

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy										Date: March 2019		
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	294.369	224.249	219.403	202.346	-	202.346	71.964	115.546	103.921	97.393	75.000	1,404.191
2939: RQ-4 Modernization	294.369	224.249	219.403	202.346	-	202.346	71.964	115.546	103.921	97.393	75.000	1,404.191
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 373												
Note MQ-4C Triton RDT&E 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 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 2,000 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 networked 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 Maritime Intelligence, Surveillance, Reconnaissance and Targeting (MISR&T) transition plan. System upgrades will include Multi-Intelligence capabilities, Counter Electronic Attack upgrades, a more robust electronic support capability, and continued improvements to baseline mission system payloads.  The MQ-4C air vehicle, mission control system, specialized sensors, and communications suite will play a significant role in achieving the Navy's strategic vision for the 21st century. The Triton system as a persistence ISR enabler provides the supported combatant commander and fleet commander with unparalleled situational awareness of the maritime battle space to develop and sustain the common operational tactical picture. The system will also serve as a Fleet response plan enabler with a persistent, global force offering to provide critical trip wire information for intelligence preparation of the environment. Triton will connect to both the Global												

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Information Grid and the Distributed Common Ground System-Navy information backbone to provide the Warfighter with unprecedented levels of battlespace awareness to synchronize actions necessary to maintain maritime Full Spectrum Superiority.						
JUSTIFICATION FOR BUDGET ACTIVITY: 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		229.404	219.894	136.526	-	136.526
Current President's Budget		224.249	219.403	202.346	-	202.346
Total Adjustments		-5.155	-0.491	65.820	-	65.820
• Congressional General Reductions		-	-0.491			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-0.067	0.000			
• Program Adjustments		0.000	0.000	66.000	-	66.000
• Rate/Misc Adjustments		-0.002	0.000	-0.180	-	-0.180
• Congressional General Reductions		-0.186	-	-	-	-
Adjustments						
• Congressional Directed Reductions		-4.900	-	-	-	-
Adjustments						
Change Summary Explanation						
FY 2020 funding increases by \$66 million to adequately resource Multi-INT (IFC-4.0) system development and accelerate IFC-5.0 phased capability development.						
Schedule:						
Baseline Early Operational Capability (EOC) moved 5 Quarters to 3rd Quarter FY 2019 due to schedule delays during the operational test period and the operational pause in flight test resulting from an aircraft mishap in September 2018						
Multi-INT EOC moved 2 Quarters to 2nd Quarter FY 2021 due to delayed completion of retrofit aircraft						
Baseline Operational Test Event end date changed to align to the planned System Development and Demonstration completion of 2nd Quarter FY 2019						
Updated schedule to reflect Airframe Fatigue Testing and Analysis start of 2nd Quarter FY 2018						
Initiate Integrated Functional Capability (IFC-5.0) development 1st Quarter FY 2020						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
2939: RQ-4 Modernization	294.369	224.249	219.403	202.346	-	202.346	71.964	115.546	103.921	97.393	75.000	1,404.191
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 373												
A. Mission Description and Budget Item Justification												
<p>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.</p> <p>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 2,000 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 networked 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.</p> <p>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 Maritime Intelligence, Surveillance, Reconnaissance and Targeting (MISR&amp;T) 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.</p> <p>The MQ-4C air vehicle, mission control system, specialized sensors, and communications suite will play a significant role in achieving the Navy's strategic vision for the 21st century. The Triton system as a persistence ISR enabler provides the supported combatant commander and fleet commander with unparalleled situational awareness of the maritime battle space to develop and sustain the common operational tactical picture. The system will also serve as a Fleet response plan enabler with a persistent, global force offering to provide critical trip wire information for intelligence preparation of the environment. Triton will connect to both the Global Information Grid and the Distributed Common Ground System-Navy information backbone to provide the Warfighter with unprecedented levels of battlespace awareness to synchronize actions necessary to maintain maritime Full Spectrum Superiority.</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	
Title: Product Development							211.326	202.555	183.671	0.000	183.671	
Articles:							-	-	-	-	-	

