Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-433

KC-130J Transport Aircraft (KC-130J)

As of FY 2019 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Sensitivity Originator

No originator info Available at this time.

Common Acronyms and Abbreviations for MDAP Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ACAT - Acquisition Category
ADM - Acquisition Decision Memorandum
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
$B - Billions of Dollars
BA - Budget Authority/Budget Activity
Blk - Block
BY - Base Year
CAPE - Cost Assessment and Program Evaluation
CARD - Cost Analysis Requirements Description
CDD - Capability Development Document
CLIN - Contract Line Item Number
CPD - Capability Production Document
CY - Calendar Year
DAB - Defense Acquisition Board
DAE - Defense Acquisition Executive
DAMIR - Defense Acquisition Management Information Retrieval
DoD - Department of Defense
DSN - Defense Switched Network
EMD - Engineering and Manufacturing Development
EVM - Earned Value Management
FOC - Full Operational Capability
FMS - Foreign Military Sales
FRP - Full Rate Production
FY - Fiscal Year
FYDP - Future Years Defense Program
ICE - Independent Cost Estimate
IOC - Initial Operational Capability
Inc - Increment
JROC - Joint Requirements Oversight Council
$K - Thousands of Dollars
KPP - Key Performance Parameter
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MDA - Milestone Decision Authority
MDAP - Major Defense Acquisition Program
MILCON - Military Construction
N/A - Not Applicable
O&M - Operations and Maintenance
ORD - Operational Requirements Document
OSD - Office of the Secretary of Defense
O&S - Operating and Support
PAUC - Program Acquisition Unit Cost

PB - President's Budget
PE - Program Element
PEO - Program Executive Officer
PM - Program Manager
POE - Program Office Estimate
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
SCP - Service Cost Position
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting
U.S. - United States
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name
KC-130J Transport Aircraft (KC-130J)

DoD Component
Navy

Responsible Office

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References

SAR Baseline (Production Estimate)

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated February 7, 2011

Approved APB

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated February 7, 2011

Mission and Description

The KC-130J Transport Aircraft (KC-130J) is a high-wing, long range land based monoplane which is powered by four turboprop engines equipped with six blade variable pitch propellers.

The KC-130J program provides the Marine Corps with air-to-air refueler/tactical transport capability to replace the KC-130 F/R/T aircraft. Specific KC-130J mission capabilities encompass air-to-air refueling, air delivered ground refueling, tactical troop transport, aerial delivery of personnel and cargo, airborne radio relay, tactical aero-medical evacuation, multi-sensor reconnaissance, and close air support. The KC-130J improves readiness, capability and survivability while reducing maintenance and operating costs.

Executive Summary

The KC-130J Hercules continues to meet all KPP's and excel operationally as it has been continuously forward deployed in support of multiple operations since February 2005. PMA-207 Tactical Airlift Program Office remains focused on sustaining fleet aircraft, reducing operating costs and increasing readiness while delivering new production aircraft. The Program of Record (POR) is 104 consisting of 79 United States Marine Corp (USMC) and 25 United States Navy (USN) aircraft. As of January 2018, 53 USMC KC-130Js have been delivered.

PMA-207 acquires all KC-130J aircraft via United States Air Force (USAF) contracts. All US Government customers are participating in the second USAF Multi-Year Procurement (MYP) II contract (FY 2014- FY 2018). The USMC and USN are currently preparing for a five-year MYP III in collaboration with the USAF beginning in FY 2019. The combined USN/USMC and USAF proposed procurements via a multiyear contract provides a savings to the government over single-year pricing and mitigates future-year cost challenges through FY 2023.

High Combatant Command demand has increased USMC operational tempo necessitating the need to complete the POR and retire the remaining aging legacy fleet aircraft shared across active and reserve components. Until the POR completes, there will be a shortage of back-up aircraft and the existing legacy aircraft will experience increasing maintenance requirements and necessary upgrades in order to meet operational mandates. All of these factors have contributed to availability challenges. The Program is executing a plan with Naval Supply Systems Command and the Defense Logistics Agency to increase supply inventories as well as incentivizing the industrial base to improve readiness via contract strategies. The Program is also procuring new training devices and working with USMC to increase the number of qualified personnel performing aircraft maintenance. The Program has initiated a plan to determine possible reliability and maintainability improvements, maintenance concept changes, improved repair turnaround times, repair price reductions, and contract strategy changes in order to identify areas of opportunity to streamline support and return aircraft to service in the most expeditious and cost-effective manner.

