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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0605278F / <i>HC/MC-130 Recap RDT&E</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	0.000	15.552	46.796	47.994	0.000	47.994	12.860	24.744	25.265	25.826	2.613	201.650
675006: <i>HC/MC-130 Recap</i>	0.000	9.840	0.660	0.287	0.000	0.287	0.924	0.742	0.741	0.757	0.000	13.951
675910: <i>Block 8.X</i>	0.000	5.712	46.136	47.707	0.000	47.707	11.936	24.002	24.524	25.069	2.613	187.699

Program MDAP/MAIS Code: 257

Note

In FY 2022, PE 0605278F, (HC/MC-130J Recap RDT&E), Project 675006, (HC/MC-130 Recap) efforts were transferred to, Project 675910, (Block 8.X), in order to combine the Communication Modernization funding to execute a single Communications Modernization program for AC/HC/MC-130J. The HC-130J 7.0/8.1 program and the AC/MC-130J 7.0/8.X program include critical upgrades needed as a baseline requirement for the Communications Modernization radio/software architecture.

A. Mission Description and Budget Item Justification

HC/MC-130 Recapitalization provides a Medium lift tanker aircraft to replace and augment the aging USAF fleet of combat rescue HC-130P/N and special operations MC-130E/H/P/W aircraft for the Combat Search and Rescue (CSAR) forces, and Air Force Special Operation Forces, which are experiencing airworthiness, maintainability, and operations limitations. The HC/MC-130 Recap incorporates production line modifications to the C-130J common/baseline configuration to convert them to the HC/MC model. The program also funds post-production modifications to add special mission systems required for behind-enemy-line operations required of CSAR and Special Operations aircraft.

The Research, Development, Testing and Evaluation (RDT&E) portion of the Recap program funds engineering support and studies to conduct rapid development activities, and develops major "block" upgrades to deliver specific increments of capability in common configurations across the fielded fleet, which includes AC/HC/MC-130J. The RDT&E activities in PE 0605278F currently include but are not limited to Block 7.0/8.1 and Communications Modernization. Block 7.0/8.1 leverages the baseline C-130J (PE0401132F) Block 7.0/8.1 upgrade, but funds unique AC/HC/MC-130J integration requirements. The Block 7.0/8.1 project will deliver Communication, Navigation and Surveillance/Air Traffic Management (CNS/ATM) capabilities required for compliance with evolving international airspace standards. It also incorporates a new Flight Management System (FMS) that allows AC/HC/MC-130J aircraft to maintain hardware and software commonality with the C-130J Enterprise. The remaining capabilities 7.0/8.1 provides are Link-16, Civil GPS Navigation and Data Link, Identification Friend or Foe (IFF) Transponder Mode-5, and Automatic Dependent Surveillance-Broadcast Out (ADS-B Out) The USAF has also initiated the Communications Modernization program to comply with Mobile User Objective System (MUOS) and VINSON/ANDVT Cryptographic Modernization (VACM) mandates, as well as deliver Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Single Channel Ground and Airborne Radio System (SINCGARS), and HF Modernization capabilities to resolve DMS issues.

The Air Force decoupled IFF Mode 5 and ADS-B from the 7.0/8.1 program to accelerate fielding and address 2020 mandates. Additionally, The Air Force recently separated the HC-130J and MC-130J 7.0/8.1 programs to address MC-130J availability for other modifications. Due to technical inter-dependencies of the Communications Modernization program on some sub-systems delivered in the Block 7.0/8.1 program, AC/MC-130J 7.0/8.1 requirements will be addressed through both the Communications Modernization program and a future AC/MC-130J 7.0/8.x program. That is, some 7.0/8.1 requirements/subsystems must be accelerated

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Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0605278F / <i>HC/MC-130 Recap RDT&E</i>
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for the new communications systems to function properly; those will now be executed under the Communications Modernization program. The later AC/MC Block 8.x program will then address the remaining requirements.

HC/MC-130J Recap funding also supports innovation activities to include studies, analyses, requirements definition, and quick-reaction capability prototypes/ demonstrations to accelerate planning for technology transition, technology insertion and future acquisition programs.

