Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-257

HC/MC-130 Recapitalization Aircraft (HC/MC-130 Recap)

As of FY 2015 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
BA - Budget Authority/Budget Activity
BY - Base Year
DAMIR - Defense Acquisition Management Information Retrieval
Dev Est - Development Estimate
DoD - Department of Defense
DSN - Defense Switched Network
Econ - Economic
Eng - Engineering
Est - Estimating
FMS - Foreign Military Sales
FY - Fiscal Year
IOC - Initial Operational Capability
$K - Thousands of Dollars
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MILCON - Military Construction
N/A - Not Applicable
O&S - Operating and Support
Oth - Other
PAUC - Program Acquisition Unit Cost
PB - President's Budget
PE - Program Element
Proc - Procurement
Prod Est - Production Estimate
QR - Quantity Related
Qty - Quantity
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
Sch - Schedule
Spt - Support
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting

Program Information

Program Name

HC/MC-130 Recapitalization Aircraft (HC/MC-130 Recap)

DoD Component

Air Force

Responsible Office

Responsible Office

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References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 29, 2010

Approved APB

Air Force Acquisition Executive (AFAE) Approved Acquisition Program Baseline (APB) dated October 7, 2013

Mission and Description

The HC/MC-130 Recapitalization Aircraft (HC/MC-130 Recap) will replace the HC-130P/N tanker aircraft that currently support Personnel Recovery. These tankers are currently operated by active duty Air Reserve Components. The MC-130 Recap aircraft will replace the legacy MC-130P/E tanker aircraft currently operated by the Air Force Special Operations Command. Most of these aircraft are more than 35 years old and are burdened by multiple unique aircraft configurations. These multiple configurations create significantly increased maintenance and sustainment challenges.

The primary mission of the HC/MC-130J aircraft will be to provide aerial refueling support to the respective component commanders. In addition to the specialized air refueling support to mission-unique receiver aircraft, the aircraft can provide a specialized mobility capability to position, supply, re-supply and recover specialized ground tactical units.

The HC/MC-130J is a medium size tanker that can transport airmen for infiltration and exfiltration operations. It is also an in-flight refueling receiver, which extends its combat mission and/or increases the amount of fuel available for offload to receivers. The HC/MC-130J incorporates state-of-the-art technology to reduce manpower requirements, lower operating cost and provide life-cycle cost savings over earlier C-130 models. The HC/MC-130J model climbs faster and higher, flies farther at a higher cruise speed and can take off and land in a shorter distance.

Executive Summary

The HC/MC-130 Recap Program successfully delivered 7 MC-130Js and 5 HC-130Js during 2013 calendar year. As of December 31, 2013, 31 aircraft have been delivered (11 HC-130Js and 20 MC-130Js, which includes 1 MC-130J for conversion to an AC-130J).

In April 2013, Director of Operational Test and Evaluation issued a positive Beyond LRIP for the program. This report was integral to a successful Full Rate Production (FRP) Decision brief to the Milestone Decision Authority in late April 2013. After document finalization, the program formally entered FRP on October 4, 2013.

Operational highlights for 2013 include Air Combat Command declaring IOC for the HC-130J on April 25, 2013, approximately four months after the Air Force Special Operations Command declared IOC for the MC-130J. Additionally, two new operational locations, Royal Air Force Station Mildenhall, United Kingdom, and Moody Air Force Base, Georgia were activated.

Of final note, the program garnered the Office of the Secretary of Defense David Packard Excellence in Acquisition Award for 2013.

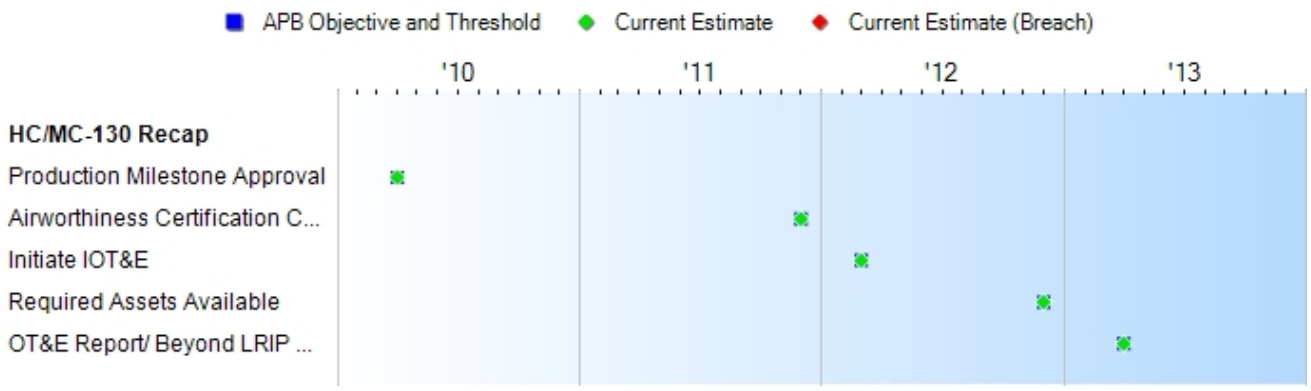
There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