**UNCLASSIFIED**

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p><b>Description:</b> 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><b>FY 2019 Plans:</b> FY 2019 continues development of capability upgrades as the program continues 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><b>FY 2020 Base Plans:</b> FY 2020 continues development of capability upgrades as the program continues test asset modification and software development, including Multi-Intelligence capabilities in support of the Intelligence, Surveillance, Reconnaissance and Targeting transition plan. Funding includes Electromagnetic Interference (EMI) corrective actions, Sense and Avoid radar (IFC-5.0) development, AMP development and integration of development assets for capability upgrades including electro-optical/infra-red, SIGINT High Band and SIGINT Low Band systems. The major phased capability improvement for IFC-5.0 is the Sense and Avoid Radar (SAAR) which includes planned improvements to the integrated mission management computer (IMMC), collision avoidance systems (CAS) and size/weight/power criteria.</p> <p><b>FY 2020 OCO Plans:</b> N/A</p> <p><b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> FY 2020 reflects the decrease in funding required for development of phased capability upgrades, driven primarily by the transition of High Gain Common Data Link work, part of IFC-4.0 efforts, at L-3 in FY 2019 and a reduction in Systems Engineering efforts.</p>						
<p><b>Title:</b> ILS, Support, Studies &amp; Analysis</p> <p><b>Articles:</b></p> <p><b>Description:</b> Integrated Logistics Support, Studies and Analysis.</p> <p><b>FY 2019 Plans:</b></p>		2.679 -	2.789 -	2.845 -	0.000 -	2.845 -

**UNCLASSIFIED**

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Funding continues in FY 2019 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.  <b>FY 2020 Base Plans:</b> Funding continues in FY 2020 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.  <b>FY 2020 OCO Plans:</b> N/A  <b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> Increase in FY 2020 reflects initiation of IFC-5.0 Risk Reduction.						
<b>Title:</b> Test & Evaluation (T&E)  <b>Articles:</b>  <b>Description:</b> T&E efforts.  <b>FY 2019 Plans:</b> Funding continues in FY 2019 to support DT 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 OT support to allow test and fielding of the MQ-4C Triton UAS phased capability upgrades in accordance with the program schedule. Increase from FY 2018 to FY 2019 in preparation for the start of IFC 4.0 ground and flight test.  <b>FY 2020 Base Plans:</b> Funding continues in FY 2020 to support DT 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 OT support to allow test and fielding of the MQ-4C Triton UAS phased capability upgrades in accordance with the program schedule.  <b>FY 2020 OCO Plans:</b>		7.541 -	12.259 -	13.996 -	0.000 -	13.996 -

**UNCLASSIFIED**

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
N/A											
FY 2019 to FY 2020 Increase/Decrease Statement: Increase funds support integration testing of IFC-4.0 to support Multi-Int EOC in early FY 2021.											
Title: Program Management (PM) <div>Articles:</div>							2.703 -	1.800 -	1.834 -	0.000 -	1.834 -
Description: PM support and travel.											
FY 2019 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 2020 Base 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 2020 OCO Plans: N/A											
FY 2019 to FY 2020 Increase/Decrease Statement: Increase for program and analysis support of integration testing of IFC-4.0 to support Multi-Int EOC in early FY 2021.											
Accomplishments/Planned Programs Subtotals							224.249	219.403	202.346	0.000	202.346
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• RDT&E/0305220N: (U)MQ-4C Triton	94.115	14.395	11.784	-	11.784	11.375	14.057	14.337	14.623	0.000	3,570.815

**UNCLASSIFIED**

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

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

<b>Line Item</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APN/0442: MQ-4 Triton	552.806	602.539	493.273	-	493.273	523.992	623.077	632.308	712.354	5,608.478	10,798.811
• APN/0605/J0442: Spares and Repair Parts	114.652	43.903	171.874	-	171.874	4.730	11.861	2.793	0.000	0.000	549.618
• APN/0596: MQ-4 Series	13.296	48.278	27.994	-	27.994	12.992	36.992	50.991	17.990	0.000	208.533
• OMN/1D4D: Weapons Maintenance	9.996	16.220	23.902	-	23.902	37.407	45.926	46.869	47.827	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 (EOC) in 2018 to facilitate Fleet introduction and learning while continuing System Development and 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.

