

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
---	-----------------------

Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
1319: <i>Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development</i>	PE 0305239M I (U)RQ-21A											
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	66.029	6.251	9.497	8.899	-	8.899	6.000	6.000	6.000	6.000	Continuing	Continuing
2298: <i>SMALL (LEVEL 0) TACTICAL UAS (STUALO)</i>	66.029	6.251	9.497	8.899	-	8.899	0.000	0.000	0.000	0.000	0.000	90.676
3192: <i>RQ-21 BLACKJACK</i>	0.000	0.000	0.000	0.000	-	0.000	6.000	6.000	6.000	6.000	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 under PE 0305234N RQ-21A BLACKJACK.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	6.251	9.497	9.295	-	9.295
Current President's Budget	6.251	9.497	8.899	-	8.899
Total Adjustments	0.000	0.000	-0.396	-	-0.396
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	-0.464	-	-0.464
• Rate/Misc Adjustments	0.000	0.000	0.068	-	0.068

Change Summary Explanation

The FY 2018 funding request was reduced by \$0.464M to account for the availability of prior year execution balances.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305239M / (U)RQ-21A				Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
2298: SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	66.029	6.251	9.497	8.899	-	8.899	0.000	0.000	0.000	0.000	0.000	90.676
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

In FY19 this effort will move to PE 0305239M PU 3192 (RQ-21 Blackjack).

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.

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, Short Wave Infrared, Laser Designator, Frequency Agile Communications Relay, Digital Common Data link, and cyclic refresh of the Electro-optical/Infrared (EO/IR) camera.

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

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Product Development	5.332	8.514	7.763	0.000	7.763
Articles:	-	-	-	-	-
FY 2016 Accomplishments: -Continued correction of deficiencies from IOT&E, including ALTICAM (product name) turret upgrade. -Continued software engineering and development for software block updates. -Continued advanced heavy fuel engine development. -Initiated cyclic technology refresh for EO/IR camera. -Initiated product improvement program to assess and address improvements to the fuel tank, maximum gross takeoff weight, recovery system, avionics module, and other components.					
FY 2017 Plans:					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305239M / (U)RQ-21A		Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<div>-Continue correction of deficiencies from IOT&E.</div> <div>-Continue software engineering and development for software block updates.</div> <div>-Continue product improvement program to assess and address improvements to the fuel tank, maximum gross takeoff weight, recovery system, avionics module, and other components.</div> <div>-Initiate Short Wave Infrared and Laser Designator Development.</div> <div>-Complete advanced heavy fuel engine development.</div> <div>-Complete cyclic technology refresh for EO/IR camera and associated ECP.</div> <div>FY 2018 Base Plans:</div> <div>-Continue correction of deficiencies from IOT&E.</div> <div>-Continue software engineering and development for software block updates.</div> <div>-Continue product improve program to assess and address improvements to the fuel tank, maximum gross takeoff weight, recovery system, avionics module, and other components.</div> <div>-Initiate assessment of block upgrade plan for the RQ-21 system.</div> <div>-Complete Short Wave Infrared and Laser Designator Development and associated ECP.</div> <div>FY 2018 OCO Plans:</div> <div>N/A</div>						
<div>Title: Support</div> <div>Articles:</div> <div>FY 2016 Accomplishments:</div> <div>-Continue Government Engineering Technical Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support efforts, and program related travel via NAWCAD Pax River in support of upgrades and technology refresh.</div> <div>FY 2017 Plans:</div> <div>-Continue Government Engineering Technical Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support efforts, and program related travel via NAWCAD Pax River in support of upgrades and technology refresh.</div> <div>FY 2018 Base Plans:</div>		0.628 -	0.628 -	0.629 -	0.000 -	0.629 -

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305239M / (U)RQ-21A		Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
-Continue Government Engineering Technical Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support efforts, and program related travel via NAWCAD Pax River in support of upgrades and technology refresh. FY 2018 OCO Plans: N/A					
Title: Test and Evaluation FY 2016 Accomplishments: -Initiate follow-on test and evaluation for Software build 7.5.2 FY 2017 Plans: -Initiate follow-on test and evaluation for cyclic turret refresh. -Initiate follow-on test and evaluation for recovery system upgrades. FY 2018 Base Plans: -Initiate follow-on test and evaluation for Short Wave Infrared (SWIR). -Initiate follow-on test and evaluation for Laser Designator (LD). -Initiate follow-on test and evaluation for Advanced Engine. -Initiate follow-on test and evaluation for software build 7.X.X. FY 2018 OCO Plans: N/A	0.291 -	0.355 -	0.507 -	0.000 -	0.507 -
Articles:					
Accomplishments/Planned Programs Subtotals	6.251	9.497	8.899	0.000	8.899

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

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• RDTEN/0305234N: (U)SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	4.647	5.071	4.835	-	4.835	5.551	5.293	5.403	5.509	Continuing	Continuing
• PMC/4737: RQ-21 UAS	77.916	89.177	77.841	8.400	86.241	0.000	0.000	0.000	0.000	0.000	402.638
• PMC/7000: Spares and Repair Parts	4.070	5.812	11.027	-	11.027	0.000	0.000	0.000	0.000	0.000	37.400

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305239M / (U)RQ-21A				Project (Number/Name) 2298 / SMALL (LEVEL 0) TACTICAL UAS (STUAL0)			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2018</u>	<u>FY 2018</u>	<u>FY 2018</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Complete</u>	<u>Total Cost</u>
• APN/0444: STUASLO	57.298	70.000	0.880	3.900	4.780	1.070	0.000	0.000	0.000	0.000	206.348
Remarks											
D. Acquisition Strategy											
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 (LRIP) test article was utilized to successfully complete Initial Operational Test and Evaluation. LRIP production continues through FY16 to demonstrate production line maturity. Marine Corps Initial Operational Capability was achieved in 2Q FY16 with entry into full rate production decision occurring in 4Q FY16. Future payload 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 Initial Operational Capability (IOC) and Full Operational Capability (FOC) in accordance with the approved schedule.											

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305239M / (U)RQ-21A				Project (Number/Name) 3192 / RQ-21 BLACKJACK			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3192: RQ-21 BLACKJACK	0.000	0.000	0.000	0.000	-	0.000	6.000	6.000	6.000	6.000	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.

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, Short Wave Infrared, Laser Designator, Frequency Agile Communications Relay, Digital Common Data link, and cyclic refresh of the Electro-optical/Infrared (EO/IR) camera.