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 Objective/Threshold		Current Estimate
Production Milestone Approval	FEB 2010	APR 2010	APR 2010	APR 2010
Airworthiness Certification Complete	JAN 2012	DEC 2011	DEC 2011	DEC 2011
Initiate IOT&E	MAR 2012	MAR 2012	MAR 2012	MAR 2012
Required Assets Available	DEC 2012	DEC 2012	DEC 2012	DEC 2012
OT&E Report/ Beyond LRIP Report Approved	DEC 2012	APR 2013	APR 2013	APR 2013

Change Explanations

None

Acronyms and Abbreviations

IOT&E - Initial Operational Test and Evaluation
OT&E - OperationalTest and Evaluation

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Simultaneous air refueling (CSAR and SOF receivers)	While in flight, refuel full range of DoD probe equipped aircraft: rotary-wing, fixed-wing, and tilt rotor.	While in flight, refuel full range of DoD probe equipped aircraft: rotary-wing, fixed-wing, and tilt rotor.	While in flight, simultan-eously provide fuel to two CSAR recovery vehicles or SOF rotary wing receivers. Must aerial refuel one M/CV-22.	While in flight, simultan-eously provide fuel to two CSAR recovery vehicles or SOF rotary wing receivers. Must aerial refuel one M/CV-22.	While in flight, simultan-eously provide fuel to two CSAR recovery vehicles or SOF rotary wing receivers. Must aerial refuel one M/CV-22.
Net-ready	Fully support execution of all operational activities and must satisfy technical requirements for transition to Net-Centric military operations.	Fully support execution of all operational activities and must satisfy technical requirements for transition to Net-Centric military operations.	Fully support execution of joint critical operational activities and must satisfy technical requirements for transition to Net-Centric military operations.	Fully support execution of joint critical operational activities and must satisfy technical requirements for transition to Net-Centric military operations.	Fully support execution of joint critical operational activities and must satisfy technical requirements for transition to Net-Centric military operations.
Survivability (IR Signature)	In a single engagement, weapon system shall be able to defeat, 90% of time, specific IR threat.	In a single engagement, weapon system shall be able to defeat, 90% of time, specific IR threat.	In a single engagement, weapon system shall be able to defeat, 70% of the time, a specific IR threat.	In a single engagement, weapon system shall be able to defeat, 70% of the time, a specific IR threat.	In a single engagement, weapon system shall be able to defeat, 70% of the time, a specific IR threat.
Survivability (Threat warning)	Provide warning for EO/IR and RF threats and equivalent capability	Provide warning for EO/IR and RF threats and equivalent capability	Provide warning for EO/IR and RF threats.	Provide warning for EO/IR and RF threats.	Provide warning for EO/IR and RF threats.

	described in the LAIRCM ORD and the ASACM CDD, respectively.	described in the LAIRCM ORD and the ASACM CDD, respectively.				
Survivability (Flight critical damage tolerance)	Greater levels of ballistic hardening/tol-erance are desired and should be incorporated, if achievable, without significant aircraft performance or cost penalties.	Greater levels of ballistic hardening/tol-erance are desired and should be incorporated, if achievable, without significant aircraft performance or cost penalties.	Must withstand flight critical damage with 95% probability of survival against single impact (imposed by 7.62mm ball projectile at 100m) and continue operations for 30 minutes.	Must withstand flight critical damage with 95% probability of survival against single impact (imposed by 7.62mm ball projectile at 100m) and continue operations for 30 minutes.	Must withstand flight critical damage with 95% probability of survival against single impact (imposed by 7.62mm ball projectile at 100m) and continue operations for 30 minutes.	
Force Protection (Crew Protection)	Cargo compartment positions should be protected against a single 7.62mm ball projectile at 100m, with less than 3% increase in operating weight.	Cargo compartment positions should be protected against a single 7.62mm ball projectile at 100m, with less than 3% increase in operating weight.	Primary crewmember positions and oxygen supplies must be protected against a single 7.62mm ball projectile at 100m.	Primary crewmember positions and oxygen supplies must be protected against a single 7.62mm ball projectile at 100m.	Primary crewmember positions and oxygen supplies must be protected against a single 7.62mm ball projectile at 100m.	
Materiel Availability (Sustainability)	80% average monthly AA rate, 89% average monthly MC rate; from 25 to 30 months after both MAJCOMs declare IOC.	80% average monthly AA rate, 89% average monthly MC rate; from 25 to 30 months after both MAJCOMs declare IOC.	76% average monthly AA rate, 85% average monthly MC rate; from 25 to 30 months after both MAJCOMs declare IOC.	During IOT&E, the aircraft met the 76% AA rate, and the 85% average monthly MC rate.	Average monthly AA rate is 88.64% for HC-130J and 85.20% for the MC-130J. The average monthly MC should be 85%; from	(Ch-1)

