payloads will fill current capability gaps for the Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) mission and is required as part of the Marine Corps mission to locate and target adversary Signals of Interest (SOI). The SIGINT/ES payload will leverage payloads previously developed by other Services and/or DoD laboratories to reduce cost and minimize schedule. The payload currently under development is Spectral Bat. Future SIGINT payloads include the Tactical Electro-optical/Infrared (EO/IR) SIGINT for integrated Targeting (TEISIT). Test articles required in order to properly conduct testing requirements in order to field products on schedule to the fleet.

The UAS Payloads program will develop and integrate Synthetic Aperture Radar (SAR) with Moving Target Indicator (MTI) for Marine Corps small tactical UASs. This capability fills current capability gaps for the Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) mission and will allow Marine Corps ISR assets to locate and track ground targets that cannot effectively be located or tracked with the current ground based or EO/IR airborne sensor technology. The ability to locate and track moving ground targets from small tactical UAS is an essential capability that facilitates the six functions of Marine Corps Aviation and the Marine Corps Intelligence Surveillance, and Reconnaissance Enterprise across the range of military operations. SAR/MTI payloads will leverage payloads previously developed by other Services and/or DoD laboratories to reduce cost and minimize schedule.

The UAS Payloads program will develop and integrate Wide Area Persistent Surveillance (WAS) payloads for Marine Corps small tactical UASs. This capability fills current capability gaps for the Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) mission and will allow Marine Corps ISR assets the ability to improve battlefield awareness, improve the capability to assure access and hold at risk, and enable power projection in environments that are not currently accessible is an essential capability that facilitates the six functions of Marine Corps Aviation and the Marine Corps Intelligence Surveillance, and Reconnaissance Enterprise across the range of military operations. The current payload in development is the Tactical Nighttime Wide Area Surveillance (TNWAS) payload. Future WAS payloads include the Spectral and Reconnaissance Imagery for Tactical Exploitation (SPRITE) payload.

## UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: February 2018				
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		Project (Number/Name) 2052 / RQ-21 Payload Development				
The WAS payloads will leverage payloads previously developed by other Services and/or DoD laboratories to reduce cost and minimize schedule.								
Test articles required in order to properly conduct testing requirements in order to field products on schedule to the fleet.								
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<b>Title:</b> Product Development  <b>Articles:</b>  <b>FY 2018 Plans:</b> N/A  <b>FY 2019 Base Plans:</b> -Initiate a Field User Evaluation of the Spectral Bat V4 payload. -Continue development of a Tactical EO/IR SIGINT Integrated for Targeting (TEISIT) payload system. -Continue Government Engineering Technical Support, other Government Support, Contract Support Services, Program Management Support, and program related travel in support of the Tactical EO/IR SIGINT Integrated for Targeting (TEISIT) payload system. -Continue development of Wide Area Surveillance software.  <b>FY 2019 OCO Plans:</b> N/A  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> The FY2019 funding request was increased by \$4.512 million to account for the re-alignment of funds from PU's 5501, 5502, and 5504 to PU 2052.				0.000	0.000	4.512	0.000	4.512
				-	-	-	-	-
<b>Title:</b> Support  <b>Articles:</b>  <b>FY 2018 Plans:</b> N/A  <b>FY 2019 Base Plans:</b> -Continue Government Engineering Technical Support, other Government Support, Contract Support Services, Program Management Support, and program related travel in support of the Tactical EO/IR SIGINT Integrated for Targeting (TEISIT) payload system.				0.000	0.000	0.846	0.000	0.846
				-	-	-	-	-

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: February 2018		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		Project (Number/Name) 2052 / RQ-21 Payload Development		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
-Complete Integrated Logistics Support (ILS), training concept development and data management/ documentation.  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was increased by \$0.846 million to account for the re-alignment of funds from PU's 5501, 5502, and 5504 to PU 2052.						
Title: Management Services  Articles:  FY 2018 Plans: N/A  FY 2019 Base Plans: -Continue development of a Tactical EO/IR SIGINT Integrated for Targeting (TEISIT) payload system. -Document Field User Evaluation (FUE) reports.  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was increased by \$0.303 million to account for the re-alignment of funds from PU's 5501, 5502, and 5504 to PU 2052.		0.000 -	0.000 -	0.303 -	0.000 -	0.303 -
Title: Test and Evaluation  Articles:  FY 2018 Plans: N/A  FY 2019 Base Plans: Continue developmental testing  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement:		0.000 -	0.000 -	0.295 -	0.000 -	0.295 -

