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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0401115F I C-130 Airlift Squadron							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	10.219	105.988	140.425	0.000	140.425	113.473	34.207	0.400	0.406	0.000	405.118
672030: C-130 MUOS Radio	-	0.000	0.000	15.800	0.000	15.800	0.000	0.400	0.400	0.400	0.000	17.000
675248: C-130H Avionics Modernization Program (AMP) Increment 1	-	2.894	5.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.758
675250: C-130H Avionics Modernization Program (AMP) Increment 2	-	7.325	100.124	124.625	0.000	124.625	113.473	33.807	0.000	0.006	0.000	379.360

Note

This program, BA 7, PE 0401115F, project 672030, RDT&E MOUS Radios, is a new start.

A. Mission Description and Budget Item Justification

The C-130H is a medium sized tactical transport aircraft providing multi-purpose theater support throughout the globe. The C-130H fleet supports several diverse Air Force roles, including but not limited to tactical and inter-theater airlift and airdrop support, Arctic resupply, special operations support, aeromedical evacuation, aerial spraying, firefighting duties, and natural disaster and humanitarian relief missions.

C-130H AMP Increment 1 addresses modifications to meet airspace compliance mandates and safety requirements. RDT&E efforts cover design, integration, developmental and operational test, studies and risk reduction efforts, trial kit buy and installation, spares and peculiar support equipment in support of trial kit installs, type 1 training and C-130H aircrew and maintenance training systems and course ware development efforts and other efforts necessary to fulfill program requirements.

C-130H AMP Increment 2 includes digital avionics upgrades (e.g. Flight Management System, improved navigation), cockpit modernization (e.g. glass/engine flight displays) and resolves select obsolescence and Diminishing Manufacturing Source (DMS) issues. RDT&E efforts will cover software development, design, integration, developmental and operational test, studies and risk reduction efforts, trial kit buy and installation, technical order development validation and verification, spares and peculiar support equipment in support of trial kit installs, Systems Integration Laboratory (SIL) development, type 1 training and C-130H aircrew and maintenance training systems and course ware development efforts, and other efforts necessary to fulfill program requirements.

The MUOS radio funding is required for the Non Recurring Effort associated with integration, testing, TO's, Engineering drawing's, TKI, VKI, spectrum authorization, and Group A and Group B kits to support 19 aircraft. This funding includes Rapid Global Mobility (RGM) platform related activities including but not limited to fielding actions. Funds in FY 22-24 are required to fund additional LRIP unique C-130H aircraft requirements.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force				Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0401115F I C-130 Airlift Squadron				
This funding includes Rapid Global Mobility (RGM) platform related activities including but not limited to prototyping, capability development, process activities, planning analysis and systems engineering activities.						
This program element may include necessary civilian pay expenses required to manage, execute, and deliver C-130H weapon system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F. The program may also include any Contractor Manpower Equivalent (CME)/A&AS support deemed necessary to support the program objectives.						
As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.						
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		10.219	105.988	127.778	0.000	127.778
Current President's Budget		10.219	105.988	140.425	0.000	140.425
Total Adjustments		0.000	0.000	12.647	0.000	12.647
• 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		0.000	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• Other Adjustments		0.000	0.000	12.647	0.000	12.647
Change Summary Explanation						
The FY20 change of \$12.647M is a result of the addition of \$15.8M for the Mobile User Objective System Radio (MUOS), a new start, and the reduction of \$3.153M for AMP Increment 2.						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 672030 / C-130 MUOS Radio			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
672030: C-130 MUOS Radio	-	0.000	0.000	15.800	0.000	15.800	0.000	0.400	0.400	0.400	0.000	17.000
Quantity of RDT&E Articles	-	-	-	19	-	19	-	-	-	-		

Note

This program, BA 7, PE 0401115F, project 672030, RDT&E MOUS Radios, is a new start.

A. Mission Description and Budget Item Justification

The MUOS radio funding is required for the Non Recurring Effort associated with integration, testing, TO's, Engineering drawing's, TKI, VKI, spectrum authorization, and Group A and Group B kits to support 19 aircraft. This funding includes Rapid Global Mobility (RGM) platform related activities including but not limited to fielding actions.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: RDT&E MOUS Radios	0.000	0.000	15.800	0.000	15.800
Description: RDT&E for LRIP of 19 Group and Group B MOUS radios ARC-210					
FY 2019 Plans: N/A					
FY 2020 Base Plans: Initial \$15.8M will fund MOUS ARC-210 radio effort is for NRE to include TO's, Engineering drawing's, TKI, VKI, spectrum authorization and Group A and Group B kits to support 19 Aircraft. This includes Rapid Global Mobility (RGM) platform related activities including but not limited to fielding actions					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: New start for FY20					
Accomplishments/Planned Programs Subtotals	0.000	0.000	15.800	0.000	15.800

