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 0305239M *I (U)RQ-21A*

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	47.125	11.122	8.192	6.435	-	6.435	9.608	9.393	8.853	9.035	Continuing	Continuing
2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	47.125	11.122	8.192	6.435	-	6.435	9.608	9.393	8.853	9.035	Continuing	Continuing

A. Mission Description and Budget Item Justification

The RQ-21A program will provide persistent maritime and land-based tactical Reconnaissance, Surveillance and Target Acquisition (RSTA) data collection and dissemination capability to the war fighter. For the United States Marine Corps (USMC), RQ-21A will provide the Marine Expeditionary Force and subordinate commands (divisions and regiments) with a dedicated, organic Intelligence, Surveillance, and Reconnaissance (ISR) capability delivering intelligence products directly to the tactical commander in real time. For the United States Navy (USN) RQ-21A will provide persistent RSTA support for tactical maneuver decisions and unit-level force defense/force protection for Navy Ships, Marine Corps land forces, Navy Expeditionary Combat Command forces, and Navy Special Warfare Units. This is a combined development program between Navy and Marine Corps. This submission is the Marine Corps portion of the program and has been coordinated with the Navy budget submission PE 0305234N RQ-21A BLACKJACK (formerly known as (STUAS)).

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	11.122	8.192	8.376	-	8.376
Current President's Budget	11.122	8.192	6.435	-	6.435
Total Adjustments	-	-	-1.941	-	-1.941
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
 Rate/Misc Adjustments 	-	-	-1.941	-	-1.941

Change Summary Explanation

The FY 2016 funding request was reduced by \$1.848M to account for the availability of prior year execution balances. Schedule: Due to ship availability, IOT&E extends through 4QFY14 thereby extending the correction of deficiencies and shifting the IOT&E final report into 1QFY15.

The decrease in funding from FY14 to FY15 is due to completion of major test periods. The decrease in funding from FY15 to FY16 reflects the re-phasing of funding to better align with revised program development schedule.

PE 0305239M: (U)RQ-21A

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2016 N	lavy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 7					R-1 Progra PE 030523		t (Number/ Q-21A	Name)	, ,	umber/Nan ALL (LEVEL	ne) _ 0) TACTIC	AL 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 (STUAL0)	47.125	11.122	8.192	6.435	-	6.435	9.608	9.393	8.853	9.035	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The RQ-21A program will provide persistent maritime and land-based tactical Reconnaissance, Surveillance and Target Acquisition (RSTA) data collection and dissemination capability to the Warfighter. For the United States Marine Corps (USMC), RQ-21A will provide the Marine Expeditionary Force and subordinate commands (divisions and regiments) with a dedicated, organic Intelligence, Surveillance, and Reconnaissance (ISR) capability delivering intelligence products directly to the tactical commander in real time. For the United States Navy (USN) RQ-21A will provide persistent RSTA support for tactical maneuver decisions and unit-level force defense/force protection for Navy Ships, Marine Corps land forces, Navy Expeditionary Combat Command forces, and Navy Special Warfare Units. This is a combined development program between Navy and Marine Corps. This submission is the Marine Corps portion of the program and has been coordinated with the Navy budget submission PE 0305234N RQ-21A BLACKJACK (formerly known as (Small Tactical Unmanned Aircraft System (STUAS)).

The RQ-21A system will continue to evolve addressing capability shortfalls, new requirements, obsolescence equipment, reliability, maintainability, and safety issues. Additional capabilities and/or system upgrades may include Navy Command and Control integration, Weapons Integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data link, and cyclic refresh of the Electro-optical/Infrared (EO/IR) camera. The decrease in funding from FY14 to FY15 is due to completion of major test periods. The decrease in funding from FY15 to FY16 reflects the re-phasing of funding to better align with ongoing program development.

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		6.200	4.640	2.699	-	2.699
	Articles:	-	-	-	-	-
FY 2014 Accomplishments:						
-Completed developmental land and sea based testing.						
-Completed land based IOT&E.						
-Initiated correction of deficiencies from IOT&E.						
-Continued software engineering and development for software block updates.						
FY 2015 Plans:						
-Complete ship based IOT&E.						
-Continue correction of deficiencies from IOT&E.						
-Continue software engineering and development for software block updates.						