The program may also include any Contractor Manpower Equivalent (CME)/A&AS support deemed necessary to support the program objectives. The HC/MC-130 Recap RDT&E permits the initiation and employment of rapid acquisition authorities to respond to emerging threats and requirements as needed.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver HC/MC-130 Recap weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program elements 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2021 \$1.659 million was expended for civilian pay expenses in this program element, and in FY 2022 \$4.067 million is forecasted for civilian pay expenses in this program element.

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.

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	19.491	46.796	0.000	0.000	0.000
Current President's Budget	15.552	46.796	47.994	0.000	47.994
Total Adjustments	-3.939	0.000	47.994	0.000	47.994
• 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	-3.375	0.000			
• SBIR/STTR Transfer	-0.564	0.000			
• Other Adjustments	0.000	0.000	47.994	0.000	47.994

Change Summary Explanation

FY 2021 funding was reduced by a total of \$3.939 million which included a \$3.375 million reprogramming action for higher Air Force priorities and \$0.564 million for Small Business Innovation Research.

The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY 2023 cannot be made in a relevant manner.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force										Date: April 2022		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E				Project (Number/Name) 675006 / HC/MC-130 Recap			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
675006: HC/MC-130 Recap	0.000	9.840	0.660	0.287	0.000	0.287	0.924	0.742	0.741	0.757	0.000	13.951
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2022, PE 0605278F, (HC/MC-130J Recap RDT&E), Project 675006, (HC/MC-130 Recap) efforts were transferred to, Project 675910, (Block 8.X), in order to combine the Communication Modernization funding to execute a single Communications Modernization program for AC/HC/MC-130J. The HC-130J 7.0/8.1 program and the AC/MC-130J 7.0/8.X program include critical upgrades needed as a baseline requirement for the Communications Modernization radio/software architecture.

A. Mission Description and Budget Item Justification

HC/MC-130 Recapitalization will replace and augment the aging USAF fleets of combat rescue HC-130P/N and special operations MC-130E/P/H aircraft which are experiencing airworthiness, maintainability and operational limitations.

The RDT&E portion of the Recap program funds three major thrusts to include but not limited to Continuous Improvement Program, HC Block 7.0/8.1, and Governmental Test.

The HC-130J Recap RDT&E activity integrates Block 7.0/8.1 into a HC-130J, provides program capability updates, and integration with other HC-130J unique modifications. The HC-130J Block 7.0/8.1 program follows the same "Block Upgrade" strategy being used in the C-130J program (PE 0401132F).

The USAF will be fielding the IFF Mode 5, ADS-B Out and Link-16 portions of Block 7.0/8.1 ahead of the remaining 36 capabilities in order to comply with the 2020 mandates. The Link 16 has been deferred due to funding shortages driven by the requirement to upgrade, but will be developed as a future spiral capability should additional funds become available. A follow-on stand-alone program will be established to address issues out of the Block 7.0/8.1 effort. This stand-alone will include 2 Capability Management Upgrade, CMU-1C and CMU-2, that address discrepancies in the Block 7.0/8.1 program and the Communication/Navigation/Identification - System Processors (CNI-SP) and also addresses Link-16 integration. This program would also include HC-130J platform certification for the Link-16 terminal (BU3) and any other discrepancies/upgrades that come up at that time.

The HC Block 7.0/8.1 Recap program is scheduled to complete development in 2023; however, the Direct Cite Authority (DCA) positions continue through the FYDP to support ACC program planning, and may be reallocated to future programs as they are established.

HC/MC-130J Recap funding also supports innovation activities to include studies, analyses, requirements definition, and quick-reaction capability prototypes/ demonstrations to accelerate planning for technology transition, technology insertion and future acquisition programs.

