

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0401219F KC-10S

PROJECT

4496

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4496 KC-10 GATM	27,016	19,347	22,774	10,584	2,422	0	0	0	0	82,143
Quantity of RDT&E Articles	1	0	0	0	0	0	0	0	0	1

FY03-FY07 budget numbers do not reflect the DoD strategic review.

(U) **A. Mission Description**

Global Air Traffic Management (GATM) is based on evolving Communication, Navigation and Surveillance (CNS) and Free Flight concepts. Key elements of its architecture are Flight Management System (FMS), Dual Multi-Mode Receiver (MMR), Dual Communications Management Unit (CMU), and Communications Datalinks (HF, VHF, SATCOM). Communications upgrades include a data link to augment/replace voice communications. The navigation capabilities include a fully integrated GPS and advanced flight management system. The surveillance capabilities include automatic aircraft position reporting (both enroute and oceanic).

(U) **FY 2000 (\$ in Thousands)**

(U) \$9,100 System Engineering/Program Management/FAA Certification
 (U) \$12,536 Kit Design/Development
 (U) \$2,046 Prototype Fabrication
 (U) \$1,845 Award Fee
 (U) \$1,489 Mission Support
 (U) \$27,016 Total

(U) **FY 2001 (\$ in Thousands)**

(U) \$3,041 System Engineering/Program Management/FAA Certification
 (U) \$6,143 Kit Design/Development
 (U) \$4,656 Prototype Fabrication
 (U) \$2,748 Award Fee
 (U) \$2,759 Mission Support
 (U) \$19,347 Total

The following net transactions are not reflected in the FY01 program total: BTR=-\$185K and SBIR=-\$793K. These transactions are not reflected in other sections of the R-docs where an FY01 total is shown.

Project 4496

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

07 - Operational System Development**0401219F KC-10S****4496**(U) **A. Mission Description Continued**(U) **FY 2002 (\$ in Thousands)**

(U) \$2,427 System Engineering/Program Management/FAA Certification
 (U) \$13,478 Kit Design/Development
 (U) \$3,255 Prototype Fabrication/Install
 (U) \$3,334 Award Fee
 (U) \$280 Mission Support
 (U) \$22,774 Total

(U) **B. Budget Activity Justification**

This effort is a low technical risk effort supporting a fielded weapon system and, therefore, is assigned to Budget Activity 7, Operational Systems Development.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 2001 PBR)	23,609	19,526		43,135
(U) Appropriated Value	23,609	19,526		43,135
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-150			-150
b. Small Business Innovative Research	-683			-683
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram	4,332			4,332
e. Rescissions	-92	-179		-271
(U) Adjustments to Budget Years Since FY 2001 PBR			22,774	35,780
(U) Current Budget Submit/FY 2002 PBR	27,016	19,347	22,774	69,137

(U) **Significant Program Changes:**

FY99 Omnibus payback added \$4.3M to FY00 funds since the FY01 PB.

Program was restructured in Jun 01 with the following RDT&E changes:

