

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305421N I (U)RQ-4 Modernization							
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	30.000	119.892	181.266	229.404	-	229.404	176.195	123.890	89.740	71.544	0.000	1,021.931
2939: RQ-4 Modernization	30.000	119.892	181.266	229.404	-	229.404	176.195	123.890	89.740	71.544	0.000	1,021.931
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 373												
Note MQ-4C Triton RDTE funding for modernization was segregated into a new program element (from PE 0305220N to PE 0305421N) for increased transparency.												
A. Mission Description and Budget Item Justification MQ-4C Triton Unmanned Air System (UAS). The popular name Triton was approved for the MQ-4C UAS in June 2012, designating the RQ-4 Broad Area Maritime Surveillance (BAMS) UAS as the MQ-4C Triton. The MQ-4C Triton is a high altitude-long endurance UAS designed to provide Fleet and combatant commanders with persistent maritime Intelligence, Surveillance and Reconnaissance (ISR) of nearly all the world's high-density sea-lanes, littorals, and areas of national interest. Teamed with its manned-capability counterpart, the P-8A, Triton will be a key component of the Navy's family of systems to achieve maritime domain awareness. MQ-4C Triton will seek to leverage Maritime Patrol and Reconnaissance Force manpower, training and maintenance efficiencies. The MQ-4C Triton features sensors designed to provide near worldwide coverage through a network of five orbits inside and outside continental United States, with sufficient air vehicles to remain airborne for 24 hours a day, 7 days a week, out to ranges of 2000 nautical miles. Onboard sensors will provide detection, classification, tracking and identification of maritime targets and include maritime radar, electro-optical/infra-red and Electronic Support Measures systems. Additionally, the MQ-4C will have a communications relay capability designed to link dispersed forces in the theater of operations and serve as a node in the Navy's FORCEnet strategy. Tactical-level data analysis will occur in real-time at shore-based mission control sites connected to the air vehicle via satellite communications. Further intelligence exploitation can be conducted at Fleet shore-based sites or aboard aircraft carriers and other ships. The MQ-4C Triton UAS will implement phased capability upgrades within the ongoing acquisition program to pace capability with rapidly evolving technologies and threats to ensure the Navy maintains persistent ISR dominance through the system's lifecycle, and to support the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. System upgrades will include Multi-Intelligence capabilities, Counter Electronic Attack upgrades, a more robust electronic support capability and continue improvements to baseline mission system payloads. MQ-4C will play a significant role in the Sea Shield and FORCEnet pillars of Sea Power 21. In its Sea Shield role, the system will rely on its key attribute of persistence to provide the supported combatant command or fleet commander with unparalleled situational awareness of the maritime battle space as it develops and sustains the common operational tactical picture. The system will also serve as a Fleet response plan enabler, while acting as a trip wire for intelligence preparation of the												

UNCLASSIFIED

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

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305421N I (U)RQ-4 Modernization
---	---

environment. Additionally, Triton Unmanned Air System will be a FORCEnet enabler and relay platform, directly connected to both the Global Information Grid and the Distributed Common Ground System-Navy information backbone.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	129.892	181.266	166.651	-	166.651
Current President's Budget	119.892	181.266	229.404	-	229.404
Total Adjustments	-10.000	0.000	62.753	-	62.753
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-10.000	0.000			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	62.500	-	62.500
• Rate/Misc Adjustments	0.000	0.000	0.253	-	0.253

Change Summary Explanation

The Triton program was revised to align key program events and funding (\$62.5M) with the development of the Multi-INT capability upgrade in order to continue to support the Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR&T) Transition Plan. Key Performance Parameters and Key System Attributes were not affected and capabilities essential to FY11 National Defense Authorization Act compliance is prioritized. To preserve the MISR&T transition plan, the Navy is prioritizing remaining work and adjusting the Triton fielding plan by:

- 1) Truncating the Triton Baseline program to deliver a safe, stable, and effective system that establishes the foundation for Triton Multi-INT development; and provides an early operational capability to facilitate Fleet introduction and learning in FY18.
- 2) Retrofitting low-rate initial production (LRIP) lot 1 and 2 air vehicles (Baseline) to a Multi-INT configuration upon delivery. Retrofit of LRIP lot 1 and 2 increases Triton Multi-INT capacity from three to five air vehicles by the end of FY20.
- 3) Deploying a Triton Multi-INT early operational capability in FY20.
- 4) Deferring initial operational test and evaluation and initial operational capability to the Multi-INT configuration in FY20/21.