					25 to 30 months after both MAJCOMs declare IOC. AFSOC declared IOC in December 2012. ACC declared IOC in April 2013. Effective January 2014, the MC rate for HC-130J is 88.93% and the MC rate for the MC-130J is 95.22%.

Requirements Source

Capability Production Document (CPD) dated August 13, 2009

Change Explanations

(Ch-1) The Materiel Availability (Sustainability) current estimate was changed to support the latest report January 2014 rates; in particular the AA rate changed from 81.8% to 88.64 (HC-130J) and 85.6% to 85.2% (MC-130J) due to the latest report dated January 2014 and the average MC rate changed from 91.1% to 88.93% (HC-130J) and 89.6% to 95.22% (MC-130J) based on the latest January 2014 report.

Acronyms and Abbreviations

AA - Aircraft Availability
ACC - Air Combat Command
AFSOC - Air Force Special Operations Command
ASACM - Advanced Situational Awareness Countermeasures
CDD - Capability Development Document
CSAR - Combat Search And Rescue
EO/IR - Electro-Optical/Infrared
IOT&E - Initial Operational Test and Evaluation
IR - Infrared (missile threat)
LAIRCM - Large Aircraft Infrared Countermeasures
m - meter
MAJCOM - Major Command
MC - Mission Capable
mm - millimeter
ORD - Operational Requirements Document
RF - Radio Frequency
SOF - Special Operations Forces

Track to Budget

RDT&E

Appn		BA	PE		
Air Force	3600	05	0604261F		
	Project		**Name**		
	5249		Personnel Recovery System	(Shared)	(Sunk)
	Notes:		FY 2008 only		
Air Force	3600	05	0605278F		
	Project		**Name**		
	5249		HC/MC130 Recap		

Procurement

Appn		BA	PE		
Air Force	3010	02	0401132F		
	Line Item		**Name**		
	C130J0		C-130J	(Shared)	(Sunk)
	Notes:		FY 2008 Global War on Terror Supplimental Funding		
Air Force	3010	04	0207237F		
	Line Item		**Name**		
	C130JA		AC-130 Recap		(Sunk)
Air Force	3010	02	0207224F		
	Line Item		**Name**		
	C130JH		Combat Search and Rescue		
Air Force	3010	02	0207230F		
	Line Item		**Name**		
	C130JM		MC-130 Recap		
Air Force	3010	05	0401134F		
	Line Item		**Name**		
	HCMC00		HC/MC-130 Modifications		(Sunk)
Air Force	3010	05	0207230F		
	Line Item		**Name**		
	HCMC00		HC/MC-130 Modifications		
Air Force	3010	05	0207224F		
	Line Item		**Name**		
	HCMC00		HC/MC-130 Modifications		
Air Force	3010	02	0207230F		
	Line Item		**Name**		
	HMC130		MC-130 Recap		(Sunk)

Air Force	3010	02	0207224F		
	Line Item		**Name**		
	HMC130		Combat Search and Rescue		(Sunk)
Air Force	3010	05	0401134F		
	Line Item		**Name**		
	LAIRCM		Large Aircraft Infrared Countermeasures	(Shared)	(Sunk)
Air Force	3010	04	0207237F		
	Line Item		**Name**		
	MC0130		AC-130 Recap		(Sunk)
Defense-Wide	0300	02	1160429BB		
	Line Item		**Name**		
	2012C130J		AC/MC-130J		(Sunk)

