



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-327



C-5 RERP

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

C-5 Reliability Enhancement and Re-engineing Program (C-5 RERP)

DoD Component

Air Force

Responsible Office

Responsible Office

Ms. Kathryn Sowers

C-5 Division

Mobility Directorate

2275 D Street, Bldg 16, Room 127

Wright Patterson, OH 45433-7222

kathryn.sowers@wpafb.af.mil

Phone 937-656-9475

Fax 937-656-5020

DSN Phone 986-9475

DSN Fax 986-5020

Date Assigned February 1, 2010

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 24, 2008

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 7, 2010

Mission and Description

The C-5 Reliability Enhancement and Reengining Program (RERP) is the second phase of a two-phase modernization program for the C-5. The Avionics Modernization Program (AMP) was Phase I and is the baseline for RERP. Following completion of Phase II, the aircraft is designated a C-5M. RERP is a comprehensive modernization effort that will improve aircraft reliability, maintainability, and availability. RERP will enable the C-5M to achieve wartime mission requirements by increasing fleet availability (mission capable rates and departure reliability), reducing Total Ownership Costs (TOC), and improving aircraft performance. This effort centers on replacing the current TF-39 engine with a more reliable, Commercial Off-the-Shelf (COTS) General Electric (GE) CF6-80C2 (F138-GE-100 military designation) turbofan engine with increased takeoff thrust, stage-3 noise compliance, and Federal Aviation Regulation pollution compliance. In addition to new engines/pylons, C-5 RERP will provide upgrades to wing attachment fittings; new thrust reversers and Auxiliary Power Units (APUs); upgrades to the electrical, hydraulic, fuel, fire suppression, landing gear, and pressurization/air conditioning systems; and airframe structural modifications. These aircraft improvements increase payload capability and access to Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) airspace. C-5 RERP also decreases aircraft time to climb, increases engine-out climb gradient for takeoff, improves transportation system throughput, and decreases engine removals.

The procurement tempo to deliver a C-5 RERP aircraft is a three year process. The first year is advance procurement of material with longer than 12 months duration to buy and deliver, the second year involves material procurement and fabrication, while the third and final year is installation on the aircraft.

Executive Summary

Unreliable operation (deployment and stow) of thrust reversers (TR) prevented C-5M from fully meeting Air Mobility Command (AMC) and air vehicle specification requirements. Lockheed Martin Aeronautics Company (LM Aero) and sub-contractors completed root cause investigation. TR modification testing and air exit door environmental characterization were integrated with existing software upgrade (Operational Flight Program 3.5 [OFP 3.5]) testing at Dover AFB, DE June 21 – October 31, 2011. Air Mobility Command Test and Evaluation Squadron (AMCTES) Operational Test is planned for February 2012. AMC fielding decision for OFP 3.5 is planned for second quarter FY 2012. LM Aero is proceeding with preparation of TR Engineering Change Proposals and is targeting TR mod production cut-in for Lot 4, Aircraft #1.

C-5M RERP Aircrew Training Device (ATD) first delivery delayed until February 28, 2012 with Ready for Training (RFT) March 31, 2012. Capability is late to need and drives AMC to on-aircraft training. Effort is being closely managed by Aeronautical Systems Center C-5 Division, Ogden Air Logistics Center, and AMC.

LM Aero continues to experience delivery delays during RERP Low Rate Initial Production. LM Aero delivered the second through the fourth production aircraft late to contract schedule. LM Aero and the C-5 Enterprise are developing a manufacturing and schedule improvement plan to enable the on-time delivery of RERP aircraft. Efforts include implementing manufacturing efficiency initiatives, work flow consolidation, improving aircraft condition at induction and joint acceptance flights (DCMA and LM Aero).

The Air Force (AF) accepted delivery of three C-5M aircraft bringing the total delivered to four. Upon delivery to the Air Force, each aircraft entered into Minor Isochronal (ISO)/Refurbishment at Stewart Air National Guard Base, NY prior to return to home station. In addition to deliveries, LM Aero inducted seven AF aircraft into the RERP modification line. A total of 14 C-5 aircraft, including Systems Development and Demonstration, have been inducted into the RERP mod.