The KC-130J continues to make modifications to meet communication, navigation, surveillance and Air Traffic Management mandates and other upgrades to continue aircraft relevancy to evolving defense needs. Currently, the Program Office has successfully completed Automatic Dependent Surveillance – Broadcast Out final certifications with fleet installs commencing by the fourth quarter. Other modifications include upgrade to the Block 7.0/8.1 configuration which will enhance navigation and communications, the addition of the Department of the Navy Large Aircraft Infrared Counter Measures, and improvements to the Hercules Airborne Weapons Kit (known as 'Harvest HAWK'). In conjunction with Harvest HAWK (HH), the Program is leveraging the successful USAF Outer Wing Station modification to allow for HH-modified aircraft to again support a second aerial refueling hose similar to non-HH aircraft.

The Program has active FMS cases with the Kuwait Air Force (KC-130Js), the Japan Maritime Self Defense Force (KC-130Rs), the Chilean Air Force (KC-130Ts) and the Philippines Air Force (KC-130Ts). The Program maintains coordination with international communities for Security Assistance and Security Cooperation and works to accomplish program objectives of assigned cases within applicable laws and regulations.

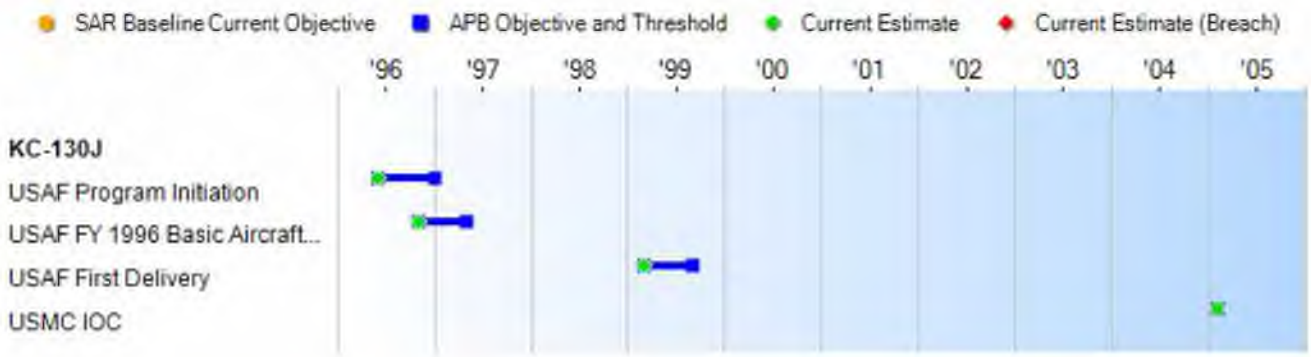
There are no significant software-related issues with this program at this time.

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



Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate
USAF Program Initiation	Jun 1996	Jun 1996	Jan 1997	Jun 1996
USAF FY 1996 Basic Aircraft Contract	Nov 1996	Nov 1996	May 1997	Nov 1996
USAF First Delivery	Mar 1999	Mar 1999	Sep 1999	Mar 1999
USMC IOC	Feb 2005	Feb 2005	Feb 2005	Feb 2005