MILCON

Appn	**BA**	**PE**		
Air Force	3300	01	0207224F	
	Project		**Name**	
	VARIOUS		Combat Rescue and Recovery	(Shared)
Defense-Wide	0500	01	1140494BB	
	Project		**Name**	
	VARIOUS		USSOCOM	(Shared)

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2009 $M			BY2009 $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	148.0	147.6	162.4	145.4	154.3	160.2	156.8
Procurement	7436.0	12665.9	13932.5	12703.2	8054.2	14836.6	14691.6
Flyaway	--	--	--	9865.2	--	--	11329.8
Recurring	--	--	--	9748.7	--	--	11208.2
Non Recurring	--	--	--	116.5	--	--	121.6
Support	--	--	--	2838.0	--	--	3361.8
Other Support	--	--	--	981.4	--	--	1124.3
Initial Spares	--	--	--	1856.6	--	--	2237.5
MILCON	494.1	336.7	370.4	229.5	536.8	377.9	248.9
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	8078.1	13150.2	N/A	13078.1	8745.3	15374.7	15097.3

Confidence Level for Current APB Cost 55% -

Cost is based on the HC/MC-130 Recap approved Service Cost Position, September 9, 2013.

The cost estimate represents the expected value, or mean, of the cost estimate distribution, and for both the Research, Development, Test and Evaluation (RDT&E) and production estimates, the confidence levels are approximately 55%. This portion of the estimate takes into consideration relevant risks, including ordinary levels of external and unforeseen events. It aims to provide sufficient resources to execute the program under normal conditions encountering average levels of technical, schedule, and programmatic risk and external influence.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	74	131	131
Total	74	131	131

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2015 President's Budget / December 2013 SAR (TY$ M)

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	84.7	2.6	7.5	24.2	28.2	4.7	4.9	0.0	156.8
Procurement	5072.8	1130.9	654.9	1712.4	1229.7	591.9	914.0	3385.0	14691.6
MILCON	224.9	0.0	0.0	24.0	0.0	0.0	0.0	0.0	248.9
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2015 Total	5382.4	1133.5	662.4	1760.6	1257.9	596.6	918.9	3385.0	15097.3
PB 2014 Total	4986.6	1189.8	688.9	1332.2	875.4	589.4	996.4	4148.9	14807.6
Delta	395.8	-56.3	-26.5	428.4	382.5	7.2	-77.5	-763.9	289.7

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	53	10	6	16	12	6	7	21	131
PB 2015 Total	0	53	10	6	16	12	6	7	21	131
PB 2014 Total	0	49	10	6	13	8	6	8	31	131
Delta	0	4	0	0	3	4	0	-1	-10	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
2008	--	--	--	--	--	--	13.0
2009	--	--	--	--	--	--	19.6
2010	--	--	--	--	--	--	18.4
2011	--	--	--	--	--	--	8.1
2012	--	--	--	--	--	--	15.1
2013	--	--	--	--	--	--	10.5
2014	--	--	--	--	--	--	2.6
2015	--	--	--	--	--	--	7.5
2016	--	--	--	--	--	--	24.2
2017	--	--	--	--	--	--	28.2
2018	--	--	--	--	--	--	4.7
2019	--	--	--	--	--	--	4.9
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**156.8**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2009 $M	Non End Item Recurring Flyaway BY 2009 $M	Non Recurring Flyaway BY 2009 $M	Total Flyaway BY 2009 $M	Total Support BY 2009 $M	Total Program BY 2009 $M
2008	--	--	--	--	--	--	13.1
2009	--	--	--	--	--	--	19.5
2010	--	--	--	--	--	--	18.1
2011	--	--	--	--	--	--	7.8
2012	--	--	--	--	--	--	14.3
2013	--	--	--	--	--	--	9.8
2014	--	--	--	--	--	--	2.4
2015	--	--	--	--	--	--	6.7
2016	--	--	--	--	--	--	21.3
2017	--	--	--	--	--	--	24.3
2018	--	--	--	--	--	--	4.0
2019	--	--	--	--	--	--	4.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**145.4**