FY02: realigned \$22.774M from 3010 to 3600

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<p>(U) <u>D. Other Program Funding Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><u>FY 2000</u></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> <th><u>Cost to</u></th> <th><u>Total Cost</u></th> </tr> <tr> <th></th> <th><u>Actual</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Complete</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>(U) AF RDT&E</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Other APPN</td> <td style="text-align: center;">0</td> <td style="text-align: center;">39,231</td> <td style="text-align: center;">15,093</td> <td style="text-align: center;">8,163</td> <td style="text-align: center;">14,085</td> <td style="text-align: center;">1,973</td> <td></td> <td></td> <td></td> <td style="text-align: right;">78,545</td> </tr> <tr> <td colspan="11">PE#401219F / KC-10 Squadrons, Aircraft Procurement, AF, BA-5, KC-10 Mods, GATM, BP-11</td> </tr> </tbody> </table> <p>(U) <u>E. Acquisition Strategy</u> A sole source cost plus award fee contract was awarded to the aircraft manufacturer for the Engineering, Manufacturing, and Development (EMD) effort. The contract is managed at the KC-10 System Program Office at OC-ALC. Installs are planned to be performed by the KC-10 Contractor Logistic Support Contractor.</p> <p>(U) <u>F. Schedule Profile</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th colspan="4"><u>FY 2000</u></th> <th colspan="4"><u>FY 2001</u></th> <th colspan="4"><u>FY 2002</u></th> </tr> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>(U) Acquisition Strategy Plan (FY99/1)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) EMD Contract Award</td> <td></td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Prototype Installation</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>(U) Production Decision</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>(U) First Flight (1QFY03)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Flight Certification Test (2QFY03)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) AF OT&E Complete (4QFY03)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) 1st Production Aircraft Delivery (1QFY04)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Low Rate Initial Production (4QFY03)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>X=Start / * = Complete</p>										<u>FY 2000</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>Estimate</u>	<u>Complete</u>		(U) AF RDT&E											(U) Other APPN	0	39,231	15,093	8,163	14,085	1,973				78,545	PE#401219F / KC-10 Squadrons, Aircraft Procurement, AF, BA-5, KC-10 Mods, GATM, BP-11												<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>					1	2	3	4	1	2	3	4	1	2	3	4	(U) Acquisition Strategy Plan (FY99/1)													(U) EMD Contract Award		X											(U) Prototype Installation											X		(U) Production Decision											X		(U) First Flight (1QFY03)													(U) Flight Certification Test (2QFY03)													(U) AF OT&E Complete (4QFY03)													(U) 1st Production Aircraft Delivery (1QFY04)													(U) Low Rate Initial Production (4QFY03)												
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE		June 2001	
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
07 - Operational System Development					0401219F KC-10S					4496	
(U) A. Project Cost Breakdown (\$ in Thousands)											
					FY 2000		FY 2001		FY 2002		
(U) System Engineering/Program Management					9,100		3,041		2,427		
(U) Kit Design/Development					12,536		6,143		13,478		
(U) Prototype Fabrication					2,046		4,656				
(U) Prototype Fabrication/Install									3,255		
(U) Award Fee					1,845		2,748		3,334		
(U) Mission Support					1,489		2,759		280		
(U) Total					27,016		19,347		22,774		
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or</u>		<u>Contract</u>									
<u>Government</u>		<u>Method/Type</u>		<u>Award or</u>		<u>Performing</u>		<u>Project</u>			
<u>Performing</u>		<u>or Funding</u>		<u>Obligation</u>		<u>Activity</u>		<u>Office</u>		<u>Total Prior</u>	
<u>Activity</u>		<u>Vehicle</u>		<u>Date</u>		<u>EAC</u>		<u>EAC</u>		<u>to FY 2000</u>	
Boeing		SS/CPAF		Sep 99-Mar						25,568	
				01						19,347	
										22,074	
										13,006	
										79,995	
<u>Product Development Organizations</u>											
<u>Support and Management Organizations</u>											
ARINC, Frontier, other		C/FP		Sep 99-Mar						323	
support contractors				01							
AF Mission Support System		T&M		Mar 00						1,000	
(AFMSS)										600	
<u>Test and Evaluation Organizations</u>											
418 Test Squadrn AFFTC		T&M		Jan 01						28	
(Edwards AFB)										100	
Joint Spectrum Center		T&M		Apr 00						97	
Project 4496											
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0401219F KC-10S			PROJECT 4496		
(U) <u>Government Furnished Property:</u>									
	<u>Contract</u>								
	<u>Method/Type</u>	<u>Award or</u>							
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>									
TBD									
<u>Support and Management Property</u>									
TBD									
<u>Test and Evaluation Property</u>									
TBD									
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>				<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
					25,568	19,347	22,074	13,006	79,995
Subtotal Product Development									
Subtotal Support and Management					1,323		600		1,923
Subtotal Test and Evaluation					125		100		225
Total Project					27,016	19,347	22,774	13,006	82,143

Project 4496

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