

## UNCLASSIFIED

PE NUMBER: 0401130F

PE TITLE: C-17 Aircraft

Exhibit R-2, RDT&E Budget Item Justification									DATE <b>February 2005</b>	
BUDGET ACTIVITY <b>07 Operational System Development</b>					PE NUMBER AND TITLE <b>0401130F C-17 Aircraft</b>					
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	174.902	199.915	165.762	173.251	176.190	192.337	174.327	164.678	Continuing	TBD
2569 C-17 Aircraft	174.902	199.915	165.762	173.251	176.190	192.337	174.327	164.678	Continuing	TBD

FY02 and later funds for LAIRCM were ZBTed to PE 41134F.

(U) **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 U.S. mobility requirements. Specific tasks associated with the airlift mission include deployment, employment (airland and airdrop), sustaining support, retrograde, and combat redeployment. The C-17 provides a vast increase in overall airlift capability necessary to replace and exceed the capabilities lost from retiring the aging C-141 fleet from the Air Force inventory. 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 the airlift mission well into this century. RDT&E efforts support aircraft performance improvements.

This program is budget activity 7, Operational System Development, because the program has completed Milestone III and is continuing performance improvements to increase the operational capability of the C-17 through programmed modifications.

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	183.913	199.692	141.141	166.101
(U) Current PBR/President's Budget	174.902	199.915	165.762	173.251
(U) Total Adjustments	-9.011	0.223		
(U) Congressional Program Reductions		-1.777		
Congressional Rescissions	-1.100			
Congressional Increases		2.000		
Reprogrammings	-3.138			
SBIR/STTR Transfer	-4.773			

(U) **Significant Program Changes:**

FY06/07 increases are for several new projects, including Airdrop Improvements, Identification Friend/Foe (IFF) Mode 5 & Global Air Traffic Management (GATM) IFF Mode S Enhanced S, Crew Armor Protection Phase II (12.7 mm), and Demand Assigned Multiple Access (DAMA).

The FY03 National Defense Authorization Act (NDAA) language directed T&E centers to charge only direct costs beginning FY06; this reduction in FY06-FY11 is a result of the ZBT transferring indirect dollars from the customer accounts to PE 65807F, T&E Support.

## UNCLASSIFIED

## Exhibit R-2a, RDT&amp;E Project Justification

DATE

February 2005

BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
<b>07 Operational System Development</b>					<b>0401130F C-17 Aircraft</b>			<b>2569 C-17 Aircraft</b>		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
2569 C-17 Aircraft	174.902	199.915	165.762	173.251	176.190	192.337	174.327	164.678	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) **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 U.S. mobility requirements. Specific tasks associated with the airlift mission include deployment, employment (airland and airdrop), sustaining support, retrograde, and combat redeployment. The C-17 provides a vast increase in overall airlift capability necessary to replace and exceed the capabilities lost from retiring the aging C-141 fleet from the Air Force inventory. 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 the airlift mission well into this century. RDT&E efforts support aircraft performance improvements.

This program is budget activity 7, Operational System Development, because the program has completed Milestone III and is continuing performance improvements to increase the operational capability of the C-17 through programmed modifications.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Performance Improvement Development & Testing	100.934	124.425	91.691	92.651
(U) Systems Engineering/Program Management	42.506	34.649	35.293	36.900
(U) Producibility Enhancement/Performance Improvement (PE/PI) Contractor Flight Test	16.338	19.820	26.900	27.800
(U) Producibility Enhancement/Performance Improvement (PE/PI) Government Flight Test	15.124	21.021	11.878	15.900
(U) Total Cost	174.902	199.915	165.762	173.251

(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2004</u> <u>Actual</u>	<u>FY 2005</u> <u>Estimate</u>	<u>FY 2006</u> <u>Estimate</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) APAF, MYP, BA02, PE0401130F	2099.873	2633.679	2790.859	2328.012	344.935	345.363	310.844	289.044	0.000	11,142.609
(U) APAF, ICS, PE0401130F	910.964	931.089	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,842.053
(U) APAF, A/C Mods, BA05, PE0401130F	80.285	87.786	260.826	395.261	499.540	501.419	390.683	381.588	0.000	2,597.388
(U) MilCon, Facilities, PE0401130F	74.145	55.244	70.300	173.928	46.071	1.204	0.000	0.000	0.000	420.892

In FY06, aircraft interim contract support (ICS) transitions to contractor logistic support (CLS). Sustainment funds were transferred from ICS to O&M. Funds for initial spares and other non-CLS efforts were transferred from ICS to MYP.

