

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2021 Air Force **Date:** February 2020

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0102110F / <i>UH-1N Replacement Program</i>
--	--

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	191.551	190.523	170.975	44.464	0.000	44.464	16.375	4.293	0.399	0.000	0.000	618.580
672021: <i>UH-1N Replacement Program</i>	191.551	190.523	170.975	44.464	0.000	44.464	16.375	4.293	0.399	0.000	0.000	618.580
Quantity of RDT&E Articles	4	-	2	-	-	-	-	-	-	-	-	-

**Program MDAP/MAIS Code:** 562

**A. Mission Description and Budget Item Justification**

The MH-139 program will replace the Air Force fleet of UH-1N aircraft with modern helicopters that will close significant mission capability gaps associated with the current fleet of UH-1N aircraft. The replacement aircraft will provide vertical airlift and support the requirements of four Air Force major commands and operating agencies: Air Force Global Strike Command (AFGSC), Air Force District of Washington (AFDW), Air Education and Training Command (AETC), and Air Force Material Command (AFMC). AFGSC is the Air Force lead command and operational capability requirements sponsor. This program is an element of the Air Force's nuclear enterprise reform initiatives.

Program includes, but is not limited to, continued funding for four test aircraft and two System Demonstration Test Article (SDTA) aircraft, support equipment, Interim Contractor Support (ICS), training system air vehicles and devices, Type I training and courseware, non-developmental item (NDI) integration, cyber test articles, associated Government support activities, and permits the initiation of activities to support rapid requirement development.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver MH-139 weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2021 Air Force	<b>Date:</b> February 2020
--	----------------------------

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0102110F / <i>UH-1N Replacement Program</i>
--	--

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
Previous President's Budget	258.022	170.975	44.544	0.000	44.544
Current President's Budget	190.523	170.975	44.464	0.000	44.464
Total Adjustments	-67.499	0.000	-0.080	0.000	-0.080
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-59.000	0.000			
• SBIR/STTR Transfer	-8.499	0.000			
• Other Adjustments	0.000	0.000	-0.080	0.000	-0.080

**Change Summary Explanation**

FY 2019 funding decreased due to \$8.499M for Small Business Innovative Research and \$59M decrease for reprogramming actions.

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
---	----------------	----------------	----------------

<b>Title:</b> MH-139	182.145	158.307	32.566
<b>Description:</b> Development of MH-139 helicopter and integration of non-developmental item (NDI) hardware, software, and other capabilities into aircraft system, training systems, support elements and technical/manufacturing baselines to achieve MH-139 operational capability requirements.			
<b>FY 2020 Plans:</b> Continued systems engineering efforts for NDI integration onto an airworthiness-certified aircraft to achieve operational capability requirements, including associated mission planning and training systems, and procurement of test articles. Includes government oversight of contractor design reviews toward finalizing changes from the airworthiness-certified baseline aircraft specifications. Other contractor and government systems engineering tasks include associated testing and certifications. Management services include miscellaneous program office support, travel, office supplies, and service contracts. Includes incremental funding of four aircraft for test and two SDTA aircraft.			
<b>FY 2021 Plans:</b> Continue systems engineering efforts, government oversight, contractor and government systems engineering tasks and management services.			
<b>FY 2020 to FY 2021 Increase/Decrease Statement:</b>			

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2021 Air Force **Date:** February 2020

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0102110F / <i>UH-1N Replacement Program</i>
--	--

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
Funding decreased due to the completed purchase of 4 RDT&E aircraft.			
<b>Title:</b> MH-139 Government Test and Evaluation	8.378	12.668	11.898
<b>Description:</b> System and subsystem test and evaluation of the MH-139 solution.			
<b>FY 2020 Plans:</b> Continued Live Fire Test & Evaluation (LFT&E), Development Test (DT) and Operational Assessment (OA), and begin Operational Test (OT) support execution. Conduct technical reviews of the MH-139 contractor's non-developmental item (NDI) integration onto an airworthiness-certified baseline aircraft system.			
<b>FY 2021 Plans:</b> Continue LFT&E, DT and OA, and OT support execution.			
<b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding decreased due to phasing of LFT&E, DT/OA and OT support.			
<b>Accomplishments/Planned Programs Subtotals</b>	190.523	170.975	44.464

<b>D. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF 04 Line Item H0106O: <i>UH-1N Replacement</i>	0.000	0.000	194.016	-	194.016	279.604	339.501	520.883	527.781	890.400	2,752.185
• APAF 06 Line Item H0106O: <i>UH-1N Replacement</i> <i>Initial Spares/Repair Parts</i>	0.000	0.000	18.389	-	18.389	18.045	7.660	22.948	17.985	65.400	150.427
• MILCON 0: <i>UH-1N</i> <i>Replacement - Primary Facility</i>	66.000	46.000	0.000	-	0.000	38.000	0.000	0.000	0.000	0.000	150.000

**Remarks**

**E. Acquisition Strategy**  
The Air Force intends to procure an airworthiness-certified baseline helicopter that requires non-developmental item integration (e.g. Electro-Optical/Infrared Sensor, personnel recovery hoists, cockpit/cabin armor, etc.) and training systems to meet all operational capability requirements. Specific acquisition and contracting strategies for RDT&E funded integration tasks and the test and evaluation program will be determined as part of the overall program strategy.

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Air Force												Date: February 2020			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 7				PE 0102110F / UH-1N Replacement Program				672021 / UH-1N Replacement Program							
<b>Product Development (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
MH-139 weapon system integration and type/airworthiness certification	C/FFP	Boeing : Philadelphia, PA	180.745	169.344	Jan 2019	133.163	Dec 2019	11.657	Dec 2020	-		11.657	17.129	512.038	-
<b>Subtotal</b>			180.745	169.344		133.163		11.657		-		11.657	17.129	512.038	N/A
<b>Support (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
MH-139 other government costs and civilian pay	C/Various	Various : TBD	0.510	4.934	Jan 2019	15.372	Jan 2020	8.659		-		8.659	2.175	31.650	-
<b>Subtotal</b>			0.510	4.934		15.372		8.659		-		8.659	2.175	31.650	N/A
<b>Test and Evaluation (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
MH-139 live fire, developmental, and operational test and evaluation, planning and technical support	Various	Various : TBD	3.210	8.378	May 2019	12.668	Dec 2019	11.898		-		11.898	1.763	37.917	-
<b>Subtotal</b>			3.210	8.378		12.668		11.898		-		11.898	1.763	37.917	N/A
<b>Management Services (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
MH-139 Program Management Administration	Various	Various : TBD	0.972	1.159	Dec 2018	1.772	Dec 2019	1.250		-		1.250	0.000	5.153	-



**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2021 Air Force		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0102110F / UH-1N Replacement Program	<b>Project (Number/Name)</b> 672021 / UH-1N Replacement Program

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<b>MH-139 Program</b>																												
MH-139 NDI Contract																												
Test and Evaluation																												
System/Subsystem Test and Integration																												
Weapon System Integration																												
Milestone C																												
Required Assets Available for Initial Operational Capability																												

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2021 Air Force		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0102110F / <i>UH-1N Replacement Program</i>	<b>Project (Number/Name)</b> 672021 / <i>UH-1N Replacement Program</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>MH-139 Program</i></b>				
MH-139 NDI Contract	4	2019	4	2021
Test and Evaluation	1	2019	3	2022
System/Subsystem Test and Integration	1	2019	1	2022
Weapon System Integration	1	2019	4	2022
Milestone C	4	2021	4	2021
Required Assets Available for Initial Operational Capability	4	2023	4	2023