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 0305421N / (U)RQ-4 Modernization				Project (Number/Name) 2939 / RQ-4 Modernization			
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
2939: RQ-4 Modernization	30.000	119.892	181.266	229.404	-	229.404	176.195	123.890	89.740	71.544	0.000	1,021.931
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 373												
A. Mission Description and Budget Item Justification												
MQ-4C Triton Unmanned Air System (UAS). The MQ-4C Triton is a high altitude-long endurance UAS designed to provide Fleet and combatant commanders with persistent maritime Intelligence, Surveillance and Reconnaissance (ISR) of nearly all the world's high-density sea-lanes, littorals, and areas of national interest. Teamed with its manned-capability counterpart, the P-8A, Triton will be a key component of the Navy's family of systems to achieve maritime domain awareness. MQ-4C Triton will seek to leverage Maritime Patrol and Reconnaissance Force manpower, training and maintenance efficiencies.												
The MQ-4C Triton features sensors designed to provide near worldwide coverage through a network of five orbits inside and outside continental United States, with sufficient air vehicles to remain airborne for 24 hours a day, 7 days a week, out to ranges of 2000 nautical miles. Onboard sensors will provide detection, classification, tracking and identification of maritime targets and include maritime radar, electro-optical/infra-red and Electronic Support Measures systems. Additionally, the MQ-4C will have a communications relay capability designed to link dispersed forces in the theater of operations and serve as a node in the Navy's FORCEnet strategy. Tactical-level data analysis will occur in real-time at shore-based mission control sites connected to the air vehicle via satellite communications. Further intelligence exploitation can be conducted at Fleet shore-based sites or aboard aircraft carriers and other ships.												
The MQ-4C Triton UAS will implement phased capability upgrades within the ongoing acquisition program to pace capability with rapidly evolving technologies and threats to ensure the Navy maintains persistent ISR dominance through the system's lifecycle, and to support the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. System upgrades will include Multi-Intelligence capabilities, Counter Electronic Attack upgrades, a more robust electronic support capability and continue improvements to baseline mission system payloads.												
MQ-4C will play a significant role in the Sea Shield and FORCEnet pillars of Sea Power 21. In its Sea Shield role, the system will rely on its key attribute of persistence to provide the supported combatant command or fleet commander with unparalleled situational awareness of the maritime battle space as it develops and sustains the common operational tactical picture. The system will also serve as a Fleet response plan enabler, while acting as a trip wire for intelligence preparation of the environment. Additionally, Triton UAS will be a FORCEnet enabler and relay platform, directly connected to both the Global Information Grid and the Distributed Common Ground System-Navy information backbone.												
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							112.871	162.557	215.359	0.000	215.359	
Articles:							-	-	-	-	-	

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 0305421N / (U)RQ-4 Modernization		Project (Number/Name) 2939 / RQ-4 Modernization		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>Description: MQ-4C Triton Unmanned Air System (UAS) modernization effort for incorporation of phased capability upgrades. The prime contractor is responsible for integration of upgrades into the Triton UAS including associated management, engineering and logistics activities. Capability upgrades will also include development of system payloads directly with original equipment manufacturers.</p> <p>FY 2016 Accomplishments: Funding continues development of phased capability upgrades, including Multi-Intelligence capabilities in support of the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. Funding includes Sense and Avoid radar development and acquisition of development assets for capability upgrades including electro-optical/infra-red, Signals Intelligence (SIGINT) High Band and SIGINT Low Band systems.</p> <p>FY 2017 Plans: Funding increase from FY16 to FY17 supports higher levels of development effort for the integration of modernization capabilities as the program approaches Critical Design Review for Multi-INT. FY17 continues development of phased capability upgrades, including Multi-Intelligence capabilities in support of the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. Funding includes Sense and Avoid radar development, Airborne Mission Processor (AMP) development and acquisition of development assets for capability upgrades including electro-optical/infra-red, SIGINT High Band and SIGINT Low Band systems.</p> <p>FY 2018 Base Plans: Funding increase from FY17 to FY18 supports higher levels of development effort for the integration of modernization capabilities. FY18 continues development of phased capability upgrades as the program initiates test asset modification and software development, including Multi-Intelligence capabilities in support of the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. Funding includes Sense and Avoid radar development, AMP development and integration of development assets for capability upgrades including electro-optical/infra-red, SIGINT High Band and SIGINT Low Band systems.</p> <p>FY 2018 OCO Plans: N/A</p>						
<p>Title: ILS, Support, Studies & Analysis</p> <p>Articles:</p> <p>Description: Integrated Logistics Support, Studies and Analysis.</p> <p>FY 2016 Accomplishments:</p>		2.908 -	3.066 -	3.127 -	0.000 -	3.127 -

