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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force **Date:** May 2021

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 0401132F / C-130J Program
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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	0.000	6.919	10.656	14.112	0.000	14.112	-	-	-	-	-	-
675061: C-130J	0.000	6.919	10.656	7.607	0.000	7.607	-	-	-	-	-	-
675305: C-130J Prog	0.000	0.000	0.000	6.505	0.000	6.505	-	-	-	-	-	-

Program MDAP/MAIS Code: 220

Note

In FY 2022, PE 0401132F, (C-130J Program), Project 675061, (C-130J) efforts were transferred to, Project 675610, (C-130J Prog), in order to create a follow on ACAT III program to separate Communications Modernization from the C-130J ACAT I program.

A. Mission Description and Budget Item Justification

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J and AC-130J). All aircraft variants must be capable of worldwide operations.

This project provides RDT&E funding for required capabilities that are grouped as "Block" upgrades or "Capability" or Enhancement and Deficiencies (EnD) updates. Content/requirements for block modifications is documented in International Program Directives (IPDs) and as determined in the Cooperative Systems and Software Upgrade Requirements Management (COSSURM) prioritized requirements process. This project will integrate the common-core capabilities developed under this program into the C-130J.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver the C-130J weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 \$0.000M was expended for civilian pay expenses in this program element, and in FY21 \$0.000M 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.

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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	8.640	10.674	14.324	0.000	14.324
Current President's Budget	6.919	10.656	14.112	0.000	14.112
Total Adjustments	-1.721	-0.018	-0.212	0.000	-0.212
• 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	-1.500	0.000			
• SBIR/STTR Transfer	-0.221	0.000			
• Other Adjustments	0.000	-0.018	-0.212	0.000	-0.212

Change Summary Explanation

FY20 funding was reduced by \$1.721 million due to a below threshold reprogramming and Small Business Innovative Research (SBIR).

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force										Date: May 2021		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401132F / C-130J Program				Project (Number/Name) 675061 / C-130J			
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
675061: C-130J	0.000	6.919	10.656	7.607	0.000	7.607	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

In FY 2022, PE 0401132F, (C-130J Program), Project 675061, (C-130J) efforts were transferred to, Project 675610, (C-130J Prog), in order to create a follow on ACAT III program to separate Communications Modernization from the C-130J ACAT I program.

A. Mission Description and Budget Item Justification

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J and AC-130J). All aircraft variants must be capable of worldwide operations.

This project also provides RDT&E funding for required capabilities that are grouped as "Block" upgrades or "Capability" or Enhancement and Deficiencies (EnD) updates. Content/requirements for these efforts is documented in International Program Directives (IPDs) as determined through the Cooperative Systems and Software Upgrade Requirements Management (COSSURM) process or other approved C-130J Joint User Group (JUG) processes. Activities required to complete development and integration of the common-core capabilities for all United States' variants are included in this project. In addition, this project includes early acquisition and engineering studies and initiatives related to the C-130J such as, but not limited to, capability gap resolution, emerging technology assessments, exploration and adaptation, systems integration assessments and technology transition.

This project also provides RDT&E funding for requirements that are outside of the "Block" upgrades, "Capability" updates, "Enhancement and Deficiencies" (EnD) updates, or COSSURM process. These efforts may include, but are not limited to, communication, data link, Global Positioning Systems (GPS), electronic warfare, formation flight system, and mission support system updates. The requirements are identified and concurred between the C-130J Program Office and Air Mobility Command (AMC). Requirements are documented through the C-130J Program Office approval process.

This project provides RDT&E funding for studies and risk reduction activities and Program Management Administration (PMA).

This project includes RDT&E funding for the following C-130J aircraft variants: C-130J stretch aircraft, C-130J short aircraft, EC-130J aircraft, WC-130J aircraft, HC-130J aircraft, MC-130J aircraft, and AC-130J aircraft.

This project included RDT&E funding for Rapid Global Mobility (RGM) platform related activities including, but not limited to, prototyping, capability development, process activities, planning analysis, and systems engineering activities.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force	Date: May 2021
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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This program includes funding for Mobile User Objective System (MUOS), which began in FY 2020 under project 675061. In FY21, the name of this effort changed to Communication Modernization. Development and integration of the new radio and communication systems including, but not limited to, Mobile User Objective System (MUOS), Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Joint Range Extension Application Protocols (JREAP) to modernize Military Satellite Communication System (MILSATCOM), Ultra High Frequency (UHF), High Frequency (HF), special mission processing, and data link messaging. These systems will provide secure, global Line of Sight (LOS) and Beyond Line of Sight (BLOS) satellite voice and data connectivity utilizing modern satellite constellations. Furthermore, these systems will also be integrated into other C-130J capabilities, such as Radio Frequency (RF) components including ALR-69A and DRFM (Digital Radio Frequency Memory Countermeasure). Starting in FY22, funding for this effort will continue under project 675305.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver the C-130J weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 \$0.000M was expended for civilian pay expenses in this program element, and in FY21 \$0.000M is forecasted for civilian pay expenses in this program element.