USAF C-5 Fleet Viability Board (FVB) kickoff was held on June 3, 2011. This completed the review initiated and postponed during Fall 2010. Initial C-5 Division responses to the FVB questionnaires were provided to the FVB on July 5, 2011. Galaxy Division (System Program Manager), C-5 Division (Development System Manager), and AMC were the AF leads to the FVB. The FVB visits to the C-5 Division were completed on January 4 and 20, 2012. This review was the second C-5 FVB assessment conducted on the C-5 Weapon System since the original review and report in 2005.

The updated Test and Evaluation Master Plan, approved in October 2010 addressed the deficiencies and deferrals cited by the Office of the Undersecretary of Defense for Acquisition Technology and Logistics, Developmental Test and Evaluation (DT&E), and Director, Operational Test and Evaluation (OT&E) from the Qualification Test and Evaluation and Qualification Operational Test and Evaluation and have been adequately funded to execute the recovery plan. Test planning for the associated efforts is proceeding. Overall, the Air Force Flight Test Center rated the performance of the C-5M OFP 3.5 as satisfactory and ready to proceed to the OT&E verification phase. Planning for testing of OFP 3.5.2 is on-going, with DT&E to be conducted in two-phases during FY 2012 (April 2012 and July - August 2012) and OT&E by AMC to follow in early FY 2013. AMCTES briefed the operational test plan to OSD in August 2011.

There are no significant software-related issues with this program at this time.

Threshold Breaches**APB Breaches**

Schedule		<input type="checkbox"/>
Performance		<input type="checkbox"/>
Cost	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
Unit Cost	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

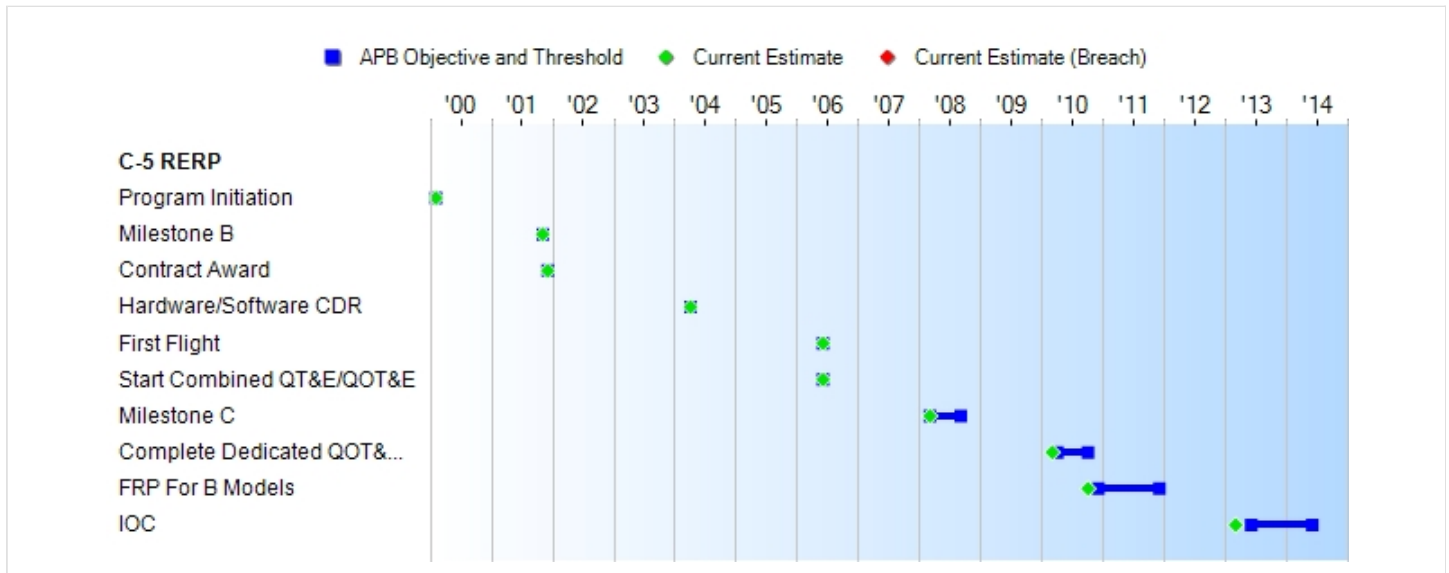
Nunn-McCurdy Breaches**Current UCR Baseline**

