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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 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605221F: KC-46							
COST (\$ in Millions)	All Prior Years	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
Total Program Element	861.789	818.947	1,815.588	1,558.590	-	1,558.590	911.630	613.378	319.999	60.740	4.361	6,965.022
655271: KC-46 RDT&E	861.789	818.947	1,815.588	1,558.590	-	1,558.590	911.630	613.378	319.999	60.740	4.361	6,965.022
Quantity of RDT&E Articles	4	0	0	0		0	0	0	0	0		
MDAP/MAIS Code(s): 387												
[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
^{##} The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
Replacement of the legacy KC-135 fleet will take place in three stages, known as the KC-X (now the KC-46), KC-Y, and the KC-Z. The initial KC-46 increment will replace roughly a third of the current capability with the purchase of 179 aircraft. The Air Force completed an Analysis of Alternatives (AoA) in Apr 2006 to determine the most appropriate strategy to recapitalize the aging fleet of KC-135 aerial refueling aircraft. Based on this analysis, the Air Force concluded that a strategy of full and open competition to select a commercial derivative replacement tanker aircraft would result in a best value tanker contract. To initiate the first phase of the KC-135 replacement, the KC-46 program released a final Request for Proposal (RFP) on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46 program held a Milestone B Defense Acquisition Board (DAB) on 23 Feb 2011, received approval to enter Engineering and Manufacturing Development (EMD) from OSD AT&L on 24 Feb 2011, and awarded the KC-46 EMD contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46 aircraft.												
The KC-46 will provide fuel to joint and coalition receivers via a boom or drogue system on every mission and will also augment the airlift fleet with cargo, passenger and aeromedical evacuation capabilities. The KC-46 will be able to operate in day/night and adverse weather conditions to enable deployment, employment, sustainment and redeployment of U.S. joint, allied, and coalition forces. The KC-46 will have communication, navigation and surveillance equipment for world-wide operations; will have the capability to perform missions in chemical and biological environments; will have the capability to operate in low-to-medium threat areas and near-high threat areas with self-defense/protection (both active and passive) capabilities; and will have necessary battle space awareness to mitigate survivability threats.												
The KC-46 development effort will also procure the necessary ground and flight test assets to support development/operational test. The program plans to procure four RDT&E aircraft for integration and demonstration of capability that will ultimately be operationally fielded after a successful operational test phase. In addition, aircrew and maintenance training systems will be developed and procured using KC-46 funding. The Aircrew Training System (ATS) entered source selection on 31 May 2012. The Maintenance Training System (MTS) is scheduled to enter source selection in FY2014. A business case analysis will also be conducted to determine if the engines for the production aircraft will be government furnished or contractor furnished. Initial training and sustainment efforts will be provided via Interim Contractor Support (ICS). KC-46 funding will also support various studies and analyses including the five-nation Future Technology for Aerial Refueling (FTAR) project, and KC-Y/KC-Z planning activities.												