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

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Title: Block 8.1</p> <p>Description: BLOCK 8.1 Adds Identification Friend or Foe (IFF) Mode 5, Civil Data Link, Automatic Dependent Surveillance - Broadcast (ADS-B), Air Traffic Services (ATS)/Airline Operational Control (AOC) Data Link for Line of Sight (LOS) and Beyond Line of Sight (BLOS) communication, enhanced covert lighting, improved Public Address(PA) System, and Approach Procedure with Vertical guidance (APV)/ Localizer Performance with Vertical guidance (LPV) approach capability. Major avionics platforms impacted include, but are not limited to, Flight Management System (FMS)Software, Mission Computer (MC) Software, Bus Interface Unit (BIU) software, special mission processing, and Maintenance Management System (MMS).</p> <p>FY 2021 Plans: Continue de-confliction of Block 8.1 Dynamic Retasking Capability (DRC) and begin Block 8.1 TKI for WC variant.</p> <p>FY 2022 Base Plans: Continue Block 8.1 TKI for WC variant.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding increased due to phasing of Block 8.1 TKI effort for WC variant.</p>	4.326	3.156	5.532	-	5.532
<p>Title: Test & Evaluation</p> <p>Description: Test and evaluation planning, conduct and support for developmental and operational testing of Block 8.1.</p> <p>FY 2021 Plans:</p>	0.000	0.750	0.060	-	0.060

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force			Date: May 2021		
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J			
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Continuation of test planning and support for integration efforts. FY 2022 Base Plans: Anticipated minimal CMU2 testing requirements for FY22. FY 2021 to FY 2022 Increase/Decrease Statement: Funding decreased due to no new current planned test and evaluation requirements.					
Title: Capability Management Update (CMU) Description: CMU 1 and 2 refine and build on Block upgrade modifications that improve operational effectiveness, satisfy emerging operational needs, and enhance human machine interface (HMI) to allow a workload that meets human factors standards and maintains the present crew complement. Major systems software impacted includes, but not limited to, FMS Software, MC Software, BIU software, and MMS. FY 2021 Plans: Continuation of software development for Capability Management Update (CMU) 1 and CMU 2 efforts which will be fielded as Block 8.1.1 and 8.1.2 respectively. FY 2022 Base Plans: Continuation of software development for Capability Management Update (CMU) 1 and CMU 2 efforts which will be fielded as Block 8.1.1 and 8.1.2 respectively. FY 2021 to FY 2022 Increase/Decrease Statement: Funding decreased due to CMU phasing adjustments.	1.153	1.600	1.045	-	1.045
Title: Communication Modernization Description: Development and integration of the new radio and communication systems including, but not limited to, Mobile User Objective System (MUOS), Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Joint Range Extension Application Protocols (JREAP) to modernize Military Satellite Communication System (MILSATCOM), Ultra High Frequency (UHF), High Frequency (HF), special mission processing, and data link messaging. These systems will provide secure, global Line of Sight (LOS) and Beyond Line of Sight (BLOS) satellite voice and data connectivity utilizing modern satellite constellations. Furthermore, these systems will also be integrated into other C-130J capabilities, such as Radio Frequency (RF) components including ALR-69A and DRFM (Digital Radio Frequency Memory Countermeasure). Starting in FY22, funding for this effort will continue under Project 675305. FY 2021 Plans:	0.741	4.700	0.000	-	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Development of new radio systems to modernize MILSATCOM. FY 2022 Base Plans: N/A FY 2021 to FY 2022 Increase/Decrease Statement: Funding decreased due to transfer of funding to Project 675305 beginning in FY 2022.					
Title: Cooperative Systems and Software Upgrade Requirements Management (COSSURM) Description: Continuing effort to collect potential requirements for inclusion into a Capability Management Update, or Enhancement and Deficiencies (EnD) Common Non-Recurring Engineering (CNRE) effort. FY 2022 Base Plans: Continuation of CMU/EnD COSSURM requirements review and analysis. FY 2021 to FY 2022 Increase/Decrease Statement: Funding increased due to defining EnD requirements for review and analysis.	-	-	0.170	-	0.170
Title: Other AMC Initiatives Description: C-130J initiatives/studies. FY 2021 Plans: Mission Planning software and updates continue. FY 2022 Base Plans: Continuation of Mission Planning and software updates. FY 2021 to FY 2022 Increase/Decrease Statement: Funding increased due phasing efforts and identified initiatives.	0.699	0.450	0.800	-	0.800
Accomplishments/Planned Programs Subtotals	6.919	10.656	7.607	-	7.607