**E. Performance Metrics**

Successfully achieve Operational Evaluation and EOC.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	167.129	141.386	Nov 2017	149.631	Nov 2018	152.478	Nov 2019	-		152.478	268.035	878.659	878.659
Systems Engineering	Various	Various : Various	24.229	8.000	Nov 2017	7.750	Nov 2018	0.750	Nov 2019	-		0.750	0.250	40.979	-
Systems Engineering	WR	NAWC-AD : Patuxent River, MD	32.088	23.462	Nov 2017	22.391	Nov 2018	21.643	Nov 2019	-		21.643	83.711	183.295	-
Primary Hardware Development	SS/FFP	Raytheon : McKinney, TX	6.979	0.000	Nov 2017	0.000		0.000		-		0.000	0.000	6.979	6.979
Primary Hardware Development	C/CPFF	Sierra Nevada Corporation : Beaver Creek, OH	6.500	6.500	Jan 2018	0.000		0.000		-		0.000	0.000	13.000	13.000
Primary Hardware Development	C/CPFF	Boeing Argon ST : Fairfax, VA	5.128	0.000		0.000		0.000		-		0.000	0.000	5.128	5.128
Primary Hardware Development	C/CPFF	Ticom Geomatics : Austin, TX	5.000	6.281	Jan 2018	6.800	Jan 2019	7.000	Jan 2020	-		7.000	14.000	39.081	39.081
Primary Hardware Development	WR	NSWC-Crane : Crane, Indiana	21.230	14.250	Nov 2017	0.050	Nov 2018	0.050	Nov 2019	-		0.050	0.100	35.680	-
Primary Hardware Development	C/CPFF	L-3 Communication Systems : Salt Lake City, UT	0.000	7.757	Jan 2018	12.243	Jan 2019	0.000		-		0.000	0.000	20.000	20.000
Systems Engineering	C/CPFF	Mitre : Mclean, VA	3.070	1.990	Nov 2017	1.990	Nov 2018	1.000	Nov 2019	-		1.000	5.000	13.050	13.050
Systems Engineering	C/CPFF	MIT-Lincoln Labs : Lexington, MA	4.066	1.700	Nov 2017	1.700	Nov 2018	0.750	Nov 2019	-		0.750	3.750	11.966	11.966
Subtotal			275.419	211.326		202.555		183.671		-		183.671	374.846	1,247.817	N/A
Remarks															
The Product Development budget resources Northrop Grumman for Multi-Intelligence 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, Ticom Geomatics for networking, L-3 Communication Systems for High Gain Common Data Link, NSWC-Crane for Airborne Mission Processor design and MITRE/MIT-LL for Airspace Integration efforts.															