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
2008	7	528.4	--	--	528.4	86.8	615.2
2009	13	866.2	--	13.0	879.2	126.9	1006.1
2010	3	266.1	2.0	--	268.1	184.7	452.8
2011	9	605.7	1.9	--	607.6	177.1	784.7
2012	10	814.5	31.4	--	845.9	215.4	1061.3
2013	11	899.7	73.1	--	972.8	91.3	1064.1
2014	10	965.9	47.3	--	1013.2	117.7	1130.9
2015	6	521.7	1.9	--	523.6	131.3	654.9
2016	16	1248.0	23.4	10.0	1281.4	431.0	1712.4
2017	12	941.3	6.0	10.0	957.3	272.4	1229.7
2018	6	484.3	4.1	--	488.4	103.5	591.9
2019	7	803.1	4.2	--	807.3	106.7	914.0
2020	8	710.8	--	--	710.8	430.0	1140.8
2021	5	479.2	--	--	479.2	329.4	808.6
2022	5	493.6	--	--	493.6	339.3	832.9
2023	3	384.4	--	--	384.4	218.3	602.7
Subtotal	**131**	**11012.9**	**195.3**	**33.0**	**11241.2**	**3361.8**	**14603.0**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2009 $M	Non End Item Recurring Flyaway BY 2009 $M	Non Recurring Flyaway BY 2009 $M	Total Flyaway BY 2009 $M	Total Support BY 2009 $M	Total Program BY 2009 $M
2008	7	525.4	--	--	525.4	86.3	611.7
2009	13	846.8	--	12.7	859.5	124.1	983.6
2010	3	255.2	1.9	--	257.1	177.2	434.3
2011	9	571.4	1.8	--	573.2	167.1	740.3
2012	10	755.8	29.1	--	784.9	199.9	984.8
2013	11	814.2	66.2	--	880.4	82.6	963.0
2014	10	858.3	42.0	--	900.3	104.6	1004.9
2015	6	454.7	1.7	--	456.4	114.4	570.8
2016	16	1066.5	20.0	8.5	1095.0	368.4	1463.4
2017	12	788.7	5.0	8.4	802.1	228.2	1030.3
2018	6	397.8	3.4	--	401.2	85.0	486.2
2019	7	646.7	3.4	--	650.1	85.9	736.0
2020	8	561.2	--	--	561.2	339.5	900.7
2021	5	370.9	--	--	370.9	255.0	625.9
2022	5	374.6	--	--	374.6	257.4	632.0
2023	3	286.0	--	--	286.0	162.4	448.4
Subtotal	**131**	**9574.2**	**174.5**	**29.6**	**9778.3**	**2838.0**	**12616.3**

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

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2009 $M
2008	7	525.4
2009	13	773.4
2010	3	253.4
2011	9	537.1
2012	10	787.0
2013	11	827.1
2014	10	895.9
2015	6	382.6
2016	16	1084.7
2017	12	810.2
2018	6	398.5
2019	7	634.1
2020	8	628.3
2021	5	371.6
2022	5	375.3
2023	3	289.6
Subtotal	**131**	**9574.2**

Annual Funding TY$
0300 | Procurement | Procurement, Defense-Wide

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
2008	--	--	--	56.9	56.9	--	56.9
2009	--	--	--	9.5	9.5	--	9.5
2010	--	--	--	1.5	1.5	--	1.5
2011	--	--	--	2.0	2.0	--	2.0
2012	--	--	--	18.7	18.7	--	18.7
Subtotal	**--**	**--**	**--**	**88.6**	**88.6**	**--**	**88.6**

Annual Funding BY$
0300 | Procurement | Procurement, Defense-Wide

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2009 $M	Non End Item Recurring Flyaway BY 2009 $M	Non Recurring Flyaway BY 2009 $M	Total Flyaway BY 2009 $M	Total Support BY 2009 $M	Total Program BY 2009 $M
2008	--	--	--	56.7	56.7	--	56.7
2009	--	--	--	9.3	9.3	--	9.3
2010	--	--	--	1.5	1.5	--	1.5
2011	--	--	--	1.9	1.9	--	1.9
2012	--	--	--	17.5	17.5	--	17.5
Subtotal	**--**	**--**	**--**	**86.9**	**86.9**	**--**	**86.9**

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

Fiscal Year	Total Program TY $M
2010	22.6
2011	35.8
2012	12.5
2013	8.5
2014	--
2015	--
2016	24.0
Subtotal	**103.4**

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

Fiscal Year	Total Program BY 2009 $M
2010	21.8
2011	33.8
2012	11.6
2013	7.7
2014	--
2015	--
2016	20.4
Subtotal	**95.3**

Annual Funding TY$
0500 | MILCON | Military Construction, Defense-Wide

Fiscal Year	Total Program TY $M
2010	14.2
2011	37.3
2012	94.0
Subtotal	**145.5**

Annual Funding BY$
0500 | MILCON | Military Construction, Defense-Wide

Fiscal Year	Total Program BY 2009 $M
2010	13.5
2011	34.7
2012	86.0
Subtotal	**134.2**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	4/12/2010	5/9/2011
Approved Quantity	46	52
Reference	Milestone C ADM	Milestone C ADM
Start Year	2008	2008
End Year	2013	2013

The Current Total LRIP Quantity is more than 10% of the total production quantity due to user's urgent need and existing capability of the aircraft production line.