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This program is in Budget Activity 05, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.						
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		877.084	1,815.588	1,576.063	-	1,576.063
Current President's Budget		818.947	1,815.588	1,558.590	-	1,558.590
Total Adjustments		-58.137	0.000	-17.473	-	-17.473
• 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		-0.272	0.000			
• SBIR/STTR Transfer		-47.865	0.000			
• Other Adjustments		-10.000	0.000	-17.473	-	-17.473
Change Summary Explanation						
FY2012: (-\$57.137) adjusted for Small Business Innovation Research (-\$47.865), Program Element 0605807F (-\$10.000) in compliance with Public Law 112-74 Section 8074, and other higher priority Air Force requirements (-\$0.272)						
FY2014 Base: (-\$17.473) RDT&E, AF adjusted to reflect rephasing of RDT&E funding requirements						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: KC-46 Aircraft Product Development				795.544	1,727.392	1,470.159
Description: To begin re-capitalizing the aging KC-135 fleet, EMD activities will be conducted to include the following types of activities: Develop a commercial 767-2C aircraft upon which the KC-46 is based; develop the KC-46 military capability and integrate it into the aircraft; build 4 EMD aircraft; procure live fire assets; procure any required Government Furnished Equipment; procure simulator and maintenance data; develop technical manuals and Type 1 training; conduct development and operational testing.						
FY 2012 Accomplishments: Completed aircraft preliminary design and began aircraft detailed design.						
FY 2013 Plans: Complete aircraft detailed design and begin aircraft manufacturing and certification/qualification testing.						
FY 2014 Plans:						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Continue aircraft manufacturing and certification/qualification testing.				
Title: KC-46 Trainer Product Development Description: To begin re-capitalizing the aging KC-135 fleet, Trainer Development activities will be conducted to include the following types of activities: Develop an Aircrew Training System; Develop a Maintenance Training System. FY 2012 Accomplishments: Continued solicitation of KC-46 Aircrew & Maintenance Training System, and award KC-46 Aircrew Training System EMD contract. FY 2013 Plans: Continue solicitation of KC-46 Maintenance Training System and continue activities associated with Aircrew Training System development. FY 2014 Plans: Continue solicitation of KC-46 Maintenance Training System, award KC-46 Maintenance Training System EMD contract, and continue activities associated with Aircrew Training System development.		1.250	51.391	35.781
Title: KC-46 Direct Mission Support Description: Studies and Analysis activity associated with the development, integration, and demonstration of KC-46 capability. In addition, planning activities for future efficiency initiatives, business case analyses, KC-Y & KC-Z planning, and misc. program office support & planning. FY 2012 Accomplishments: Continued KC-46 Studies and Analysis activities and completed business case analysis, such as Commercial Derivative Sustainment study FY 2013 Plans: Continue KC-46 Studies and Analysis activities FY 2014 Plans: Continue KC-46 Studies and Analysis activities		3.275	6.415	5.260
Title: KC-46 Test & Evaluation Description: To begin re-capitalizing the aging KC-135 fleet, Test & Evaluation activities will be conducted to include the following types of activities: Development Test & Evaluation support; Operational Test & Evaluation; Receiver Qualification; Federal Aviation Administration (FAA) support, and other test planning and organizational support.		6.833	15.183	30.939

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Continued KC-46 Test & Evaluation planning and began Live Fire Testing												
FY 2013 Plans: Continue KC-46 Test & Evaluation planning, Live Fire Testing and conduct Operational Assessment #1												
FY 2014 Plans: Continue KC-46 Test & Evaluation planning, Live Fire Testing and begin aircraft Development Test & Evaluation.												
Title: KC-46 Program Management Administration										12.045	15.207	16.451
Description: Program Office Support activity associated with the development, integration, and demonstration of KC-46 capability. Includes requirements such as travel, office supplies, training courses, and service contracts.												
FY 2012 Accomplishments: Continued KC-46 Program Office Support activity (AFLCMC)												
FY 2013 Plans: Continue KC-46 Program Office Support activity (AFLCMC)												
FY 2014 Plans: Continue KC-46 Program Office Support activity (AFLCMC)												
Accomplishments/Planned Programs Subtotals										818.947	1,815.588	1,558.590
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 #	0.000	0.000	0.000		0.000	1,777.836	2,777.307	3,228.685	3,382.300	29,155.199	40,321.327	
KC135R: KC-46A												
Remarks												
E. Acquisition Strategy												
The KC-46 Program acquisition strategy is to procure an existing commercial, Federal Aviation Administration (FAA) certified aircraft modified to meet USAF requirements. The KC-46 program released a final Request for Proposal (RFP) on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46 program held a Milestone B Defense Acquisition Board (DAB) on 23 Feb 2011, received approval to enter Engineering and Manufacturing Development (EMD) from OSD AT&L on 24 Feb 2011, and awarded the KC-46 contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46 aircraft. The KC-46 contract procurement was conducted												

