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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0401130F: C-17 Aircraft (IF)							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	81.938	99.225	109.134	-	109.134	93.818	65.822	66.720	77.592	Continuing	Continuing
672569: C-17 Aircraft	-	81.938	99.225	109.134	-	109.134	93.818	65.822	66.720	77.592	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
MDAP/MAIS Code(s): 200												
<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date												
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: Operational Flight Program (OFP); flight test activities and facilities; aircraft performance improvements and airspace access mandates (i.e. Communications/Navigation Improvements); development of solutions for obsolescence and safety of flight issues; systems engineering/program management administration support; block development/change management; proposal preparation for new projects; cost estimating; technical studies (as directed) and Technology Integrated Change Roadmap (TICR) efforts.												
The C-17 Operational Flight Program (OFP) cycle is designed to implement a consistent and regular schedule for software/hardware development and sustainment with a bi-yearly software release. Costs include design, development, flight testing, and implementation of scheduled updates for software/hardware. OFP line includes software candidates such as, but not limited to Air Improvement Program (AIP), Fire Filter Fix/Fuel Economy Improvement program, and Communication Navigation Surveillance / Air Traffic Management (CNS/ATM) mandates and improvements.												
This program is in Budget Activity 7, Operational System Development because requirements include 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 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		93.777	99.225	126.834	-	126.834
Current President's Budget		81.938	99.225	109.134	-	109.134
Total Adjustments		-11.839	0.000	-17.700	-	-17.700
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		-9.300	0.000			
• SBIR/STTR Transfer		-2.539	0.000			
• Other Adjustments		0.000	0.000	-17.700	-	-17.700
Change Summary Explanation						
FY12 - Funds reprogrammed for higher Air Force priorities						
FY14 - Cost savings resulting from implementation of the Operational Flight Program and restructuring of the flight test program into Edwards AFB and Boeing flight test lines.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Operational Flight Program				0.000	0.000	3.000
Description: Develop and implement a consistent and regular schedule for software/hardware development and sustainment with a bi-yearly OFP release. Costs include design, development, flight testing, test facilities and implementation of scheduled updates.						
FY 2012 Accomplishments: N/A						
FY 2013 Plans: N/A						
FY 2014 Plans: Implements a consistent and regular schedule for software/hardware development and sustainment with a bi-yearly OFP release. Initiates Vittles 16 OFP development.						
Title: Performance Improvement and Obsolescence				45.599	67.624	74.396

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<p><b>Description:</b> 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.</p> <p><b>FY 2012 Accomplishments:</b> 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, RCIP Obsolescence, IFF Mode 5, ILS &amp; FCC updates, Communication and Navigation Capability, Airdrop improvements and CNS/ATM System - Phase 1 Surveillance. Completes Radio Frequency Countermeasures.</p> <p><b>FY 2013 Plans:</b> 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, Communication and Navigation Capability, and CNS/ATM System - Phase 1 Surveillance. Completes efforts on ILS ID &amp; FCC updates, IFF Mode 5, and Airdrop improvements.</p> <p><b>FY 2014 Plans:</b> 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, Pad Bundle Tracking and CNS/ATM System - Phase 1 Surveillance. Completes Communication and Navigation Capability. Initiates CNS/ATM Phase 2 Communication.</p>				
<p><b>Title:</b> Systems Engineering/ Program Management</p> <p><b>Description:</b> Continuation of Systems Engineering/prime contractor Program Management (SE/PM). 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.</p> <p><b>FY 2012 Accomplishments:</b> Continuation of Systems Engineering/prime contractor 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.</p> <p><b>FY 2013 Plans:</b></p>		9.234	7.059	5.000

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continuation of Systems Engineering/prime contractor 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.  <b>FY 2014 Plans:</b> Continuation of Systems Engineering/prime contractor 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.				
<b>Title:</b> Boeing Flight Test  <b>Description:</b> Continuation of contractor testing of new capabilities as required. Costs include maintenance on test aircraft, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution.  <b>FY 2012 Accomplishments:</b> Continuation of contractor testing of new capabilities as required. Costs include maintenance on 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.  <b>FY 2013 Plans:</b> Continuation of contractor testing of new capabilities as required. Costs include maintenance on test aircraft, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution.  <b>FY 2014 Plans:</b> Continuation of contractor testing of new capabilities as required. Costs include maintenance on test aircraft, contractor engineering support for test related technical and safety of flight issues, test planning, test analysis and test execution.		18.500	17.042	13.000
<b>Title:</b> Edwards Flight Test  <b>Description:</b> 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.  <b>FY 2012 Accomplishments:</b> 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.  <b>FY 2013 Plans:</b>		8.605	7.500	7.500