PAUC	None
APUC	None

Original UCR Baseline

PAUC	None
APUC	None

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production		Current Estimate
		Objective/Threshold		
Program Initiation	FEB 2000	FEB 2000	FEB 2000	FEB 2000
Milestone B	NOV 2001	NOV 2001	NOV 2001	NOV 2001
Contract Award	DEC 2001	DEC 2001	DEC 2001	DEC 2001
Hardware/Software CDR	APR 2004	APR 2004	APR 2004	APR 2004
First Flight	JUN 2006	JUN 2006	JUN 2006	JUN 2006
Start Combined QT&E/QOT&E	JUN 2006	JUN 2006	JUN 2006	JUN 2006
Milestone C	MAR 2008	MAR 2008	SEP 2008	MAR 2008
Complete Dedicated QOT&E (AFOTEC Report complete)	APR 2010	APR 2010	OCT 2010	MAR 2010
FRP For B Models	DEC 2010	DEC 2010	DEC 2011	OCT 2010
IOC	JUN 2013	JUN 2013	JUN 2014	MAR 2013

Acronyms And Abbreviations

AFOTEC - Air Force Operational Test and Evaluation Center
 CDR - Critical Design Review
 FRP - Full Rate Production
 IOC - Initial Operational Capability
 QOT&E - Qualification Operational Test and Evaluation
 QT&E - Qualification Test and Evaluation

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Time To Climb/Initial Level Off	837,000 lbs take-off gross weight; RCR 23; climb condition: 77 deg F; SL to 31,000 ft in less than 25 min	837,000 lbs take-off gross weight; RCR 23; climb condition: 77 deg F; SL to 31,000 ft in less than 25 min	769,000 lbs take-off gross weight; RCR 23; climb condition: 77 deg F; SL to 31,000 ft in less than 25 min	Demonstrated during SDD/QOT&E: 837,000 lbs take-off gross weight; RCR 23; climb condition: 77 deg F; SL to 31,000 ft in less than 25 min.	Will meet or exceed Current APB Threshold
Aircraft Take-off Climb Gradient	One engine out climb gradient $\geq 3.3\%$ beginning at departure end of runway / 837,000 lbs take-off weight / hot day (103 deg F) / 10,000 ft runway / SL / RCR 23	One engine out climb gradient $\geq 3.3\%$ beginning at departure end of runway / 837,000 lbs take-off weight / hot day (103 deg F) / 10,000 ft runway / SL / RCR 23	One engine out climb gradient $\geq 2.5\%$ beginning at departure end of runway / 837,000 lbs take-off weight / hot day (103 deg F) / 10,000 ft runway / SL / RCR 23	Demonstrated during SDD/QOT&E: One engine out climb gradient $\geq 3.3\%$ beginning at departure end of runway/ 837,000 lbs takeoff weight; hot day (103 deg F)/ 10,000 ft runway/ SL/ RCR 23.	Will meet or exceed Current APB Threshold
Mission Capable Rate (MCR)	Wartime $\geq 82\%$ and Peacetime $\geq 75\%$	Wartime $\geq 82\%$ and Peacetime $\geq 75\%$	Wartime $\geq 75\%$	Demonstrated during SDD (81.6%)/ QOT&E (66% & 76%)/ CONOPS I Surge (78%) & CONOPS II Surge (89%)/ AMC/ AFTR-ANS	Will meet or exceed Current APB Threshold

				Surge (90%); Wartime >= 75% & Peace time >= 82%.	
Noise Compliance	Certifiable under FAR Part 36 Stage 4 noise standards	Certifiable under FAR Part 36 Stage 4 noise standards	Certifiable under FAR part 36 Stage 3 noise standards	Demonstrated under SDD. Certifiable under FAR Part 36 Stage 4 noise standards	Will meet or exceed Current APB Threshold
Emission Compliance	Certifiable under FAR Part 34 emission requirements	Certifiable under FAR Part 34 emission requirements	Certifiable under FAR Part 34 emission requirements	Demonstrated during SDD. Certifiable under FAR Part 34 emission requirements	Will meet or exceed Current APB Threshold

Requirements Source:

Capability Production Document (CPD), change 1, C-5 Reliability Enhancement and Re-Engining Program (RERP), December 1, 2009

