

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0401218F KC-135s					
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	452	5,361	1,497	1,502	1,110	1,530	15,572	Continuing	TBD
4494 KC-135 Aging Aircraft Program	452	5,361	1,497	1,502	1,110	1,530	1,133	Continuing	TBD
4927 KC-X	0	0	0	0	0	0	14,439	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**
 674494: KC-135 Aging Aircraft Program: This program supports the aging aircraft corrosion and fatigue project CORAL REACH. CORAL REACH studies include the analysis and testing efforts in the area of aging aircraft, to include structural, corrosion, fatigue, and stress corrosion cracking. Additionally, the Functional System Integrity Program proactively examines individual aircraft systems for potential impacts due to aging components. The USAF will utilize these activities to improve KC-135 Programmed Depot Maintenance efficiency and to provide direction for future aging aircraft efforts to maintain the KC-135 as a viable airframe. CORAL REACH results provided accurate data for incorporation into the KC-135 Economic Life Study. The KC-135 Economic Life Study consisted of studies for structure, systems, and component support as well as cost benefit analyses to support an Analysis of Alternatives (AOA). The AOA addresses replacement for the KC-135 based on economic decision points and requirements.

674927: In FY07 RDT&E (\$14.4M) will be applied towards the replacement of the KC-135.

(U) **B. Budget Activity Justification**
 Project 674494 is comprised of low technical risk efforts supporting a fielded weapon system and, therefore, is assigned to Budget Activity 7, Operational Systems. Project 674927, while associated with the KC-135 PE, will be assigned to Budget Activity 7, Operational Systems. However, when the KC-X PE is established, it will be assigned a BA that properly reflects the program content and risk.

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BUDGET ACTIVITY		PE NUMBER AND TITLE		
07 - Operational System Development		0401218F KC-135s		
(U) <u>C. Program Change Summary (\$ in Thousands)</u>				
		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
	<u>Total Cost</u>			
(U) Previous President's Budget		487	5,416	1,500
(U) Appropriated Value		487	5,416	
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions			-55	
b. Small Business Innovative Research		-31		
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram				
e. Rescissions		-4		
(U) Adjustments to Budget Years Since FY 2002 PBR				-3
(U) Current Budget Submit/FY 2003 PBR		452	5,361	1,497
(U) <u>Significant Program Changes:</u>				
None				

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0401218F KC-135s	PROJECT 4494
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4494 KC-135 Aging Aircraft Program	452	5,361	1,497	1,502	1,110	1,530	1,133	Continuing	TBD

(U) **A. Mission Description**
 This program, in part, supports the aging aircraft corrosion and fatigue project CORAL REACH. CORAL REACH studies include the analysis and testing efforts in the area of aging aircraft, to include structural, corrosion, fatigue, and stress corrosion cracking. Additionally, the Functional System Integrity Program proactively examines individual aircraft systems for potential impacts due to aging components. The USAF will utilize these activities to improve KC-135 Programmed Depot Maintenance efficiency and to provide direction for future aging aircraft efforts to maintain the KC-135 as a viable airframe. CORAL REACH results provided accurate data for incorporation into the KC-135 Economic Life Study. The KC-135 Economic Life Study consisted of studies for structure, systems, and component support as well as cost benefit analyses to support an Analysis of Alternatives (AOA). The AOA addresses replacement for the KC-135 based on economic decision points and requirements.

(U) **FY 2001 (\$ in Thousands)**
 (U) \$40 Functional Systems Integrity Program
 (U) \$19 Basic materials test and predictive technique
 (U) \$243 Mission support/contractor support
 (U) \$150 Economic Service Life Study
 (U) \$452 Total

(U) **FY 2002 (\$ in Thousands)**
 (U) \$925 Corrosion/crack growth rate and fatigue determination and testing
 (U) \$884 Functional Systems Integrity Program (FSIP)
 (U) \$507 Mission support/contractor support
 (U) \$3,045 Analysis of Alternatives
 (U) \$5,361 Total