RDT&E permits the initiation and employment of rapid acquisition authorities to respond to emerging threats and requirements as needed.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force	Date: April 2022
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap
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This program element may include necessary civilian pay expenses required to manage, execute, and deliver HC/MC-130 Recap weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program elements 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2021 0.522 million was expended for civilian pay expenses in this program element, and in FY 2022 0.285 million is forecasted for civilian pay expenses in this program element.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: HC/MC-130 Recap Continuous Improvement Program (CIP)</p> <p>Description: Recurring Software and hardware enhancements to address evolving requirements for Special Operations Forces and Personnel Recovery missions. These enhancements will be incorporated in both production and fielded aircraft. These enhancements will include, but are not limited to, parallel operational flight program (OFP) updates.</p> <p>FY 2022 Plans: Recurring Software and hardware enhancements of multiple onboard systems.</p> <p>FY 2023 Base Plans: Recurring Software and hardware enhancements of multiple onboard systems.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: N/A no change in funding.</p>	0.001	0.001	0.001	0.000	0.001
<p>Title: HC-130 Block 7.0/8.1</p> <p>Description: Combined software/hardware upgrade for Block 7.0/8.1. Block 7.0/8.1 includes, but is not limited to: Link 16, a new Flight Management System (FMS), Civil Global Positioning System (GPS) Navigation, a Special Mission Processor Interface (SMP-I), Identification Friend or Foe (IFF) Mode 5, Civil Data Link, Automatic Dependent Surveillance-Broadcast Out (ADS-B-Out) and the CSO 2.5.</p> <p>FY 2022 Plans: Combined software/hardware upgrade activities for Block 7.0/8.1.</p> <p>FY 2023 Base Plans: Reduced software/hardware upgrade for Block 7.0/8.1. due to HC Block 7.0/8.1 program is scheduled to complete development in 2023.</p> <p>FY 2023 OCO Plans:</p>	9.718	0.522	0.285	0.000	0.285

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreased due to reduced software/hardware upgrades for Block 7.0/8.1 program approaching completion.					
Title: Government Test Support	0.121	0.137	0.001	0.000	0.001
Description: Government Test Support includes but are is not limited to, Test and evaluation planning, execution, Joint Interoperability Testing Certification (JITC) and support to include MITRE for developmental and operational testing.					
FY 2022 Plans: Government test support to include but is not limited to Development and operational testing for the HC Block 7.0/8.1 program.					
FY 2023 Base Plans: Government test support includes but is not limited to Development and operational testing for the HC Block 7.0/8.1 program.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreased due to reduced Government test support as the HC-130 Block 7.0/8.1 program approaches completion.					
Accomplishments/Planned Programs Subtotals	9.840	0.660	0.287	0.000	0.287

C. Other Program Funding Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• APAF 05 Line Item HCMC00: HC/MC-130 Modifications	3.961	0.357	0.919	-	0.919	1.756	5.000	5.000	0.000	0.000	16.993
• APAF 02 Line Item C-130JM: MC-130J	383.106	220.049	40.351	-	40.351	10.088	10.364	10.696	10.928	0.000	685.582

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
3600 / 7	PE 0605278F / HC/MC-130 Recap RDT&E	675006 / HC/MC-130 Recap

D. Acquisition Strategy

Lockheed Martin is the primary contractor for Research and Development work in support of the HC/MC-130J Recap program. Block 7.0/8.1 strategy takes the common core Block 7.0/8.1 developed in the C-130J program and integrates it into the HC-130J. Block 7.0/8.1 will also integrate with HC- unique mods. The C-130J ADS-B Out program includes all C-130J variants.

Development work done to date on the HC-130J Recap program has been on Cost Plus Award Fee (CPAF) and Cost Plus Incentive Fee (CPIF) type contracts.

The Continuous Improvement Program (CIP) acquisition strategy is developed on an as needed basis.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
HC/MC-130 Recap Continuous Improvement Program (CIP)	SS/CPHF	Lockheed Martin : Marietta, GA	0.000	0.001	Sep 2021	0.001	Mar 2022	0.001	Mar 2023	-		0.001	0.000	0.003	1.198
HC-130 Recap Block 7.0/8.1	SS/CPHF	Lockheed Martin : Marietta, GA	0.000	9.252	Nov 2020	0.001	Mar 2022	0.001	Mar 2023	-		0.001	18.391	27.645	81.441
Subtotal			0.000	9.253		0.002		0.002		-		0.002	18.391	27.648	N/A

