Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy												Date: February 2020
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0305421N *I RQ-4 Modernization*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	518.618	218.366	185.446	178.799	-	178.799	198.466	200.488	174.357	157.676	39.700	1,871.916
2939: *RQ-4 Modernization*	518.618	218.366	185.446	178.799	-	178.799	198.466	200.488	174.357	157.676	39.700	1,871.916
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

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy	Date: February 2020
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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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	219.403	202.346	71.964	-	71.964
Current President's Budget	218.366	185.446	178.799	-	178.799
Total Adjustments	-1.037	-16.900	106.835	-	106.835
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-16.900			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.999	0.000			
• SBIR/STTR Transfer	-0.038	0.000			
• Program Adjustments	0.000	0.000	73.708	-	73.708
• Rate/Misc Adjustments	0.000	0.000	33.127	-	33.127

Change Summary Explanation

FY 2021 funding increase of $106.835 million preserves development of Multi-Intelligence (Multi-INT) to meet Initial Operational Capability (IOC) FY 2022, and maintains alignment with MISR&T plan. Challenges with integration and incorporation of critical path development efforts have caused a shift in Multi-INT IOC. Specific development efforts that caused the IOC shift include software integration, EMI and Co-site interference mitigation, and late integration of government GFE.

Schedule:
Full Rate Production Milestone moved 5 Qtrs to 1st Qtr FY 2023
Multi-INT Initial Operational Capability moved 5 Qtrs to 4th Qtr FY 2022
Multi-INT Early Operational Capability removed as a schedule milestone
Sense and Avoid Radar ECP moved 8 Qtrs to 1st Qtr FY 2023
Future Capability Development (Triton in the Fight) moved 6 Qtrs to 1st Qtr FY 2023
Multi-INT Initial Operational Test and Evaluation moved 5 Qtrs to 2nd Qtr FY 2022
Added Multi-INT Follow-On Operational Test and Evaluation to commence 4th Qtr FY 2022
Low Rate Initial Production (LRIP) Lot 4 Contract Award moved 2 Qtrs to 1st Qtr FY 2020
LRIP Lot 5 Contract Award moved 2 Qtrs to 1st Qtr FY 2020

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy	Date: February 2020
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LRIP Lot 6 Contract Award changed to Production Lot 6 and moved 6 Qtrs to 1st Qtr FY 2023
Full Rate Production (FRP) Lot notations were changed to Production Lot notation
FRP Lot 7 Contract Award changed to Production Lot 7 and moved 6 Qtrs to 1st Qtr FY 2024
FRP Lot 8 Contract Award changed to Production Lot 8 and moved 6 Qtrs to 1st Qtr FY 2025
LRIP 2 Delivery Start on the R-4a moved 2 Qtrs from 1st Qtr 2020 to 3rd Qtr 2019
LRIP 2 Delivery End on the R-4a moved 6 Qtrs from 3rd Qtr 2020 to 1st Qtr 2023
LRIP 3 Delivery moved 5 Qtrs to 3rd Qtr FY 2022 - 4th Qtr FY 2022
LRIP 4 Delivery moved 5 Qtrs to 2nd Qtr FY 2023 - 3rd Qtr FY 2023
LRIP 5 Delivery moved 2 Qtrs to 4th Qtr FY 2023 - 1st Qtr FY 2024

