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

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development					PE 0305234N I (U)SMALL (LEVEL 0) TACTICAL UAS (STUASLO)							
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	69.322	4.647	5.071	4.835	-	4.835	5.551	5.293	5.403	5.509	Continuing	Continuing
3192: RQ-21 BLACKJACK	69.322	4.647	5.071	4.835	-	4.835	5.551	5.293	5.403	5.509	Continuing	Continuing

A. Mission Description and Budget Item Justification

The RQ-21A BLACKJACK (formerly known as The Small Tactical Unmanned Aircraft System (STUAS)) is a combined United States Navy (USN) and United States Marine Corps (USMC) program that provides persistent maritime and land-based tactical 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. 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. This submission is the USNs portion of the program and has been coordinated with the USMC budget submission PE 0305239M (RQ-21A).

The RQ-21A BLACKJACK 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, Weapons Integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data Link, and cyclic refresh of the Electro-Optical/Infrared camera. RQ-21A BLACKJACK will also continue to expand its shipboard capability across new ship classes.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	4.647	5.071	5.218	-	5.218
Current President's Budget	4.647	5.071	4.835	-	4.835
Total Adjustments	0.000	0.000	-0.383	-	-0.383
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	-0.364	-	-0.364
• Rate/Misc Adjustments	0.000	0.000	-0.019	-	-0.019

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Change Summary Explanation The FY 2018 funding request was reduced by \$0.364M to account for the availability of prior year execution balances.		

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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 0305234N / (U)SMALL (LEVEL 0) TACTICAL UAS (STUASL0)				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	69.322	4.647	5.071	4.835	-	4.835	5.551	5.293	5.403	5.509	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The RQ-21A BLACKJACK (formerly known as The Small Tactical Unmanned Aircraft System (STUAS)) is a combined United States Navy (USN) and United States Marine Corps (USMC) program that provides persistent maritime and land-based tactical 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. 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. This submission is the USNs portion of the program and has been coordinated with the USMC budget submission PE 0305239M (RQ-21A).												
The RQ-21A BLACKJACK 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, Weapons Integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data Link, and cyclic refresh of the Electro-Optical/Infrared camera. RQ-21A BLACKJACK will also continue to expand its shipboard capability across new ship classes.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Upgrade Efforts Articles:								1.961	1.833	1.523	0.000	1.523
								-	-	-	-	-
Description: Provide Upgrade Efforts												
FY 2016 Accomplishments: RQ-21A Blackjack established a Corrective Action Program to continue the correction of deficiencies based on the final FY15 IOT&E Report, and the deficiencies identified during continuing developmental testing. The heavy fuel engine integration executed its first technical review. As well as, the cyclic refresh of the Electro-Optic/Infrared camera upgrade work has begun and increased functionality of the communications relay package was demonstrated. Additionally, turret upgrade was initiated.												
FY 2017 Plans: RQ-21A Blackjack will continue correction of deficiencies for the IOT&E Report. The program will continue software engineering and development for block software updates. The program will complete heavy fuel engine												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
development. Continue other upgrades which includes the cyclic refresh of the Electro-Optical/Infrared camera, associated turret system, communications relay package, and automated identification system. FY 2018 Base Plans: RQ-21A Blackjack Corrective Action Program will continue the correction of deficiencies from the IOT&E Report. The program will continue software engineering and development for block software updates. The program will continue to assess improvements to the fuel tank, maximum gross takeoff weight, recovery system, avionics module, and other components. Initiate assessment of block upgrade plan for the RQ-21A system. FY 2018 OCO Plans: N/A						
Title: Engineering and Technical Services <div>Articles:</div> Description: Provides for the Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support, Program related travel in support of the upgrade/payload efforts. FY 2016 Accomplishments: Provide support for the Government Engineering Technical Support, Logistics Support, Test and Evaluation, Other Government Support, Contract Support Services, Program Management Support, and program related travel in support of correction of deficiencies and upgrade efforts. FY 2017 Plans: Provide support for Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government support, Contractor Services support, Program Management Support, and program related travel in support of upgrades and correction of deficiencies. FY17 includes additional funding for Government Engineering technical support to perform and evaluate correction of deficiencies completed by the Government and Prime contractor based on the Initial Operational Test and Evaluation report released in 3QFY15. FY 2018 Base Plans: Continue Government Engineering Technical Support, Test and Evaluation, other Government Support, Contract Support Services, Program Management Support, and program related travel in support of correction of deficiencies and upgrade efforts FY 2018 OCO Plans:		2.686 -	3.238 -	3.312 -	0.000 -	3.312 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A											
Accomplishments/Planned Programs Subtotals							4.647	5.071	4.835	0.000	4.835
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
• 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
• RDTEN/0305239M: (U)RQ-21A	6.251	9.497	8.899	-	8.899	6.000	6.000	6.000	6.000	Continuing	Continuing
• PMC/4737: STUAS/RQ-21A	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	37.401
Remarks											
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 that meets threshold requirements. Low Rate Initial Production (LRIP) test article was utilized to successfully complete Initial Operational Test and Evaluation (IOT&E). LRIP continues through FY16 to demonstrate production line maturity. 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, correction of deficiencies from the IOT&E Report, and attainment of United States Marine Corps and United States Navy Full Operational Capability in accordance with the approved schedule.											