

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy **Date:** February 2018

Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0604292N / (U)MH-XX
----------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	7.469	1.618	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.087
2934: MH-XX	7.469	1.618	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.087

A. Mission Description and Budget Item Justification

The MH-XX project directs developmental activities in support of the replacement of the current inventory of Navy and Marine Corps helicopters in the 2030+ timeframe through the Joint Future Vertical Lift (FVL) family of systems program. Specific developmental activities will include: capability requirements definition, documentation, and approval; support to the Joint Multi-Role Technology Demonstrator and Joint Future Vertical Lift, including Common Systems Integrated Product Team leadership, open hardware and software reference and objective architectures definition, mission system interoperability, and shipboard compatibility; Analysis of Alternatives planning and execution; and associated affordability studies. Follow-on activities support preparation and execution of efforts to develop common systems reference and objective open architectures, and eventual prototype aircraft flight demonstrations in support of the FVL Technology Maturation and Risk Reduction acquisition phase. Activities and technologies developed also have the potential to be leveraged for sustainment of legacy Navy and Marine Corps helicopters. These efforts will enable timely development of a system which provides best value and capability to the Joint Warfighter while maintaining effective and efficient war fighting capability in support of the Navy/Marine Corps 30-year Aviation Plan.

The MH-XX Program has been terminated in FY 2018 and out pending results of the MH-60S Service Life Assessment Program.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	1.620	0.000	0.000	-	0.000
Current President's Budget	1.618	0.000	0.000	-	0.000
Total Adjustments	-0.002	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.002	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000

Change Summary Explanation

Technical: Not applicable.

Schedule: The schedule has been updated to add the delivery of a Radio Frequency (RF) Survivability Assessment Study. The development and delivery of the RF Survivability Assessment Study will inform upgrade options for the MH-60S Radar Warning Receiver systems.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604292N / (U)MH-XX				Project (Number/Name) 2934 / MH-XX			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
2934: MH-XX	7.469	1.618	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.087
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The MH-XX project directs Naval Aviation developmental activities in support of the replacement of the Navy H-60 series helicopters, multi-mission medium lift helicopter capability, in the 2030+ timeframe. These aircraft will be used extensively to protect Joint assets from airborne, surface, and sub-surface threats. Other supported mission areas will include Combat Search and Rescue, Naval Special Warfare, Humanitarian Assistance/Disaster Relief, Logistics, and Medical Evacuation. Specific developmental activities will include: capability requirements definition documentation, and approval; support to the Joint Multi-Role Technology Demonstrator (JMR TD) and Joint Future Vertical Lift including Common Systems Integrated Product Team leadership, open hardware and software reference and objective architectures definition, common hardware prototyping efforts, mission system interoperability, and shipboard compatibility; Analysis of Alternatives planning and execution; and associated affordability studies. These activities will result in completion of all pre-system acquisition documentation required for a Material Development Decision in first quarter FY 2017. These efforts will enable timely development of a system which provides best value to the Joint Warfighter and Naval Aviation while maintaining effective and efficient war fighting capability in support of the Navy's 30-year Aviation Plan.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: MH-XX Requirements Definition and Acquisition Documentation	1.618	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2018 Plans: N/A					
FY 2019 Base Plans: N/A					
FY 2019 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	1.618	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)
N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604292N / (U)MH-XX	Project (Number/Name) 2934 / MH-XX
C. Other Program Funding Summary (\$ in Millions)		
<u>Remarks</u>		
D. Acquisition Strategy Provide research and development support for Pre-Milestone A activities, predominantly government, to enable replacement of the Navy H-60 series helicopters, multi-mission medium lift helicopter capability, in the 2030+ timeframe.		
E. Performance Metrics Completion of business metrics and reference architecture white papers.		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604292N / (U)MH-XX				Project (Number/Name) 2934 / MH-XX					
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Government Engineering Support	WR	NAWCAD : Patuxent River, MD	3.202	0.504	Aug 2017	0.000		0.000		-		0.000	0.000	3.706	-
Trade Studies/ Requirements Analysis	Various	Various : Various	3.317	1.011	Apr 2017	0.000		0.000		-		0.000	0.000	4.328	-
Subtotal			6.519	1.515		0.000		0.000		-		0.000	0.000	8.034	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	WR	NAWCAD : Patuxent River, MD	0.920	0.084	Dec 2016	0.000		0.000		-		0.000	0.000	1.004	-
Travel	Various	Various : Various	0.030	0.019	Oct 2016	0.000		0.000		-		0.000	0.000	0.049	-
Subtotal			0.950	0.103		0.000		0.000		-		0.000	0.000	1.053	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			7.469	1.618		0.000		0.000		-		0.000	0.000	9.087	N/A
Remarks															

UNCLASSIFIED

PE 0604292N: (U)MH-XX
Navy

R-1 Line #91

Project (Number/Name)	Start Date	End Date	Status	Manager	Budget (USD)	Actual Cost (USD)	Variance (USD)	Progress (%)	Risk Level	Notes
101/Alpha	2023-01-15	2023-03-31	Completed	J. Doe	120000	118000	2000	100	Low	Minor budget variance.
102/Beta	2023-02-01	2023-05-15	In Progress	A. Smith	250000	260000	-10000	75	Medium	Costs slightly over budget.
103/Gamma	2023-03-10	2023-06-30	On Hold	M. Chen	80000	80000	0	20	High	Project paused due to resource allocation.
104/Delta	2023-04-01	2023-07-31	Planned	S. Kim	150000	150000	0	0	Medium	Initial planning phase.
105/Epsilon	2023-05-01	2023-08-31	On Hold	L. Garcia	90000	90000	0	10	Low	Waiting for client requirements.
106/Zeta	2023-06-01	2023-09-30	Planned	K. Lee	110000	110000	0	0	Medium	Scope definition in progress.
107/Eta	2023-07-01	2023-10-31	Planned	H. Patel	130000	130000	0	0	Medium	Resource allocation pending.
108/Theta	2023-08-01	2023-11-30	Planned	B. Wong	100000	100000	0	0	Low	Initial meeting scheduled.
109/Iota	2023-09-01	2023-12-31	Planned	N. Brown	140000	140000	0	0	Medium	Contract review ongoing.
110/Kappa	2023-10-01	2024-01-31	Planned	D. White	160000	160000	0	0	Medium	Feasibility study initiated.

2934 / MH-XX

[illegible]

2019DON - 0604292N - 2934

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604292N / (U)MH-XX	Project (Number/Name) 2934 / MH-XX	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2934				
Acquisition Milestones: Planning: Design Analysis Trade Studies	1	2017	4	2017
Deliverables: Business Metrics White Paper	1	2017	2	2017
Deliverables: Reference Architecture White Paper	1	2017	1	2018
Deliverables: RF Survivability Assessment	4	2017	3	2018