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
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COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
2939: *RQ-4 Modernization*	518.618	218.366	185.446	178.799	-	178.799	198.466	200.488	174.357	157.676	39.700	1,871.916
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 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 continue 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 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Title: Product Development	201.518	166.771	154.976	0.000	154.976
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
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. ***FY 2020 Plans:*** 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, Signal Intelligence (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. ***FY 2021 Base Plans:*** FY 2021 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, AMP development and integration of development assets for capability upgrades including electro-optical/infra-red, SIGINT High Band and SIGINT Low Band systems. Supports Multi-INT development emergent scope, preserves development schedule and employment for Q4 FY 2022 Multi-INT IOC, and maintains alignment with MISR&T plan. ***FY 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Decrease from FY 2020 to FY 2021 aligns to required funding for hardware development and systems engineering in support of phased capability upgrades driven by the program's transition to test efforts for the Multi-INT FY 2022 IOC.					
Title: ILS, Support, Studies & Analysis	2.789	2.845	2.950	0.000	2.950
Articles:	-	-	-	-	-
Description: Integrated Logistics Support, Studies and Analysis.					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
FY 2020 Plans: 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. ***FY 2021 Base Plans:*** Funding continues in FY 2021 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. Initiates Triton in the Fight and other pace the threat studies and analysis efforts to support Triton capabilities against evolving technologies. ***FY 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Increase from FY 2020 to FY 2021 reflects continued support toward attaining Multi-INT IOC in FY 2022.					
Title: Test & Evaluation (T&E)	12.259	13.996	18.998	0.000	18.998
Articles:	-	-	-	-	-
Description: T&E efforts. ***FY 2020 Plans:*** 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. ***FY 2021 Base Plans:*** Funding continues in FY 2021 to support IOT&E activities, including integrated test team labor to reduce risk in design and development, 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					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305421N / *RQ-4 Modernization*	**Project (Number/Name)** 2939 / *RQ-4 Modernization*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
UAS phased capability upgrades in accordance with the program schedule. To support Multi-INT EOC/IOC, the program commences major IOT&E events, validates EMI corrective actions, and initiates follow-on test activities. ***FY 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Increase from FY 2020 to FY 2021 provides for increased DT&E events to complete Multi-INT calibration and validate EMI corrections in support of Multi-INT IOC in FY 2022.					
Title: Program Management (PM) ***Articles:*** ***Description:*** PM support and travel. ***FY 2020 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 2021 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 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Increase from FY 2020 to FY 2021 provides for continued program and analysis support toward attaining Multi-INT IOC in FY 2022.	1.800 -	1.834 -	1.875 -	0.000 -	1.875 -
Accomplishments/Planned Programs Subtotals	218.366	185.446	178.799	0.000	178.799

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305421N / *RQ-4 Modernization*	Project (Number/Name) 2939 / *RQ-4 Modernization*	

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• RDT&E/0305220N: *(U)MQ-4C Triton*	13.395	11.784	11.120	-	11.120	13.751	14.820	14.598	14.891	0.000	3,584.603
• APN/0442: *MQ-4 Triton*	596.283	478.288	186.676	-	186.676	95.654	549.539	604.024	736.586	6,541.561	11,352.414
• APN/0605/J0442: *Spares and Repair Parts*	68.926	107.888	3.228	-	3.228	6.122	0.000	0.000	0.000	0.000	500.621
• APN/0596: *MQ-4 Series*	53.278	27.994	12.998	-	12.998	0.000	94.533	73.294	95.446	249.617	620.422
• OMN/1D4D: *Weapons Maintenance*	19.316	23.747	26.802	-	26.802	31.607	43.489	44.059	44.558	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 2020 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development Multi-INT	C/CPFF	Northrop Grumman : Rancho Bernardo, CA	308.515	148.594	Nov 2018	135.578	Nov 2019	127.330	Nov 2020	-		127.330	197.386	917.403	917.403
Primary Hardware Development - Sense and Avoid Radar	C/CPFF	Northrop Grumman : Rancho Bernardo, CA	0.000	0.000		0.000		0.000		-		0.000	185.400	185.400	185.400
Primary Hardware Development - Sense and Avoid Radar	C/CPFF	Raytheon : McKinney, TX	0.000	0.000		0.000		0.000		-		0.000	101.600	101.600	101.600
Primary Hardware Development	SS/FFP	Raytheon : McKinney, TX	6.979	0.000		0.000		0.000		-		0.000	0.000	6.979	6.979
Primary Hardware Development	C/CPFF	Sierra Nevada Corporation : Beaver Creek, OH	13.000	0.000		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	11.281	6.800	Jan 2019	7.000	Jan 2020	7.000	Jan 2021	-		7.000	7.000	39.081	39.081
Primary Hardware Development	WR	NSWC-Crane : Crane, Indiana	35.480	0.050	Nov 2018	0.050	Nov 2019	0.050	Nov 2020	-		0.050	0.050	35.680	-
Primary Hardware Development	C/CPFF	L-3 Communication Systems : Salt Lake City, UT	7.757	12.243	Jan 2019	0.000		0.000		-		0.000	0.000	20.000	20.000
Systems Engineering - Multi-INT	Various	Various : Various	32.229	7.750	Nov 2018	0.750	Nov 2019	0.250	Nov 2020	-		0.250	0.000	40.979	-
Systems Engineering - Multi-INT	WR	NAWC-AD : Patuxent River, MD	55.550	22.391	Nov 2018	21.643	Nov 2019	18.596	Nov 2020	-		18.596	83.020	201.200	-
Systems Engineering - Multi-INT	C/CPFF	Mitre : Mclean, VA	5.060	1.990	Nov 2018	1.000	Nov 2019	1.000	Nov 2020	-		1.000	4.549	13.599	13.599
Systems Engineering - Multi-INT	C/CPFF	MIT-Lincoln Labs : Lexington, MA	5.766	1.700	Nov 2018	0.750	Nov 2019	0.750	Nov 2020	-		0.750	3.413	12.379	12.379
		Subtotal	486.745	201.518		166.771		154.976		-		154.976	582.418	1,592.428	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

