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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	14.937	863.875	877.084	-	877.084	1,150.032	817.471	383.983	47.706	Continuing	Continuing
655271: <i>KC-X RDT&E</i>	14.937	863.875	877.084	-	877.084	1,150.032	817.471	383.983	47.706	Continuing	Continuing

Note

Totals include funding for Program Resources Collection Process (PRCP) Program Number 387, KC-X.

The KC-X program entered source selection on 9 Jul 2010 and is planning a CY 2011 Milestone B Defense Acquisition Board (DAB) and contract award. The program schedule and the budget request presented in these documents represent a restructure based upon a contract award in CY 2011. Any additional restructuring of the funding will occur after contract award to reflect the vendor specific development strategy.

In FY 2009, PE 0401221F, KC-X Replacement Tanker, 4927, KC-X Replacement Tanker, efforts were transferred to PE 0605221F, KC-X Next Generation Aerial Refueling Aircraft, 5271, KC-X RDT&E, in order to move funds to Budget Activity (BA) 05 to correctly represent the phase of the KC-X Program.

The program funding includes reductions for overhead efficiencies that are not intended to impact program content. The efficiencies reductions are \$13.806M in FY 2012.

A. Mission Description and Budget Item Justification

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. Replacement of the legacy KC-135 fleet will take place in three stages, known as the KC-X, the KC-Y, and the KC-Z. The initial KC-X increment will replace roughly a third of the current capability with the purchase of 179 aircraft. On 24 Sep 2009 a draft Request For Proposal (RFP) was released which led to the final RFP release on 24 Feb 2010. The KC-X Program is currently in source selection.

The KC-X will be able to 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 medical evacuation capabilities. The KC-X 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-X 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-X development effort will also procure the necessary ground and flight test assets to support developmental/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, both aircrew and maintenance Training System Requirements Analyses (TSRA) are being conducted to determine training requirements. Aircrew and Maintenance

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APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0605221F: *KC-X, Next Generation Aerial Refueling Aircraft*

training systems will be developed and procured via a future trainer-specific source selection, using KC-X funding. 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-X 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.

This program is in Budget Activity 05, System Development and Demonstration (SDD) because after Milestone B, it will be conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	15.000	863.875	1,146.007	-	1,146.007
Current President's Budget	14.937	863.875	877.084	-	877.084
Total Adjustments	-0.063	-	-268.923	-	-268.923
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-0.063	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-268.923	-	-268.923

Change Summary Explanation

The FY 2010 Defense Appropriations Bill reduced \$132.9M in RDT&E, moved \$291.715M of FY 2010 RDT&E into the Tanker Replacement Transfer Fund (TRTF), and left \$15.0M in RDT&E to support program office & source selection activities. The Tanker Replacement Transfer Fund amount of \$291.615M will be used as FY 2010 RDT&E in FY 2011 per SECAF Memo to Congress dated 2 Nov 2010. Funds completed transfer on 6 Jan 2011.

The KC-X program entered source selection on 9 Jul 2010 and is planning a CY 2011 Milestone B Defense Acquisition Board (DAB) and contract award. The program schedule and the budget request presented in these documents represent a FY 2012 PB restructure based upon a contract award in CY 2011. Adjustments in FY 2012 of \$268.923M reflect a restructure based upon a contract award in CY 2011 and additional reductions.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>				655271: <i>KC-X RDT&E</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
655271: <i>KC-X RDT&E</i>	14.937	863.875	877.084	-	877.084	1,150.032	817.471	383.983	47.706	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Totals include funding for Program Resources Collection Process (PRCP) Program Number 387, KC-X.

The KC-X program entered source selection on 9 Jul 2010 and is planning a CY 2011 Milestone B Defense Acquisition Board (DAB) and contract award. The program schedule and the budget request presented in these documents represent a restructure based upon a contract award in CY 2011. Any additional restructuring of the funding will occur after contract award.

The FY 2010 Defense Appropriations Bill reduced \$132.9M in RDT&E, moved \$291.715M of FY 2010 RDT&E into the Tanker Replacement Transfer Fund (TRTF), and left \$15.0M in RDT&E to support program office & source selection activities. The Tanker Replacement Transfer Fund amount of \$291.615M will be used as FY 2010 RDT&E in FY 2011 per SECAF Memo to Congress dated 2 Nov 2010. Funds completed transfer on 6 Jan 2011. The FY 2012 PB restructures the KC-X budget for the CY 2011 contract award.