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<p>via a full and open competition per Federal Acquisition Regulation (FAR) Part 15, and resulted in a FY 2011 EMD Fixed Price Incentive Firm (FPIF) contract. The EMD phase will develop, build, and test four KC-46 aircraft, and will qualify receiver aircraft.</p> <p>Production will begin in FY 2015 with the first of two Low-Rate Initial Production (LRIP) lots (Firm Fixed Priced (FFP)) and then Full-Rate Production (FRP) options (FFP with Not to Exceed (NTE) + Economic Price Adjustment (EPA)). The LRIP and FRP options will be exercised following successful completion of Operational Assessments (OAs) for the LRIP decisions, and a successful completion of Initial Operational Test and Evaluation (IOT&E) for the FRP decision.</p> <p>The Government plans to compete the development, deployment, and sustainment of both the aircrew and maintenance training systems separately.</p> <p>Based on the market research and a cost effectiveness analysis, the engines will be procured as contractor furnished equipment (CFE) for EMD. Following EMD, the Government will assess the potential of breaking out the engines as a separate procurement based on an updated market analysis.</p> <p>The KC-46 Program is responsible for the development, testing, and production of a drogue-equipped, wing-mounted refueling system to meet Capability Development Document (CDD) thresholds and objectives, for simultaneous refueling of two probe-equipped receivers. The system can be installed or removed from the KC-46 as mission needs dictate.</p> <p>The long-term support concept for the KC-46 is organic two-level maintenance (2LM): organization level (O-level) and depot level (D-level). For the purposes of this program, all maintenance other than O-level shall be referred to as D-level. The product support strategy will use a Contractor Supported Weapon System (CSWS) to provide interim support (Interim Contractor Support (ICS)), during the transition to a Government organically managed maintenance and supply support capability. Performance Based Logistics (PBL) solutions will be evaluated during EMD as viable approaches to facilitate the transition.</p> <p>This acquisition strategy requires sufficient aircraft to be designed, tested, and delivered to meet a Required Assets Available (RAA) date of 78 months after contract award. RAA is defined as 18 aircraft meeting final production configuration with all required training and support in place. Initial Operational Capability (IOC) will be attained when the Commander, Air Mobility Command (AMC/CC) determines the unit is operationally war ready. AMC has not yet determined an IOC date. Full Operational Capability (FOC) is expected approximately 24 months after IOC.</p> <p><u>F. Performance Metrics</u></p> <p>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.</p>		

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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 5: System Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0605221F: KC-46				PROJECT 655271: KC-46 RDT&E					
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
KC-46 aircraft non-recurring development, integration, and testing, 4 RDT&E tanker aircraft and support	C/FPIF	The Boeing Company:Seattle, WA	812.710	795.544		1,727.392		1,470.159		-		1,470.159	1,515.058	6,320.863	4,393.857
Develop an Aircrew Training System; Develop a Maintenance Training System	C/FPIF	TBD:TBD,	0.000	1.250		51.391		35.781		-		35.781	266.551	354.973	TBD
Subtotal			812.710	796.794		1,778.783		1,505.940		0.000		1,505.940	1,781.609	6,675.836	
Remarks															
The KC-46 aircraft row's "Target Value on Contract" represents the \$4.4B target price of the prime contract. The contract ceiling price of \$4.9B is the Government's maximum financial liability on the prime contract. The "Total Cost" value represents the Milestone B Service Cost Position (SCP), which accounts for the ceiling price of the contract plus the financial risk of potential design changes for the KC-46 Aircraft, Aircrew Training System (ATS), and Maintenance Training System (MTS). ATS and MTS contract dates and information will be provided after ATS and MTS source selections are completed.															
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
Studies and Analysis associated with the development, integration, and demonstration of KC-46 capability & future planning	Various	Various:Various,	7.811	3.275		6.415		5.260		-		5.260	19.060	41.821	
Subtotal			7.811	3.275		6.415		5.260		0.000		5.260	19.060	41.821	
Remarks															
These contracts are on an as needed basis, with various contract types and performing activities.															

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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
Testing and Planning support of development & operational test, FAA & military certification, and aircraft qualification activities	Various	Various:Various,	12.314	6.833		15.183		30.939		-		30.939	88.121	153.390	
Subtotal			12.314	6.833		15.183		30.939		0.000		30.939	88.121	153.390	
Remarks Testing and planning activities are performed by Government organizations, with some A&AS support.															
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
Program Management Administration	Various	KC-46 Program Office:Dayton, W-P AFB, OH	28.954	12.045		15.207		16.451		-		16.451	21.318	93.975	
Subtotal			28.954	12.045		15.207		16.451		0.000		16.451	21.318	93.975	
Remarks Multiple A&AS contracts over \$1M: FY 2012 (total cost \$10.256M); FY 2013 (total cost: \$12.769M); FY 2014 (total cost of \$13.890). All competitive, various contract types, and various locations.															
			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			861.789	818.947		1,815.588		1,558.590		0.000		1,558.590	1,910.108	6,965.022	
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