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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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	1.566	0.529	Nov 2017	0.539	Nov 2018	0.550	Nov 2019	-		0.550	1.250	4.434	-
Integrated Logistics Support	Various	Various : Various	1.325	0.800	Nov 2017	0.873	Nov 2018	0.890	Nov 2019	-		0.890	2.806	6.694	-
Integrated Logistics Support	WR	NAWC-AD : Patuxent River, MD	2.393	1.350	Nov 2017	1.377	Nov 2018	1.405	Nov 2019	-		1.405	5.385	11.910	-
Subtotal			5.284	2.679		2.789		2.845		-		2.845	9.441	23.038	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	1.261	0.676	Nov 2017	0.690	Nov 2018	0.704	Nov 2019	-		0.704	3.720	7.051	-
Developmental Test & Evaluation	WR	NAWC-AD : Patuxent River, MD	7.122	5.855	Nov 2017	10.069	Nov 2018	11.498	Nov 2019	-		11.498	57.312	91.856	-
Operational Test & Evaluation	Various	Various : Various	0.500	0.510	Nov 2017	0.500	Nov 2018	0.794	Nov 2019	-		0.794	10.100	12.404	-
Developmental Test & Evaluation (SATCOMM)	MIPR	DITCO : Various	0.181	0.500	Nov 2017	1.000	Nov 2018	1.000	Nov 2019	-		1.000	5.000	7.681	-
Subtotal			9.064	7.541		12.259		13.996		-		13.996	76.132	118.992	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	0.496	0.170	Nov 2017	0.173	Nov 2018	0.176	Nov 2019	-		0.176	0.900	1.915	-
Travel	Allot	Various : Various	0.106	0.033	Nov 2017	0.034	Nov 2018	0.035	Nov 2019	-		0.035	0.184	0.392	-
Program Management Support	C/CPFF	Ausley : Lexington Park, MD	4.000	2.500	Nov 2017	1.593	Nov 2018	1.623	Nov 2019	-		1.623	3.655	13.371	13.371
Subtotal			4.602	2.703		1.800		1.834		-		1.834	4.739	15.678	N/A

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	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	294.369	224.249		219.403		202.346		-		202.346	465.158	1,405.525	N/A

Remarks

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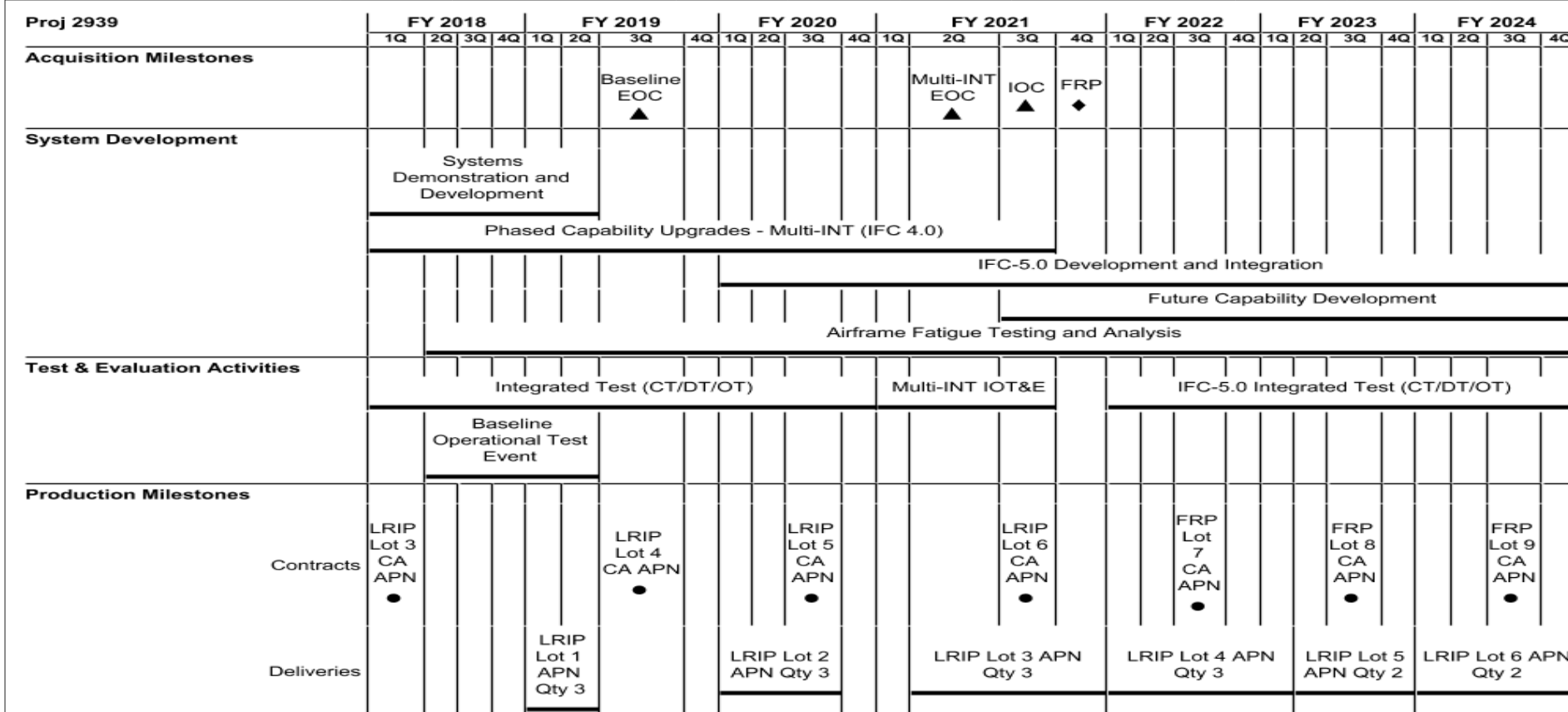
Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy

