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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0401130F: C-17 Aircraft							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	156.943	93.777	99.225	-	99.225	126.834	120.203	76.533	77.157	Continuing	Continuing
672569: C-17 Aircraft	156.943	93.777	99.225	-	99.225	126.834	120.203	76.533	77.157	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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 the airlift mission well into this century.

RDT&E efforts support aircraft performance improvements and airspace access mandates. In addition, funding may be used to develop solutions to emergency obsolescence and safety of flight issues that impact the mission capability or continued support of the C-17 weapon system.

- FY 2011: Continued development and testing of C-17 aircraft performance improvements/mandates to include projects such as, but not limited to, Instrument Landing System (ILS) Identification and Flight Control Computer (FCC) Updates, Replacement Heads-Up Display (RHUD), Replacement Core Integrated Processor (RCIP) Obsolescence, Identification Friend or Foe (IFF) Mode 5, Communication and Navigation Capability, Iridium EMI/EMC Testing, Radio Frequency Counter Measures (RFCM) Risk Reduction Evaluation, Information Assurance Strategy (IAS), and Airdrop.

- FY 2012: Continued development and testing of C-17 aircraft performance improvements/mandates to include projects such as, but not limited to, ILS Identification and FCC Updates, RHUD, RCIP Obsolescence, IFF Mode 5, Communication and Navigation Capability, and Communication Navigation Surveillance (CNS)/Air Traffic Management (ATM) System - Phase 1 Surveillance.

- FY 2013: Continued development and testing 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, RHUD, RCIP Obsolescence, IFF Mode 5, Communication and Navigation Capability, and CNS/ATM System - Phase 1 Surveillance.

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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget		177.212	128.169	98.494	-	98.494
Current President's Budget		156.943	93.777	99.225	-	99.225
Total Adjustments		-20.269	-34.392	0.731	-	0.731
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-4.172	-			
• Other Adjustments		-16.097	-34.392	0.731	-	0.731
Change Summary Explanation						
Other Adjustments						
FY11						
-\$1.097 Congressional General Reductions						
-\$15.000 Congrssional Directed Reductions						
FY12						
-\$0.492 Congressional General Reductions						
-\$33.900 Congrssional Directed Reductions						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013
Title: Performance Improvement Development and Testing				97.644	43.777	55.725
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 2011 Accomplishments:						
Continued development of C-17 aircraft performance improvements/mandates to include projects such as, but not limited to, Instrument Landing System (ILS) Identification and Flight Control Computer (FCC) Updates, Replacement Heads-Up Display (RHUD), Replacement Core Integrated Processor (RCIP) Obsolescence, Identification Friend or Foe (IFF) Mode						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
5, Communication and Navigation Capability, Iridium EMI/EMC Testing, Radio Frequency Counter Measures (RFCM) Risk Reduction Evaluation, Information Assurance Strategy (IAS), and Airdrop. FY 2012 Plans: Continued development of C-17 aircraft performance improvements/mandates to include projects such as, but not limited to, ILS Identification and FCC Updates, RHUD, RCIP Obsolescence, IFF Mode 5, Communication and Navigation Capability, and Communication Navigation Surveillance (CNS)/Air Traffic Management (ATM) System - Phase 1 Surveillance. FY 2013 Plans: 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, RHUD, RCIP Obsolescence, IFF Mode 5, Communication and Navigation Capability, and CNS/ATM System - Phase 1 Surveillance.				
Title: Systems Engineering/ Program Managment (Annex C/Annex E) Description: Continuation of Systems Engineering/Program Management. Costs include operation and maintenance of the system integration and software development laboratories and test facilities, maintenance of the Software Development Plan (SDP), and program management. FY 2011 Accomplishments: Continuation of Systems Engineering/Program Management. Costs include operation and maintenance of the system integration and software development laboratories and test facilities, maintenance of the Software Development Plan (SDP), and program management. FY 2012 Plans: Continuation of Systems Engineering/Program Management. Costs include operation and maintenance of the system integration and software development laboratories and test facilities, maintenance of the Software Development Plan (SDP), and program management. FY 2013 Plans: Continuation of Systems Engineering/Program Management. Costs include operation and maintenance of the system integration and software development laboratories and test facilities, maintenance of the Software Development Plan (SDP), and program management.		32.793	26.000	21.000
Title: Producibility Enhancement/Performance Improvement (PE/PI) Contractor Flight Test (Annex D)		16.506	16.000	15.000