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Navy						<b>Date:</b> February 2018					
<b>Appropriation/Budget Activity</b> 1319 / 7				<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads			<b>Project (Number/Name)</b> 2052 / RQ-21 Payload Development				
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>											
						<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	
The FY2019 funding request was increased by \$0.295 million to account for the re-alignment of funds from PU's 5501, 5502, and 5504 to PU 2052.											
<b>Accomplishments/Planned Programs Subtotals</b>						0.000	0.000	5.956	0.000	5.956	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PMC/4787: UAS Payloads	14.471	14.193	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	28.664
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
The UAS Payloads program utilizes a Hybrid Acquisition Model of Incremental/Spiral approach for payload development that leverages upon work conducted by various government laboratories in order to field capability that meets threshold requirements, facilitates the six functions of Marine Corps Aviation and the Marine Corps Intelligence Surveillance, and Reconnaissance Enterprise across the range of military operations.											
<b>E. Performance Metrics</b>											
Validation of funding, derived requirements, project risks, cost and schedule estimates, contracting strategy and achievement of a TRL 7 or higher for Program of Record transition.											
A. Successful development of SIGINT payloads, integration into Marine Corps small tactical UAS, and completion of testing.											
B. Successful development of SAR/MTI payloads, integration into Marine Corps small tactical UAS, and completion of testing.											
C. Successful development of WAS payloads, integration into Marine Corps small tactical UAS, and completion of testing.											

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads						Project (Number/Name) 2052 / RQ-21 Payload 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
Systems Engineering	MIPR	ACC-Natick : Natick, MA	0.000	0.000		0.000		4.017	Dec 2018	-		4.017	Continuing	Continuing	Continuing
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.495	Dec 2018	-		0.495	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		4.512		-		4.512	Continuing	Continuing	N/A
Support (\$ 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
Contractor Engineering Support	Various	Various : Various	0.000	0.000		0.000		0.846	Dec 2018	-		0.846	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		0.846		-		0.846	Continuing	Continuing	N/A
Test and Evaluation (\$ 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
Test and Evaluation	MIPR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.303	Dec 2018	-		0.303	0.000	0.303	-
Subtotal			0.000	0.000		0.000		0.303		-		0.303	0.000	0.303	N/A
Management Services (\$ 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
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.244	Feb 2019	-		0.244	0.000	0.244	-
Travel	Various	Various : Various	0.000	0.000		0.000		0.051	Oct 2018	-		0.051	0.000	0.051	-
Subtotal			0.000	0.000		0.000		0.295		-		0.295	0.000	0.295	N/A

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2019 Navy</b>										<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 1319 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads					<b>Project (Number/Name)</b> 2052 / RQ-21 Payload Development			
	<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	0.000		0.000		5.956		-		5.956	Continuing	Continuing	N/A
<b>Remarks</b>													