(U) **D. Acquisition Strategy**

Project 2569

R-1 Shopping List - Item No. 213-2 of 213-6

Exhibit R-2a (PE 0401130F)

2086

UNCLASSIFIED

## UNCLASSIFIED

<b>Exhibit R-2a, RDT&amp;E Project Justification</b>		<b>DATE</b> <b>February 2005</b>
<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0401130F C-17 Aircraft</b>	<b>PROJECT NUMBER AND TITLE</b> <b>2569 C-17 Aircraft</b>
<p>The C-17 Acquisition Strategy is based on five separate contracts to support the entire scope of the C-17 weapon system. These five contracts are: 1) a multi-year procurement (MYP) aircraft contract (to economically purchase the full complement of production aircraft) - (APAF); 2) a Producibility Enhancement and Performance Improvement (PE/PI) contract (to develop cost reduction changes, capability enhancements, and design fixes to service-revealed problems) - (RDT&amp;E, APAF); 3) a Globemaster III Sustainment Partnership (field support) contract (to support the current and future fielded aircraft) - (APAF); 4) a MYP engine contract (for Government Furnished Equipment [GFE] engines) - (APAF); and 5) a set of simulator and training contracts: two aircrew training systems (ATS) contracts (one for aircrew simulators and one for training &amp; concurrency upgrades), and a maintenance training device contract (for devices &amp; concurrency upgrades) - (APAF).</p> <p>The congressionally mandated Mobility Requirements Study (MRS), initially forwarded to Congress on 23 Jan 92 and updated in 1995 and again in 2001, validated the need for the C-17 aircraft. Two C-17 Defense Acquisition Board (DAB) decisions, contained in the 3 Nov 95 and 1 Feb 96 USD(A&amp;T) Acquisition Decision Memoranda (ADM), directed the Air Force to proceed with a 120-aircraft production program and pursue a multi-year procurement for the last 80 aircraft. The FY96 Supplemental Appropriations Act and FY97 Defense Appropriations Act approved a 7-year MYP program. The Air Force proceeded with an 80-aircraft MYP program (along with engines to support them) to complete a 120-aircraft total purchase at the maximum affordable rate (FY97-03 Quantity: 8-9-13-15-12-15-8), beginning with the economic order quantity (EOQ) funding in FY96. Sixty additional C-17s are programmed at the end of the 80-aircraft MYP to replace Air Mobility Command's (AMC's) C-141 aircraft and meet requirements not included in the 120 aircraft program. The original program was (FY03-07 Quantity): 7-11-14-15-13. Congressional direction during the FY 05 budget process has added an additional aircraft in FY 05 and removed one aircraft in FY 07. The new program (FY 03 through FY 07 quantities) is 7-11-15-15-12.</p>		
Project 2569	R-1 Shopping List - Item No. 213-3 of 213-6	Exhibit R-2a (PE 0401130F)

## UNCLASSIFIED

## Exhibit R-3, RDT&amp;E Project Cost Analysis

DATE

February 2005

BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
<b>07 Operational System Development</b>					<b>0401130F C-17 Aircraft</b>					<b>2569 C-17 Aircraft</b>				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &amp;</u> <u>Type</u>	<u>Performing</u> <u>Activity &amp;</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u>														
Boeing	C,FPI/FP		5,337.804										5,337.804	
Boeing	C,CPFF		719.235	159.639	Jan-04	178.745	Jan-05	153.734	Jan-06	157.191	Jan-07	638.192	2,006.736	
Pratt & Whitney	C,FP		25.346									0.000	25.346	
Boeing	C,FPI		83.885									0.000	83.885	
Pratt & Whitney	FP+EPA		7.506									0.000	7.506	
None													0.000	
Subtotal Product Development			6,173.776	159.639		178.745		153.734		157.191		638.192	7,461.277	0.000
Remarks:														
(U) <u>Support</u>														
Mission Support OGC	PO		97.800									0.000	97.800	
Site Activation OGC	PO		1.500									0.000	1.500	
Miscellaneous			22.400									0.000	22.400	
None													0.000	
Subtotal Support			121.700	0.000		0.000		0.000		0.000		0.000	121.700	0.000
Remarks:														
(U) <u>Test &amp; Evaluation</u>														
Combined Test Force	PO		281.336	15.124	Jan-04	21.021	Jan-05	11.878	Jan-06	15.900	Jan-07	68.600	413.859	
Wright Labs/Arnold Eng Dev Center	PO		10.443	0.139	Oct-03	0.149	Oct-04	0.150	Oct-05	0.160	Oct-06	0.740	11.781	
Other	PO		3.150									0.000	3.150	
None													0.000	
Subtotal Test & Evaluation			294.929	15.263		21.170		12.028		16.060		69.340	428.790	0.000
Remarks:														
(U) <u>Management</u>														
													0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) Total Cost			6,590.405	174.902		199.915		165.762		173.251		707.532	8,011.767	0.000

