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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 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads							
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	0.000	-	2.000	9.246	-	9.246	11.942	11.654	6.864	3.810	Continuing	Continuing
2298: SMALL (LEVEL 0) TACTICAL UAS (STUALO)	0.000	-	2.000	-	-	-	-	-	-	-	-	2.000
5501: Signals Intelligence (SIGINT)	0.000	-	-	5.564	-	5.564	6.763	5.269	3.676	2.780	Continuing	Continuing
5502: Synthetic Aperture Radar/ Motion Target Indicator (SAR/ MTI)	0.000	-	-	3.682	-	3.682	5.179	6.385	3.188	1.030	Continuing	Continuing

A. Mission Description and Budget Item Justification

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 the Electro-Optic(EO) / Infrared (IR) collection, communications relay, and automatic identification capabilities. Upgrades include, but are not limited to Signals Intelligence (SIGINT) and Synthetic Aperture Radar (SAR) / Motion Target Indicator (MTI).

The increase of \$7.2M from FY15 to FY16 supports development and integration of payloads such as Signals Intelligence (SIGINT), and Synthetic Aperture Radar (SAR)/Motion Target Indicator (MTI) in support of the Marine Corps UAS. These payloads provide the Marine Expeditionary Unit (MEU) organic capabilities and support force protection, airborne ISR, and counter-IED missions.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016 Base</u>	<u>FY 2016 OCO</u>	<u>FY 2016 Total</u>
Previous President's Budget	-	2.000	2.000	-	2.000
Current President's Budget	-	2.000	9.246	-	9.246
Total Adjustments	-	-	7.246	-	7.246
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	18.100	-	18.100

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy				Date: February 2015	
Appropriation/Budget Activity			R-1 Program Element (Number/Name)		
1319: Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development			PE 0305242M / Unmanned Aerial Systems (UAS) Payloads		
• Rate/Misc Adjustments			-	-	-10.854
			</		

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)			
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
2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	-	-	2.000	-	-	-	-	-	-	-	-	2.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
UAS Payloads was initially established in FY15 under Program Element 0305242M, Project 2298. Project 2298 was also used for Program Element 0305239M, RQ-21A Small Tactical UAS. In order to provide greater detail on payload development, each payload was assigned an individual project number starting in FY16.												
In FY15, the UAS Payloads program will continue development of a Signals Intelligence (SIGINT) and Synthetic Aperture Radar (SAR)/Motion Target Indicator (MTI) payload leveraging existing payloads developed by the U.S. Air Force and U.S. Army, ultimately creating a payload that fits within form and fit limitations of Marine Corps small tactical unmanned aerial systems. FY15 efforts include technology maturation primarily of SIGINT and secondarily of SAR/MTI technologies including efforts to reduce size, weight, and power requirements in preparation for full scale development efforts commencing in FY16.												
SIGINT and SAR/MTI capabilities are vital to the Marine Expeditionary Unit (MEU) and support force protection, airborne ISR, and counter-IED missions. Funding for these efforts are represented in Projects 5501 and 5502 for FY16 and beyond.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Product Development Articles: FY 2014 Accomplishments: N/A FY 2015 Plans: - Initiate SIGINT and SAR/MTI technology development and perform maturation of payload components, including reducing size, weight, and power requirements. - Initiate development of components for SIGINT prototype preparation. FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A								-	0.980	-	-	-
								-	-	-	-	-
Title: Support								-	0.500	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: February 2015		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>		Project (Number/Name) 2298 / <i>SMALL (LEVEL 0) TACTICAL UAS (STUAL0)</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Articles:		-	-	-	-	-
FY 2014 Accomplishments: N/A FY 2015 Plans: - Initiate payload development and integration efforts. - Initiate mapping of payload requirements to specifications. - Initiate engineering analysis of alternatives for available payload components. FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A						
Title: Management Services Articles:		- -	0.520 -	- -	- -	- -
FY 2014 Accomplishments: N/A FY 2015 Plans: - Initiate development of integrated master schedule. - Initiate refinement and documentation of program acquisition strategy. FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A						
Accomplishments/Planned Programs Subtotals		-	2.000	-	-	-
C. Other Program Funding Summary (\$ in Millions)						
N/A						
Remarks						