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

N/A

Remarks

Complete Non Recurring Efforts for MOUS radio upgrade. Funds in FY 22-24 are required for additional LRIP kits.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron	Project (Number/Name) 672030 / C-130 MUOS Radio
<u>D. Acquisition Strategy</u> A Small Business Set Aside Contract will provide the Non Recurring Engineering required to integrate the ARC-210 radios onto 19 C-130H aircraft. A procurement acquisition strategy will be developed once a solution is integrated on the LRIP aircraft.		
<u>E. Performance Metrics</u> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 672030 / C-130 MUOS Radio					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
MOUS Contract TBD	C/CPFF	Not specified. : TBD	-	-		-		15.800	Dec 2020	-		15.800	Continuing	Continuing	-
Subtotal			-	-		-		15.800		-		15.800	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		0.000		15.800		-		15.800	Continuing	Continuing	N/A
Remarks															
Funds in FY 22-24 are required to fund additional LRIP unique C-130H aircraft.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force						Date: February 2019					
Appropriation/Budget Activity						R-1 Program Element (Number/Name)					
3600 / 7						PE 0401115F / C-130 Airlift Squadron					
						Project (Number/Name)					
						672030 / C-130 MUOS Radio					

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
New Contract																												
New Contract for NRE and Kit Build																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron	Project (Number/Name) 672030 / C-130 MUOS Radio	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>New Contract</i>				
New Contract for NRE and Kit Build	4	2020	2	2021

Note

Funds in FY 22-24 are required to fund additional LRIP unique C-130H aircraft.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 675248 / C-130H Avionics Modernization Program (AMP) Increment 1			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
675248: C-130H Avionics Modernization Program (AMP) Increment 1	-	2.894	5.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.758
Quantity of RDT&E Articles	-	4	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The C-130H AMP Increment 1 program performs modifications to meet airspace compliance and safety mandates; the mod includes automatic dependent surveillance-broadcast (ADS-B) Out, enhanced Mode S, 8.33 kHz radios, and cockpit voice recorder/digital flight data recorder (CVR/DFDR).

RDT&E efforts include but are not limited to, design, integration, development and operational test, studies and risk reduction efforts, trial kit buy and installation, spares and peculiar support equipment in support of trial kit installs, type 1 training and C-130H aircrew and maintenance training systems and courseware development efforts (including Mode 5 effort for the trainers) and other efforts necessary to fulfill program mandates and requirements. Obsolescence and Diminishing Manufacturing Sources (DMS) issues will be resolved with solutions that may include life of type buys or bridge buys. DMS efforts to include removal of end-of-life software/hardware within simulator systems and move to a modular, common open system architecture that is sustainable and cyber-resilient. Implement requirements and standards defined under the Simulator Common Architecture Requirements and Standards (SCARS) initiative.

The C-130H AMP Increment 1 program currently modifies up to 176 C-130H aircraft consisting of H3s, H2.5s, H2s, H1s and LC-130H aircraft. The modification effort consists of 4 prototype aircraft representative of variations in the mission designs and required for accomplishment of the Engineering and Manufacturing Development (EMD) phase with the remaining aircraft modified in the production phase.

This funding includes Rapid Global Mobility (RGM) platform related activities including but not limited to prototyping, capability development, process activities, planning analysis and systems engineering activities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver C-130H weapon system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F. The program may also include any Contractor Manpower Equivalent (CME)/A&AS support deemed necessary to support the program objectives.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: C-130H AMP Increment 1	2.894	5.864	0.000	-	0.000
Description: Executing Engineering and Manufacturing Development (EMD) phase activities.					

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force							Date: February 2019				
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron			Project (Number/Name) 675248 / C-130H Avionics Modernization Program (AMP) Increment 1				

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p><i>FY 2019 Plans:</i> Continuation of EMD activities to include but are not limited to, design, integration, development and operational test, studies and risk reduction efforts, spares, type 1 training and C-130H aircrew and maintenance training systems and courseware development efforts (including Mode 5 effort for the trainers) and other efforts necessary to fulfill program requirements and development portion of Weapon System Trainers (WST).</p> <p><i>FY 2020 Base Plans:</i> RDT&E complete by FY20.</p> <p><i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> Funding decreased to \$0.0 (due to EMD ending in FY19).</p>					
Accomplishments/Planned Programs Subtotals	2.894	5.864	0.000	-	0.000

