Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational

PE 0305242M I Unmanned Aerial Systems (UAS) Payloads

Systems Development

•												
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 (STUAL0)	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

PE 0305242M: Unmanned Aerial Systems (UAS) Payloads

Navy

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.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
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

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 I BA 7: Operational	PE 0305242M I Unmanned Aeria		oads
Systems Development			
Rate/Misc Adjustments -	10.8	354	10.854
Change Summary Explanation			
The increase of \$7.2M from FY15 to FY16 supports development and	integration of payloads such as Sig	inals Intelligence (SIGI	NT) and Synthetic Aperture
Radar (SAR)/Motion Target Indicator (MTI) in support of the Marine Cowith revised program development schedule.			

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Exhibit R-2A, RDT&E Project J	ustification	: PB 2016 N	Navy							Date: Feb	ruary 2015	
Appropriation/Budget Activity 1319 / 7		_	12M I Unma	i t (Number l anned Aeria	lumber/Name) ALL (LEVEL 0) TACTICAL UAS							
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 (STUALO)	-	-	2.000	-	-	-	-	-	-	-	-	2.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

PE 0305242M: Unmanned Aerial Systems (UAS) Payloads

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 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	oco	Total
Title: Product Development	-	0.980	-	-	-
Article	s: -	-	-	-	-
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					
Title: Support	-	0.500	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: Febr	ruary 2015			
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/ PE 0305242M / Unmanned Aerial (UAS) Payloads			ect (Number/Name) I SMALL (LEVEL 0) TACTICAL UAS AL0)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantition)	ŕ	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 compone	nts.							
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								
	ments/Planned Programs Subtotals		2.000	_				

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

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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	Project (Number/Name) 2298 I SMALL (LEVEL 0) TACTICAL UAS (STUAL0)
D. Acquisition Strategy		
The UAS Payload program leverages existing payloads, Goractivities.	vernment facilities, ranges, and UAS assets to conduct testing, i	ntegration, certification and demonstration
E. Performance Metrics Successful integration of SIGINT and SAR/MTI payloads into	o Marine Corps small tactical LIAS	
ouccessful integration of Stoller and OARWITT payloads into	o Marine Gorps Small tactical GAG.	

					O.	NCLA5)LD								
Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2016 Navy	/								Date:	February	2015	
Appropriation/Budge 1319 / 7	et Activity	1				PE 030			lumber/N ed Aerial S		Project 2298 / S (STUAL	ACTICA	L UAS		
Product Developme	nt (\$ in M	illions)		FY	2014	FY:	2015		2016 ase		2016 CO	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	Total Cost	Target Value o Contrac
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 Million	ıs)			FY:	2014	FY:	2015		2016 ase		2016 CO	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	Total Cost	Target Value o Contrac
Contractor Engineering Support	Various	Various : Patuxent River, MD	0.000	-		0.500	Feb 2015	-		-		-	-	0.500	-
		Subtotal	0.000	-		0.500		-		-		-	-	0.500	-
Management Service	es (\$ in M	lillions)		FY	2014	FY:	2015		2016 ase		2016 CO	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 o Contrac
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		2016 ase		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value o Contrac
·	·	Project Cost Totals	0.000			2.000				_				2.000	_

PE 0305242M: Unmanned Aerial Systems (UAS) Payloads Navy UNCLASSIFIED Page 6 of 21

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Exhibit R-4, RDT&E Schedule Prof	ile:	PB 2	2016	Nav	'y																		Da	te: F	ebru	uary	201	5	
Appropriation/Budget Activity 1319 / 7										PE	0305	gran 5242 Paylo	M / (i e) tems	2	298						ACT	ICAL	. UAS
SMALL (LEVEL 0) TACTICAL UAS (STUAL0)		FY:	2014			FY 2	015			FY 2	2016			FY 2	017			FY 2	2018			FY 2	019			FY 2	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	
Milestones					SRR •																								
Product Development						Dev	Inital elopm Prod ansitio	uct																					

2016OSD - 0305242M - 2298

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity	,	- , ,	umber/Name)
1319 / 7	PE 0305242M I Unmanned Aerial Systems (UAS) Payloads	(STUALO)	ALL (LEVEL 0) TACTICAL UAS

Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
SMALL (LEVEL 0) TACTICAL UAS (STUALO)				
Milestones: System Requirements Review	1	2015	1	2015
Product Development: Component Development and Transition to Specific Payloads	2	2015	4	2015