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 0305421N / (U)RQ-4 Modernization		Project (Number/Name) 2939 / RQ-4 Modernization		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Integrated logistics support, technical engineering services, sensor risk reduction, logistics supportability analyses and environmental planning, modeling and simulation, development of manpower and basing assessments, and development of technical data to support fielding of the MQ-4C Triton Unmanned Air System (UAS) capabilities. FY 2017 Plans: Funding increases from FY16 to FY17 support the increased effort in the development and integration of logistics and product support considerations for Triton's modernization upgrade. Efforts include integrated logistics support, technical engineering services, sensor reliability and maintainability risk reduction, logistics supportability analyses and environmental planning, modeling and simulation, development of manpower and basing assessments, and development of technical data to support fielding of the MQ-4C Triton UAS modernization capabilities. FY 2018 Base Plans: Funding continues in FY18 to support the development and integration of logistics and product support considerations for Triton's modernization upgrade. Efforts include integrated logistics support, technical engineering services, sensor reliability and maintainability risk reduction, logistics supportability analyses and environmental planning, modeling and simulation, development of manpower and basing assessments, and development of technical data to support fielding of the MQ-4C Triton UAS modernization capabilities. FY 2018 OCO Plans: N/A						
Title: Test & Evaluation (T&E) Articles: Description: T&E efforts. FY 2016 Accomplishments: Begin Developmental Testing (DT) and Operational Testing (OT) support activities to allow test and fielding of the MQ-4C Triton UAS phased capability upgrades in accordance with the program schedule. FY 2017 Plans: Funding increases from FY16 to FY17 are in support of program increases in DT activities, including integrated test team labor to reduce risk in design and development, to perform subsystem level ground and acceptance		2.400 -	13.902 -	9.155 -	0.000 -	9.155 -

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 0305421N / (U)RQ-4 Modernization		Project (Number/Name) 2939 / RQ-4 Modernization		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
testing, obtain the necessary satellite communications required for testing and continue OT support to allow test and fielding of the MQ-4C Triton UAS phased capability upgrades in accordance with the program schedule. FY 2018 Base Plans: Funding continues in FY18 to support Developmental Testing activities, including integrated test team labor to reduce risk in design and development, to perform subsystem level ground and acceptance testing, obtain the necessary satellite communications required for testing and continue Operational Testing support to allow test and fielding of the MQ-4C Triton Unmanned Air System phased capability upgrades in accordance with the program schedule. FY 2018 OCO Plans: N/A						
Title: Program Management (PM) Articles: Description: PM support and travel. FY 2016 Accomplishments: Continue the following: PM support and travel, development of milestone and acquisition-related documentation, capability refinement and open systems architecture development, resource justification, affordability assessments and cost analyses, risk reduction and risk management, system integration and interoperability planning, technology maturity reviews, program protection planning, corrosion prevention planning, and joint and international cooperation efforts. FY 2017 Plans: Continue the following: PM support and travel, development of milestone and acquisition-related documentation, capability refinement and open systems architecture development, resource justification, affordability assessments and cost analyses, risk reduction and risk management, system integration and interoperability planning, technology maturity reviews, program protection planning, corrosion prevention planning, and joint and international cooperation efforts. FY 2018 Base Plans:		1.713 -	1.741 -	1.763 -	0.000 -	1.763 -