In FY 2009, PE 0401221F, KC-X Replacement Tanker, 4927, KC-X Replacement Tanker, efforts were transferred to PE 0605221F, KC-X Next Generation Aerial Refueling Aircraft, 5271, KC-X RDT&E, in order to move funds to Budget Activity (BA) 05 to correctly represent the phase of the KC-X Program.

The program funding includes reductions for overhead efficiencies that are not intended to impact program content. The efficiencies reductions are \$13.806M in FY 2012.

A. Mission Description and Budget Item Justification

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. Replacement of the legacy KC-135 fleet will take place in three stages, known as the KC-X, the KC-Y, and the KC-Z. The initial KC-X increment will replace roughly a third of the current capability with the purchase of 179 aircraft. On 24 Sep 2009 a draft Request For Proposal (RFP) was released which led to the final RFP release on 24 Feb 2010. The KC-X Program is currently in source selection.

The KC-X will be able to 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 medical evacuation capabilities. The KC-X 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-X 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

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0605221F: KC-X, Next Generation Aerial Refueling Aircraft	PROJECT 655271: KC-X RDT&E				
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-X development effort will also procure the necessary ground and flight test assets to support developmental/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, both aircrew and maintenance Training System Requirements Analyses (TSRA) are being conducted to determine training requirements. Aircrew and Maintenance training systems will be developed and procured via a future trainer-specific source selection, using KC-X funding. 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-X 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.							
This program is in Budget Activity 05, System Development and Demonstration (SDD) because after Milestone B, it will be conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.							
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: KC-X Product Development Description: To begin recapitalizing the aging KC-135 fleet--EMD activities FY 2010 Accomplishments: No KC-X EMD contract activities FY 2011 Plans: Program office plans to award the contract. Begin the Engineering and Manufacturing Development (EMD) phase which includes purchase of 4 EMD aircraft for development, integration, and demonstration of capability. FY 2012 Base Plans: Continue KC-X tanker EMD activities. FY 2012 OCO Plans:			-	810.412	775.084	-	775.084
Title: KC-X Support Description: To begin recapitalizing the aging KC-135 fleet -- Support Activities FY 2010 Accomplishments: No KC-X Studies and Analyses activities FY 2011 Plans:			-	1.800	2.000	-	2.000

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0605221F: KC-X, Next Generation Aerial Refueling Aircraft		PROJECT 655271: KC-X RDT&E		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
KC-X Studies and Analyses activities FY 2012 Base Plans: Continue KC-X Studies and Analyses activities. FY 2012 OCO Plans: NA						
Title: KC-X Test & Evaluation Description: To begin recapitalizing the aging KC-135 fleet -- Test & Planning FY 2010 Accomplishments: No KC-X Test and Planning Activites FY 2011 Plans: KC-X Test and Planning activities FY 2012 Base Plans: Continue KC-X Test and Planning activities. FY 2012 OCO Plans: NA		-	15.500	30.000	-	30.000
Title: KC-X Program Office Support Description: To begin recapitalizing the aging KC-135 fleet -- Program Office Support FY 2010 Accomplishments: Program office released the final Request For Proposal on 24 Feb 2010. Program office entered source selection on 9 Jul 2010. The Tanker Replacement Transfer Fund (TRTF) amount of \$291.615M will be used as FY 2010 RDT&E in FY 2011 per SECAF Memo to Congress dated 2 Nov 2010. These TRTF funds will support EMD contract, program support, studies, training systems, and test support beginning in CY 2011. FY 2011 Plans: Continue program office mission support. FY 2012 Base Plans:		14.937	21.013	20.000	-	20.000