The Multi-INT 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.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	Various	Various : Various	2.095	0.539	Nov 2018	0.550	Nov 2019	0.250	Nov 2020	-		0.250	1.152	4.586	-
Integrated Logistics Support	Various	Various : Various	2.125	0.873	Nov 2018	0.890	Nov 2019	0.602	Nov 2020	-		0.602	2.515	7.005	-
Integrated Logistics Support	WR	NAWC-AD : Patuxent River, MD	3.743	1.377	Nov 2018	1.405	Nov 2019	2.098	Nov 2020	-		2.098	5.598	14.221	-
		Subtotal	7.963	2.789		2.845		2.950		-		2.950	9.265	25.812	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various : Various	1.937	0.690	Nov 2018	0.704	Nov 2019	0.718	Nov 2020	-		0.718	3.406	7.455	-
Developmental Test & Evaluation	WR	NAWC-AD : Patuxent River, MD	12.977	10.069	Nov 2018	11.498	Nov 2019	15.692	Nov 2020	-		15.692	50.331	100.567	-
Operational Test & Evaluation	Various	Various : Various	1.010	0.500	Nov 2018	0.794	Nov 2019	1.588	Nov 2020	-		1.588	114.988	118.880	-
Developmental Test & Evaluation (SATCOMM)	MIPR	DITCO : Various	0.681	1.000	Nov 2018	1.000	Nov 2019	1.000	Nov 2020	-		1.000	4.589	8.270	-
		Subtotal	16.605	12.259		13.996		18.998		-		18.998	173.314	235.172	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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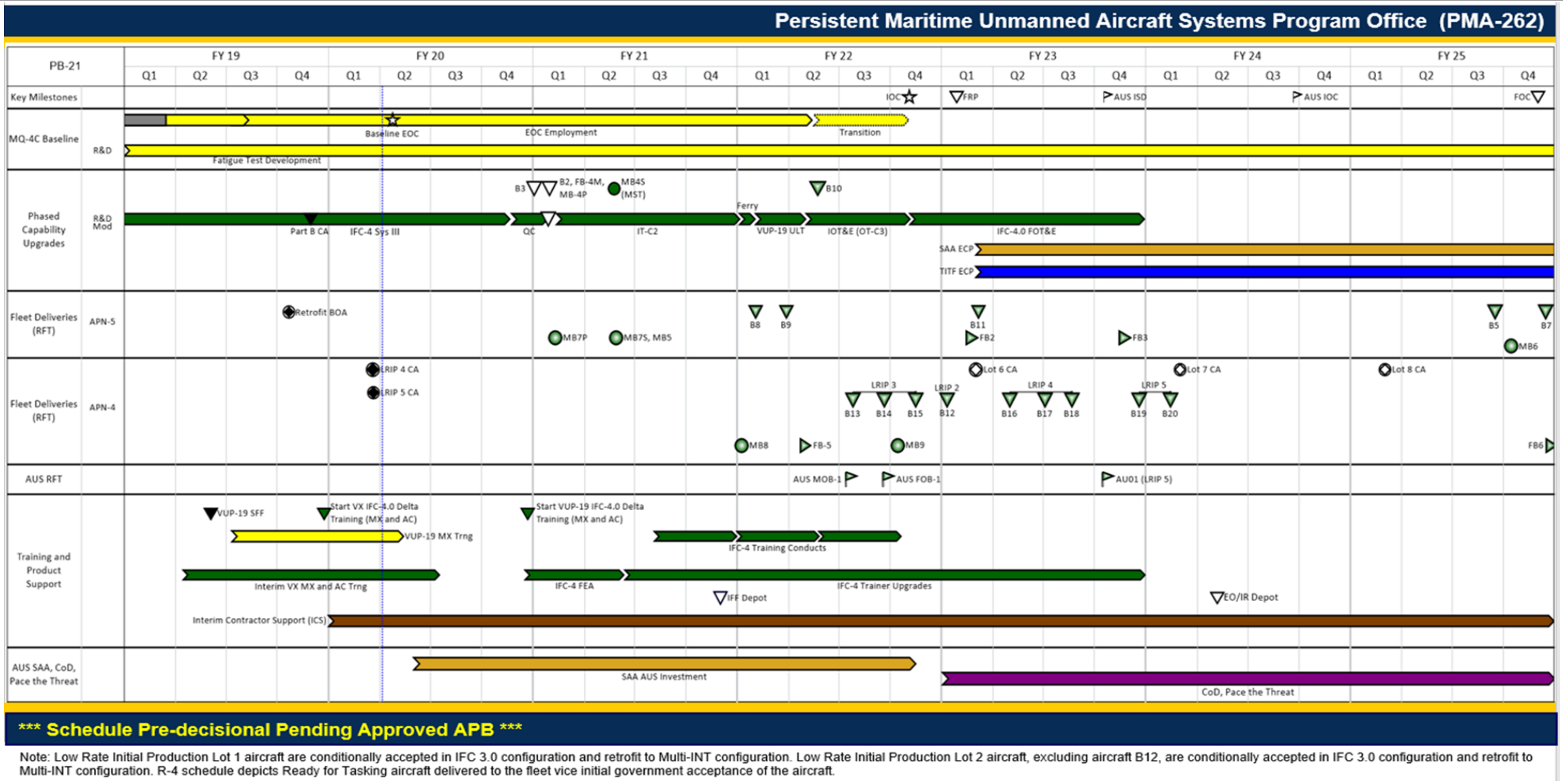
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	Various : Various	0.666	0.173	Nov 2018	0.176	Nov 2019	0.184	Nov 2020	-		0.184	0.838	2.037	-
Travel	Allot	Various : Various	0.139	0.034	Nov 2018	0.035	Nov 2019	0.036	Nov 2020	-		0.036	0.168	0.412	-
Program Management Support	C/CPFF	Ausley : Lexington Park, MD	6.500	1.593	Nov 2018	1.623	Nov 2019	1.655	Nov 2020	-		1.655	4.684	16.055	16.055
		Subtotal	7.305	1.800		1.834		1.875		-		1.875	5.690	18.504	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	518.618	218.366		185.446		178.799		-		178.799	770.687	1,871.916	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305421N / *RQ-4 Modernization*	**Project (Number/Name)** 2939 / *RQ-4 Modernization*