Acronyms And Abbreviations

AFTRANS - Air Forces Transportation
 AMC - Air Mobility Command
 APB - Acquisition Program Baseline
 CONOPS - Concept of Operations
 deg - degrees
 F - Fahrenheit
 FAR - Federal Aviation Regulation
 ft - feet
 lbs - pounds
 min - minutes
 QOT&E - Qualification Operational Test and Evaluation
 RCR - Runway Condition Reading
 SDD - System Design and Development
 SL - Sea Level

Change Explanations

None

Memo

Demonstrated performance reflects the outcome of Flight Test completed during SDD on August 18, 2008; QOT&E completed on March 8, 2010; and Post-QOT&E Real-World Surge Exercises.

Track To Budget**RDT&E**

APPN 3600	BA 07	PE 0401119F	(Air Force)
	Project 4835	C-5 Airlift Squadrons/C-5 Reliability Enhancement & Reengining Program (RERP)	(Sunk)

Procurement

APPN 3010	BA 07	PE 0401119F	(Air Force)
	ICN 000075	C-5 Reliability Enhancement and Reengining Program (RERP)	
APPN 3010	BA 06	PE 0401119F	(Air Force)
	ICN 000999	C-5 Reliability Enhancement and Reengining Program (RERP)	
APPN 3010	BA 05	PE 0401119F	(Air Force)
	ICN C00500	C-5 Reliability Enhancement and Reengining Program (RERP)	(Sunk)
	ICN C005M0	C-5 Reliability Enhancement and Reengining Program (RERP)	

MILCON

APPN 3300	BA 01	PE 0401896F	(Air Force)
	Project 103003	C-5 Reliability Enhancement and Reengining Program (RERP)	(Sunk)
	Dover AFB		

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2008 \$M			BY2008 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	1722.9	1734.3	1907.7	1674.3	1643.5	1645.0	1583.5
Procurement	5415.9	5396.3	5935.9	5330.3	6042.1	5860.4	5847.4
Flyaway	4441.7	--	--	4521.5	4961.8	--	4965.3
Recurring	4441.7	--	--	4521.5	4961.8	--	4965.3
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	974.2	--	--	808.8	1080.3	--	882.1
Other Support	433.8	--	--	276.2	480.5	--	300.2
Initial Spares	540.4	--	--	532.6	599.8	--	581.9
MILCON	7.8	5.1	5.6	5.0	8.5	5.3	5.3
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	7146.6	7135.7	N/A	7009.6	7694.1	7510.7	7436.2

Confidence Level for current Acquisition Program Baseline (APB) cost is 50%

The Independent Cost Estimate (ICE) to support C-5 RERP Full Rate Production decision, like all life-cycle cost estimates previously performed by the Cost Assessment and Program Evaluation (CAPE), is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition Program (MDAP) programs. Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E		3	3
Procurement		49	49
Total		52	52

Unit of measure is number of aircraft being modified.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary FY2013 President's Budget / December 2011 SAR (TY\$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	1570.6	12.9	0.0	0.0	0.0	0.0	0.0	0.0	1583.5
Procurement	2021.1	1089.7	1238.8	1155.3	342.5	0.0	0.0	0.0	5847.4
MILCON	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2013 Total	3597.0	1102.6	1238.8	1155.3	342.5	0.0	0.0	0.0	7436.2
PB 2012 Total	3627.4	1114.6	1229.1	1143.8	330.9	0.0	0.0	0.0	7445.8
Delta	-30.4	-12.0	9.7	11.5	11.6	0.0	0.0	0.0	-9.6

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	3	0	0	0	0	0	0	0	0	3
Production	0	16	11	11	11	0	0	0	0	49
PB 2013 Total	3	16	11	11	11	0	0	0	0	52
PB 2012 Total	3	16	11	11	11	0	0	0	0	52
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY\$

3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2000	--	--	--	--	--	--	16.3
2001	--	--	--	--	--	--	39.6
2002	--	--	--	--	--	--	83.7
2003	--	--	--	--	--	--	191.4
2004	--	--	--	--	--	--	260.2
2005	--	--	--	--	--	--	278.2
2006	--	--	--	--	--	--	222.9
2007	--	--	--	--	--	--	137.6
2008	--	--	--	--	--	--	161.6
2009	--	--	--	--	--	--	80.9
2010	--	--	--	--	--	--	62.4
2011	--	--	--	--	--	--	35.8
2012	--	--	--	--	--	--	12.9
Subtotal	3	--	--	--	--	--	1583.5