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Direct Site Civilian Pay	C/CPAF	Not specified. : TBD	0.000	0.466	Oct 2020	0.521	Oct 2021	0.284	Oct 2022	-		0.284	0.000	1.271	-
Subtotal			0.000	0.466		0.521		0.284		-		0.284	0.000	1.271	N/A

Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Support Test	RO	46th Test Wing: EAFB, FL : TBD	0.000	0.121	Apr 2021	0.137	Mar 2022	0.001	Mar 2023	-		0.001	0.000	0.259	-
Subtotal			0.000	0.121		0.137		0.001		-		0.001	0.000	0.259	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
	Project Cost Totals		0.000	9.840	0.660	0.287	-	0.287	18.391	29.178

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap
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FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
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

HC/MC-130 Recap Development	
HC-130J Government Testing	
HC-130 RECAP Block 7.0/8.1 Development	
Continuous Improvement Program (CIP)	

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>HC/MC-130 Recap Development</i>				
HC-130J Government Testing	1	2021	4	2027
HC-130 RECAP Block 7.0/8.1 Development	3	2021	4	2027
Continuous Improvement Program (CIP)	2	2021	4	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E				Project (Number/Name) 675910 / Block 8.X			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
675910: <i>Block 8.X</i>	0.000	5.712	46.136	47.707	0.000	47.707	11.936	24.002	24.524	25.069	2.613	187.699
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2022, PE 0605278F, (HC/MC-130J Recap RDT&E), Project 675006, (HC/MC-130 Recap) efforts were transferred to, Project 675910, (Block 8.X), in order to combine the Communication Modernization funding to execute a single Communications Modernization program for AC/HC/MC-130J. The HC-130J 7.0/8.1 program and the AC/MC-130J 7.0/8.X program include critical upgrades needed as a baseline requirement for the Communications Modernization radio/software architecture.

A. Mission Description and Budget Item Justification

This project funding is intended to execute system upgrades for AC/HC/MC-130J aircraft upgrades. The upgrades currently include but are not limited to AC/MC-130J 7.0/8.1 (i.e., Block 8.X) and Communications Modernization as well as studies and integration activities required for special mission 130J aircraft.

The USAF has also initiated the Communications Modernization program to comply with Mobile User Objective System (MUOS) and VINSON/ANDVT Cryptographic Modernization (VACM) mandates, as well as deliver Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Single Channel Ground and Airborne Radio System (SINCGARS), and HF Modernization capabilities to resolve DMS issues.

Near-term, the Air Force intends to execute critical portions of AC/MC-130J 7.0/8.1 program as part of the Communications Modernization program. The remaining AC/MC-130J 7.0/8.1 capabilities (i.e., those not needed to execute Communications Modernization) will be installed on the AC and MC-130J under a future RDT&E program within this project, projected to begin in FY25.

Block 8.X funding also supports innovation activities to include studies, analyses, requirements definition, and quick-reaction capability prototypes/demonstrations to accelerate planning for technology transition, technology insertion and future acquisition programs.

RDT&E permits the initiation and employment of rapid acquisition authorities to respond to emerging threats and requirements as needed.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver HC/MC-130 Recap weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program elements 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2021 1.136 million was expended for civilian pay expenses in this program element, and in FY 2022 3.790 million is forecasted for civilian pay expenses in this program element.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Communications Modernization Phase I	4.739	41.340	16.318	0.000	16.318