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UN	CLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/I PE 0305239M / (U)RQ-21A	Name)	• •	umber/Nan A <i>LL (LEVEL</i>	,	CAL UAS
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities i	<u>n Each)</u>	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
-Initiate advanced heavy fuel engine development.						
FY 2016 Base Plans: -Continue correction of deficiencies from IOT&EContinue software engineering and development for software block updatesContinue advanced heavy fuel engine developmentInitiate cyclic technology refresh for EO/IR camera, Communications Relay Paldentification System.	ckage, and Automated					
FY 2016 OCO Plans: N/A						
Title: Engineering and Technical Services	Articles:	4.922 -	3.552	3.736	-	3.73
FY 2014 Accomplishments: -Continued Government Engineering Technical Support, Logistics Support, Technical Support, Contractor Support Services, Program Management Suptravel via NAWCAD Pax River in support of IOT&E.						
FY 2015 Plans: -Continue Government Engineering Technical Support, Logistics Support, Test Government Support, Contractor Support Services, Program Management Suptravel via NAWC Pax River in support of IOT&E, upgrades, correction of deficie development efforts.	port efforts, and program related					
FY 2016 Base Plans: -Continue Government Engineering Technical Support, Test and Evaluation, or Contractor Support Services, Program Management Support efforts, and program River in support of upgrades and technology refresh.						
FY 2016 OCO Plans: N/A						
Accomplishme	ts/Planned Programs Subtotals	11.122	8.192	6.435	-	6.43

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Exhibit R-2A, RDT&E Project Just	ification: PB	2016 Navy	,			,		,	Date: Fel	oruary 2015	
Appropriation/Budget Activity 1319 / 7					rogram Eler 05239M / (U	•	er/Name)	, ,	,	i me) EL 0) TACTI	CAL UAS
C. Other Program Funding Summ	ary (\$ in Milli	ons)									
	FY 2016	FY 2016					Cost To				
<u>Line Item</u>	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
• RDTEN/0305234N:	5.033	4.813	4.647	_	4.647	5.276	5.266	5.258	5.365	Continuing	Continuing
USN RQ-21A Blackjack										_	
• PMC/4737: STUAS/RQ-21A	66.007	69.315	84.916	_	84.916	84.034	78.779	76.675	83.332	Continuing	Continuing
• PMC/7000: STUAS/RQ-21A	4.950	5.093	4.111	-	4.111	5.869	5.760	5.454	5.567	Continuing	Continuing
Spares and Repair Parts											-
• APN/0444: <i>USN</i>	-	55.000	3.450	55.000	58.450	-	-	-	-	Continuing	Continuing
RQ-21A Blackjack											-

D. Acquisition Strategy

Remarks

The program office utilized a competitive acquisition approach to award the Engineering and Manufacturing Development effort to field a capability that meets threshold requirements. The Low Rate Initial Production test article was utilized to successfully complete Initial Operational Test and Evaluation and achieve Initial Operational Capability (IOC) in the fourth quarter of FY2014. Future upgrades and development shall be competitively sourced or procured via Government Laboratories with Insitu, the prime contractor, performing integration efforts as required.

E. Performance Metrics

Attainment of Full Rate Production (FRP), correction of Deficiencies from the IOT&E Report, and attainment of USMC Full Operational Capability (FOC) in accordance with the approved schedule.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

R-1 Program Element (Number/Name)

Date: February 2015

Appropriation/Budget Activity 1319 / 7

PE 0305239M / (U)RQ-21A

Project (Number/Name)
2298 / SMALL (LEVEL 0) TACTICAL UAS

(STUALO)

Product Developmen	roduct Development (\$ in Millions)			FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise	FY 2	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
Product Development/ Upgrades	C/BOA	Insitu, Inc : Bingen, WA	0.000	6.200	Jan 2014	4.640	Dec 2014	2.699	Jan 2016	-		2.699	Continuing	Continuing	Continuing
Prior Years Cumulative Total	C/FPIF	Insitu, Inc : Bingen, WA	28.492	-		-		-		-		-	-	28.492	28.492
	Subtotal 28.49		28.492	6.200		4.640		2.699		-		2.699	-	-	-

Remarks

Product development corresponds to R-2A Product Development.

