Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

ATUDE

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0305239M: (U)RQ-21A

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	24.201	22.343	-	22.343	11.158	9.289	9.478	9.649	Continuing	Continuing
2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	-	24.201	22.343	-	22.343	11.158	9.289	9.478	9.649	Continuing	Continuing

### Note

The Tier II program is in PE 0305234M, Project C2272 in FY10. The Tier II program is in PE 0305234M, Project C2298 in FY11. The Tier II program was realigned to PE 0305239M, Project C2298 in FY12 and out. The Navy PE is 0305234N.

### A. Mission Description and Budget Item Justification

TIER II - This is a combined Navy (PE 0305204N-TCS) and Marine Corps (PE 0305239M) budget submission. The Tier II/UAS will provide persistent, Intelligence, Surveillance, and Reconnaissance (ISR) support for tactical level maneuver decisions and unit level force defense/force protection for Navy ships and Marine Corps land forces. This system will fill the ISR capability shortfalls identified by the Navy Small Tactical Unmanned Aircraft System (STUAS) and Marine Corps Tier II UAS efforts. Consisting of five air vehicles, two ground control stations, multiple payloads, and associated launch, recovery and support equipment, this system will support the Navy missions including building the Recognized Maritime Picture, Maritime Security Operations, Maritime Interdiction Operations, and support of Navy units operating from sea/shore and the Marine Corps close range (<50 nautical miles (nm)) UAS enabling enhanced decision-making and improved integration with ground schemes of maneuver. This submission is the Marine Corps portion of the program and has been coordinated with the Navy budget submission PE 0305204N.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	26.301	22.343	-	22.343
Current President's Budget	-	24.201	22.343	-	22.343
Total Adjustments	-	-2.100	-	-	-
Congressional General Reductions	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-2.100			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Rate/Misc Adjustments	_	_	_	-	-

# **Change Summary Explanation**

Technical: The FY12 to FY13 decrease reflects the Small Tactical Unmanned Aircraft System (STUAS) TIER II (RQ-21A) entry into MS C phase in FY 13.

PE 0305239M: (U)RQ-21A

APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Navy			I <b>OMENCLA</b> 1 9M: <i>(U)RQ-2</i>			PROJECT 2298: SMAI (STUALO)	LL (LEVEL 0	) TACTICAL	UAS
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	-	24.201	22.343	-	22.343	11.158	9.289	9.478	9.649	Continuing	Continuing

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#### **Note**

Quantity of RDT&E Articles

This project moved from PE 0305234M to 0305239M starting in FY12.

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### A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

The Small Tactical Unmanned Aircraft System (STUAS) is a combined Navy and Marine Corps program that provides Persistent Intelligence, Surveillance, and Reconnaissance/Target Acquisition support for tactical level maneuver decisions and unit level force defense/force protection for Naval amphibious assault ships (multi-ship classes) and Navy and Marine land forces. Costs are shared between the two services. This system will support Naval Missions such as building the Recognized Maritime Picture, Maritime Security Operations, Maritime Interdiction Operations, and provide support for Naval Units operating from sea/shore in Overseas Contingency Operations.

A STUAS system (Land-based or Ship-based) consists of five (5) air vehicles (AV), Ground Control Station(s) (GCS), Launch and Recovery equipment, and associated support equipment.

The STUAS system will continue to evolve and upgrade capabilities to satisfy capabilities shortfalls, new requirements, and reliability, maintainability, and safety issues. Upgraded capabilities may include Navy Command and Control integration, Signals Intelligence and Synthetic Aperture Radar payloads, weapons integration, Heavy Fuel Engine, Laser Designator and Digital Common Data Link.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: STUAS: Product Development	-	11.400	11.801
Articles:		0	0
FY 2012 Plans: Continue the Engineering and Manufacturing Development efforts for the STUAS UAS program. Efforts include continued Technical and Operational Evaluation. Continue support for Government Engineering Technical Support, Logistics Support, Test and Evaluation, Contractor Support Services, Program Management Support and program related travel.			
FY 2013 Plans: Complete the Engineering and Manufacturing Development efforts for the STUAS UAS program. Procurement of two (2) LRIP systems.			
Title: STUAS: Program Management	-	12.801	10.542

PE 0305239M: (U)RQ-21A

R-1 Line #225

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**DATE:** February 2012

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0305239M: (U)RQ-21A	2298: SMA	LL (LEVEL 0) TACTICAL UAS
BA 7: Operational Systems Development		(STUALO)	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Articles:		0	0
FY 2012 Plans: Provides for the Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support, and program related travel via NAWC Pax River.			
FY 2013 Plans: Continue support for Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support, and program related travel via NAWC Pax River.			
Accomplishments/Planned Programs Subtotals	-	24.201	22.343