Annual Funding BY\$**3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 \$M	Non End Item Recurring Flyaway BY 2008 \$M	Non Recurring Flyaway BY 2008 \$M	Total Flyaway BY 2008 \$M	Total Support BY 2008 \$M	Total Program BY 2008 \$M
2000	--	--	--	--	--	--	19.0
2001	--	--	--	--	--	--	45.6
2002	--	--	--	--	--	--	95.4
2003	--	--	--	--	--	--	215.2
2004	--	--	--	--	--	--	285.4
2005	--	--	--	--	--	--	297.5
2006	--	--	--	--	--	--	231.4
2007	--	--	--	--	--	--	139.2
2008	--	--	--	--	--	--	160.2
2009	--	--	--	--	--	--	79.2
2010	--	--	--	--	--	--	60.3
2011	--	--	--	--	--	--	33.9
2012	--	--	--	--	--	--	12.0
Subtotal	3	--	--	--	--	--	1674.3

Annual Funding TY\$

3010 | Procurement | Aircraft Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2007	--	52.5	--	--	52.5	9.0	61.5
2008	1	133.7	--	--	133.7	57.2	190.9
2009	3	289.7	--	--	289.7	46.9	336.6
2010	5	506.5	--	--	506.5	77.1	583.6
2011	7	692.2	--	--	692.2	156.3	848.5
2012	11	885.0	--	--	885.0	204.7	1089.7
2013	11	1064.3	--	--	1064.3	174.5	1238.8
2014	11	1009.6	--	--	1009.6	145.7	1155.3
2015	--	331.8	--	--	331.8	10.7	342.5
Subtotal	49	4965.3	--	--	4965.3	882.1	5847.4

Annual Funding BY\$
3010 | Procurement | Aircraft Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 \$M	Non End Item Recurring Flyaway BY 2008 \$M	Non Recurring Flyaway BY 2008 \$M	Total Flyaway BY 2008 \$M	Total Support BY 2008 \$M	Total Program BY 2008 \$M
2007	--	52.3	--	--	52.3	8.9	61.2
2008	1	131.0	--	--	131.0	56.0	187.0
2009	3	278.9	--	--	278.9	45.2	324.1
2010	5	478.2	--	--	478.2	72.8	551.0
2011	7	642.3	--	--	642.3	145.0	787.3
2012	11	807.4	--	--	807.4	186.7	994.1
2013	11	954.6	--	--	954.6	156.5	1111.1
2014	11	889.6	--	--	889.6	128.4	1018.0
2015	--	287.2	--	--	287.2	9.3	296.5
Subtotal	49	4521.5	--	--	4521.5	808.8	5330.3

Cost Quantity Information**3010 | Procurement | Aircraft Procurement, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2008 \$M
2007	--	--
2008	1	176.7
2009	3	314.5
2010	5	457.0
2011	7	666.0
2012	11	936.3
2013	11	998.2
2014	11	972.8
2015	--	--
Subtotal	49	4521.5

Annual Funding TY\$
3300 | MILCON | Military Construction, Air
Force

Fiscal Year	Total Program TY \$M
2010	5.3
Subtotal	5.3

Annual Funding BY\$
3300 | MILCON | Military Construction, Air Force

Fiscal Year	Total Program BY 2008 \$M
2010	5.0
Subtotal	5.0

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	11/5/2001	3/25/2008
Approved Quantity	12	16
Reference	ADM	Milestone C ADM
Start Year	2006	2007
End Year	2010	2012

Although above 10% of the total quantity, the C-5 RERP MS C Acquisition Decision Memorandum (ADM) approves an LRIP quantity of 16 systems as being necessary to maintain a steady ramp to Full Rate Production (FRP).

The start year changed from the Initial LRIP Decision to the Current Total LRIP during the Nunn-McCurdy restructure.

The procurement tempo to deliver a C-5 RERP aircraft is a three-year process. The first year is advance procurement of material with longer than 12 months duration to buy and deliver, the second year involves material procurement and fabrication, while the third and final year is installation on the aircraft.