Support (\$ in Million	upport (\$ in Millions)				2014	FY 2	2015		2016 ise	FY 2		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	WR	NAWCWD : China Lake, CA	0.000	-		1.118	Dec 2014	1.118	Dec 2015	-		1.118	Continuing	Continuing	Continuing
Government Engineering Support	WR	NAWCAD : Patuxent River, MD	0.000	-		1.312	Dec 2014	1.496	Dec 2015	-		1.496	Continuing	Continuing	Continuing
		Subtotal	0.000	-		2.430		2.614		-		2.614	-	-	-

Remarks

Support corresponds to R-2A Engineering and Technical Services.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	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
Test and Evaluation	MIPR	NAWCAD : Patuxent River, MD	0.000	-		0.650	Dec 2014	0.650	Dec 2015	-		0.650	Continuing	Continuing	Continuing
		Subtotal	0.000	-		0.650		0.650		-		0.650	-	-	-

Remarks

Test and Evaluation corresponds to R-2A Engineering and Technical Services.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

1319 / 7 PE 0305239M / (U)RQ-21A 2298 / SM

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

Test and Evaluation (\$ in Milli	ons)		FY 2	2014	FY 2	2015	_	2016 ise		2016 CO	FY 2016 Total			
	Contract														Target
	Method	Performing	Prior		Award		Award		Award		Award		Cost To	Total	Value of
Cost Category Item	& Type	Activity & Location	Years	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Cost	Complete	Cost	Contract

FOT&E planned in FY16 and out to provide test periods for product updates and cyclic technology refresh.

Management Service	anagement Services (\$ in Millions)				2014	FY 2	2015	FY 2 Ba		FY 2	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 of Contract
STUAS	Various	NAWCAD : Patuxent River, MD	18.633	4.922	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
Contractor Engineering Support	MIPR	DTIC : Ft. Belvoir, VA	0.000	-		0.236	Mar 2015	0.236	Mar 2016	-		0.236	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Bowhead : Patuxent River, MD	0.000	-		0.236	Jan 2015	0.236	Jan 2016	-		0.236	Continuing	Continuing	Continuing
	Subtotal 18.6			4.922		0.472		0.472		-		0.472	-	-	-

Remarks

Management Services corresponds to R-2A Engineering and Technical Services.

									Target
	Prior			FY 2016	FY 2016	FY 2016	Cost To	Total	Value of
	Years	FY 2014	FY 201	15 Base	oco	Total	Complete	Cost	Contract
Project Cost Totals	47.125	11.122	8.192	6.435	-	6.435	-	-	-

Remarks

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RQ-21A UNCLASSIFIED
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R-1 Line #224

xhibit R-4, RDT&E Schedule	Profi	le: PB	2016	Nav	y				_											Da	ate: Fe	ebruar	y 20	15
Appropriation/Budget Activity 1319 / 7						PE 0305239M / (U)RQ-21A								229	Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)									
RQ-21A	10	FY 20	014	40	10	FY:	2015	40	1 10	FY 20		40		Y 201			Y 20			/ 20°		FY 2	020 20pop	
Acquisition Milestones Milestones:						PCA	USMC IOC	FRPD																
Test and Evaluation Developmental Test	IT-C1						•													+				-
Operational Evaluation	^	IOT&E			IOT&E Ship	IOT&E Rpt A BLRIP Rpt		FO	T&E		FO	T&E		F	OT&E					-	FOT&E			
Logistics Evaluation			Log Demo	Maint Demo		^																		
Production Milestones Contract Awards	LRIP II (1 USMC)		ICS I		LRIP III (3 USMC)		LRIP IV (3 USMC/3 USN) •		FRP I (4 USMC/ 3 USN)		ICS III		FRP II (4 USMC)		ICS IV	FRP III (4 USMC)			FRP IV (5 USMC)		I .	FRP V (5 USMC)		
Deliveries	LRIP I (1 USMC)		LRIP II (1 USMC	,			•	LRIP III (3 USMC)	LRIP IV (3 USMC)	LRIP	•	FRP I (4 JSMC)	FRP I (3 USN)		FRP II (4 USMC)			FRP III (4 USMC)		<u> </u>	FRP IV (5 USMC)			