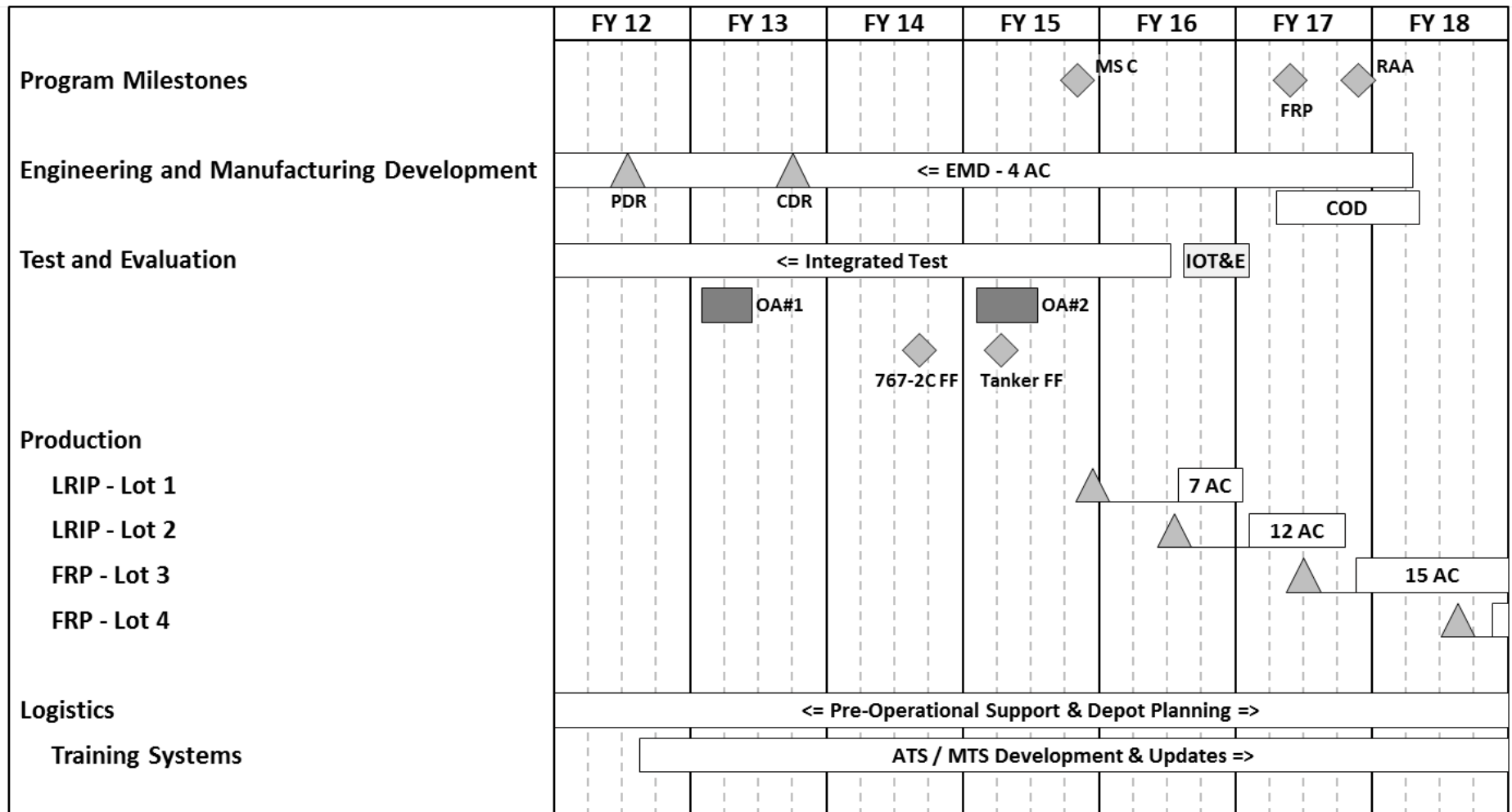
3600: Research, Development, Test & Evaluation, Air Force
BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605221F: KC-46

PROJECT

655271: KC-46 RDT&E



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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
EMD: KC-46 Aircraft	1	2012	2	2018
Preliminary Design Review	2	2012	3	2012
Critical Design Review	4	2013	4	2013
Test & Evaluation	1	2012	1	2017
Operational Assessment #1	1	2013	2	2013
767-2C First Flight	3	2014	3	2014
Tanker First Flight	2	2015	2	2015
Operational Assessment #2	1	2015	3	2015
Integrated Operational Test & Evaluation	3	2016	1	2017
Low Rate Initial Production - Lot 1	4	2015	4	2016
Low Rate Initial Production - Lot 2	3	2016	4	2017
Full Rate Production - Lot 3	3	2017	4	2018
Pre-Operational Support & Depot Planning	1	2012	4	2018
Aircrew / Maintenance Training System Development & Updates	3	2012	4	2018