Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0401130F / C-17 Aircraft (IF)

Operational Systems Development

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	76.569	97.134	83.773	-	83.773	56.172	55.168	66.032	67.486	Continuing	Continuing
672569: C-17 Aircraft	-	76.569	97.134	83.773	-	83.773	56.172	55.168	66.032	67.486	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 200

A. Mission Description and Budget Item Justification

The C-17 can perform the entire spectrum of airlift missions and is specifically designed to operate effectively and efficiently in both strategic and theater environments. Airlift provides essential flexibility when responding to contingencies on short notice anywhere in the world. It is a major element of America's national security strategy and constitutes the most responsive means of meeting mobility requirements. Specific tasks associated with the airlift mission include deployment, employment (airland and airdrop), sustaining support, retrograde, and combat redeployment. Not only can the C-17 deliver outsize cargo to austere tactical environments, but it also reduces ground time during airland operations. The C-17 will perform its airlift mission well into this century.

C-17 RDT&E funding efforts support, but are not limited to: aircraft performance improvements and airspace access mandates (i.e., Communications/Navigation Improvements); flight test activities and facilities; development of solutions for obsolescence and safety of flight issues; systems engineering/program management administration support; maintenance of avionics laboratories; block development/change management; proposal preparation for new projects; cost estimating and engineering/acquisition studies not related to requirements generation.

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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[#] The FY 2015 OCO Request will be submitted at a later date.

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B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	99.225	109.134	93.818	-	93.818
Current President's Budget	76.569	97.134	83.773	-	83.773
Total Adjustments	-22.656	-12.000	-10.045	=	-10.045
 Congressional General Reductions 	-0.114	-			
 Congressional Directed Reductions 	-13.000	-12.000			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-2.220	-			
Other Adjustments	-7.322	-	-10.045	-	-10.045

Change Summary Explanation

FY13 adjustments are from SBIR (\$2.22M), Sequestration (\$7.322M), and a Congressional Directed Reduction due to unobligated balances (\$13M).

FY14 adjustments are from a Congressional Directed Reduction due to program decrease (\$9M) and Program Management Administration growth (\$3M).

FY15 adjustment of \$10.045M is due to higher AF priorities.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Performance Improvement and Obsolescence	49.545	69.876	55.795
Description: Continued development of C-17 aircraft performance improvements for its avionics, aircraft and mission systems and the development of solutions to emergent obsolescence and safety of flight issues and airspace access mandates.			
FY 2013 Accomplishments: Continued development of C-17 aircraft performance improvements/mandates to include projects such as, but not limited to, development efforts in support of C-17 operational efficiencies, Replacement Heads up Display (RHUD), Replacement Core Integrated Processor (RCIP) obsolescence, Communication and Navigation Capability, and Communication Navigation Surveillance/Air Traffic Management (CNS/ATM) System - Phase 1 Surveillance. Completes efforts on Instrument Landing System Identification (ILS ID) & Flight Control Computer (FCC) updates, Identification Friend or Foe (IFF) Mode 5, and Airdrop improvements.			
FY 2014 Plans:			

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force		Date: N	larch 2014	
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Continue development of C-17 aircraft performance improvements/mandate to, RHUD, RCIP Obsolescence, and CNS/ATM System - Phase 1 Surveilla Capability. Initiates CNS/ATM Phase 2 Communication.				
FY 2015 Plans: Continued development of C-17 aircraft performance improvements/manda RHUD, RCIP Obsolescence, and CNS/ATM System - Phase 1 Surveillance redesign On-Board Gas Generation System II (OBIGGS II) shut off valve to	e, CNS/ATM Phase 2 Communication. Begins efforts to			
Title: Systems Engineering/Program Managment		9.651	7.758	8.478
Description: Continuation of Systems Engineering/prime contractor Prograupdates, system integration and software development laboratories, test face				
FY 2013 Accomplishments: Continued SE/PM. Funding supports software updates, system integration and programmatic efforts in support of C-17.	and software development laboratories, test facilities,			
FY 2014 Plans: Continuation of SE/PM. Funding supports software updates, system integral facilities, and programmatic efforts in support of C-17.	ation and software development laboratories, test			
FY 2015 Plans: Continuation of SE/PM. Funding supports software updates, system integral facilities, and programmatic efforts in support of C-17.	ation and software development laboratories, test			
Title: Boeing Flight Test		13.399	13.000	12.000
Description: Continues contractor testing of new capabilities as required. engineering support for test related technical and safety of flight issues, tes				
FY 2013 Accomplishments: Continued contractor testing of new capabilities as required. Costs include support for test related technical and safety of flight issues, test planning, te				
FY 2014 Plans:				