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy	Date: February 2015		
1	,	, ,	umber/Name) ALL (LEVEL 0) TACTICAL UAS

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
RQ-21A					
Acquisition Milestones: Milestones:: USMC Initial Operational Capability (IOC)	3	2015	3	2015	
Acquisition Milestones: Milestones:: Full Rate Production Decision	4	2015	4	2015	
Acquisition Milestones: Milestones:: Physical Configuration Audit	2	2015	2	2015	
Test and Evaluation: Developmental Test: Initial Testing - C1	1	2014	1	2014	
Test and Evaluation: Developmental Test: Operational Test Readiness Review (OTRR)	1	2014	1	2014	
Test and Evaluation: Operational Evaluation: Initial Operational Test & Evaluation (IOT&E)	2	2014	2	2014	
Test and Evaluation: Operational Evaluation: Initial Operational Test & Evaluation (IOT&E) Ship	1	2015	1	2015	
Test and Evaluation: Operational Evaluation: Follow-On Test and Evaluation 1	4	2015	1	2016	
Test and Evaluation: Operational Evaluation: Follow-On Test and Evaluation 2	3	2016	4	2016	
Test and Evaluation: Operational Evaluation: Follow-On Test and Evaluation 3	3	2017	4	2017	
Test and Evaluation: Operational Evaluation: Follow-On Test and Evaluation 4	3	2019	4	2019	
Test and Evaluation: Operational Evaluation: IOT&E Report	2	2015	2	2015	
Test and Evaluation: Operational Evaluation: Beyond LRIP Report (BLRIP)	2	2015	2	2015	
Test and Evaluation: Logistics Evaluation: Logistics Demo LRIP 1	3	2014	3	2014	
Test and Evaluation: Logistics Evaluation: Maintenance Demo	4	2014	4	2014	
Production Milestones: Contract Awards: LRIP Lot 2	1	2014	1	2014	
Production Milestones: Contract Awards: LRIP Lot 3	1	2015	1	2015	
Production Milestones: Contract Awards: LRIP Lot 4	3	2015	3	2015	
Production Milestones: Contract Awards: Full-Rate Production Contract Award 1	1	2016	1	2016	

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy Date: February 2015 Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name) 1319 / 7 PE 0305239M / (U)RQ-21A 2298 I SMALL (LEVEL O) TACTICAL UAS (STUALO)

	Start		En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: Full-Rate Production Contract Award 2	1	2017	1	2017
Production Milestones: Contract Awards: Full-Rate Production Contract Award 3	1	2018	1	2018
Production Milestones: Contract Awards: Full-Rated Production Contract Award 4	1	2019	1	2019
Production Milestones: Contract Awards: Full-Rate Production Contract Award 5	1	2020	1	2020
Production Milestones: Contract Awards: ICS Contract Award 1	3	2014	3	2014
Production Milestones: Contract Awards: ICS Contract Award 2	3	2015	3	2015
Production Milestones: Contract Awards: ICS Contract Award 3	3	2016	3	2016
Production Milestones: Contract Awards: ICS Contract Award 4	4	2017	4	2017
Deliveries: LRIP Lot 1	1	2014	1	2014
Deliveries: LRIP Lot 2	3	2014	3	2014
Deliveries: LRIP Lot 3	4	2015	4	2015
Deliveries: LRIP Lot 4 USMC	1	2016	1	2016
Deliveries: LRIP Lot 4 USN	2	2016	2	2016
Deliveries: FRP Lot 1 USMC	4	2016	4	2016
Deliveries: FRP Lot 1 USN	1	2017	1	2017
Deliveries: FRP Lot 2	4	2017	4	2017
Deliveries: FRP Lot 3	4	2018	4	2018
Deliveries: FRP Lot 4	4	2019	4	2019

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