Foreign Military Sales

None

Nuclear Cost

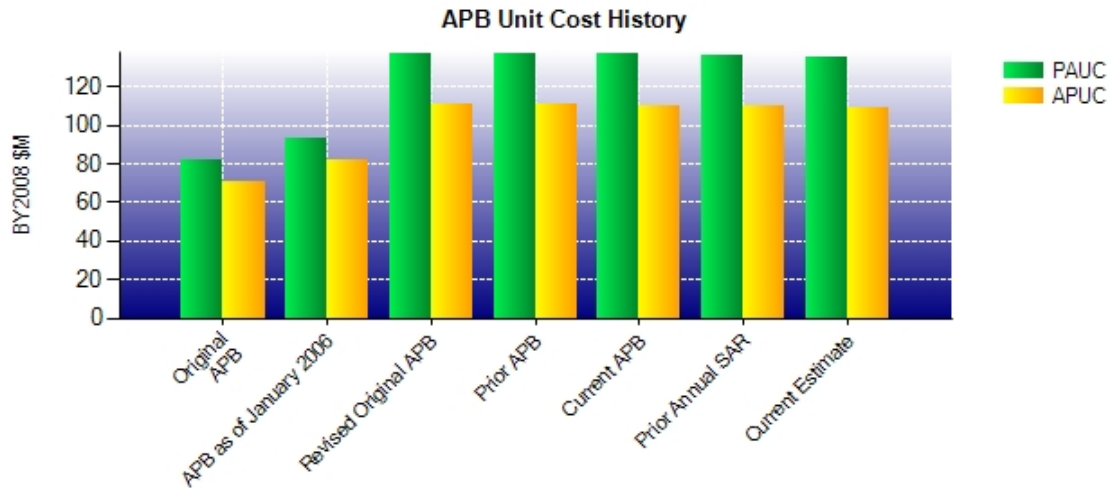
None

Unit Cost**Unit Cost Report**

	BY2008 \$M	BY2008 \$M	
Unit Cost	Current UCR Baseline (OCT 2010 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7135.7	7009.6	
Quantity	52	52	
Unit Cost	137.225	134.800	-1.77
Average Procurement Unit Cost (APUC)			
Cost	5396.3	5330.3	
Quantity	49	49	
Unit Cost	110.129	108.782	-1.22

	BY2008 \$M	BY2008 \$M	
Unit Cost	Revised Original UCR Baseline (JUN 2008 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7146.6	7009.6	
Quantity	52	52	
Unit Cost	137.435	134.800	-1.92
Average Procurement Unit Cost (APUC)			
Cost	5415.9	5330.3	
Quantity	49	49	
Unit Cost	110.529	108.782	-1.58

Unit Cost History



	Date	BY2008 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	NOV 2001	81.955	71.010	88.047	78.293
APB as of January 2006	FEB 2005	92.829	81.564	98.252	88.355
Revised Original APB	JUN 2008	137.435	110.529	147.963	123.308
Prior APB	JUN 2008	137.435	110.529	147.963	123.308
Current APB	OCT 2010	137.225	110.129	144.437	119.600
Prior Annual SAR	DEC 2010	136.171	110.031	143.188	119.331
Current Estimate	DEC 2011	134.800	108.782	143.004	119.335

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
88.047	0.635	55.435	10.863	-1.056	-6.673	0.000	0.712	59.916	147.963

Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
147.963	-2.192	0.000	0.000	0.000	0.671	0.000	-3.438	-4.959	143.004

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
78.293	0.640	32.062	7.029	0.000	-4.756	0.000	10.040	45.015	123.308

Current SAR Baseline to Current Estimate (TY \$M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
123.308	-2.133	0.000	0.000	0.000	1.809	0.000	-3.649	-3.973	119.335

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	N/A	FEB 2000	FEB 2000	FEB 2000
Milestone B	N/A	NOV 2001	NOV 2001	NOV 2001
Milestone C	N/A	DEC 2006	MAR 2008	MAR 2008
IOC	N/A	MAR 2010	JUN 2013	MAR 2013
Total Cost (TY \$M)	N/A	11093.9	7694.1	7436.2
Total Quantity	N/A	126	52	52
Prog. Acq. Unit Cost (PAUC)	N/A	88.047	147.963	143.004