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force				DATE: February 2011							
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>		PROJECT 655271: <i>KC-X RDT&E</i>							
B. Accomplishments/Planned Programs (\$ in Millions)											
	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total						
Continue program office mission support.											
FY 2012 OCO Plans: NA											
Title: KC-X Trainer Development Description: To begin recapitalizing the aging KC-135 fleet -- Trainer Development FY 2010 Accomplishments: No KC-X Trainer Development activities FY 2011 Plans: Solicitation for KC-X aircrew and maintenance training systems. FY 2012 Base Plans: Continue solicitation of, and award KC-X aircrew training and maintenance systems development contracts. FY 2012 OCO Plans: NA											
Accomplishments/Planned Programs Subtotals		14.937	863.875	877.084	-	877.084					
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• PE 0401221F: <i>KC-X, APAF, BA2</i>	0.000	0.000	0.000	0.000	0.000	1,704.446	2,746.445	3,351.189	2,604.153	Continuing	Continuing
• PE 0401221F (1): <i>KC-X, MILCON</i>	0.000	0.000	0.000	0.000	0.000	50.000	69.000	358.600	221.924	Continuing	Continuing
D. Acquisition Strategy											
<p>The KC-X program entered source selection on 9 Jul 2010 and is planning a CY 2011 Milestone B Defense Acquisition Board (DAB) and contract award. The program schedule and the budget request presented in these documents represent a restructure based upon a contract award in CY 2011. Any additional restructuring of the funding will occur after contract award to reflect the vendor specific development strategy. The KC-X is a commercial derivative aerial refueling tanker. The Engineering and Manufacturing Development (EMD) program is a Fixed Priced Incentive contract that will include 4 RDT&E aircraft that will be converted to production aircraft after testing and other activities are complete. Production will begin with two Low Rate Initial Production (LRIP) lots that will lead into Full Rate Production.</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>	PROJECT 655271: <i>KC-X RDT&E</i>

E. 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 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605221F: KC-X, Next Generation Aerial Refueling Aircraft	PROJECT 655271: KC-X RDT&E
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Non-recurring, RDT&E tanker aircraft and support	C/TBD	TBD:TBD,	-	810.412		775.084		-		775.084	Continuing	Continuing	0.000
Subtotal			-	810.412		775.084		-		775.084			0.000

Remarks
Contract dates will be provided after source selection is completed.

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Studies and Analysis	Various	Various:Various,	-	1.800		2.000		-		2.000	Continuing	Continuing	0.000
Subtotal			-	1.800		2.000		-		2.000			0.000

Remarks
Contract dates will be provided after source selection is completed.

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Planning	Various	Various:Various,	0.665	15.500		30.000		-		30.000	Continuing	Continuing	0.000
Subtotal			0.665	15.500		30.000		-		30.000			0.000

Remarks
Contract dates will be provided after source selection is completed.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>	PROJECT 655271: <i>KC-X RDT&E</i>
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Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Office Support	Various	KC-X Program Office:Wright Patterson AFB, OH	32.195	21.013		20.000		-		20.000	Continuing	Continuing	0.000
Trainer Development	TBD	TBD:TBD,	-	15.150		50.000		-		50.000	Continuing	Continuing	0.000
Subtotal			32.195	36.163		70.000		-		70.000			0.000

Remarks
Multiple A&AS Contracts over \$1M: FY 2010 (total cost: \$9.416M); FY 2011 (total cost \$8.375M); FY 2012 (\$8.627M). All competitive, various contract types, various locations.

Contract dates will be provided after source selection is completed.

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	32.860	863.875		877.084		-		877.084			0.000

Remarks
FY 2010: The Tanker Replacement Transfer Fund (TRTF) amount of \$291.615M will be used as FY 2010 RDT&E per SECAF Memo to Congress dated 2 Nov 2010.

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>	PROJECT 655271: <i>KC-X RDT&E</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605221F: <i>KC-X, Next Generation Aerial Refueling Aircraft</i>	PROJECT 655271: <i>KC-X RDT&E</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Product Development: Non recurring, RDT&E tanker aircraft and support	2	2011	4	2016
Support: Studies and Analysis	1	2010	4	2016
Test & Evaluation: Test & Planning	2	2011	1	2015
Management Services: Trainer Development	1	2010	4	2016
Management Services: Program Office Support	1	2010	4	2016
MS B	2	2011	2	2011
EMD & 4 Aircraft	2	2011	3	2016
LRIP - Lot 1: 7 Aircraft	2	2013	1	2016
LRIP - Lot 2: 12 Aircraft	2	2014	4	2016
FRP - Lot 3: 15 Aircraft	2	2015	4	2016
Logistics	1	2010	4	2016