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 0305421N / (U)RQ-4 Modernization		Project (Number/Name) 2939 / RQ-4 Modernization	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Continue the following: PM support and travel, development of milestone and acquisition-related documentation, capability refinement and open systems architecture development, resource justification, affordability assessments and cost analyses, risk reduction and risk management, system integration and interoperability planning, technology maturity reviews, program protection planning, corrosion prevention planning, and joint and international cooperation efforts. FY 2018 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	119.892	181.266	229.404	0.000	229.404

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
• RDT&E/0305220N: (U)MQ-4C Triton	237.118	111.729	84.115	-	84.115	17.604	15.965	11.577	14.288	0.000	3,413.396
• APN-4/044200: MQ-4 Triton	619.662	464.657	579.392	-	579.392	681.233	588.256	622.602	611.734	6,654.217	10,902.923
• APN-6/060500: Spares and Repair Parts	103.954	114.529	56.915	-	56.915	39.009	26.238	1.839	0.000	0.000	342.484
• MILCON/0212176N: Facilities New Footprint - Fleet Ops	8.296	30.475	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	88.385
• MILCON/0712876N: Facilities New Footprint - Main and Prod	40.641	0.000	0.000	-	0.000	0.000	0.000	27.686	0.000	0.000	68.327
• MILCON/0815976N: Facilities New Footprint - Training	0.000	41.380	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	79.411
• MILCON/0805976N: Facilities Restoration and Mod-Training	2.974	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.974
• APN-5/059600: MQ-4 Series	0.000	0.000	39.996	-	39.996	43.947	7.874	0.000	0.000	0.000	91.817
• OMN/1D4D: Weapons Maintenance	0.000	0.000	13.367	-	13.367	20.476	36.902	130.093	151.932	Continuing	Continuing

Remarks

D. Acquisition Strategy

The MQ-4C Triton acquisition approach supports the Navy's Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR&T) Transition Plan by providing a stable and effective baseline early operational capability in FY18 to facilitate Fleet introduction and learning while continuing System Development and

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 0305421N / (U)RQ-4 Modernization	Project (Number/Name) 2939 / RQ-4 Modernization
<p>Demonstration engineering and integrated test on Signals Intelligence (SIGINT) and other upgrades to deliver a Multi-INT configuration at Initial Operational Capability (IOC). Phased capability upgrades will continue post IOC to enable the MQ-4C Triton to keep pace with rapidly evolving technologies and threats, and address correction of deficiencies and obsolescence issues to ensure the Navy maintains persistent Intelligence, Surveillance and Reconnaissance dominance through the system's lifecycle.</p> <p>The MQ-4C Triton program office is pursuing joint efficiency with the Air Force on the Global Hawk Unmanned Aircraft System (UAS). However, the integration of the Triton UAS into the Maritime Patrol Reconnaissance Force and the unique maritime sensors employed dictate a Navy-led acquisition program focused on joint efficiencies, where possible.</p> <p>E. Performance Metrics</p> <p>Successfully achieved Integrated Test, Operational Evaluation and Initial Operation Capability.</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305421N / (U)RQ-4 Modernization			Project (Number/Name) 2939 / RQ-4 Modernization			

Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Primary Hardware Development	C/CPFF	Northrop Grumman : Rancho Bernardo, CA	25.320	67.864	Nov 2015	114.351	Nov 2016	176.695	Nov 2017	-		176.695	532.953	917.183	917.183
Systems Engineering	Various	Various : Various	2.824	2.000	Nov 2015	2.957	Nov 2016	2.509	Nov 2017	-		2.509	1.297	11.587	-
Systems Engineering	WR	NAWC-AD : Patuxent River, MD	1.138	21.265	Nov 2015	17.644	Nov 2016	23.273	Nov 2017	-		23.273	26.896	90.216	-
Primary Hardware Development	SS/FFP	Raytheon : McKinney, TX	0.000	7.400	Feb 2016	1.300	Nov 2016	1.000	Nov 2017	-		1.000	0.500	10.200	10.200
Primary Hardware Development	C/CPFF	Sierra Nevada Corporation : Beaver Creek, OH	0.000	2.500	Apr 2016	7.000	Nov 2016	0.000		-		0.000	0.000	9.500	9.500
Primary Hardware Development	C/CPFF	Boeing Argon ST : Fairfax, VA	0.000	4.628	Feb 2016	2.870	Nov 2016	0.000		-		0.000	0.000	7.498	7.498
Primary Hardware Development	WR	NSWC-Crane : Crane, Indiana	0.000	3.636	Feb 2016	12.786	Nov 2016	8.160	Nov 2017	-		8.160	1.500	26.082	-
Sytems Engineering	C/CPFF	Mitre : Mclean, VA	0.000	1.122	May 2016	1.144	Nov 2016	1.167	Nov 2017	-		1.167	1.190	4.623	4.623
Systems Engineering	C/CPFF	MIT-Lincoln Labs : Lexington, MA	0.000	2.456	Nov 2015	2.505	Nov 2016	2.555	Nov 2017	-		2.555	2.606	10.122	10.122
Subtotal			29.282	112.871		162.557		215.359		-		215.359	566.942	1,087.011	-

Remarks

The Product Development budget resources Northrop Grumman for Triton Air to Air Radar Subsystem (AARSS) development and Multi-INT integration design efforts, Raytheon for an Electro-Optical/Infrared (EO/IR) upgrade contract, Sierra Nevada Corporation for high band sensor kits, Boeing Argon for low band sensor kits, NSWC-Crane for Airborne Mission Processor design and MITRE/MIT-LL for Airspace Integration efforts.

Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Development Support	Various	Various : Various	0.540	0.508	Nov 2015	0.518	Nov 2016	0.529	Nov 2017	-		0.529	2.339	4.434	-
Integrated Logistics Support	Various	Various : Various	0.000	1.200	Nov 2015	1.224	Nov 2016	1.248	Nov 2017	-		1.248	5.072	8.744	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305421N / (U)RQ-4 Modernization				Project (Number/Name) 2939 / RQ-4 Modernization					
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Integrated Logistics Support	WR	NAWC-AD : Patuxent River, MD	0.000	1.200	Nov 2015	1.324	Nov 2016	1.350	Nov 2017	-		1.350	6.822	10.696	-
Subtotal			0.540	2.908		3.066		3.127		-		3.127	14.233	23.874	-
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Developmental Test & Evaluation	Various	Various : Various	0.000	0.650	Nov 2015	0.663	Nov 2016	0.676	Nov 2017	-		0.676	5.243	7.232	-
Developmental Test & Evaluation	WR	NAWC-AD : Patuxent River, MD	0.000	0.500	Nov 2015	10.667	Nov 2016	5.857	Nov 2017	-		5.857	40.145	57.169	-
Operational Test & Evaluation	Various	Various : Various	0.000	0.250	Nov 2015	0.500	Nov 2016	0.510	Nov 2017	-		0.510	8.700	9.960	-
Developmental Test & Evaluation (SATCOMM)	MIPR	DITCO : Various	0.000	1.000	Nov 2015	2.072	Nov 2016	2.112	Nov 2017	-		2.112	7.000	12.184	-
Subtotal			0.000	2.400		13.902		9.155		-		9.155	61.088	86.545	-
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Program Management	Various	Various : Various	0.167	0.163	Nov 2015	0.166	Nov 2016	0.170	Nov 2017	-		0.170	0.529	1.195	-
Travel	Allot	Various : Various	0.011	0.050	Nov 2015	0.045	Nov 2016	0.033	Nov 2017	-		0.033	0.253	0.392	-
Program Management Support	C/CPFF	Ausley : Lexington Park, MD	0.000	1.500	Apr 2016	1.530	Nov 2016	1.560	Nov 2017	-		1.560	6.870	11.460	11.460
Subtotal			0.178	1.713		1.741		1.763		-		1.763	7.652	13.047	-
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			30.000	119.892		181.266		229.404		-		229.404	649.915	1,210.477	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy							Date: May 2017		
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0305421N / (U)RQ-4 Modernization		Project (Number/Name) 2939 / RQ-4 Modernization			
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks									