**UNCLASSIFIED**

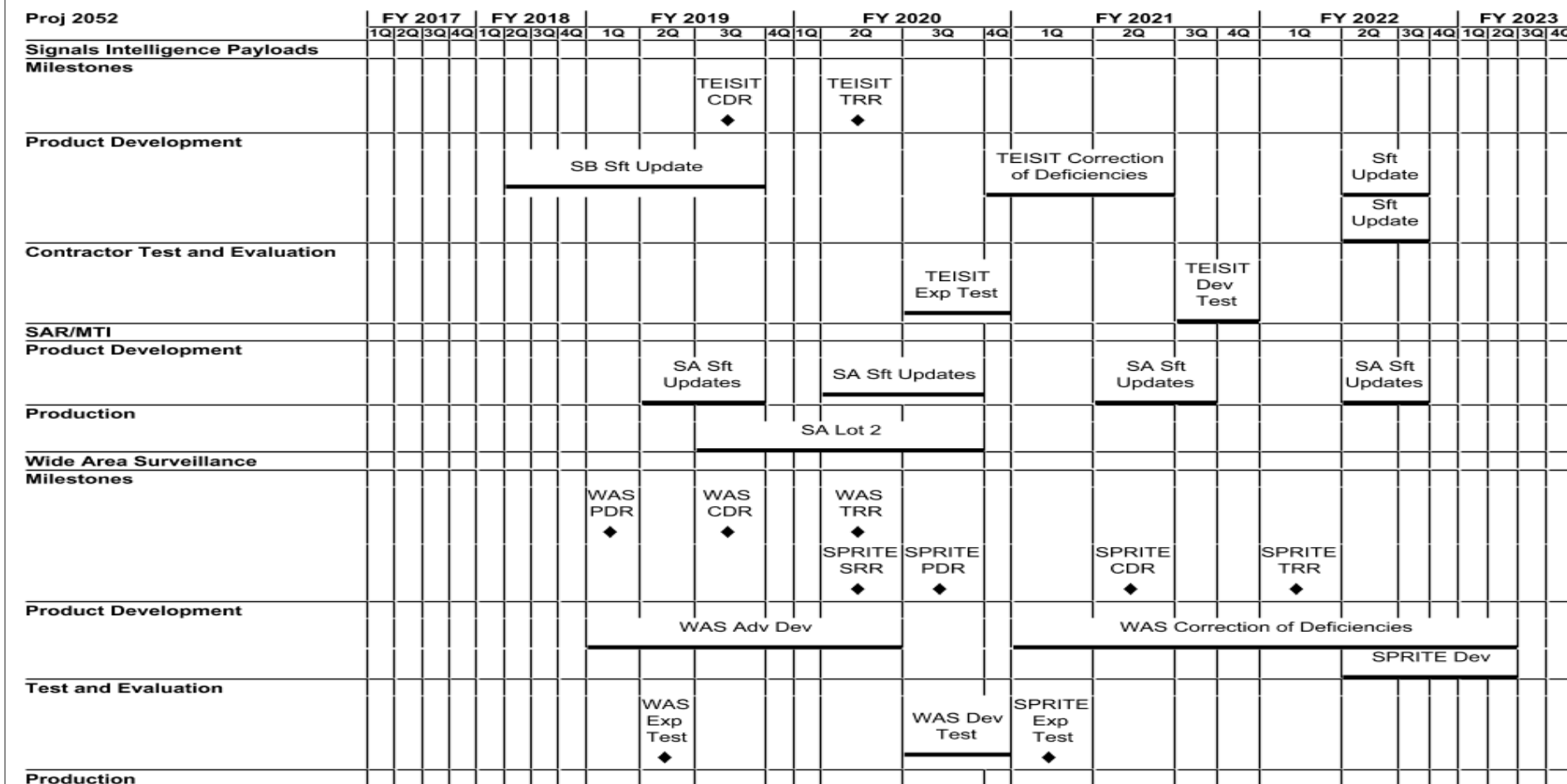
**Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy**

**Date:** February 2018

**Appropriation/Budget Activity**  
1319 / 7

**R-1 Program Element (Number/Name)**  
PE 0305242M / (U)Unmanned Aerial  
Systems (UAS) Payloads

**Project (Number/Name)**  
2052 / RQ-21 Payload Development



UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy																								Date: February 2018							
Appropriation/Budget Activity 1319 / 7														R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads										Project (Number/Name) 2052 / RQ-21 Payload Development							
														WAS Lot 1 ◆										WAS Lot 2 ◆							
2019OSD - 0305242M - 2052																															

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Navy			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads	<b>Project (Number/Name)</b> 2052 / RQ-21 Payload Development	