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• APAF 05 Line Item C13000: C-130	7.200	7.637	7.338	-	7.338	3.846	-	-	-	0.000	26.021
• APAF 06 Line Item 000999: Initial Spares/Repair Parts	2.814	0.616	-	-	-	-	-	-	-	0.000	3.430
Remarks C-130H AMP Increment 1 Procurement funding began in FY18.											
D. Acquisition Strategy C-130H AMP Increment 1 acquisition strategy (30 Sept 2015) was to conduct a competitive small business set aside source selection for ADS-B Out and Enhanced Mode S followed by a Federal Acquisition Regulation (FAR) Part 15 contract award. The EMD contract was awarded in 2nd quarter FY17. Preliminary Design Review (PDR) completed 3rd quarter FY17 and Critical Design Review (CDR) completed 4th quarter FY17. Milestone C approved 4th quarter FY18 (23 Jul 2018). Current efforts continue to focus on the execution of Engineering and Manufacturing Development (EMD) of the Weapon Systems Trainer (WST).											
E. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force													Date: February 2019		
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 675248 / C-130H Avionics Modernization Program (AMP) Increment 1					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 1 EMD Contract	TBD	TBD : TBD	-	-		0.500	Jan 2019	-		-		-	0.000	0.500	0.500
C-130H AMP Increment 1 Trainers/Training	TBD	TBD : TBD	-	-		5.000	Jan 2019	-		-		-	0.000	5.000	5.000
Subtotal			-	-		5.500		-		-		-	0.000	5.500	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 1 Development Flight Test	Various	413 Flight Test Squadron : FL	-	0.965	Feb 2018	-		-		-		-	0.000	0.965	0.965
Subtotal			-	0.965		-		-		-		-	0.000	0.965	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 1 PMA Contractor Services	Various	Not Specified : TBD	-	1.929	Mar 2018	0.364	Mar 2019	-		-		-	0.000	2.293	2.293
Subtotal			-	1.929		0.364		-		-		-	0.000	2.293	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	2.894		5.864		-		-		-	0.000	8.758	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron		
			Project (Number/Name) 675248 / C-130H Avionics Modernization Program (AMP) Increment 1		

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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-130H AMP Increment 1																												
Design/Integration																												
Developmental/ Operational Testing (DT/OT)																												
Functional Configuration Audit																												
Milestone C																												
Physical Configuration Audit (PCA)																												
Trainers & Training																												
MOUS Radio																												
EMD Contract Award																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron	Project (Number/Name) 675248 / C-130H Avionics Modernization Program (AMP) Increment 1

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
C-130H AMP Increment 1				
Design/Integration	1	2018	2	2019
Developmental/ Operational Testing (DT/OT)	2	2018	3	2018
Functional Configuration Audit	4	2018	4	2018
Milestone C	4	2018	4	2018
Physical Configuration Audit (PCA)	2	2019	2	2019
Trainers & Training	2	2019	1	2020
MOUS Radio				
EMD Contract Award	4	2020	4	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 675250 / C-130H Avionics Modernization Program (AMP) Increment 2			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
675250: C-130H Avionics Modernization Program (AMP) Increment 2	-	7.325	100.124	124.625	0.000	124.625	113.473	33.807	0.000	0.006	0.000	379.360
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The C-130H AMP Increment 2 upgrades the C-130H fleet with comprehensive avionics and cockpit modernization which replaces aging unreliable equipment and adds combat capability enhancements. It also addresses select obsolescence and Diminishing Manufacturing Sources (DMS) issues with solutions that may include life of type buys or bridge buys. DMS efforts to include removal of end-of-life software/hardware within simulators systems and move to a modular, common open system architecture that is sustainable and cyber-resilient. Implement requirements and standards defined under the Simulator Common Architecture Requirements and Standards (SCARS) initiative.

RDT&E efforts include but are not limited to software development, design, integration, development and operational test, studies and risk reduction efforts, trial kit buy and installation, technical order development validation and verification, peculiar support equipment and spares in support of trial kit installs, SIL development, type 1 training, and C-130H aircrew and maintenance training systems and courseware development efforts and other efforts required to fulfill requirements.

The C-130H AMP Increment 2 program modifies up to 176 aircraft consisting of H3s, H2.5s, H2s, H1s and LC-130H aircraft. The modification effort will have 4 prototype aircraft representative of variations in the mission designs and required for accomplishment of the Engineering and Manufacturing Development (EMD) phase with the remaining aircraft modified in the production phase.