The May 2011 Acquisition Decision Memorandum (ADM) approved an updated LRIP quantity of 52 aircraft.

Foreign Military Sales

None

Nuclear Costs

None

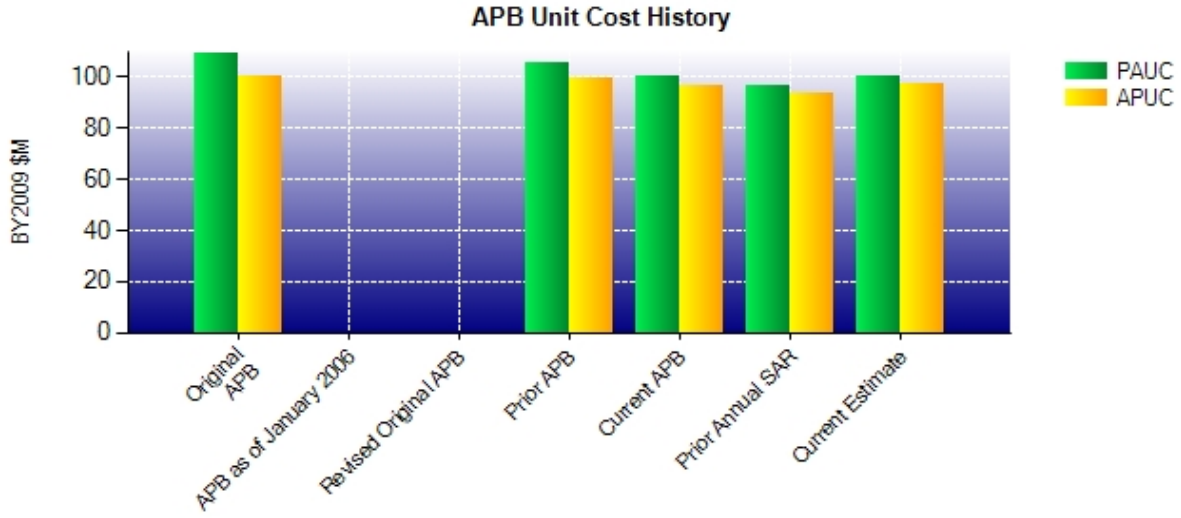
Unit Cost

Unit Cost Report

Unit Cost	BY2009 $M Current UCR Baseline (OCT 2013 APB)	BY2009 $M Current Estimate (DEC 2013 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	13150.2	13078.1	
Quantity	131	131	
Unit Cost	100.383	99.833	-0.55
Average Procurement Unit Cost (APUC)			
Cost	12665.9	12703.2	
Quantity	131	131	
Unit Cost	96.686	96.971	+0.29

Unit Cost	BY2009 $M Original UCR Baseline (MAR 2010 APB)	BY2009 $M Current Estimate (DEC 2013 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	8078.1	13078.1	
Quantity	74	131	
Unit Cost	109.164	99.833	-8.55
Average Procurement Unit Cost (APUC)			
Cost	7436.0	12703.2	
Quantity	74	131	
Unit Cost	100.486	96.971	-3.50

Unit Cost History



		BY2009 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	MAR 2010	109.164	100.486	118.180	108.841
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	MAR 2011	105.002	99.739	116.920	111.256
Current APB	OCT 2013	100.383	96.686	117.364	113.256
Prior Annual SAR	DEC 2012	96.653	93.509	113.035	109.595
Current Estimate	DEC 2013	99.833	96.971	115.247	112.150

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
118.180	2.280	-3.193	-1.415	2.167	-16.322	0.000	13.550	-2.933	115.247

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
108.841	2.209	0.871	-1.415	2.167	-14.073	0.000	13.550	3.309	112.150

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	N/A	N/A	N/A
Milestone C	N/A	N/A	FEB 2010	APR 2010
RAA	N/A	N/A	DEC 2012	DEC 2012
Total Cost (TY $M)	N/A	N/A	8745.3	15097.3
Total Quantity	N/A	N/A	74	131
Prog. Acq. Unit Cost (PAUC)	N/A	N/A	118.180	115.247