**Schedule Details**

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
<b>Proj 2052</b>				
Milestones: TEISIT Critical Design Review	3	2019	3	2019
Milestones: TEISIT Test Readiness Review	2	2020	2	2020
Product Development: Spectral Bat Software Update	2	2018	3	2019
Product Development: TEISIT Correction of Deficiencies	4	2020	2	2021
Product Development: Payload Software Update 1	2	2022	3	2022
Product Development: Payload Software Update 2	2	2022	3	2022
Contractor Test and Evaluation: TEISIT Experimental Test	3	2020	4	2020
Contractor Test and Evaluation: TEISIT Developmental Test	3	2021	4	2021
Product Development: SAR/MTI Software Update	2	2019	3	2019
Product Development: SAR/MTI Software Update 2	2	2020	3	2020
Product Development: SAR/MTI Software Update 3	2	2021	3	2021
Product Development: SAR/MTI Software Update 4	2	2022	3	2022
Production: SAR/MTI	3	2019	3	2020
Milestones: WAS Preliminary Design Review	1	2019	1	2019
Milestones: WAS Critical Design Review	3	2019	3	2019
Milestones: WAS Test Readiness Review	2	2020	2	2020
Milestones: SPRITE System Requirement Review	2	2020	2	2020
Milestones: SPRITE Preliminary Design Review	3	2020	3	2020
Milestones: SPRITE Critical Design Review	2	2021	2	2021
Milestones: SPRITE Test Readiness Review	1	2022	1	2022
Product Development: WAS Advanced Development	1	2019	2	2020

**UNCLASSIFIED**

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305242M I (U)Unmanned Aerial Systems (UAS) Payloads		Project (Number/Name) 2052 I RQ-21 Payload Development	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Product Development: WAS Correction of Deficiencies		1	2021	2	2023
Product Development: SPRITE Development		2	2022	2	2023
Test and Evaluation: WAS Experimental Test		2	2019	2	2019
Test and Evaluation: WAS Developmental Test		3	2020	4	2020
Test and Evaluation: SPRITE Experimental Test		1	2021	1	2021
Production: WAS Production Lot 1		2	2021	2	2021
Production: WAS Production Lot 2		2	2022	2	2022

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5501 / Signals Intelligence (SIGINT)			
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
5501: Signals Intelligence (SIGINT)	3.564	6.062	5.618	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.244
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Product Development  Articles:  FY 2018 Plans: - Initiate development of a Tactical EO/IR SIGINT Integrated for Targeting (TEISIT) payload system.  FY 2019 Base Plans: N/A  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was decreased by \$5.139 million to account for the re-alignment of funds from PU 5501 to PU 2052.								5.594	5.139	0.000	0.000	0.000
								5	-	-	-	-
Title: Support  Articles:  FY 2018 Plans: - Initiate development of TEISIT payload software.  FY 2019 Base Plans: N/A  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement:								0.375	0.384	0.000	0.000	0.000
								-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Navy				<b>Date:</b> February 2018							
<b>Appropriation/Budget Activity</b> 1319 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		<b>Project (Number/Name)</b> 5501 / Signals Intelligence (SIGINT)							
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>											
	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>						
The FY2019 funding request was decreased by \$0.384 million to account for the re-alignment of funds from PU 5501 to PU 2052.											
<b>Title:</b> Management Services	0.093	0.095	0.000	0.000	0.000						
<b>Articles:</b>	-	-	-	-	-						
<b>FY 2018 Plans:</b>											
- Complete Integrated Logistics Support (ILS), Training Concept development and Data Management/ Documentation											
- Complete information assurance certification and accreditation											
<b>FY 2019 Base Plans:</b>											
N/A											
<b>FY 2019 OCO Plans:</b>											
N/A											
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b>											
The FY2019 funding request was decreased by \$0.095 million to account for the re-alignment of funds from PU 5501 to PU 2052.											
<b>Accomplishments/Planned Programs Subtotals</b>	6.062	5.618	0.000	0.000	0.000						
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PMC/4787: UAS Payloads	2.971	14.193	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	17.164
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
In FY19 this effort will transition to PE 0305242M PU 2052 and will fall in line with respective acquisition strategy.											
<b>E. Performance Metrics</b>											
In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).											

## UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5501 / Signals Intelligence (SIGINT)					
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
Systems Engineering	MIPR	AFRL : Dayton, OH	1.500	5.155	Dec 2016	4.692	Feb 2018	0.000		-		0.000	0.000	11.347	-
Government Engineering	WR	NAWCAD : Patuxent River, MD	1.351	0.439	Oct 2016	0.447	Feb 2018	0.000		-		0.000	0.000	2.237	-
Subtotal			2.851	5.594		5.139		0.000		-		0.000	0.000	13.584	N/A
Support (\$ 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
Contractor Engineering Support	MIPR	NAWCAD : Patuxent River, MD	0.619	0.375	Nov 2016	0.384	Feb 2018	0.000		-		0.000	0.000	1.378	-
Subtotal			0.619	0.375		0.384		0.000		-		0.000	0.000	1.378	N/A
Management Services (\$ 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
Program Management Support	MIPR	NAWCAD : Patuxent River, MD	0.064	0.065	Nov 2016	0.067	Feb 2018	0.000		-		0.000	0.000	0.196	-
Travel	Various	Various : Various	0.030	0.028	Nov 2016	0.028	Feb 2018	0.000		-		0.000	0.000	0.086	-
Subtotal			0.094	0.093		0.095		0.000		-		0.000	0.000	0.282	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			3.564	6.062		5.618		0.000		-		0.000	0.000	15.244	N/A
Remarks															

**UNCLASSIFIED**

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy																Date: February 2018												
Appropriation/Budget Activity 1319 / 7									R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads								Project (Number/Name) 5501 / Signals Intelligence (SIGINT)											
Proj 5501	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Signals Intelligence Payloads																												
Milestones																												
	SB TRR ◆																											
	SB PDR ◆																											
	SB CDR ◆						TEISIT SRR ◆	TEISIT PDR ◆																				
Product Development	SB Development																											
			SB Correction of Deficiencies			TEISIT Development																						
Contractor Test and Evaluation		SB Dev Test ◆	SB Exp Test ◆																									
Production				SB Lot 1 ▲			SB Lot 2 ▲																					
2019DON - 0305242M - 5501																												

2019DON - 0305242M - 5501



**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Navy			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads	<b>Project (Number/Name)</b> 5501 / Signals Intelligence (SIGINT)	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 5501</b>				
Milestones: Spectral Bat Test Readiness Review	1	2017	1	2017
Milestones: Spectral Bat Preliminary Design Review	1	2017	1	2017
Milestones: Spectral Bat Critical Design Review	1	2017	1	2017
Milestones: TEISIT Systems Requirements Review	3	2018	3	2018
Milestones: TEISIT Preliminary Design Review	4	2018	4	2018
Product Development: Spectral Bat Prototype Design and Development	1	2017	4	2017
Product Development: Spectral Bat Correction of Deficiencies	3	2017	4	2017
Product Development: TEISIT Payload Development	2	2018	4	2018
Contractor Test and Evaluation: Spectral Bat Experimental Test	3	2017	3	2017
Contractor Test and Evaluation: Spectral Bat Developmental Test	2	2017	2	2017
Production: Spectral Bat Production Lot 1	4	2017	4	2017
Production: Spectral Bat Production Lot 2	3	2018	3	2018

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)			
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
5502: Synthetic Aperture Radar/ Motion Target Indicator (SAR/ MTI)	5.682	5.119	5.860	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.661
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Product Development  Articles:  FY 2018 Plans: - Complete integrated payload development. - Complete concurrent dual mode functionality of SAR and MTI. - Complete construction of dual mode functionality prototype payload (V3.1).  FY 2019 Base Plans: N/A  FY 2019 OCO Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was decreased by \$4.855 million to account for the re-alignment of funds from PU 5502 to PU 2052.								4.133	4.855	0.000	0.000	0.000
								2	2	-	-	-
Title: Support  Articles:  FY 2018 Plans: - Initiate ILS, training concept development and data management/documentation.  FY 2019 Base Plans:								0.590	0.604	0.000	0.000	0.000
								-	-	-	-	-

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: February 2018				
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		Project (Number/Name) 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
N/A								
FY 2019 OCO Plans: N/A								
FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was decreased by \$.604 million to account for the re-alignment of funds from PU 5502 to PU 2052.								
Title: Management Services				0.104	0.104	0.000	0.000	0.000
Articles:				-	-	-	-	-
FY 2018 Plans: - Complete engineering required for flight clearances. - Complete information assurance certification for accreditation.								
FY 2019 Base Plans: N/A								
FY 2019 OCO Plans: N/A								
FY 2018 to FY 2019 Increase/Decrease Statement: The FY2019 funding request was decreased by \$.104 million to account for the re-alignment of funds from PU 5502 to PU 2052.								
Title: Test and Evaluation				0.292	0.297	0.000	0.000	0.000
Articles:				-	-	-	-	-
FY 2018 Plans: - Initiate and complete developmental testing.								
FY 2019 Base Plans: N/A								
FY 2019 OCO Plans: N/A								
FY 2018 to FY 2019 Increase/Decrease Statement:								