## Exhibit R-4, RDT&amp;E Schedule Profile

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

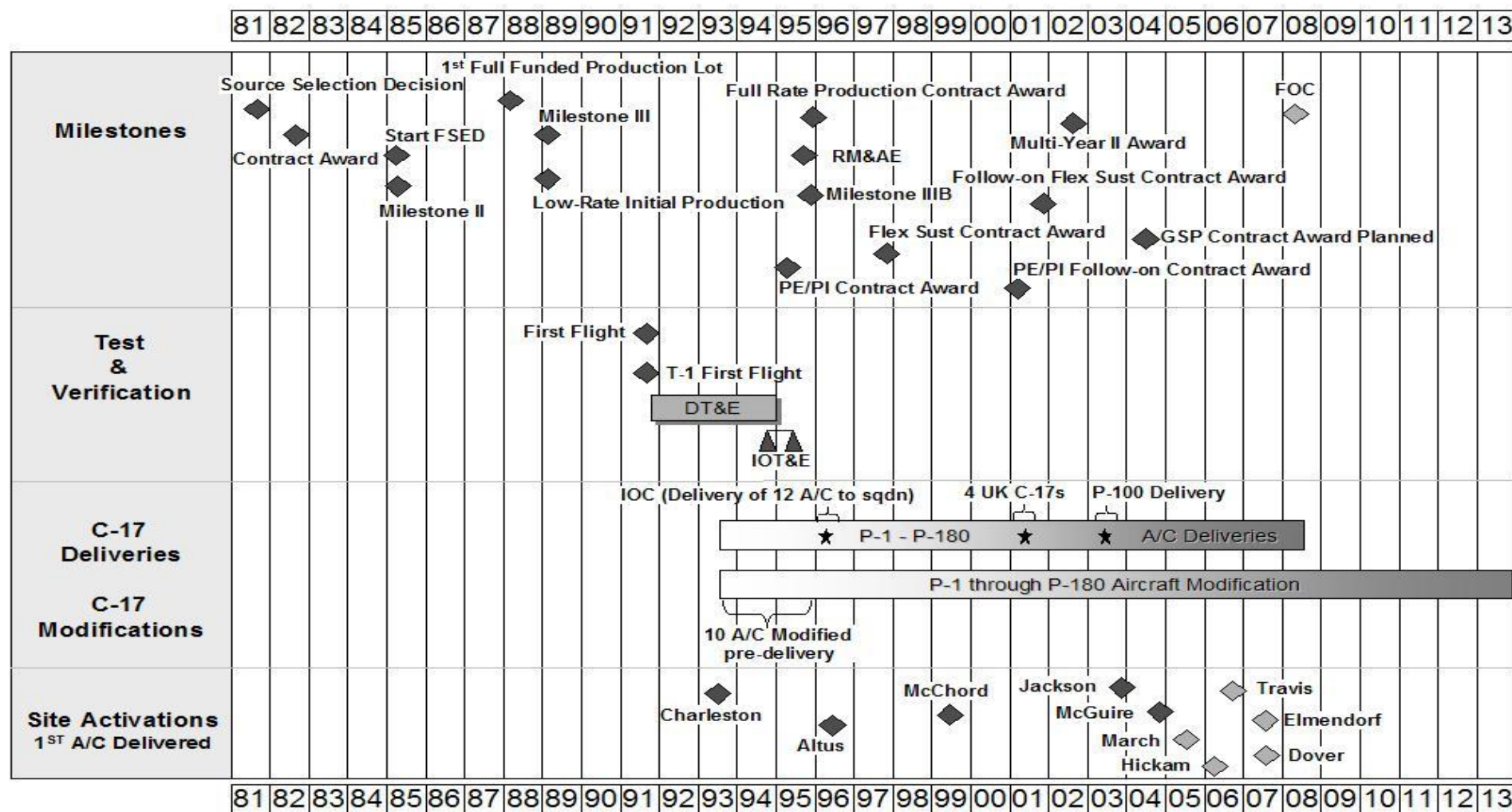
PE NUMBER AND TITLE

0401130F C-17 Aircraft

PROJECT NUMBER AND TITLE

2569 C-17 Aircraft

## C-17 Schedule



## UNCLASSIFIED

## Exhibit R-4a, RDT&amp;E Schedule Detail

DATE

February 2005

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0401130F C-17 Aircraft

PROJECT NUMBER AND TITLE

2569 C-17 Aircraft

(U) **Schedule Profile**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Incremental Funding of Ongoing Performance Improvement Projects (Boeing)	1-3Q	1-3Q	1-3Q	1-3Q
(U) GATM/SAASM RNP Improvements	1Q			
(U) Formation Flying	2Q			
(U) Mission Computer/Core Integrated Processor	3Q			
(U) Flight Test Data Archive	2Q			
(U) Software Product Improvement Change Request (PICR)	1Q			
(U) Airdrop Improvements				1Q
(U) IFF Mode 5 & GATM IFF Mode S Enhanced S			1Q	
(U) Crew Armor Protection Phase II				1Q
(U) Demand Assigned Multiple Access (DAMA)				1Q
(U) Air Force Flight Test Center	2Q	1Q	2Q	1Q