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	154.3	8054.2	536.8	8745.3
Previous Changes				
Economic	+2.0	+368.4	+10.3	+380.7
Quantity	--	+6318.0	--	+6318.0
Schedule	--	-47.5	--	-47.5
Engineering	--	--	--	--
Estimating	+16.0	-1285.3	-268.7	-1538.0
Other	--	--	--	--
Support	--	+949.1	--	+949.1
Subtotal	+18.0	+6302.7	-258.4	+6062.3
Current Changes				
Economic	-1.0	-79.0	-2.0	-82.0
Quantity	--	--	--	--
Schedule	--	-137.9	--	-137.9
Engineering	--	+283.9	--	+283.9
Estimating	-14.5	-558.2	-27.5	-600.2
Other	--	--	--	--
Support	--	+825.9	--	+825.9
Subtotal	-15.5	+334.7	-29.5	+289.7
Total Changes	+2.5	+6637.4	-287.9	+6352.0
CE - Cost Variance	156.8	14691.6	248.9	15097.3
CE - Cost & Funding	156.8	14691.6	248.9	15097.3

Summary Base Year 2009 $M				
	RDT&E	**Proc**	**MILCON**	**Total**
SAR Baseline (Prod Est)	148.0	7436.0	494.1	8078.1
Previous Changes				
Economic	--	--	--	--
Quantity	--	+5247.2	--	+5247.2
Schedule	--	-104.5	--	-104.5
Engineering	--	--	--	--
Estimating	+12.1	-1097.1	-242.3	-1327.3
Other	--	--	--	--
Support	--	+768.1	--	+768.1
Subtotal	+12.1	+4813.7	-242.3	+4583.5
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	+261.1	--	+261.1
Estimating	-14.7	-449.6	-22.3	-486.6
Other	--	--	--	--
Support	--	+642.0	--	+642.0
Subtotal	-14.7	+453.5	-22.3	+416.5
Total Changes	-2.6	+5267.2	-264.6	+5000.0
CE - Cost Variance	145.4	12703.2	229.5	13078.1
CE - Cost & Funding	145.4	12703.2	229.5	13078.1

Previous Estimate: December 2012

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-1.0
Revised estimate due to sequestration reductions in FY 2012. (Estimating)	-6.6	-6.9
Refinement of prior year actuals and estimate methodology for Block 7/8.1. (Estimating)	-8.5	-8.0
Adjustment for current and prior escalation. (Estimating)	+0.4	+0.4
RDT&E Subtotal	-14.7	-15.5

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-79.0
Adjustment for current and prior escalation. (Estimating)	+23.0	+25.0
Acceleration of procurement buy profile in prior years and within the Future Years Defense Program. (Schedule)	0.0	-137.9
Inclusion of modification funding to include common core. (Engineering)	+174.4	+195.3
Inclusion of non-recurring engineering for Special Operations Command. (Engineering)	+86.7	+88.6
Revised estimate to reflect actuals. (Estimating)	-83.1	-89.6
Revised estimate to align with Full Rate Production Service Cost Position. (Estimating)	-389.5	-493.6
Adjustment for current and prior escalation. (Support)	+5.6	+6.3
Decrease in Other Support due to approval of the multi-year contract which resulting in diminishing manufacturing resources. (Support)	-11.3	-13.3
Increase in Initial Spares due to a $73M increase in requirement, a $303M database error, and a $457M for Block Upgrade (Block 8.1 inline incorporation) previously categorized as Other Support that should have been moved to Flyaway but was inadvertently added to initial spares. The database error and funding movement from Initial Spares to Flyaway will be accomplished in the FY 2016 budget cycle. (Support)	+647.7	+832.9
Procurement Subtotal	+453.5	+334.7

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-2.0
Adjustment for current and prior escalation. (Estimating)	+1.4	+1.5
Revised estimate to align with funded MILCON requirements. (Estimating)	-20.2	-24.8
Revised estimate to align with funded MILCON requirements. (Estimating)	-3.5	-4.2
MILCON Subtotal	-22.3	-29.5

Contracts

General Contract Memo

The HC/MC-130 Recapitalization program uses the existing C-130J Five Year Ordering Contracts.