Note: Low Rate Initial Production Lot 1 aircraft are conditionally accepted in IFC 3.0 configuration and retrofit to Multi-INT configuration. Low Rate Initial Production Lot 2 aircraft, excluding aircraft B12, are conditionally accepted in IFC 3.0 configuration and retrofit to Multi-INT configuration. R-4 schedule depicts Ready for Tasking aircraft delivered to the fleet vice initial government acceptance of the aircraft.

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305421N / *RQ-4 Modernization*	**Project (Number/Name)** 2939 / *RQ-4 Modernization*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2939				
Acquisition Milestones: Full Rate Production	1	2023	1	2023
Acquisition Milestones: Initial Operational Capability	4	2022	4	2022
Acquisition Milestones: Baseline Early Operational Capability	2	2020	2	2020
System Development: Airframe Fatigue Testing and Analysis	1	2019	4	2025
System Development: Phased Capability Upgrades - Multi-INT (IFC 4.0)	1	2019	4	2023
System Development: Sense and Avoid (IFC-5.0) Development and Integration	1	2023	4	2025
System Development: Future Capability Development (Triton in the Fight)	4	2022	4	2025
Test & Evaluation Activities: Integrated Test (Combined/Developmental/Operational)	1	2019	1	2022
Test & Evaluation Activities: Multi-INT Initial Operational Test and Evaluation	2	2022	4	2022
Test & Evaluation Activities: Multi-INT Follow-On Operational Test and Evaluation	4	2022	4	2023
Production Milestones: Contracts: Low Rate Initial Production Lot 4 Contract Award	1	2020	1	2020
Production Milestones: Contracts: Low Rate Initial Production Lot 5 Contract Award	1	2020	1	2020
Production Milestones: Contracts: Production Lot 6 Contract Award	1	2023	1	2023
Production Milestones: Contracts: Production Lot 7 Contract Award	1	2024	1	2024
Production Milestones: Contracts: Production Lot 8 Contract Award	1	2025	1	2025
Production Milestones: Deliveries: Low Rate Initial Production Lot 1 Delivery	1	2019	3	2019
Production Milestones: Deliveries: Low Rate Initial Production Lot 2 Delivery	3	2019	1	2023
Production Milestones: Deliveries: Low Rate Initial Production Lot 3 Delivery	3	2022	4	2022
Production Milestones: Deliveries: Low Rate Initial Production Lot 4 Delivery	2	2023	3	2023
Production Milestones: Deliveries: Low Rate Initial Production Lot 5 Delivery	4	2023	1	2024