Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0304240M *I Advanced Tactical Unmanned Aircraft System*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	17.686	45.407	28.125	16.204	-	16.204	-	-	-	-	-	-
3135: *USMC MUX*	17.686	12.907	11.625	16.204	-	16.204	-	-	-	-	-	-
9999: *Congressional Adds*	0.000	32.500	16.500	0.000	-	0.000	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

Project 3135 - The Marine Air Ground Task Force (MAGTF) Unmanned Aircraft System (UAS) Expeditionary (MUX) Family of Systems (FoS) project provides funding to address capability gaps identified in the October 2016 MUX Initial Capabilities Document (ICD) and associated Requirements Clarification document. This PE supports experimentation and prototyping of advanced payloads, system architectures, mission control capabilities, ground control stations, and networking and communications infrastructure. In addition, MUX FoS will also develop CONOPS to integrate the MUX FoS into joint programs and operating concepts to mitigate technical risk through model-based systems engineering, analysis, simulation, test and evaluation, and partnership with industry.

The MUX FoS provides Advanced Tactical UAS in support of Expeditionary Advanced Base Operations (EABO), Littoral Operations in Contested Environments (LOCE), and Distributed Maritime Operations (DMO) to provide advanced, unmanned, multi-mission capability for the MAGTF and Marine Littoral Regiment. The first MUX FoS element is MUX Medium-Altitude, Long-Endurance (MUX MALE), a land-based Group 5 UAS scheduled to begin operating in PACOM in FY23. RDT&E efforts for MUX-MALE are funded in PE 0603128N.

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	45.407	22.589	27.063	-	27.063
Current President's Budget	45.407	28.125	16.204	-	16.204
Total Adjustments	0.000	5.536	-10.859	-	-10.859
• Congressional General Reductions	-	-0.314			
• Congressional Directed Reductions	-	-10.650			
• Congressional Rescissions	-	-			
• Congressional Adds	-	16.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	-10.801	-	-10.801
• Rate/Misc Adjustments	0.000	0.000	-0.058	-	-0.058

Congressional Add Details ($ in Millions, and Includes General Reductions)

	FY 2020	FY 2021
Project: 9999: *Congressional Adds*		

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0304240M *I Advanced Tactical Unmanned Aircraft System*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Congressional Add: *Mobile unmanned/manned distributed lethality airborne network and fused integrat*	14.000	0.000
Congressional Add: *Large unmanned logistics systems air development*	18.500	0.000
Congressional Add: *Fused integrated Naval Network*	0.000	2.500
Congressional Add: *KMAX Experimentation and Support*	0.000	7.000
Congressional Add: *Mobile Unmanned/Manned Distributed Lethality Airborne Network Joint Tech Demo*	0.000	7.000
Congressional Add Subtotals for Project: 9999	32.500	16.500
Congressional Add Totals for all Projects	32.500	16.500

Change Summary Explanation

Congressional Add Details:
Project 9999 - Funding has been enacted in FY21 for the support of Mobile Unmanned/Manned Distributed Lethality Airborne Network (MUDLAN), KMAX, and Fused Integrated Naval Network (FINN)

The FY2022 funding request was reduced by $0.349 million to account for the availability of prior year execution balances; $10.510 million due to the transition of funding to support requirements within MALE program, which is a capability within the MUX FoS; and $0.058 million for miscellaneous rate adjustments.

Schedule:
Project 3135 - Schedule for the MUX FoS PE 0304240M is updated to reflect the transition of requirements for the MUX MALE element of the MUX FoS to PE 0603128N. This maintains efforts to continue developing overall MUX FoS future capabilities to meet all segments of the MUX requirement and focuses specific RDT&E effort required to address the immediate need for the MALE subset of the overall MUX requirement.

Technical: Not applicable

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	Project (Number/Name) 3135 / *USMC MUX*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
3135: *USMC MUX*	17.686	12.907	11.625	16.204	-	16.204	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project 3135 - The Marine Air Ground Task Force (MAGTF) Unmanned Aircraft System (UAS) Expeditionary (MUX) Family of Systems (FoS) project provides funding to address capability gaps identified in the October 2016 MUX Initial Capabilities Document (ICD) and associated Requirements Clarification document. This PE supports experimentation and prototyping of advanced payloads, system architectures, mission control capabilities, ground control stations, and networking and communications infrastructure. In addition MUX FoS will also develop CONOPS to integrate the MUX FoS into joint programs and operating conceptsto mitigate technical risk through model-based systems engineering, analysis, simulation, test and evaluation, and partnership with industry.