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 2298 / <i>SMALL (LEVEL 0) TACTICAL UAS (STUAL0)</i>
<p><u>D. Acquisition Strategy</u></p> <p>The UAS Payload program leverages existing payloads, Government facilities, ranges, and UAS assets to conduct testing, integration, certification and demonstration activities.</p> <p><u>E. Performance Metrics</u></p> <p>Successful integration of SIGINT and SAR/MTI payloads into Marine Corps small tactical UAS.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy													Date: February 2015		
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>				Project (Number/Name) 2298 / <i>SMALL (LEVEL 0) TACTICAL UAS (STUAL0)</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
Systems Engineering	MIPR	Air Force Research Lab : Dayton, OH	0.000	-		0.230	Feb 2015	-		-		-	-	0.230	-
Systems Engineering	MIPR	NRL : Washington, DC	0.000	-		0.500	Feb 2015	-		-		-	-	0.500	-
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	-		0.250	Feb 2015	-		-		-	-	0.250	-
Subtotal			0.000	-		0.980		-		-		-	-	0.980	-
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
Contractor Engineering Support	Various	Various : Patuxent River, MD	0.000	-		0.500	Feb 2015	-		-		-	-	0.500	-
Subtotal			0.000	-		0.500		-		-		-	-	0.500	-
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 : Patuxent River, MD	0.000	-		0.500	Feb 2015	-		-		-	-	0.500	-
Travel	WR	Various : Various	0.000	-		0.020	Feb 2015	-		-		-	-	0.020	-
Subtotal			0.000	-		0.520		-		-		-	-	0.520	-
			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			0.000	-		2.000		-		-		-	-	2.000	-
Remarks															

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PE 0305242M: *Unmanned Aerial Systems (UAS) Payloads*
Navy

R-1 Line #226

1319 / 7

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

2298 / SMALL (LEVEL 0) TACTICAL UAS
(STUAL0)

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 2298 / <i>SMALL (LEVEL 0) TACTICAL UAS (STUAL0)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>SMALL (LEVEL 0) TACTICAL UAS (STUAL0)</i>				
Milestones: System Requirements Review	1	2015	1	2015
Product Development: Component Development and Transition to Specific Payloads	2	2015	4	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5501 / Signals Intelligence (SIGINT)			
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
5501: Signals Intelligence (SIGINT)	-	-	-	5.564	-	5.564	6.763	5.269	3.676	2.780	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The UAS Payloads program will develop and integrate a Signals Intelligence (SIGINT) payload for Marine Corps small tactical UASs. The SIGINT payload 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 payload will leverage payloads previously developed by other Services and/or DoD laboratories to reduce cost and minimize schedule. This project continues efforts started in project 2298.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Product Development Articles: FY 2014 Accomplishments: N/A FY 2015 Plans: N/A FY 2016 Base Plans: - Complete SIGINT payload component development. - Initiate SIGINT payload development. - Initiate construction of a prototype SIGINT system that can receive and process a minimum of three signals of interest (SOI). - Complete engineering and experimental tests in preparation for FY17 testing. FY 2016 OCO Plans: N/A								-	-	3.750	-	3.750
								-	-	1	-	1
Title: Support Articles: FY 2014 Accomplishments:								-	-	1.544	-	1.544
								-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy							Date: February 2015				
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads			Project (Number/Name) 5501 / Signals Intelligence (SIGINT)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
				FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
N/A											
FY 2015 Plans: N/A											
FY 2016 Base Plans: - Initiate development of SIGINT payload software to include frequency agile airborne receiver software.											
FY 2016 OCO Plans: N/A											
Title: Management Services				-	-	0.270	-	0.270			
Articles:				-	-	-	-	-			
FY 2014 Accomplishments: N/A											
FY 2015 Plans: N/A											
FY 2016 Base Plans: - Complete refinement and documentation of acquisition strategy. - Initiate engineering required for flight clearances.											
FY 2016 OCO Plans: N/A											
Accomplishments/Planned Programs Subtotals				-	-	5.564	-	5.564			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• 4737: RQ-21 UAS Payloads	-	-	-	-	-	3.000	3.210	-	-	-	6.210
Remarks											
D. Acquisition Strategy											
The UAS Payload program leverages existing payloads, Government facilities, ranges, and UAS assets to conduct testing, integration, certification and demonstration activities.											