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C. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014
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 2014 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.											
Title: PMA (Program Management Administration)									0.000	0.000	6.238
Description: Includes contract services and government costs.											
FY 2012 Accomplishments: PMA											
FY 2013 Plans: PMA											
FY 2014 Plans: PMA											
Accomplishments/Planned Programs Subtotals									81.938	99.225	109.134
D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• APAF: BA02: Line Item # C017A0: Airlift Aircraft	225.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
• APAF: BA05: Line Item # C01700: Aircraft Modifications	174.742	205.079	143.197		143.197	143.197	141.193	176.220	182.142	1,083.253	0.000
• APAF: BA07: Line Item # C01700: Aircraft Support Equipment & Facilities	85.941	181.703	81.952		81.952	74.563	70.484	73.782	86.105	Continuing	Continuing
• APAF: BA06: Line Item # 000999: Initial Spares and Repair Parts	12.691	13.476	13.429		13.429	28.295	12.584	12.810	13.041	Continuing	Continuing
• APAF: BA07: Line Item # 000075: Other Production Charges	9.958	0.793	1.077		1.077	0.718	0.000	0.000	0.000	Continuing	Continuing

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<b>D. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
<b>Remarks</b>											
Aircraft modification funding (BA05) includes C-17 LAIRCM funds in PE 0401134F in FY2012.											
<b>E. Acquisition Strategy</b>											
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.											
<b>F. Performance Metrics</b>											
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 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0401130F: C-17 Aircraft (IF)				PROJECT 672569: C-17 Aircraft					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Flight Program	Various	Boeing:Long Beach, CA	-	0.000		0.000		3.000	Jan 2013	-		3.000	Continuing	Continuing	
Performance Improvement and Obsolescence	Various	Boeing:Long Beach, CA	-	45.599	Oct 2011	67.624	Oct 2012	74.396	Dec 2013	-		74.396	Continuing	Continuing	
Systems Engineering/ Program Management	Various	Boeing:Long Beach, CA	-	9.234	Nov 2011	7.059	Nov 2012	5.000	Nov 2013	-		5.000	Continuing	Continuing	
Subtotal			0.000	54.833		74.683		82.396		0.000		82.396			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Edwards Flight Test	PO	AFTC:Edwards, CA	-	8.605	Oct 2011	7.500	Oct 2012	7.500	Oct 2013	-		7.500	Continuing	Continuing	
Boeing Flight Test	SS/CPIF	Boeing:Long Beach, CA	-	18.500	Dec 2011	17.042	Dec 2012	13.000	Dec 2013	-		13.000	Continuing	Continuing	
Subtotal			0.000	27.105		24.542		20.500		0.000		20.500			
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA - Government Costs	Various	Wright-Patterson AFB:Dayton, OH	-	0.000		0.000		6.238	Oct 2013	-		6.238	Continuing	Continuing	
Subtotal			0.000	0.000		0.000		6.238		0.000		6.238			

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	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	0.000	81.938		99.225		109.134		0.000		109.134				

Remarks



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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Air Force			<b>DATE:</b> April 2013		
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<b>C-17 PROGRAM SCHEDULE</b>																											
FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
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
ON-GOING SUPPORT FOR FLIGHT TEST, LAB SUSTAINMENT, AND SYSTEM ENGINEERING/ PROGRAM MANAGEMENT																											
RFCM (RADIO FREQUENCY COUNTERMEASURES)																											
ILS ID & FCC UPDATES (INSTRUMENT LANDING SYSTEM IDENTIFICATION & FLIGHT CONTROL COMPUTER UPDATES)																											
IDENTIFY FRIEND OR FOE GATM 5																											
AIRDROP IMPROVEMENTS																											
REPLACEMENT CORE INTEGRATED PROCESSOR/OBSOLESCENCE																											
COMMUNICATION AND NAVIGATION CAPABILITIES																											
REPLACEMENT HEADS-UP DISPLAY (HUD)																											
CNS/ATM PHASE I - ADS-B																											
CNS/ATM PHASE II - COMM MODERNIZATION																											
Vittles 17 OFF																											
Vittles 19 OFF																											

**C-17 RDT&E  
PROGRAMS**

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
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## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Radio Frequency Countermeasures*	1	2012	2	2012
ILS ID & FCC Updates*	1	2012	3	2013
IFF GATM mode 5*	1	2012	3	2013
Airdrop improvements*	1	2012	3	2013
Replacement Core Integrated Processor*	1	2012	2	2015
Replacement HUD (RHUD)*	1	2012	2	2015
Comm/Nav*	1	2012	2	2014
CNS/ATM phase I--surveillance	4	2012	1	2016
CNS/ATM phase II--communications	2	2014	2	2017
Vittles 17 OFP	3	2014	2	2017
Vittles 19 OFP	3	2017	4	2018