The MUX FoS provides Advanced Tactical UAS in support of Expeditionary Advanced Base Operations (EABO), Littoral Operations in Contested Environments (LOCE), and Distributed Maritime Operations (DMO) to provide advanced, unmanned, multi-mission capability for the MAGTF and Marine Littoral Regiment. The first MUX FoS element is MUX Medium-Altitude, Long-Endurance (MUX MALE), a land-based Group 5 UAS scheduled to begin operating in PACOM in FY23. RDT&E efforts for MUX MALE are funded in PE 0603128N.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: MUX Studies, Analysis, and Concept Refinement	7.005	6.182	10.680	0.000	10.680
Articles:	-	-	-	-	-
FY 2021 Plans: Planned efforts include the development and testing of mission system payloads to include radar, communication, and other specialty payload, to include the engineering analysis, modeling & simulation of system capabilities. Additional efforts will support system integration and testing of mature mission systems as well as engineering analysis, program management, and sustainment planning.					
FY 2022 Base Plans: Planned efforts include evaluation of the radar mission system payloads as well as other specialty payloads, air vehicle design through engineering analysis, continued CONOPs refinement, modeling & simulation using payloads prize challenge data. Continue lab-based simulation with data obtained through completed prize challenges. Additional efforts will support prototyping with engineering analysis, program management, and sustainment planning.					
FY 2022 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 3135 / *USMC MUX*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Funding increase in FY22 supports the missions systems development through the identification and selection of candidate technologies associated with the evaluation of the radar mission system payloads as well as other specialty payloads, air vehicle design through engineering analysis, continued CONOPs refinement, modeling & simulation using payloads prize challenge data.					
Title: Test, Technical, Engineering and Management Services ***Articles:*** ***FY 2021 Plans:*** Provide Government Engineering support, Contractor VTOL - applicable, support, Program support and travel for execution of MUX concept development. Efforts include modeling and simulation of prize challenge data, evaluation of air vehicle data and development of prototype contract requirements. ***FY 2022 Base Plans:*** Will provide Government Systems Engineering and Program Management, Contractor RDT&E support, and travel. Tasking includes conducting Model Based Systems Engineering simulation using industry and threat data, and developing system and payload architecture studies to inform future integration approaches. ***FY 2022 OCO Plans:*** N/A - there is no FY22 OCO request ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Funding increase for minor inflationary adjustment to continue test, engineering and management support planned in FY22.	5.902 -	5.443 -	5.524 -	0.000 -	5.524 -
Accomplishments/Planned Programs Subtotals	12.907	11.625	16.204	0.000	16.204

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The MUX FoS project will use organic government resources, competitive and sole contract awards, Other Transaction Authorities, and other innovative acquisition concepts. The program will identify and leverage existing developmental technologies that support capabilities identified within the ICD.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 3135 / *USMC MUX*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MUX Studies and Experimentation	Various	USAF : Various	9.545	1.734	Nov 2019	0.450	Nov 2020	0.000		-		0.000	-	-	-
Requirements Analysis and Engineering Assessments	WR	Various : Various	4.173	0.960	Nov 2019	0.844	Nov 2020	0.945	Nov 2021	-		0.945	-	-	-
Mission System Development	Various	Various : Various	0.000	0.000		3.628	Nov 2021	8.135	Feb 2022	-		8.135	-	-	-
Prize Challenge Award	Various	Various : Various	0.000	4.000	Nov 2019	0.000		0.000		-		0.000	-	-	-
Modeling and Simulation	Various	NAWC AD : Patuxent River, MD	0.000	0.311	Nov 2019	1.260	Nov 2020	1.600	Nov 2021	-		1.600	-	-	-
		Subtotal	13.718	7.005		6.182		10.680		-		10.680	-	-	N/A