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 5501 / <i>Signals Intelligence (SIGINT)</i>

E. Performance Metrics

Successful development of a SIGINT payload, completion of DT/OT, and integration onboard Marine Corps small tactical UAVs.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5501 / Signals Intelligence (SIGINT)					
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
Systems Engineering	MIPR	AFRL : Dayton, OH	0.000	-		-		0.500	Feb 2016	-		0.500	Continuing	Continuing	Continuing
Systems Engineering	MIPR	NRL : Washington, DC	0.000	-		-		3.000	Feb 2016	-		3.000	Continuing	Continuing	Continuing
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		3.750		-		3.750	-	-	-
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
Software Engineering Support	MIPR	NRL : Washington, DC	0.000	-		-		1.294	Feb 2016	-		1.294	Continuing	Continuing	Continuing
Contractor Engineering Support	Various	Various : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		1.544		-		1.544	-	-	-
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	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Travel	Various	Various : Various	0.000	-		-		0.020	Feb 2016	-		0.020	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.270		-		0.270	-	-	-
			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			0.000	-		-		5.564		-		5.564	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy							Date: February 2015		
Appropriation/Budget Activity 1319 / 7			R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads			Project (Number/Name) 5501 / Signals Intelligence (SIGINT)			
	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 Navy

Date: February 2015

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0305242M / *Unmanned Aerial Systems (UAS) Payloads*

Project (Number/Name)

5501 / *Signals Intelligence (SIGINT)*

Proj 5501	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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 PAYLOAD																												
Milestones					SRR ◆				PDR ◆	CDR ◆		TRR ◆																
Product Development							Component Development		Development						Correction of Deficiencies		Sft Update				Sft Update				Sft Update			
Test and Evaluation										Exp Test ▲			DT															
Production															LRIP ▲		FRP ▲											

2016OSD - 0305242M - 5501

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 5501 / <i>Signals Intelligence (SIGINT)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 5501				
SIGNALS INTELLIGENCE PAYLOAD: Milestones: System Requirements Review	1	2015	1	2015
SIGNALS INTELLIGENCE PAYLOAD: Milestones: Test Readiness Review	1	2017	1	2017
SIGNALS INTELLIGENCE PAYLOAD: Milestones: Product Design Review	2	2016	2	2016
SIGNALS INTELLIGENCE PAYLOAD: Milestones: Critical Design Review	3	2016	3	2016
Product Development: Component Development	3	2015	4	2015
Product Development: Prototype Design and Development	1	2016	4	2016
Product Development: Correction of Deficiencies	3	2017	4	2017
Product Development: Software Development and Updates 1	2	2018	3	2018
Product Development: Software Development and Updates 2	2	2019	3	2019
Product Development: Software Development and Updates 3	2	2020	3	2020
Test and Evaluation: Experimental Test	3	2016	3	2016
Test and Evaluation: Developmental Test	2	2017	2	2017
Production: Low Rate Initial Production	4	2017	4	2017
Production: Full Rate Production	3	2018	3	2018

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)			
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
5502: Synthetic Aperture Radar/ Motion Target Indicator (SAR/ MTI)	-	-	-	3.682	-	3.682	5.179	6.385	3.188	1.030	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The UAS Payloads program will develop and integrate a Synthetic Aperture Radar (SAR) with Motion 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 sensor technology.