This funding includes Rapid Global Mobility (RGM) platform related activities including but not limited to prototyping, capability development, process activities, planning analysis and systems engineering activities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver C-130H weapon system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F. The program may also include any Contractor Manpower Equivalent (CME)/A&AS support deemed necessary to support the program objectives.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: C-130H Avionics Modernization Program (AMP) Increment 2	7.325	100.124	124.625	-	124.625

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force								Date: February 2019			
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron				Project (Number/Name) 675250 / C-130H Avionics Modernization Program (AMP) Increment 2			

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p>Description: Refine and complete the requirements definition phase of the program, followed by integration planning and the Engineering and Manufacturing Development (EMD) phase activities.</p> <p>FY 2019 Plans: Milestone B, contract award and execution of EMD to include but are not limited to software development, design, integration, development and operational test, studies and risk reduction efforts, trial kit buy and installation, technical order development validation and verification, peculiar support equipment and spares in support of trial kit installs, SIL development, type 1 training, and C-130H aircrew and maintenance training systems and courseware development efforts and other efforts required to fulfill program requirements.</p> <p>FY 2020 Base Plans: Continuation of EMD activities to include but are not limited to software development, design, integration, development and operational test, studies and risk reduction efforts, trial kit buy and installation, technical order development validation and verification, peculiar support equipment and spares in support of trial kit installs, SIL development, type 1 training, and C-130H aircrew and maintenance training systems and courseware development efforts and other efforts required to fulfill program requirements.</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: Funding increased \$24.501M due to the continuation of EMD and development testing.</p>					
Accomplishments/Planned Programs Subtotals	7.325	100.124	124.625	-	124.625

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• APAF 05 Line Item C13000: C-130	-	-	-	-	-	61.297	164.524	229.971	165.000	Continuing	Continuing
• APAF 06 Line Item 000999: Initial Spares/Repair Parts	-	-	-	-	-	4.900	11.027	15.096	15.368	Continuing	Continuing

Remarks
The C-130H Avionics Modernization Program (AMP) Increment 2 procurement funding begins in FY21.

D. Acquisition Strategy
C-130H AMP Increment 2 acquisition strategy intends to conduct a full and open competitive source selection followed by contract award. Current efforts are primarily focused on the Engineering and Manufacturing Development (EMD) source selection. The current schedule reflects EMD contract award in 3rd quarter FY19.

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401115F / <i>C-130 Airlift Squadron</i>	Project (Number/Name) 675250 / <i>C-130H Avionics Modernization Program (AMP) Increment 2</i>

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron						Project (Number/Name) 675250 / C-130H Avionics Modernization Program (AMP) Increment 2			
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 2 EMD Contract	C/Various	TBD : TBD	-	-		95.696	Dec 2018	111.345	Nov 2019	-		111.345	Continuing	Continuing	207.041
Subtotal			-	-		95.696		111.345		-		111.345	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 2 Development Testing	PO	TBD : TBD	-	0.171	Sep 2017	0.699	Mar 2019	8.700	Mar 2020	-		8.700	Continuing	Continuing	9.570
Subtotal			-	0.171		0.699		8.700		-		8.700	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
C-130H AMP Increment 2 PMA Contractor Services	Various	Not Specified : TBD	-	7.054	Mar 2018	3.629		4.480	Mar 2020	-		4.480	Continuing	Continuing	15.163
C-130H AMP Increment 2 PMA - Government Cost	Various	Not Specified : TBD	-	0.100	Oct 2017	0.100	Nov 2018	0.100	Oct 2019	-		0.100	0.000	0.300	0.300
Subtotal			-	7.154		3.729		4.580		-		4.580	Continuing	Continuing	N/A
Project Cost Totals			-	7.325		100.124		124.625		-		124.625	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force																Date: February 2019			
Appropriation/Budget Activity 3600 / 7								R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron								Project (Number/Name) 675250 / C-130H Avionics Modernization Program (AMP) Increment 2			

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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-130H AMP Increment 2																												
Milestone B																												
EMD Contract Award																												
Design/Integration																												
Preliminary Design Review																												
Critical Design Review																												
Design/Integration Training Development																												
Development Testing																												
Functional Configuration Audit																												
Milestone C																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0401115F / C-130 Airlift Squadron	Project (Number/Name) 675250 / C-130H Avionics Modernization Program (AMP) Increment 2	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
C-130H AMP Increment 2				
Milestone B	3	2019	3	2019
EMD Contract Award	3	2019	3	2019
Design/Integration	3	2019	1	2022
Preliminary Design Review	1	2020	1	2020
Critical Design Review	2	2020	2	2020
Design/Integration Training Development	4	2019	1	2022
Development Testing	1	2021	4	2021
Functional Configuration Audit	4	2021	4	2021
Milestone C	4	2021	4	2021