Remarks

Funding decrease in FY21 is due to a reduction of scope based on reduction assessed against the program. Funding increase in FY22 supports the missions systems development through the identification and selection of candidate technologies associated with the evaluation of the radar mission system payloads as well as other specialty payloads, air vehicle design through engineering analysis, continued CONOPs refinement, modeling & simulation using payloads prize challenge data. Continue lab-based simulation with data obtained through completed prize challenges. Additional efforts will support prototyping with engineering analysis, program management, and sustainment planning.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	Various	NAWCAD : Patuxent River, MD	0.000	0.220	Nov 2019	0.000		0.000		-		0.000	-	-	-
		Subtotal	0.000	0.220		0.000		0.000		-		0.000	-	-	N/A

Remarks

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 3135 / *USMC MUX*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Support	WR	NAWCAD : Patuxent River, MD	1.887	2.518	Nov 2019	2.849	Nov 2020	2.905	Nov 2021	-		2.905	-	-	-
Program Management Support	Various	Various : Various	1.868	3.119	Nov 2019	2.519	Nov 2020	2.569	Nov 2021	-		2.569	-	-	-
Travel	WR	NAWCAD : Patuxent River, MD	0.213	0.045	Nov 2019	0.075	Nov 2020	0.050	Nov 2021	-		0.050	-	-	-
		Subtotal	3.968	5.682		5.443		5.524		-		5.524	-	-	N/A

Remarks

Funding increase from FY21 to FY22 reflects inflationary adjustments to maintain engineering and program management support requirements.

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	17.686	12.907		11.625		16.204		-		16.204	-	-	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 3135 / *USMC MUX*