Appropriation: Procurement

Contract Name	**HC/MC-130J Production (FYOC III)**
Contractor	Lockheed Martin
Contractor Location	86 South Cobb Drive Marietta, GA 39963-0290
Contract Number, Type	FA8625-06-C-6456, FFP
Award Date	June 13, 2008
Definitization Date	June 15, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price at Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
470.0	N/A	6	2219.4	N/A	31	2219.4	2219.4

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the increased number of aircraft and associated logistic support.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this FFP contract.

Appropriation: Procurement	
Contract Name	**HC/MC-130J Production (FYOC IV)**
Contractor	Lockheed Martin
Contractor Location	86 South Cobb Drive Marietta, GA 39963-0290
Contract Number, Type	FA8625-11-C-6597, FFP
Award Date	March 17, 2011
Definitization Date	March 17, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price at Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
2.2	N/A	0	466.3	N/A	11	466.3	466.3

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to increased number of aircraft and associated logistics support.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this FFP contract.

Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	31	31	131	23.66%
Total Program Quantity Delivered	31	31	131	23.66%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	15097.3	Years Appropriated	7
Expended to Date	2546.3	Percent Years Appropriated	43.75%
Percent Expended	16.87%	Appropriated to Date	6515.9
Total Funding Years	16	Percent Appropriated	43.16%

The above data is current as of 2/27/2014.

Operating and Support Cost

HC/MC-130 Recap

Assumptions and Ground Rules

Cost Estimate Reference:
The O&S cost estimate is documented in the February 2013 Program Office Estimate (POE).

Sustainment Strategy:
Two level maintenance is planned for fleet of 131 aircraft. Aircraft will have a 30 year service life.

Antecedent Information:
The HC/MC-130 Recap program recapitalizes several antecedents, including the HC-130P/N and MC-130E/H/P fleets. It also provides aircraft which, after modification in a separate Special Operations Command (SOCOM) program, recapitalize the AC-130H/U/W gunship fleet. The total of these antecedents was 131 aircraft before retirements began.

Antecedent aircraft were designed for a 30-year service life; multiple center wing box replacements and other actions extended that life to 48 years for the last of the now-retired MC-130E. MC-130P retirement planning also reflects service lives of up to 48 years after similar extensions. O&S cost comparisons are based on the MC-130P.

Antecedent annual costs of the MC-130P are listed. Antecedent annual cost information is based on analysis of Air Force Total Ownership Cost 2010 data for HC/MC-130P. No MC-130P total O&S estimate is available.

Unitized O&S Costs BY2009 $M		
Cost Element	**HC/MC-130 Recap Average Annual Aircraft Cost**	**MC-130P (Antecedent) Average Annual Aircraft Cost**
Unit-Level Manpower	4.093	4.500
Unit Operations	0.951	1.700
Maintenance	1.831	3.500
Sustaining Support	0.457	0.400
Continuing System Improvements	0.756	0.600
Indirect Support	2.093	1.100
Other	0.000	0.000
Total	10.181	11.800

Unitized Cost Comments:
Aircraft unitized cost based on an average annual operating cost over a 30 year system life.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	HC/MC-130 Recap		HC/MC-130 Recap	MC-130P (Antecedent)
Base Year	40008.6	44009.5	40008.6	N/A
Then Year	58602.4	N/A	58602.4	0.0

Total O&S Costs Comments:

Average Annual O&S Costs per Aircraft were calculated as Total O&S Cost / useful life / quantity. This replaces the current first sentence. Since DAMIR truncates at third decimal point approx $3M variance is due to a rounding error. Actual totals are $10.1803M in BY. O&S BY 2009 cost increased from the 2012 SAR due to revision of estimate to align with Full Rate Production Service Cost Position.

O&S Cost Variance		
Category	Base Year 2009 $M	Change Explanations
Prior SAR Total O&S Estimate December 2012	37,333.6	
Cost Estimating Methodology	+666.6	Price escalation applied starting Fiscal Year 2013 versus after production shutdown ($1,277.7). Software Maintenance and modification based on AFCAA Cost Estimating Relationship versus software maintenance augmented by hardware cost factor (-$611.1).
Cost Data Update	+3,582.7	Inclusion of weapons system trainer maintenance costs ($448.3) and refined Base Operating Support costs ($3,134.4).
Labor Rate	-557.6	Updated Manpower Estimate Report.
Energy Rate	-1,016.7	Programmed fuels costs versus Defense Logistics Agency standard fuel prices.
Technical Input	0.0	
Programmatic/Planning Factors	0.0	
Other	0.0	
Total Changes	+2,675.0	
Current Estimate	40,008.6	

Disposal Costs:

Disposal and demilitarization costs are not included above.