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
Description: Continuation of contractor testing of new capabilities as required. Costs include maintenance on the test aircraft, engine overhaul of the flight test aircraft unique engines, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution. FY 2011 Accomplishments: Continuation of contractor testing of new capabilities as required. Costs include maintenance on the test aircraft, engine overhaul of the flight test aircraft unique engines, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution. FY 2012 Plans: Continuation of contractor testing of new capabilities as required. Costs include maintenance on the test aircraft, engine overhaul of the flight test aircraft unique engines, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution. FY 2013 Plans: Continuation of contractor testing of new capabilities as required. Costs include maintenance on the test aircraft, engine overhaul of the flight test aircraft unique engines, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution.				
Title: Producibility Enhancement/Performance Improvement (PE/PI) Government Flight Test Description: Continuation of the direct costs of flight testing. The costs include ramp space, fuel, air traffic control, range costs, etc., which are items each weapon system must pay for when using Air Force flight test locations. FY 2011 Accomplishments: Continuation of the direct costs of flight testing. The costs include ramp space, fuel, air traffic control, range costs, etc., which are items each weapon system must pay for when using Air Force flight test locations. FY 2012 Plans: Continuation of the direct costs of flight testing. The costs include ramp space, fuel, air traffic control, range costs, etc., which are items each weapon system must pay for when using Air Force flight test locations. FY 2013 Plans: Continuation of the direct costs of flight testing. The costs include ramp space, fuel, air traffic control, range costs, etc., which are items each weapon system must pay for when using Air Force flight test locations.		10.000	8.000	7.500
Accomplishments/Planned Programs Subtotals		156.943	93.777	99.225

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APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0401130F: C-17 Aircraft

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

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• C-17, APAF BA 02, PE 0401130F: <i>Airlift Aircraft</i>	48.414	225.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• C-17, APAF BA 05, PE 0401130F: <i>Aircraft Modifications</i>	398.121	202.179	205.079	0.000	205.079	168.616	166.301	162.380	182.050	Continuing	Continuing
• #91 C-17, APAF BA 07, PE 0401130F: <i>Aircraft Support Equipment & Facilities</i>	20.831	86.085	181.703	0.000	181.703	164.062	99.803	90.400	86.069	Continuing	Continuing
• C-17, APAF BA 06, PE 0401130F: <i>Initial Spares and Repair Parts</i>	0.000	13.626	7.955	0.000	7.955	13.429	28.649	12.826	13.034	Continuing	Continuing
• #100 C-17, APAF BA 07, PE 0401130F: <i>Other Production Charges</i>	22.549	6.458	0.793	0.000	0.793	1.077	0.718	0.000	0.000	Continuing	Continuing

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. These contracts are: 1) indefinite delivery indefinite quantity (IDIQ) contracts for the procurement of C-17s and engines beyond 180, including 44 aircraft included in the FY07 – FY12 Defense Appropriation Acts, and foreign orders that may materialize; 2) a producibility enhancement and performance improvement (PE/PI) contract to develop cost reduction changes, capability enhancements/airspace access mandates and design fixes to service-revealed problems – (RDT&E, APAF); 3) a Globemaster III Integrated Sustainment Program (field support) contract to support the current and future fielded aircraft – (O&M, TWCF); 4) an engine contract for government furnished equipment (GFE) engines – (APAF); 5) an aircrew training systems (ATS) contract - (O&M, TWCF); 6) a maintenance training systems (MTS) contract - (O&M, TWCF); 7) a weapon system trainers (WST) contract - (APAF); and 8) a training system contract for instruction, contractor logistic support (CLS), and change management of the ATS and MTS to include foreign military sales (FMS) customers. The CLS contract was awarded Nov 10 and merged tasks from both the ATS and MTS contracts into one overarching C-17 Training System follow-on services contract - (O&M, TWCF).

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 2013 Air Force		DATE: February 2012
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Radio Frequency Countermeasures*	1	2011	2	2012
ILS ID & FCC Updates*	1	2011	3	2013
IFF GATM mode 5*	1	2011	3	2013
Airdrop improvements*	1	2011	3	2013
Replacement Core Integrated Processor*	1	2011	2	2015
Replacement HUD (RHUD)	2	2011	4	2015
Comm/Nav	3	2011	2	2014
CNS/ATM phase I--surveillance	2	2012	3	2016
CNS/ATM phase II--communications	3	2014	2	2017