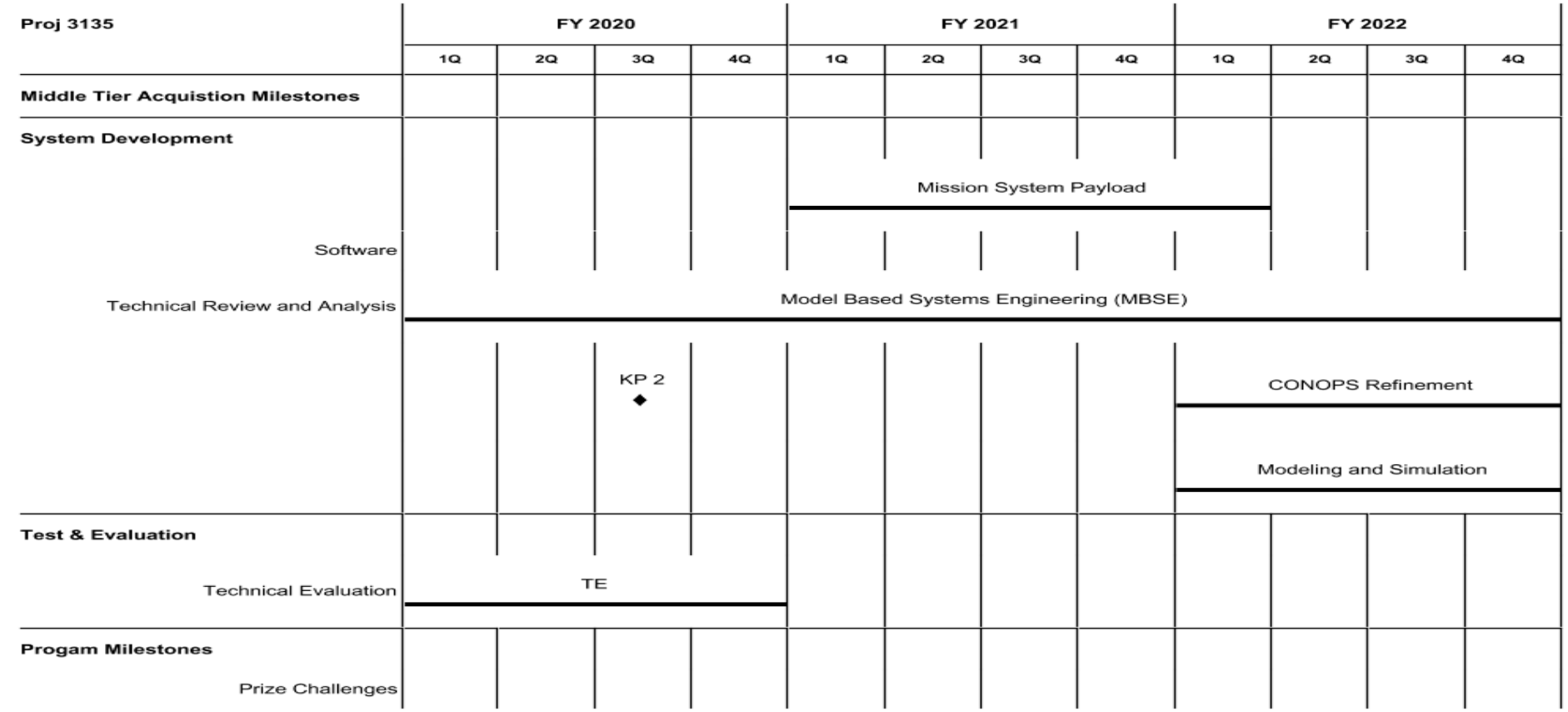

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 3135 / *USMC MUX*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3135				
System Development: Mission System Payload Development	1	2021	1	2022
System Development: Technical Review and Analysis: Model Based Systems Engineering (MBSE)	1	2020	4	2022
System Development: Technical Review and Analysis: Knowledge Point (KP) 2	3	2020	3	2020
System Development: Technical Review and Analysis: CONOPS Refinement	1	2022	4	2022
System Development: Technical Review and Analysis: Modeling and Simulation	1	2022	4	2022
Test & Evaluation: Technical Evaluation: Technical Evaluation (TE)	1	2020	4	2020

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
9999: *Congressional Adds*	0.000	32.500	16.500	0.000	-	0.000	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project C553/C629 - The Mobile Unmanned/Manned Distributed Lethality Airborne Network (MUDLAN) project provides development of high speed, high throughput, interoperable data link supporting Command and Control (C2), Intelligence, Surveillance, Reconnaissance (ISR) and Tactical Data in a SATCOM denied or restricted environment.

MUDLAN provides prototype development, testing, fleet experimentation, and concept refinement for next generation high speed, high throughput data link supporting C2, ISR and Tactical Data to connect and distribute multi-users across multiple domains in a common network architecture which enhances tactical edge situational awareness with a single user interface.

The modern protected communications capabilities allow manned and unmanned aircraft to share and disseminate large amounts of data using improved emergent communications technologies for multi-platform/ multi-service interoperability through Line-of-Sight (LOS) tactical data networks. These high-speed tactical data links are required at the forward edge where satellite services are not optimal and where existing airborne tactical data links do not support required speeds.

MUDLAN built a prototype joint tactical grid connecting over the horizon across 5 IP based links, including a high capacity transport of 45 MBPS at 130 nautical miles in a single hop, total end to end connection of 220 nautical miles demonstrated at Pax River in March 2021. MUDLAN Joint Capability Technology Demonstration concludes this summer with two defined transitions of components into programs of record. The services are continuing to invest in specific upgrades to other components to meet evolving requirements.

Project C614: Fused Integrated Naval Network (FINN) capability development includes commonality with MUDLAN technologies for Navy-USMC tactical data link interoperability, this funding will support common integration and test objectives. MUDLAN also supports Navy's Distributed Maritime Operations (DMO) objectives as a key enabler for communications and dissemination which will be formally assessed in FY21 through a series of operational exercises.

Project C554/C623 - Unmanned Logistics Support - Air (ULS-A)/KMAX provides for experimentation for unmanned cargo operations and includes complementary ISR, payloads, advanced sensors, autonomy; efforts refined requirements and Concept of Operations (CONOPS). This includes continued development of autonomous obstacle avoidance and landing system, and the continued development and integration of unique satellite communication systems designed for over-the-horizon use and operation in line-of-sight constrained environments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021
Congressional Add: Mobile unmanned/manned distributed lethality airborne network and fused integrat	14.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 9999 / *Congressional Adds*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021
FY 2020 Accomplishments: N/A ***FY 2021 Plans:*** N/A		
Congressional Add: Large unmanned logistics systems air development ***FY 2020 Accomplishments:*** N/A ***FY 2021 Plans:*** N/A	18.500	0.000
Congressional Add: Fused integrated Naval Network ***FY 2020 Accomplishments:*** N/A ***FY 2021 Plans:*** N/A	0.000	2.500
Congressional Add: KMAX Experimentation and Support ***FY 2020 Accomplishments:*** N/A ***FY 2021 Plans:*** N/A	0.000	7.000
Congressional Add: Mobile Unmanned/Manned Distributed Lethality Airborne Network Joint Tech Demo ***FY 2020 Accomplishments:*** N/A ***FY 2021 Plans:*** N/A	0.000	7.000
Congressional Adds Subtotals	32.500	16.500

