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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 0401218F / KC-135s							
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	-	8.645	3.493	0.000	0.000	0.000	4.600	0.249	0.249	0.000	Continuing	Continuing
675261: KC-135 Upgrades	-	8.645	3.493	0.000	0.000	0.000	4.600	0.249	0.249	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Aero-I SATCOM Replacement program will replace the obsolete Inmarsat Aero-I system with an Iridium system. Inmarsat's existing third generation satellites (I-3) which provide Aero-I services will no longer be functional after 31 Dec 22. Aero-I services are used to provide oceanic Controller/Pilot Data Link Communications (CPDLC) to Air Traffic Control and Aircraft Communications Addressing and Reporting System (ACARS) Beyond Line of Sight (BLOS) Command and Control (C2) messages to 618th Tactical Air Control Center (TACC) Global Decision Support System. The procurement effort modifies 359 C/KC-135s and 19 Simulators. Funding may be used to address DMS issues.

During acquisition strategy development, it was determined RDT&E funding (FY18 and FY19) is not required to field this capability.

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	9.942	3.493	0.000	0.000	0.000
Current President's Budget	8.645	3.493	0.000	0.000	0.000
Total Adjustments	-1.297	0.000	0.000	0.000	0.000
• 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	-0.933	0.000			
• SBIR/STTR Transfer	-0.364	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

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Change Summary Explanation -FY18: -\$1.297M Reduction comprised of -.364 for SIBR and -.933 for reprogramming actions											
C. Accomplishments/Planned Programs (\$ in Millions)								FY 2018	FY 2019	FY 2020	
Title: KC-135 Aero-I SATCOM								8.645	3.493	0.000	
Description: Prototype integration and validation of Iridium Aero-I. Aero-I services are used to provide oceanic Controller/Pilot Data Link Communications (CPDLC) to Air Traffic Control and Aircraft Communications Addressing and Reporting System (ACARS) Beyond Line of Sight (BLOS) Command and Control (C2) messages to 618th Tactical Air Control Center (TACC) Global Decision Support System.											
FY 2019 Plans: Prototype Integration and validation of Iridium Aero-I SATCOM											
FY 2020 Plans: N/A											
FY 2019 to FY 2020 Increase/Decrease Statement: During acquisition strategy development, it was determined RDT&E funding (FY18 and FY19) is not required to field this capability.											
Accomplishments/Planned Programs Subtotals								8.645	3.493	0.000	
D. 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 C13500: C-135	69.428	113.076	124.491	-	124.491	104.383	108.192	110.159	-	Continuing	Continuing
Remarks											
E. Acquisition Strategy N/A											
F. 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 0401218F / KC-135s				Project (Number/Name) 675261 / KC-135 Upgrades					

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
Aero-I SATCOM replacement development	C/FFP	Not specified. : NV	-	8.145	Sep 2019	2.993	Mar 2019	-		-		-	Continuing	Continuing	-
Subtotal			-	8.145		2.993		-		-		-	Continuing	Continuing	N/A

Remarks
This project will integrate an Iridium SATCOM solution for the KC-135.

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
AERO-I SATCOM Management Services	PO	Not specified. : NV	-	0.500	Jun 2018	0.500	Jun 2019	-		-		-	Continuing	Continuing	-
Subtotal			-	0.500		0.500		-		-		-	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			-	8.645		3.493		-		-		-	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force																								Date: February 2019			
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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 0401218F / KC-135s	Project (Number/Name) 675261 / KC-135 Upgrades

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
KC-135 Aero-I SATCOM Replacement				
Original strategy Contract Award, EMD, and Test	4	2018	2	2019