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Navy				<b>Date:</b> February 2018	
<b>Appropriation/Budget Activity</b> 1319 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		<b>Project (Number/Name)</b> 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)	

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>
The FY2019 funding request was decreased by \$.297 million to account for the re-alignment of funds from PU 5502 to PU 2052.					
<b>Accomplishments/Planned Programs Subtotals</b>	5.119	5.860	0.000	0.000	0.000

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PMC/4787: UAS Payloads	2.971	14.193	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	17.164
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
In FY19 this effort will transition to PE 0305242M/PU 2052 and will fall in line with respective acquisition strategy.											
<b>E. Performance Metrics</b>											
In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).											

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)					
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
Systems Engineering	MIPR	ACC-Natick : Natick, MA	5.015	3.479	Feb 2017	4.197	Feb 2018	0.000		-		0.000	0.000	12.691	-
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.384	0.654	Nov 2016	0.658	Feb 2018	0.000		-		0.000	0.000	1.696	-
Subtotal			5.399	4.133		4.855		0.000		-		0.000	0.000	14.387	N/A
Support (\$ 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
Contractor Engineering Support	Various	Various : Various	0.268	0.590	Dec 2016	0.604	Feb 2018	0.000		-		0.000	0.000	1.462	-
Subtotal			0.268	0.590		0.604		0.000		-		0.000	0.000	1.462	N/A
Test and Evaluation (\$ 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
Test and Evaluation	MIPR	NAWCAD : Patuxent River	0.000	0.292	Nov 2016	0.297	Feb 2018	0.000		-		0.000	0.000	0.589	-
Subtotal			0.000	0.292		0.297		0.000		-		0.000	0.000	0.589	N/A
Management Services (\$ 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
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	0.074	Feb 2017	0.074	Feb 2018	0.000		-		0.000	0.000	0.148	-
Travel	Various	Various : Various	0.015	0.030	Feb 2017	0.030	Feb 2018	0.000		-		0.000	0.000	0.075	-
Subtotal			0.015	0.104		0.104		0.000		-		0.000	0.000	0.223	N/A

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2019 Navy</b>										<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 1319 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads					<b>Project (Number/Name)</b> 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)			
	<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	5.682	5.119		5.860		0.000		-		0.000	0.000	16.661	N/A
<b>Remarks</b>													

**UNCLASSIFIED**

PE 0305242M: (U)Unmanned Aerial Systems (UAS) Payload...  
Navy

R-1 Line #263

**R-1 Program Element (Number/Name)**  
PE 0305242M / (U)Unmanned Aerial  
Systems (UAS) Payloads

<b>Project (Number/Name)</b> 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)
--

[illegible]

2019DON - 0305242M - 5502

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Navy			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads	<b>Project (Number/Name)</b> 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)	

**Schedule Details**

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
<b>Proj 5502</b>				
Milestones: Split Aces System Requirements Review	1	2017	1	2017
Milestones: Split Aces Test Readiness Review	1	2018	1	2018
Milestones: Split Aces Preliminary Design Review	2	2017	2	2017
Milestones: Split Aces Critical Design Review	4	2017	4	2017
Product Development: Split Aces Component Development	2	2017	4	2017
Product Development: Split Aces Design/Prototype	1	2017	4	2017
Product Development: Split Aces Correction of Deficiencies	3	2018	4	2018
Contractor Test and Evaluation: Split Aces Experimental Test	4	2017	4	2017
Contractor Test and Evaluation: Split Aces Developmental Test	2	2018	2	2018
Production: Split Aces Production Lot 1	4	2018	4	2018