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The MUDLAN/FINN experimentation will leverage MUDLAN Joint Capability Technology Demontration and MUDLAN Small Business Innovation Research prior efforts. The use of Small Business contractors, the effort will focus on continued innovation of antenna, radio and networking capabilities. Experimentation and maturation will continue to inform end user operational requirements and build on USMC, Joint service, OSD(R&E) successes. Transition will occur through future acquisition plans once the hardware is mature and the Joint service requirements are validated to enable follow-on fleet integration.

The ULS-A demonstration will be combined with the current unmanned logistics capability and will support planned demonstrations associated with CQ-24A (KMAX) as part of a Cooperative Research and Development Agreement (CRADA) between the Navy and industry partners.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 9999 / *Congressional Adds*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CONOPS, Interface Control Documents	WR	NAWCAD : Patuxent River, MD	0.000	0.500	Mar 2020	0.000		0.000		-		0.000	-	-	-
MUDLAN Pod development and flight demonstration	C/FPIF	Various : Various	0.000	5.200	Aug 2020	1.200	Jul 2021	0.000		-		0.000	-	-	-
MUDLAN communications equipment and demonstrations	C/CPIF	Various : Various	0.000	4.900	Sep 2020	3.250	Jul 2021	0.000		-		0.000	-	-	-
ULS-A Experimentation	Various	USAF : Rome, NY	0.000	14.932	May 2020	5.512	Jul 2021	0.000		-		0.000	-	-	-
ULS-A Requirements and analysis, and engineering assessements	WR	NAWCAD : Patuxent River, MD	0.000	0.750	Apr 2020	0.592	Jul 2021	0.000		-		0.000	-	-	-
FINN Dev	Various	USAF : WPAFB	0.000	0.000		2.500	May 2021	0.000		-		0.000	-	-	-
		Subtotal	0.000	26.282		13.054		0.000		-		0.000	-	-	N/A

Remarks

Congressional increase for MUDLAN, FIN and KMAX to continue efforts initiated by FY20 Congressional adjustments for product development. FINN utilizes MUDLAN to further Naval Network.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Logistics Support	Various	Various : Various	0.000	1.200	Apr 2020	1.133	Jun 2021	0.000		-		0.000	-	-	-
		Subtotal	0.000	1.200		1.133		0.000		-		0.000	-	-	N/A

Remarks

Congressional increase to continue efforts initiated by FY20 Congressional adjustments for support of developmental efforts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	Project (Number/Name) 9999 / *Congressional Adds*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Range Demo Costs	Various	Various : Patuxent River, MD	0.000	2.100	Aug 2020	0.000		0.000		-		0.000	-	-	-
SAIL Cost	Various	Various : Patuxent River, MD	0.000	0.500	Aug 2020	0.000		0.000		-		0.000	-	-	-
		Subtotal	0.000	2.600		0.000		0.000		-		0.000	-	-	N/A

Remarks

N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Various : Various	0.000	0.800	Jun 2020	0.816	May 2021	0.000		-		0.000	-	-	-
Government Engineering Support	WR	NAWCAD : Patuxent River, MD	0.000	1.468	Mar 2020	1.497	May 2021	0.000		-		0.000	-	-	-
Travel	WR	NAWCAD : Patuxent River, MD	0.000	0.150	Mar 2020	0.000		0.000		-		0.000	-	-	-
		Subtotal	0.000	2.418		2.313		0.000		-		0.000	-	-	N/A

Remarks

Continues government support of Congressional increases.