Exhibit R-2A, RDT&E Project J	ustification	: PB 2016 N	Navy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 7					_	am Elemen 12M / Unma doads	•	•	Project (N 5501 / Sign		ne) ence (SIGIN	IT)
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 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	oco	Total
Title: Product Development	-	-	3.750	-	3.750
Articles:	-	-	1	-	1
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					
Title: Support	-	-	1.544	-	1.544
Articles:	-	-	-	_	-
FY 2014 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy						Date: Feb	ruary 2015	
Appropriation/Budget Activity 1319 / 7		242M <i>I Un</i>	nent (Numbe nmanned Aeri			lumber/Nar nals Intellig		NT)
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantitie	s 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	e airborne red	ceiver soft	ware.					
FY 2016 OCO Plans: N/A								
Title: Management Services				-	-	0.270	-	0.27
			Articles	s <i>:</i> -	-	-	-	-
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								
Accomplishn	nents/Planne	ed Progra	ms Subtotal	s -	-	5.564	-	5.56
C. Other Program Funding Summary (\$ in Millions)								
	FY 2016	FY 2016					Cost To	
<u>Line Item</u> <u>FY 2014</u> <u>FY 2015</u> <u>Base</u> • 4737: <i>RQ-21 UAS Payloads</i> Remarks	<u>000</u> -	Total -	FY 2017 3.000	FY 2018 3.210	FY 2019 -	FY 2020 -	Complete -	<u>Total Cos</u> 6.21

D. Acquisition Strategy

The UAS Payload program leverages existing payloads, Government facilities, ranges, and UAS assets to conduct testing, integration, certification and demonstration activities.

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

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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	Project (Number/Name) 5501 / Signals Intelligence (SIGINT)
E. Performance Metrics Successful development of a SIGINT payload, completion of DT/OT, and integ	ration onboard Marine Corps small tactical U	AVs.

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					Ur	ICLAS	סורובט								
Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2016 Navy	/								Date:	February	2015	
Appropriation/Budg 1319 / 7		PE 030			l umber/Na ed Aerial S		Project (Number/Name) 5501 / Signals Intelligence (SIGINT)								
Product Developme	nt (\$ in M	illions)		FY:	2014	FY:	2015		2016 ise		2016 CO	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	Total Cost	Target Value of Contract
Systems Engineering	MIPR	AFRL : Dayton, OH	0.000	-		-		0.500	Feb 2016	-		0.500	Continuing	Continuing	Continuin
Systems Engineering	MIPR	NRL : Washington, DC	0.000	-		-		3.000	Feb 2016	-		3.000	Continuing	Continuing	Continuin
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		3.750		-		3.750	-	-	-
Support (\$ in Million	ort (\$ in Millions)				2014	FY:	2015		2016 ise		2016 CO	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	Total Cost	Target Value of Contract
Software Engineering Support	MIPR	NRL : Washington, DC	0.000	-		-		1.294	Feb 2016	-		1.294	Continuing	Continuing	Continuin
Contractor Engineering Support	Various	Various : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		1.544		-		1.544	-	-	-
Management Servic	es (\$ in M	lillions)		FY:	2014	FY:	2015		2016 ise		2016 CO	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	Total Cost	Target Value of Contract
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
Travel	Various	Various : Various	0.000	-		-		0.020	Feb 2016	-		0.020	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		0.270		-		0.270	-	-	-
			Prior Years	FY:	2014	FY:	2015	Ва	2016 ise		2016 CO	FY 2016 Total	Cost To	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 Analys	sis: PB 2016 Navy					Date	: February	2015	
Appropriation/Budget Activity 1319 / 7	R-1 Program El PE 0305242M / (UAS) Payloads	ement (Number/N Unmanned Aerial S	Project (Number/Name) 5501 / Signals Intelligence (SIGINT)						
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2	2016 FY 2016 CO Total	Cost To Complete	Total Cost	Target Value of Contrac
Remarks									

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

Exhibit R-4, RDT&E Schedule Pro	file	: PE	3 20	161	Navy																		Dat	e: F	ebr	uary	/ 201	5
Appropriation/Budget Activity 1319 / 7										PI		524	2M /	Unm		umbei d Aeria						t (N Sigr					(SIG	GINT)
Proj 5501		FY	201	4		F	Y 2015	i		FY	2016			FY	2017	,		FY:	2018			FY 2	2019	•		FY	2020	,
	10	20	30	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	10	20	3Q	4Q
SIGNALS INTELLIGENCE PAYLOAD																												
Milestones					SRF					PDR •	CDR		TRR •															
Product Development								oonent opment	ι	Devel	opme	nt				ection of iencies			Sft date				oft date				Sft date	_
Test and Evaluation											Exp Test			DT														
Production																LRIP			FRP									