The ability to locate and track moving ground targets from small tactical UAVs is an essential capability for force protection and counter-IED missions. The SAR/MTI payload will leverage payloads previously developed by other Services and/or DoD laboratories to reduce cost and minimize schedule. This project continues efforts started in project 2298

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Product Development	-	-	2.250	-	2.250
Articles:	-	-	-	-	-
FY 2014 Accomplishments: N/A					
FY 2015 Plans: N/A					
FY 2016 Base Plans: - Continue SAR/MTI payload component development, in preparation for integrated payload development in FY17.					
FY 2016 OCO Plans: N/A					
Title: Management Services	-	-	0.270	-	0.270
Articles:	-	-	-	-	-
FY 2014 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy								Date: February 2015			
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>				Project (Number/Name) 5502 / <i>Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)</i>			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
				FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
N/A FY 2015 Plans: N/A FY 2016 Base Plans: - Initiate mapping of payload requirements to specifications. - Initiate development of an integrated master schedule. - Complete refinement and documentation of acquisition strategy. FY 2016 OCO Plans: N/A											
Title: Support <div style="text-align: right;">Articles:</div>				-	-	1.162	-	1.162			
FY 2014 Accomplishments: N/A FY 2015 Plans: N/A FY 2016 Base Plans: - Initiate development of SAR/MTI payload software. - Initiate engineering analysis of alternatives for SAR/MTI payload components. FY 2016 OCO Plans: N/A				-	-	-	-	-			
Accomplishments/Planned Programs Subtotals				-	-	3.682	-	3.682			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• 4737: RQ-21 UAS	-	-	-	-	-	-	3.900	4.100	-	-	8.000
Remarks											

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 5502 / <i>Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)</i>
D. Acquisition Strategy The UAS Payload program leverages existing payloads, Government facilities, ranges, and UAS assets to conduct testing, integration, certification and demonstration activities.		
E. Performance Metrics Successful development of a SAR/MTI payload, completion of DT/OT, and integration onboard Marine Corps small tactical UAS.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305242M / Unmanned Aerial Systems (UAS) Payloads				Project (Number/Name) 5502 / Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)							
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
Systems Engineering	MIPR	AFRL : Dayton, OH	0.000	-		-		2.000	Feb 2016	-		2.000	Continuing	Continuing	Continuing
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		2.250		-		2.250	-	-	-
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
Software Engineering Support	MIPR	AFRL : Dayton, OH	0.000	-		-		0.912	Feb 2016	-		0.912	Continuing	Continuing	Continuing
Contractor Engineering Support	Various	Various : Various	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		1.162		-		1.162	-	-	-
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	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
Travel	Various	Various : Various	0.000	-		-		0.020	Feb 2016	-		0.020	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.270		-		0.270	-	-	-
			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			0.000	-		-		3.682		-		3.682	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0305242M / *Unmanned Aerial Systems (UAS) Payloads*

Project (Number/Name)

5502 / *Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)*

Proj 5502	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
SAR/MTI																												
Milestones										SRR ◆				PDR ◆		CDR ◆	TRR ◆											
Product Development										Initial Development			Advanced Development					Correction of Deficiencies			Sft Updates			Sft Updates				
Test and Evaluation																Exp Test ◆	DT/OT											
Production																			LRIP ◆			FRP ◆						

2016OSD - 0305242M - 5502

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305242M / <i>Unmanned Aerial Systems (UAS) Payloads</i>	Project (Number/Name) 5502 / <i>Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 5502</i>				
SAR/MTI: Milestones: System Requirements Review	2	2016	2	2016
SAR/MTI: Milestones: Test Readiness Review	1	2018	1	2018
SAR/MTI: Milestones: Product Design Review	2	2017	2	2017
SAR/MTI: Milestones: Critical Design Review	4	2017	4	2017
Product Development: Component Development	2	2016	4	2016
Product Development: Design/Prototype	1	2017	4	2017
Product Development: Correction of Deficiencies	3	2018	4	2018
Product Development: Software Update	2	2019	3	2019
Product Development: Software Update 2	2	2020	3	2020
Test and Evaluation: Experimental Test	4	2017	4	2017
Test and Evaluation: Developmental and Operational Test	2	2018	2	2018
Production: Low Rate Initial Production	4	2018	4	2018
Production: Full Rate Production	3	2019	3	2019