C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• APAF 05 Line Item C1300J: C-130J Mods	128.399	134.090	113.127	-	113.127	-	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF 02 Line Item C130J0: C-130J	742.156	8.412	8.585	-	8.585	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

The C-130J aircraft will be modified using a "block upgrade" strategy. The CNS/ATM, navigation safety requirement will initially be met in three block upgrades. Block 6.0 development was funded from FY03-07. Block 7.0 started in FY07, and Block 8.1 began in FY12. Subsequently, C-130J modifications will be grouped into smaller updates known as Capability Management Updates (CMU) or Enhancement and Deficiencies (EnD). Other AMC initiatives are upgrades to hardware and software that have arisen after the formation of the block upgrades and CMUs.

In order to better manage the fleet and to avoid having to simultaneously support three separate aircraft configurations (Block 6, Block 7 and Block 8.1) the USAF has decided to combine the Block 7 and Block 8.1 mods. This will allow aircraft and trainers to only have to be modified one time.

The proportion of CNS/ATM and navigation safety requirements allocated to Blocks 6.0 through 8.1 was determined via a design trade study conducted by Lockheed Martin (the C-130J prime contractor) and verified by the C-130J system program office and AMC. The development costs are being shared via a global Project Arrangement (PA) by the United States (USAF, USMC, USCG), the United Kingdom, Italy, Australia, Denmark, Canada, and Norway. An international program office (IPO), with USAF lead (Wright Patterson AFB, OH), manages the block upgrades development and CMU efforts. Retrofit of a Block on the aircraft is the responsibility of each nation.

To meet the Federal Aviation Administration 2020 mandate, the USAF installed the Block 8.1 ADS-B Out/Mode V IFF solution on all C-130J variants not scheduled to receive Block 8.1 by January 2020. This is Mod #8649, ADS-B Out Acceleration. All C-130Js will still require Block 8.1.

In order to meet four DoD technology refresh mandates before end of year 2024, the communications modernization program will develop and field a federated and integrated communications system to Blocks 6.0 and 8.1 C-130J variants.

In order to meet the American Mid-Band Initiative, the Station Keeping Equipment (SKE) replacement program will develop and field a new/upgraded formation flight system to Block 6.0 and 8.1 C-130J variants.

In order to comply with FAA mandated frequency remapping and NSA mandated crypto-modernization, the aircraft Link 16 receiver transmitter will need to be upgraded to a next generation receiver. One example of the next generation receiver is the MIDS-JTRS terminal.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
C-130J Block 8.1, Air Force Life Cycle Mgmt Ctr (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Information Sytems : Marietta, GA	0.000	1.979	Nov 2019	2.174	Dec 2020	4.694	Feb 2022	-		4.694	-	-	180.030
C-130J Capability Management Upgrades (CMU), Air Force Life Cycle Mgmt Ctr (AFMC), WPAFB, OH	SS/CPFF	Lockheed Martin Aero : Marietta, GA	0.000	0.066	Nov 2019	0.600	May 2021	0.000		-		0.000	-	-	20.480
C-130J AMC-Initiatives, Air Force Life Cycle Mgmt Ctr (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Aero : Marietta, GA	0.000	0.669	Nov 2019	0.450	Dec 2020	0.800		-		0.800	-	-	14.730
C-130J Communication Modernization, Air Force Life Cycle Mgmt Ctr (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Aero : Marietta, GA	0.000	0.300	Aug 2020	4.700	Aug 2021	0.000		-		0.000	-	-	-
Subtotal			0.000	3.014		7.924		5.494		-		5.494	-	-	N/A

Remarks
C-130J Block 8.1 Total Cost is below Target Value of Contract to account for the expected cost reduction initiatives on this Cost Plus Award Fee Contract.