Date: March 2019

Appropriation/Budget Activity  
1319 / 7

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

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



2020PB - 0305421N - 2939 MQ-4C Triton development activities are resourced by PE 0305220N and PE 0305421N. Schedule updated to reflect changes in acquisition and production milestones and planned system development efforts to include fatigue testing and analysis and initiation of the IFC 5.0 development and test efforts. The LRIP Lot 2 contract is comprised of 1 FY16 and 2 FY17 resourced aircraft.

## UNCLASSIFIED

Exhibit R-4A, RDT&amp;E Schedule Details: PB 2020 Navy

Date: March 2019

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
<b>Proj 2939</b>				
Acquisition Milestones: Full Rate Production	4	2021	4	2021
Acquisition Milestones: Initial Operational Capability	3	2021	3	2021
Acquisition Milestones: Multi-INT Early Operational Capability	2	2021	2	2021
Acquisition Milestones: Baseline Early Operational Capability	3	2019	3	2019
System Development: System Development and Demonstration	1	2018	2	2019
System Development: Phased Capability Upgrades - Multi-INT (IFC 4.0)	1	2018	3	2021
System Development: IFC-5.0 Development and Integration	1	2020	4	2024
System Development: Future Capability Development	3	2021	4	2024
System Development: Airframe Fatigue Testing and Analysis	2	2018	4	2024
Test & Evaluation Activities: Integrated Test (Combined/Developmental/Operational)	1	2018	4	2020
Test & Evaluation Activities: Multi-INT Initial Operational Test and Evaluation	1	2021	3	2021
Test & Evaluation Activities: IFC-5.0 Integrated Test (Combined/Developmental/Operational)	1	2022	4	2024
Test & Evaluation Activities: Baseline Operational Test Event	2	2018	2	2019
Production Milestones: Contracts: Low Rate Initial Production Lot 3 Contract Award	1	2018	1	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: Low Rate Initial 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: Contracts: Full Rate Production Lot 8 Contract Award	3	2023	3	2023
Production Milestones: Contracts: Full Rate Production Lot 9 Contract Award	3	2024	3	2024
Production Milestones: Deliveries: Low Rate Initial Production Lot 1 Delivery	1	2019	2	2019

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Navy	<b>Date:</b> March 2019
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<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305421N / (U)RQ-4 Modernization	<b>Project (Number/Name)</b> 2939 / RQ-4 Modernization
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: Deliveries: Low Rate Initial Production Lot 2 Delivery	1	2020	3	2020
Production Milestones: Deliveries: Low Rate Initial Production Lot 3 Delivery	2	2021	4	2021
Production Milestones: Deliveries: Low Rate Initial Production Lot 4 Delivery	1	2022	1	2023
Production Milestones: Deliveries: Low Rate Initial Production Lot 5 Delivery	2	2023	4	2023
Production Milestones: Deliveries: Low Rate Initial Production Lot 6 Delivery	1	2024	4	2024