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
APN/0444: NAVY STUAS/	28.200	0.000	9.593	0.000	9.593	9.685	9.840	0.000	0.000	Continuing	Continuing
RQ-21A											
APN/0605: NAVY STUAS/	0.000	0.925	0.896	0.000	0.896	0.912	0.078	0.079	0.080	Continuing	Continuing
RQ-21A Spares and Repair Parts											
• PMC/4737: STUAS/RQ-21A	0.000	0.000	27.619	0.000	27.619	71.670	76.686	79.950	81.550	Continuing	Continuing
• PMC/4757: STUAS/RQ-21A	10.165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.165
• RDTEN/0305234M: STUAS/	26.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.076
RQ-21A											
• RDTEN/0305234N: <i>NAVY</i>	12.645	21.387	9.734	0.000	9.734	5.044	5.139	5.211	5.322	Continuing	Continuing
STUAS/RQ-21A											

# D. Acquisition Strategy

The program office has utilized a competitive acquisition approach for award of the Engineering and Manufacturing Development effort to field a capability which meets threshold requirements. Utilize LRIP test articles to successfully complete IOT&E and achieve Initial Operational Capability (IOC) and Full Rate Production.

# **E. Performance Metrics**

Attainment of STUAS IOC in accordance with approved schedule.

PE 0305239M: (U)RQ-21A

Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305239M: (U)RQ-21A

PROJECT

2298: SMALL (LEVEL 0) TACTICAL UAS

**DATE:** February 2012

(STUALO)

Product Development (	\$ in Millio	ns)		FY 2	2012		2013 ise	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
STUAS	C/FPIF	Insitu, Inc:Bingen, WA	-	11.400	Nov 2011	11.801	Nov 2012	-		11.801	0.000	23.201	
		Subtotal	-	11.400		11.801		-		11.801	0.000	23.201	

#### Remarks

Funding procures two (2) LRIP systems.

Management Services (	\$ in Millio	ons)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	-	12.801	Dec 2011	10.542	Dec 2012	-		10.542	0.000	23.343	
		Subtotal	-	12.801		10.542		-		10.542	0.000	23.343	

#### Remarks

Funding will be provided to NAWCAD for development of the core STUAS program requirements established at MS B.

	Total Prior Years Cost	FY 2	2012	FY 2	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	24.201		22.343	-		22.343	0.000	46.544	

#### Remarks

PE 0305239M: *(U)RQ-21A* Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0305239M: (U)RQ-21A	PROJECT 2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)

PE 0305239M: (U)RQ-21A

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0305239M: (U)RQ-21A 2298: SMALL (LEVEL 0) TACTICAL UAS

BA 7: Operational Systems Development (STUAL0)

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 2298				
Acquisition Milestones: Milestone C	2	2013	2	2013
Acquisition Milestones: Milestones: Marine Corps IOC	2	2014	2	2014
Acquisition Milestones: Milestones:: USN IOC Landing Ship, Dock	2	2014	2	2014
Acquisition Milestones: Milestones:: Full Rate Production Decision Review	2	2014	2	2014
System Development: Hardware and Software Development:: Engineering and Manufacturing Development	1	2011	1	2013
System Development: Hardware and Software Development:: Demo System	1	2011	1	2011
System Development: Hardware and Software Development:: Engineering Design Model (EDM) 1	4	2012	4	2012
System Development: Hardware and Software Development:: EDM 2	1	2013	1	2013
System Development: Reviews:: System Requirements Review	1	2011	1	2011
System Development: Reviews:: Critical Design Review	1	2012	1	2012
Test & Evaluation: Technical Evaluation:: IT-B2	4	2011	4	2012
Test & Evaluation: Technical Evaluation:: IT-B1	1	2011	4	2011
Test & Evaluation: Operational Evaluation:: Operational Test and Readiness Review (OTRR) OA-1	1	2011	1	2011
Test & Evaluation: Operational Evaluation:: OTRR OA-2	1	2013	1	2013
Test & Evaluation: Operational Evaluation:: Initial Operational Test & Evaluation (IOT&E)	4	2013	1	2014
Test & Evaluation: Operational Evaluation:: IOT&E Report	1	2014	1	2014
Test & Evaluation: Operational Evaluation:: Follow On Test and Evaluation	4	2014	4	2017

PE 0305239M: (U)RQ-21A

Navy

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

PROJECT

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

PE 0305239M: (U)RQ-21A

2298: SMALL (LEVEL 0) TACTICAL UAS

(STUALO)

	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards:: Low Rate Initial Production (LRIP) CA APN-4	2	2013	2	2013
Production Milestones: Contract Awards:: Full Rate Production (FRP) Contract Award	3	2014	3	2014
Deliveries:: EOC Delivery APN-4	3	2012	3	2012
Deliveries:: EOC Delivery APN-4 (2)	4	2012	4	2012
Deliveries:: LRIP Delviery APN-4	4	2013	4	2013
Deliveries:: FRP Delivery 1	2	2015	2	2015
Deliveries:: FRP Delivery 2	2	2016	2	2016
Deliveries:: USMC RDT&E LRIP Delivery	3	2013	3	2013
Deliveries:: USMC PMC LRIP Delivery	3	2013	3	2013
Deliveries:: USMC PMC FRP Delivery 1	4	2014	4	2014
Deliveries:: USMC PMC FRP Delivery 2	4	2015	4	2015
Deliveries:: USMC PMC FRP Delivery 3	4	2016	4	2016
Deliveries:: USMC PMC FRP Delivery 4	4	2017	4	2017