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0401218F KC-135s			PROJECT 4494		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U) \$370 Corrosion/crack growth rate and fatigue determination and testing									
(U) \$200 Basic materials test and predictive technique									
(U) \$600 Functional Systems Integrity Program									
(U) \$327 Mission support/contractor support									
(U) \$1,497 Total									
(U) <u>B. Project Change Summary</u>									
(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u>									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(U) Other APPN									
(U) <u>D. Acquisition Strategy</u>									
The acquisition strategy consists primarily of separate task orders (with separate statements of work) ranging from fixed price to cost plus contracts. These task orders address a myriad of aging aircraft activities against existing contract vehicles, such as the SPO-managed KC-135 Fleet Support Contract and Design Engineering Program contracts managed through the Air Logistics Centers. The Analysis of Alternatives contracting vehicle has not yet been determined. AOA will be led by AMC/XP.									
(U) <u>E. Schedule Profile</u>									
		<u>FY 2001</u>			<u>FY 2002</u>			<u>FY 2003</u>	
		1	2	3	4	1	2	3	4
(U) Corrosion & Fatigue Testing (ongoing)									
(U) Materials Test & Predictive Tech (ongoing)									
(U) FSIP (ongoing- See Note 1)									
(U) Mission Support (ongoing)									
(U) Economic Service Life Study									
(U) Analysis of Alternatives									
			*				X		
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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0401218F KC-135s	PROJECT 4494																									
<p>(U) <u>E. Schedule Profile Continued</u></p> <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td></td> <td align="center" colspan="3"><u>FY 2001</u></td> <td></td> <td align="center" colspan="3"><u>FY 2002</u></td> <td></td> <td align="center" colspan="3"><u>FY 2003</u></td> </tr> <tr> <td></td> <td align="center">1</td> <td align="center">2</td> <td align="center">3</td> <td align="center">4</td> <td align="center">1</td> <td align="center">2</td> <td align="center">3</td> <td align="center">4</td> <td align="center">1</td> <td align="center">2</td> <td align="center">3</td> <td align="center">4</td> </tr> </table> <p>X=Start / *=Complete NOTE 1: Analysis of flight controls/autopilot will complete in 1st Qtr FY 03. FSIP will continue at that point with examination of additional aircraft systems as required.</p>				<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>				1	2	3	4	1	2	3	4	1	2	3	4
	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>																		
	1	2	3	4	1	2	3	4	1	2	3	4															
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT			
07 - Operational System Development				0401218F KC-135s				4494			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Corrosion/crack growth determination and testing					0		925		370	
(U)	Basic materials test and predictive technique					19		0		200	
(U)	Functional Systems Integrity Program (FSIP)					40		884		600	
(U)	Mission support/contractor support					243		507		327	
(U)	Economic service life study					150		0			
(U)	Analysis of Alternatives					0		3,045			
(U)	Total					452		5,361		1,497	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
	<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Organizations</u>										
	Boeing	C/KC-135 Fleet Support SS/FFP	Oct 97- Mar 03	TBD	TBD	2,022	383	1,784	927	Continuing	TBD
	<u>Support and Management Organizations</u>										
	ARINC, Frontier, other support contractors	Design Engineering Program (DEP) C/FP	Oct 97- Mar 03	TBD	TBD	148	50	3,277	370	Continuing	TBD
	<u>Test and Evaluation Organizations</u>										
	FAA, Wright Labs, NASA, etc.	Project Order/MPIR	Oct 97- Mar 03	TBD	TBD	100	19	300	200	Continuing	TBD
Project 4494				Page 6 of 7 Pages				Exhibit R-3 (PE 0401218F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE February 2002		
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
07 - Operational System Development		0401218F KC-135s			4494	
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>
						<u>Total</u>
						<u>Program</u>
<u>Subtotals</u>						
Subtotal Product Development		2,022	383	1,784	927	TBD
Subtotal Support and Management		148	50	3,277	370	TBD
Subtotal Test and Evaluation		100	19	300	200	TBD
Total Project		2,270	452	5,361	1,497	TBD