Cost Variance**Cost Variance Summary**

Summary Then Year \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	1643.5	6042.1	8.5	7694.1
Previous Changes				
Economic	-10.4	-170.2	-0.3	-180.9
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-39.8	+119.4	-2.9	+76.7
Other	--	--	--	--
Support	--	-144.1	--	-144.1
Subtotal	-50.2	-194.9	-3.2	-248.3
Current Changes				
Economic	+1.1	+65.7	+0.1	+66.9
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-10.9	-30.8	-0.1	-41.8
Other	--	--	--	--
Support	--	-34.7	--	-34.7
Subtotal	-9.8	+0.2	--	-9.6
Total Changes	-60.0	-194.7	-3.2	-257.9
CE - Cost Variance	1583.5	5847.4	5.3	7436.2
CE - Cost & Funding	1583.5	5847.4	5.3	7436.2

Summary Base Year 2008 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	1722.9	5415.9	7.8	7146.6
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-38.6	+109.2	-2.7	+67.9
Other	--	--	--	--
Support	--	-133.6	--	-133.6
Subtotal	-38.6	-24.4	-2.7	-65.7
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-10.0	-29.4	-0.1	-39.5
Other	--	--	--	--
Support	--	-31.8	--	-31.8
Subtotal	-10.0	-61.2	-0.1	-71.3
Total Changes	-48.6	-85.6	-2.8	-137.0
CE - Cost Variance	1674.3	5330.3	5.0	7009.6
CE - Cost & Funding	1674.3	5330.3	5.0	7009.6

Previous Estimate: December 2010

RDT&E	\$M	
	Base Year	Then Year
Current Change Explanations		
Revised escalation indices. (Economic)	N/A	+1.1
Adjustment for current and prior escalation. (Estimating)	-1.1	-1.1
Decrease due to Congressional rescission in and funding realignment in FY 2012. (Estimating)	-8.9	-9.8
RDT&E Subtotal	-10.0	-9.8

Procurement	\$M	
	Base Year	Then Year
Current Change Explanations		
Revised escalation indices. (Economic)	N/A	+65.7
Adjustment for current and prior escalation. (Estimating)	-23.2	-25.2
Decrease due to realignment of requirements from Other Government Costs (OGC) and contract actuals. (Estimating)	-2.7	-2.0
Reduction due to Air Force withholds for higher priority programs. (Estimating)	-3.5	-3.6
Adjustment for current and prior escalation. (Support)	-5.2	-5.5
Decrease in Other Support due to realignment of funds for Depot Activation and Interim Contractor Support (ICS). (Support)	-28.0	-30.6
Increase in Initial Spares due to additional requirements. (Support)	+1.4	+1.4
Procurement Subtotal	-61.2	+0.2

MILCON	\$M	
	Base Year	Then Year
Current Change Explanations		
Revised escalation indices. (Economic)	N/A	+0.1
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
MILCON Subtotal	-0.1	0.0

Contracts

Appropriation: Procurement

Contract Name **C-5 RERP LRIP Lot 2**
 Contractor Lockheed Martin Corporation (Lockheed Martin Aero Co - Marietta, GA)
 Contractor Location Marietta, GA 39963-0290
 Contract Number, Type FA8625-07-C-6471/2, FPEPA
 Award Date April 18, 2008
 Definitization Date April 18, 2008

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
49.7	N/A	3	335.9	N/A	3	335.9	335.9

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

This contract is more than 90% complete; therefore, this is the final report for this contract.

The difference between the initial contract price target and the current contract price target is due to contract mods adding the following to Lot 2: material/fabrication, installation, initial spares, rapid repair & response, pylon shipping containers, readiness spares packages, support equipment, environmental control system improved duct retention, starter air valve duct drain, contractor acquired property, serialized tracking, peculiar loose equipment, and battery charger electronic module.

Requirements for Earned Value reporting on the C-5 RERP production contract were removed in accordance with the Full Rate Production (FRP) Acquisition Decision Memorandum dated October 7, 2010.