2016OSD - 0305242M - 5501

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
ļ 11 1 g	,	- , (umber/Name) nals Intelligence (SIGINT)

Schedule Details

	Sta	art	Er	ıd
Events by Sub Project	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

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2016 N	lavy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 7						a m Elemen 12M / Unmai 10ads	Number/Name) nthetic Aperture Radar/Motion dicator (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

complishments/Dispused Dynamans (& in Millians, Auticle Occupatities in Fook)

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:					

Exhibit R-2A, RDT&E Project Justification: PB 2016	6 Navy						Date: Feb	ruary 2015				
Appropriation/Budget Activity 1319 / 7		PE 03		nent (Numbe nmanned Aeri		Project (Number/Name) 5502 I Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)						
B. Accomplishments/Planned Programs (\$ in Millio	ons, Article Quant	ities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
N/A					112014	1 1 2010	Busc		Total			
FY 2015 Plans: N/A												
FY 2016 Base Plans: - Initiate mapping of payload requirements to specifica: - Initiate development of an integrated master schedule: - Complete refinement and documentation of acquisition	le.											
FY 2016 OCO Plans: N/A												
Title: Support				Articles	- 5: -		1.162	-	1.16			
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/M	MTI payload compo	onents.										
FY 2016 OCO Plans: N/A												
	Accompli	shments/Plar	nned Progra	ams Subtotal	s -	-	3.682	-	3.68			
C. Other Program Funding Summary (\$ in Millions)) <u>FY 2016</u>	FY 2016	FY 2016					Cost To				
• 4737: RQ-21 UAS -	<u>′ 2015</u> Base -	<u>000</u>	<u>Total</u> -	FY 2017 -	FY 2018 3.900	FY 2019 4.100	FY 2020 -	Complete -	Total Cos 8.00			
Remarks												

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PE 0305242M: Unmanned Aerial Systems (UAS) Payloads

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

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	016 Navy	,								Date:	February	2015	
Appropriation/Budgon 1319 / 7		PE 030	ogram Ele 05242M / U Payloads			Project (Number/Name) 5502 I Synthetic Aperture Radar/Motion Target Indicator (SAR/MTI)									
Product Development (\$ in Millions)				FY 2014		FY	2015		2016 ase		2016 CO	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	Total Cost	Target Value of Contract
Systems Engineering	MIPR	AFRL : Dayton, OH	0.000	-		-		2.000	Feb 2016	-		2.000	Continuing	Continuing	Continuin
Government Engineering	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		2.250		-		2.250	-	-	-
Support (\$ in Million	s)			FY 2	2014	FY	2015		2016 ase		2016 CO	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	Total Cost	Target Value of Contract
Software Engineering Support	MIPR	AFRL : Dayton, OH	0.000	-		-		0.912	Feb 2016	-		0.912	Continuing	Continuing	Continuin
Contractor Engineering Support	Various	Various : Various	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		1.162		-		1.162	-	-	-
Management Servic	es (\$ in M	lillions)		FY 2	2014	FY	2015		2016 ase		2016 CO	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	Total Cost	Target Value of Contract
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	-		-		0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuin
Travel	Various	Various : Various	0.000	-		-		0.020	Feb 2016	-		0.020	Continuing	Continuing	Continuin
		Subtotal	0.000	-		-		0.270		-		0.270	-	-	-
			Prior Years	FY 2	2014	FY	2015	Ва	2016 ase		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	-		_		3.682		_		3.682	_	_	_

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

R-1 Line #226

Exhibit R-4, RDT&E Schedule Pro	file	: PE	3 20)16	Nav	/y																	D	ate	: Fe	bruar	y 201	15	
Appropriation/Budget Activity 1319 / 7												Р	E 03		42M	I Uni		Number ed Aeria			550	02/	t (Nur Synth Indica	etic	Аре	erture	Rad	ar/M	otion
Proj 5502		FY	201	4		FY 2	201	5		FY 2	2016			FY	2017	7		FY 2	2018			FY	2019			FY	2020		
	10	2Q	30	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										I Deve	nitial		С	Adva evel						ection of iencies			Sft dates				oft lates		
Test and Evaluation																Exp Test		DT/OT											
Production																				LRIP ♦			FRP ♦						

2016OSD - 0305242M - 5502

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
1319 / 7		5502 I Syn	umber/Name) thetic Aperture Radar/Motion cator (SAR/MTI)

Schedule Details

	Sta	Er	nd	
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 5502				
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