Test and Evaluation (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
Test and Evaluation	C/CPAF	Not specified. : TBD	0.000	0.685		-		-		-		-	-	-	-
C-130J Block 8.1 testing	PO	EGLIN AFB : Eglin, FL	0.000	0.000	Nov 2019	0.750	Jan 2021	0.060		-		0.060	-	-	7.490
Subtotal			0.000	0.685		0.750		0.060		-		0.060	-	-	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
C-130J IPO Support	TBD	N/A : NV	0.000	0.402	Mar 2020	1.079	Mar 2021	1.045	Mar 2022	-		1.045	-	-	15.014
C-130J COSSURM	TBD	RAF : NV	0.000	0.000		-		0.170		-		0.170	-	-	16.548
C-130J Support	TBD	N/A : OH	0.000	2.818	Mar 2020	0.903	Mar 2021	0.838	Mar 2022	-		0.838	-	-	15.014
Subtotal			0.000	3.220		1.982		2.053		-		2.053	-	-	N/A

Remarks
The current COSSURM contract is managed by the United Kingdom Royal Air Force (RAF) with the USG taking over as the primary contracting authority in FY23.

	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	6.919	10.656	7.607	-	7.607	-	-	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

C-130J	
Block 8.1 Development	
Block 7.0/ 8.1 Trial Kit Installation (TKI) WC	
CMU	
Communication Modernization	

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675061 / C-130J
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
C-130J				
Block 8.1 Development	1	2020	4	2022
Block 7.0/ 8.1 Trial Kit Installation (TKI) WC	4	2021	4	2025
CMU	1	2020	1	2025
Communication Modernization	1	2020	4	2021

Note
Communication Modernization program continues under project 675305, starting in FY22.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force										Date: May 2021		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401132F / C-130J Program				Project (Number/Name) 675305 / C-130J Prog			
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
675305: C-130J Prog	0.000	0.000	0.000	6.505	0.000	6.505	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

In FY 2022, PE 0401132F, (C-130J Program), Project 675061, (C-130J) efforts were transferred to, Project 675610, (C-130J Prog), in order to create a follow on ACAT III program to separate Communications Modernization from the C-130J ACAT I program.

A. Mission Description and Budget Item Justification

This program includes funding for Mobile User Objective System (MUOS), which began in FY 2020 under project 675061. In FY21, the name of this effort changed to Communication Modernization. Development and integration of the new radio and communication systems including, but not limited to, Mobile User Objective System (MUOS), Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Joint Range Extension Application Protocols (JREAP) to modernize Military Satellite Communication System (MILSATCOM), Ultra High Frequency (UHF), High Frequency (HF), special mission processing, and data link messaging. These systems will provide secure, global Line of Sight (LOS) and Beyond Line of Sight (BLOS) satellite voice and data connectivity utilizing modern satellite constellations. Furthermore, these systems will also be integrated into other C-130J capabilities, such as Radio Frequency (RF) components including ALR-69A and DRFM (Digital Radio Frequency Memory Countermeasure). Starting in FY22, funding for this effort will continue under project 675305.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver C-130J weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 0.000M was expended for civilian pay expenses in this program element, and in FY21 0.000M is forecasted for civilian pay expenses in this program element.

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

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Communication Modernization	0.000	0.000	6.505	0.000	6.505
Description: Development and integration of the new radio and communication systems including, but not limited to, Mobile User Objective System (MUOS), Second-generation Anti-jam Tactical UHF Radio for NATO (SATURN), Joint Range Extension Application Protocols (JREAP) to modernize Military Satellite Communication System (MILSATCOM), Ultra High Frequency (UHF), High Frequency (HF), special mission processing, and data link messaging. These systems will provide secure, global Line of Sight (LOS) and Beyond Line of Sight (BLOS) satellite voice and data connectivity utilizing modern satellite constellations. Furthermore, these systems will also be integrated into other C-130J capabilities, such as Radio Frequency (RF) components including ALR-69A and DRFM (Digital Radio Frequency Memory Countermeasure (DRFM). Starting in FY22, funding for this effort will continue under project 675305.					
FY 2021 Plans:					

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675305 / C-130J Prog
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
N/A					
FY 2022 Base Plans: Continue development of new radio systems to modernize MILSATCOM.					
FY 2022 OCO Plans: N/A					
FY 2021 to FY 2022 Increase/Decrease Statement: Funding increased due transfer from project 675061 (C-130J) to project 675305 (C-130J Prog).					
Accomplishments/Planned Programs Subtotals	0.000	0.000	6.505	0.000	6.505

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

Remarks

D. Acquisition Strategy
In order to meet four DoD technology refresh mandates before end of year 2024, the communication modernization program will develop and field a federated and integrated communications system to Block 6.0 and 8.1 C-130J variants.

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675305 / C-130J Prog
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FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

C-130J	
Communication Modernization	[REDACTED]

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401132F / C-130J Program	Project (Number/Name) 675305 / C-130J Prog

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
C-130J				
Communication Modernization	1	2022	3	2025