UNCLASSIFIED

PE 0305421N: (U)RQ-4 Modernization
Navy

R-1 Line #249

R-1 Program Element (Number/Name)
PE 0305421N / (U)RQ-4 Modernization

Project (Number/Name) 2939 / RQ-4 Modernization	
---	--

Proj 2939		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022							
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
Acquisition Milestones					MS C ▲							Baseline EOC ▲						Multi-INT EOC ▲					IOC ▲	FRP ◆									
System Development		Systems Demonstration and Development																															
		Phased Capability Upgrades - Multi-INT																				Future Capability Development											
Test & Evaluation Activities																																	
		Integrated Test CT/DT/OT																				Multi-INT IOT&E				Future Capability Follow-on Integrated Test				Future Capability OT&E			
										Operational Test Event ▼																							
Production Milestones					LRIP Lot 1 CA APN ●			LRIP Lot 2 CA APN ●				LRIP Lot 3 CA APN ●				LRIP Lot 4 CA APN ●				LRIP Lot 5 CA APN ●				FRP Lot 6 CA APN ●			FRP Lot 7 CA APN ●						
Contracts																																	
Deliveries								SDTA RDTEN Qty 2				LRIP Lot 1 APN Qty 4				LRIP Lot 2 APN Qty 2				LRIP Lot 3 APN Qty 3				LRIP Lot 4 APN Qty 3				LRIP Lot 5 APN Qty 3					

2018DON - 0305421N - 2939 MQ-4C Triton development activities are resourced by PE 0305220N and PE 0305421N.

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0305421N / (U)RQ-4 Modernization

Project (Number/Name)

2939 / RQ-4 Modernization

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2939				
Acquisition Milestones: Milestone C	4	2016	4	2016
Acquisition Milestones: Full Rate Production	3	2021	3	2021
Acquisition Milestones: Initial Operational Capability	2	2021	2	2021
Acquisition Milestones: Multi-INT Early Operational Capability	2	2020	2	2020
Acquisition Milestones: Baseline Early Operational Capability	3	2018	3	2018
System Development: System Development and Demonstration	1	2016	4	2022
System Development: Phased Capability Upgrades - Multi-INT	1	2016	2	2021
System Development: Future Capability Development	3	2021	4	2022
Test & Evaluation Activities: Integrated Test (Combined/Developmental/Operational)	1	2016	3	2020
Test & Evaluation Activities: Multi-INT Initial Operational Test and Evaluation	4	2020	2	2021
Test & Evaluation Activities: Future Capabilities Follow-on Integrated Test	3	2021	3	2022
Test & Evaluation Activities: Future Capabilities Operational Test and Evaluation	4	2022	4	2022
Test & Evaluation Activities: Operational Test Event	1	2018	1	2018
Production Milestones: Contracts: Low Rate Initial Production Lot 1 Contract Award	4	2016	4	2016
Production Milestones: Contracts: Low Rate Initial Production Lot 2 Contract Award	3	2017	3	2017
Production Milestones: Contracts: Low Rate Initial Production Lot 3 Contract Award	3	2018	3	2018
Production Milestones: Contracts: Low Rate Initial Production Lot 4 Contract Award	3	2019	3	2019
Production Milestones: Contracts: Low Rate Initial Production Lot 5 Contract Award	3	2020	3	2020
Production Milestones: Contracts: Full Rate Production Lot 6 Contract Award	3	2021	3	2021
Production Milestones: Contracts: Full Rate Production Lot 7 Contract Award	3	2022	3	2022
Production Milestones: Deliveries: System Demonstration Test Articles Delivery	4	2017	4	2017
Production Milestones: Deliveries: Low Rate Initial Production Lot 1 Delivery	3	2018	2	2019

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy	Date: May 2017
---	-----------------------

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305421N / (U)RQ-4 Modernization	Project (Number/Name) 2939 / RQ-4 Modernization
--	---	---

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: Deliveries: Low Rate Initial Production Lot 2 Delivery	4	2019	3	2020
Production Milestones: Deliveries: Low Rate Initial Production Lot 3 Delivery	4	2020	3	2021
Production Milestones: Deliveries: Low Rate Initial Production Lot 4 Delivery	4	2021	3	2022
Production Milestones: Deliveries: Low Rate Initial Production Lot 5 Delivery	4	2022	4	2022