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
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<p>Description: Includes, but is not limited to compliance with Mobile User Objective System (MUOS) and VINSON/ANDVT Cryptographic Modernization (VACM) mandates, which will allow for continuous secure voice, data, video, network-centric, and satellite communications in real-time as the satellite constellation transitions and cryptographic algorithms are modernized.</p> <p>FY 2022 Plans: Continue NRE EMD activities.</p> <p>FY 2023 Base Plans: Continue NRE EMD activities.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreased due to reduced NRE EMD activities as Block 8.X Phase I approaches completion.</p>					
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<p>Title: Communications Modernization Phase II</p> <p>Description: Includes, but is not limited to Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Single Channel Ground and Airborne Radio System (SINCGARS), and HF Modernization capabilities to resolve DMS issues, which will allow for continuous UHF, VHF, and HF communications in real-time.</p> <p>Due to technical inter-dependencies of the Communications Modernization program on some sub-systems delivered in the Block 7.0/8.1 program, AC/MC-130J 7.0/8.1 requirements will be addressed through both the Communications Modernization program and a future AC/MC-130J 7.0/8.x program.</p> <p>FY 2022 Plans: Phase II EMD activities begin in FY22.</p> <p>FY 2023 Base Plans: Phase II EMD activities for Communications Modernization.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p>	0.000	0.003	26.863	0.000	26.863
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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force	Date: April 2022
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675910 / Block 8.X
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funding increased due to Block 8.X Phase II development Communications Modernization ramp up activities.					
<p>Title: Government Test Support</p> <p>Description: Includes, but is not limited to test and evaluation planning, conduct and support to included MITRE for developmental and operational testing for Phase I and Phase II activities.</p> <p>FY 2022 Plans: Development and operational testing in support of Communications modernization.</p> <p>FY 2023 Base Plans: Development and operational testing in support of Communications modernization.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding increased due to ramp up of Test Support for Phase II testing and evaluation.</p>	0.973	0.819	2.186	0.000	2.186
<p>Title: Continuous Improvement (CIP)</p> <p>Description: Continuous Improvement projects to include but not limited to studies and other research projects.</p> <p>FY 2022 Plans: Supports continuous improvement cycle of both hardware and software of multiple onboard systems.</p> <p>FY 2023 Base Plans: Supports continuous improvement cycle of both hardware and software of multiple onboard systems.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreased due to reduced CIP requirements.</p>	0.000	3.974	2.340	0.000	2.340
Accomplishments/Planned Programs Subtotals	5.712	46.136	47.707	0.000	47.707

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675910 / Block 8.X
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF 05 HCMC00: HC/ MC-130 Modifications	0.000	2.437	30.638	-	30.638	10.925	48.682	53.200	3.220	0.000	149.102

Remarks

D. Acquisition Strategy

The Communications Modernization Phase I program complies with Mobile User Objective System (MUOS) and VINSON/ANDVT Cryptographic Modernization (VACM) mandates, which will allow for continuous secure voice, data, video, network-centric, and satellite communications in real-time as the satellite constellation transitions and cryptographic algorithms are modernized.

The Communications Modernization Phase II program addresses critical Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Single Channel Ground and Airborne Radio System (SINCGARS), and HF Modernization capabilities to resolve DMS issues, which will allow for continuous UHF, VHF, and HF communications in real-time.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675910 / Block 8.X
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Communications Modernization Phase I	SS/CPIF	Lockheed Martin : Marietta, GA	0.000	4.739	Mar 2022	41.340	Mar 2022	16.318	Mar 2023	-		16.318	0.000	62.397	-
Communications Modernization Phase II	SS/CPIF	Lockheed Martin : Marietta, GA	0.000	-		0.003	Aug 2023	26.863	Aug 2023	-		26.863	0.000	26.866	-
Subtotal			0.000	4.739		41.343		43.181		-		43.181	0.000	89.263	N/A

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Support Test	RO	46th Test Wing; TBD : TBD	0.000	0.973		0.819	Dec 2021	2.186	Nov 2022	-		2.186	0.000	3.978	-
Subtotal			0.000	0.973		0.819		2.186		-		2.186	0.000	3.978	N/A

Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Continuous Improvement Program (CIP)	C/Various	Various : TBD	0.000	-		3.974	Jul 2022	2.340	Jul 2023	-		2.340	0.000	6.314	-
Subtotal			0.000	-		3.974		2.340		-		2.340	0.000	6.314	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
	Project Cost Totals		0.000	5.712	46.136	47.707	-	47.707	0.000	99.555

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675910 / Block 8.X
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FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
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

Block 8.X	
Communications Modernization Phase I	
Communications Modernization Phase II	
Government Test Support	

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675910 / Block 8.X
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Block 8.X				
Communications Modernization Phase I	2	2022	3	2027
Communications Modernization Phase II	4	2022	4	2027
Government Test Support	1	2022	4	2026