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	32.500		16.500		0.000		-		0.000	-	-	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 9999 / *Congressional Adds*

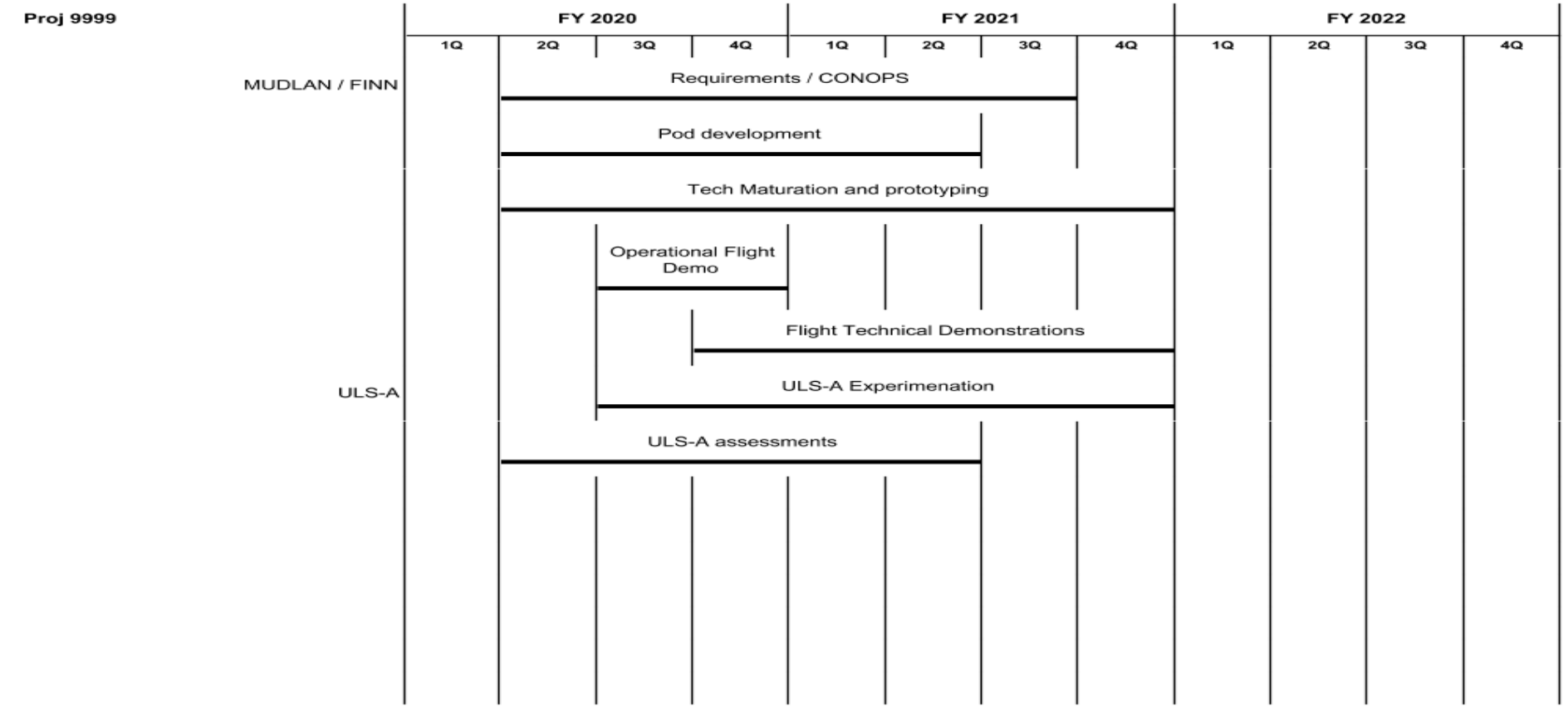

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0304240M / *Advanced Tactical Unmanned Aircraft System*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
MUDLAN / FINN: Requirements / CONOPS	2	2020	3	2021
MUDLAN / FINN: MUDLAN FINN Pod development	2	2020	2	2021
MUDLAN / FINN: Maturation and prototyping of key MUDLAN communications equipment and demonstrations	2	2020	4	2021
MUDLAN / FINN: MUDLAN FINN Operational Flight Demo	3	2020	4	2020
MUDLAN / FINN: MUDLAN Flight Technical Demonstrations	4	2020	4	2021
ULS-A: ULS-A Product Development	3	2020	4	2021
ULS-A: ULS-A Requirements and Engineering Assessments	2	2020	2	2021