Appropriation: Procurement

Contract Name **C-5 RERP LRIP Lot 3**
 Contractor Lockheed Martin Corporation (Lockheed Martin Aero Co - Marietta, GA)
 Contractor Location Marietta, GA 39963-0290
 Contract Number, Type FA8625-07-C-6471/3, FPEPA
 Award Date February 06, 2009
 Definitization Date February 06, 2009

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
79.1	N/A	5	467.7	N/A	5	467.7	467.7

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to contract mods adding the following to Lot 3: material/fabrication, installation, initial spares, rapid repair & response, support equipment, environmental control system improved duct retention, starter air valve duct drain, contractor acquired property, serialized tracking, peculiar loose equipment, trainer parts, and battery charger electronic module.

Requirements for Earned Value reporting on the C-5 RERP production contract were removed in accordance with the Full Rate Production (FRP) Acquisition Decision Memorandum dated October 7, 2010.

Appropriation: Procurement

Contract Name **C-5 RERP LRIP Lot 4**
 Contractor Lockheed Martin Corporation (Lockheed Martin Aero Co - Marietta, GA)
 Contractor Location Marietta, GA 30063
 Contract Number, Type FA8625-07-C-6471/4, FPEPA
 Award Date December 21, 2009
 Definitization Date December 21, 2009

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
77.0	N/A	7	637.2	N/A	7	637.2	637.2

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to contract mods adding the following to Lot 4: material/fabrication, installation, initial spares, rapid repair & response, support equipment, environmental control system improved duct retention, starter air valve duct drain, serialized tracking, peculiar loose equipment, loose equipment spares, item unique identification, ready-for-installation engine kits, and battery charger electronic module.

Requirements for Earned Value reporting on the C-5 RERP production contract were removed in accordance with the Full Rate Production (FRP) Acquisition Decision Memorandum dated October 7, 2010.

Appropriation: Procurement

Contract Name **C-5 RERP FRP Lot 5**
 Contractor Lockheed Martin Corporation (Lockheed Martin Aero Co - Marietta, GA)
 Contractor Location Marietta, GA 30063
 Contract Number, Type FA8625-07-C-6471/5, FPEPA
 Award Date October 20, 2010
 Definitization Date October 20, 2010

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
162.9	N/A	11	782.6	N/A	11	782.6	782.6

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to contract mods adding the following to Lot 5: material/fabrication, installation, initial spares, support equipment, environmental control system improved duct retention, serialized tracking, item unique identification, and ready-for-installation engine kits.

Requirements for Earned Value reporting on the C-5 RERP production contract were removed in accordance with the Full Rate Production (FRP) Acquisition Decision Memorandum dated October 7, 2010.

Appropriation: Procurement

Contract Name **C-5 RERP FRP Lot 6**
 Contractor Lockheed Martin Corporation (Lockheed Martin Aero Co - Marietta, GA)
 Contractor Location Marietta, GA 30063
 Contract Number, Type FA8625-07-C-6471/6, FPEPA
 Award Date October 21, 2011
 Definitization Date October 21, 2011

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
160.1	N/A	11	160.1	N/A	11	160.1	160.1

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

Requirements for Earned Value reporting on the C-5 RERP production contract were removed in accordance with the Full Rate Production (FRP) Acquisition Decision Memorandum dated October 7, 2010.

Initial Contract Price of \$160.1M reflects the first year of the three-year process for Lot 6 (eleven aircraft) long lead.

This is the first time this contract is being reported.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	3	3	3	100.00%
Production	6	4	49	8.16%
Total Program Quantities Delivered	9	7	52	13.46%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	7436.2	Years Appropriated	13
Expenditures To Date	2703.9	Percent Years Appropriated	81.25%
Percent Expended	36.36%	Appropriated to Date	4699.6
Total Funding Years	16	Percent Appropriated	63.20%

Operating and Support Cost

Assumptions And Ground Rules

Operating and Support (O&S) costs are not tracked separately for C-5 RERP. O&S costs are included in the overall operational costs for the existing C-5 fleet managed by Warner-Robins Air Logistics Center (WR-ALC). There is no antecedent system for this program.

Cost Element	Costs BY2008 \$M	
	C-5 RERP	N/A
Unit-Level Manpower	--	--
Unit Operations	--	--
Maintenance	--	--
Sustaining Support	--	--
Continuing System Improvements	--	--
Indirect Support	--	--
Other	--	--
Total Unitized Cost (Base Year 2008 \$)	--	--

Total O&S Costs \$M	C-5 RERP	N/A
Base Year	--	--
Then Year	--	--