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Exhibit R-2, RDT&E Budget Item J	ustification:	PB 2015 Aii	r Force						Date: Ma	arch 2014					
Appropriation/Budget Activity 3600: Research, Development, Test Operational Systems Development	600: Research, Development, Test & Evaluation, Air Force I BA 7: PE 0401130F I C-17 Aircraft (IF)														
C. Accomplishments/Planned Prog	grams (\$ in I	Millions)							FY 2013	FY 2014	FY 2015				
Continuation of contractor testing of engineering support for test related to															
FY 2015 Plans: Continuation of contractor testing of engineering support for test related to															
Title: Edwards Flight Test									3.974	6.500	7.500				
Description: Continues direct costs are items each weapon system must					uel, air traffic	control, ran	ge costs, etc	., which							
FY 2013 Accomplishments: Continued direct costs of flight testing each weapon system must pay for w FY 2014 Plans: Continuation of direct costs of flight t	hen using Ai	r Force flight	t test location	ns.											
items each weapon system must pay	•				anic control,	range costs,	etc., which a	are							
FY 2015 Plans: Continuation of direct costs of flight t items each weapon system must pay					affic control,	range costs,	etc., which a	are							
				Accon	nplishment	s/Planned P	rograms Su	ıbtotals	76.569	97.134	83.773				
D. Other Program Funding Summa	ıry (\$ in Milli	ons)													
			FY 2015	FY 2015	FY 2015					Cost To					
<u>Line Item</u>	FY 2013	FY 2014	<u>Base</u>	000	<u>Total</u>	FY 2016	FY 2017	FY 2018		Complete					
 APAF: BA05: Line Item # C01700: Aircraft Modifications 	195.608	98.197	127.494	-	127.494	94.947	123.341	118.569	85.155	Continuing	Continuing				
 APAF: BA07: Line Item # C01700: Aircraft Support Equipment & Facilities 	131.056	49.952	20.111	-	20.111	35.877	32.908	2.514	-	Continuing	Continuing				
APAF: BA06: Line Item # 000999: Initial Spares and Repair Parts	7.401	10.218	14.105	-	14.105	14.336	13.099	12.951	13.194	Continuing	Continuing				

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

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

FY 2015 FY 2015 FY 2015 Cost To FY 2013 FY 2014 FY 2016 FY 2019 Complete Total Cost Line Item Base OCO Total FY 2017 FY 2018 Continuing Continuing APAF: BA07: Line Item # 0.750 0.774 0.711 0.711

000075: Other Production Charges

Remarks

E. Acquisition Strategy

The C-17 Acquisition Strategy is based on several separate contracts to support the entire scope of the C-17 weapon system. Producibility Enhancement & Performance Improvement (PE/PI) and Globemaster Operational Enhancement (GLOBE) are indefinite delivery, indefinite quantity (IDIQ) contracts used to purchase services and research articles (through delivery orders) to support all RDT&E with our prime contractor. In addition, purchase orders are used to support flight test activities at Edwards AFB. Additional contract vehicles could be utilized as required.

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-4, RDT&E Schedule Profile: PB 2015 Air Force			Date: March 2014
11 1	,	, ,	umber/Name) C-17 Aircraft

								C-	17	RD	T&I	E PI	RO	GRA	AM	SC	HEL	DUL	.E								
FY 2013 FY 2014				FY 2015				FY 2016				FY 2017					FY:	2018		FY 2019							
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		OI	N-GOI	NG SL	JPPOI	RTFO	R FLI	SHT T	EST, S	OFTV	VARE	LAB S	USTA	INME	NT, AI	ID SY	STEM	ENGI	NEER	NG/ F	ROGE	AM N	ANAC	EMEN	Т	7	
RF	1																										
100	LSID	& FCC																									
	IFF M	ode 5																									
AIRD	ROP IM	PROVEM	ENTS																								
COM	MUNIC	ATION	AND NA	MGAT	ONCA	PABIL	TIES																				
	F	EPLA	CEME	NT C	ORE II	ITEGF	ATE	PRO	CESS	OR (R	CIP)																
			REP	ACE	MENT	HEAD	S-UP	DISPL	AY (H	UD)																	
				CNS	ATM	PHAS	EI-A	DS-B																			
					[CNS/A	TM P	HASE	II - CC	MM I	MODE	RNIZA	TION												
											0	BIGGS	Filte	Fire	HWI	lx											
																			Aero	-l Obs	olesc	ence					
														-												0	

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