**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5504 / Wide Area Persistent Surveillance (TNWAS)			
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
5504: Wide Area Persistent Surveillance (TNWAS)	0.000	0.000	7.100	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.100
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<b>Title:</b> Product Development  <b>Articles:</b>  <b>FY 2018 Plans:</b> - Initiate Wide Areas Surveillance payload component development.  <b>FY 2019 Base Plans:</b> N/A  <b>FY 2019 OCO Plans:</b> N/A  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> The FY2019 funding request was decreased by \$5.331 million to account for the re-alignment of funds from PU 5504 to PU 2052.								0.000	5.331	0.000	0.000	0.000
								-	-	-	-	-
<b>Title:</b> Support  <b>Articles:</b>  <b>FY 2018 Plans:</b> - Initiate development of Wide Area Surveillance software.  <b>FY 2019 Base Plans:</b> N/A  <b>FY 2019 OCO Plans:</b> N/A  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b>								0.000	1.520	0.000	0.000	0.000
								-	-	-	-	-

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Navy				<b>Date:</b> February 2018	
<b>Appropriation/Budget Activity</b> 1319 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads		<b>Project (Number/Name)</b> 5504 / Wide Area Persistent Surveillance (TNWAS)	

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>
The FY2019 funding request was decreased by \$1.520 million to account for the re-alignment of funds from PU 5504 to PU 2052.					
<b>Title:</b> Management Services  <div style="text-align: right;"><b>Articles:</b></div>	0.000 -	0.249 -	0.000 -	0.000 -	0.000 -
<b>FY 2018 Plans:</b> - Initiate and complete refinement and documentation of acquisition strategy. - Initiate mapping of requirements to specifications. - Initiate development of an integrated master schedule.					
<b>FY 2019 Base Plans:</b> N/A					
<b>FY 2019 OCO Plans:</b> N/A					
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> The FY2019 funding request was decreased by \$0.249 million to account for the re-alignment of funds from PU 5504 to PU 2052.					
<b>Accomplishments/Planned Programs Subtotals</b>	0.000	7.100	0.000	0.000	0.000

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PMC/4787: UAS Payloads	2.971	14.193	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	17.164
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> In FY19 this effort will transition to PE 0305242M/PU 2052 and will fall in line with respective acquisition strategy.											
<b>E. Performance Metrics</b> In FY19 this effort will transition to PE 0305242M/PU 2052 (Unmanned Aerial Systems (UAS) Payloads/RQ-21 Payload Development).											

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2019 Navy</b>												<b>Date: February 2018</b>			
<b>Appropriation/Budget Activity</b> 1319 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads						<b>Project (Number/Name)</b> 5504 / Wide Area Persistent Surveillance (TNWAS)			
<b>Product Development (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Systems Engineering	TBD	TBD : TBD	0.000	0.000		5.331	Mar 2018	0.000		-		0.000	0.000	5.331	-
<b>Subtotal</b>			0.000	0.000		5.331		0.000		-		0.000	0.000	5.331	N/A
<b>Remarks</b> The 2018 effort for Tactical Nighttime Wide Area Persistent Surveillance (TNWAS) payload development leverages work started by the Office of Naval Research. The contractor performing the work is L3, however the government agency performing contracting activities is TBD.															
<b>Support (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Contractor Engineering Support	C/BA	Various : Various	0.000	0.000		1.520	Mar 2018	0.000		-		0.000	0.000	1.520	-
<b>Subtotal</b>			0.000	0.000		1.520		0.000		-		0.000	0.000	1.520	N/A
<b>Management Services (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.249	Feb 2018	0.000		-		0.000	0.000	0.249	-
<b>Subtotal</b>			0.000	0.000		0.249		0.000		-		0.000	0.000	0.249	N/A
			<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Project Cost Totals</b>			0.000	0.000		7.100		0.000		-		0.000	0.000	7.100	N/A
<b>Remarks</b>															

**UNCLASSIFIED**

PE 0305242M: (U)Unmanned Aerial Systems (UAS) Payload...  
Navy

R-1 Line #263

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads
--	--

**Project (Number/Name)**  
5504 / *Wide Area Persistent Surveillance*  
(TNWAS)

[illegible]

2019DON - 0305242M - 5504

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Navy		<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305242M / (U)Unmanned Aerial Systems (UAS) Payloads	<b>Project (Number/Name)</b> 5504 / Wide Area Persistent Surveillance (TNWAS)

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 5504</b>				
Milestones: WAS System Requirement Review	2	2018	2	2018
Product Development: WAS Prototype Integration	2	2018	4	2018