Change Explanations

None

Acronyms and Abbreviations

USAF - United States Air Force
USMC - United States Marine Corps

Performance

Performance Characteristics				
SAR Baseline Production Estimate	**Current APB Production Objective/Threshold**		**Demonstrated Performance**	**Current Estimate**
Net Ready				
100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing in the joint architecture.	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing in the joint architecture.	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements present in the Block 5.4 configuration designated as enterprise-level or critical in the joint integrated architecture.	Objective met with the incorporation of Block 5.4	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing in the joint architecture.
Range with 25000 lb Cargo Load				
2,700 nm	2,700 nm	The C-130J deployment range, at long-range cruise airspeeds, mean cruise weight fuel flow, a cruise altitude of 27,000 ft or above, 6,700 lbs reserve fuel overhead destination with a 25,000 lb cargo payload, and the conditions stated above, the deployment range must be 2,460 nm	2,700 nm	2,700 nm
Maximum Effort Ground Roll				
The maximum effort landing ground roll at 135,000 lbs will not exceed 1800 ft	The maximum effort landing ground roll at 135,000 lbs will not exceed 1800 ft	The maximum effort landing ground roll at 135,000 lbs will not exceed 1800 ft	1800 ft	The maximum effort landing ground roll at 135,000 lbs will not exceed 1800 ft
Maximum Effort Takeoff Run				
2700 ft	2700 ft	The aircraft shall be able to perform a maximum effort take off from a prepared surface at sea level, standard day, no wind, and maximum gross weight of 164,000 lbs in 3,300 ft	2700 ft	2700 ft

Requirements Reference

Operational Requirements Letter (ORL) Change 3 dated February 14, 2009

Change Explanations

None

Notes

ORL Change 3 was clarified on November 12, 2013, with no changes to the KC-130J Performance Characteristics.

Acronyms and Abbreviations

ft - Feet
lbs - Pounds
nm - Nautical Miles

Track to Budget

RDT&E

Appn	BA	PE
Navy	05	0605430N

Project	Name	
3199	C/KC-130 Avionics Modernization Program	(Sunk)

Procurement

Appn	BA	PE
Navy	04	0502379N

Line Item	Name
0416	KC-130J

Notes: Direct Support Squadron

Appn	BA	PE
Navy	04	0502504M

Line Item	Name
0416	KC-130J

Notes: KC-130/VMGR Squadrons (Marine Corps Reserves)

Appn	BA	PE
Navy	04	0206127M

Line Item	Name	
0416	KC-130J	(Sunk)

Notes: KC-130J Squadrons (Marine Air Wing)

Appn	BA	PE
Navy	06	0502379N

Line Item	Name		
0605	Spares & Repair Parts	(Shared)	(Sunk)

Notes: Direct Support Squadron

Appn	BA	PE
Navy	06	0502504M

Line Item	Name	
0605	Spares & Repair Parts	(Shared)

Notes: KC-130/VMGR Squadrons (Marine Corps Reserves)

Appn	BA	PE
Navy	06	0206127M

Line Item	Name		
0605	Spares & Repair Parts	(Shared)	(Sunk)

Notes: KC-130J Squadrons (Marine Air Wing)

Appn	BA	PE
Defense-Wide	00	

Line Item	Name
1301	National Guard Reserve Equipment

Notes

PE 0502379N 0416 has been restored to an active appropriation to procure aircraft in FY 2023 and beyond.

VMGR is a Marine Aerial Refueler Transport Squadron.

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2010 $M			BY 2010 $M	TY $M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	35.6	35.6	39.2	38.1	35.5	35.5	37.8
Procurement	9198.3	9198.3	10118.1	8760.2	9846.3	9846.3	9857.8
Flyaway	--	--	--	7624.0	--	--	8634.7
Recurring	--	--	--	7478.4	--	--	8463.0
Non Recurring	--	--	--	145.6	--	--	171.7
Support	--	--	--	1136.2	--	--	1223.1
Other Support	--	--	--	767.8	--	--	835.9
Initial Spares	--	--	--	368.4	--	--	387.2
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	9233.9	9233.9	N/A	8798.3	9881.8	9881.8	9895.6

Cost Notes

In accordance with Section 842 of the National Defense Authorization Act for FY 2017, which amended title 10 U.S.C. § 2334, the Director of Cost Assessment and Program Evaluation, and the Secretary of the military department concerned or the head of the Defense Agency concerned, must issue guidance requiring a discussion of risk, the potential impacts of risk on program costs, and approaches to mitigate risk in cost estimates for MDAPs and major subprograms. The information required by the guidance is to be reported in each SAR. This guidance is not yet available; therefore, the information on cost risk is not contained in this SAR.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	104	104	104
Total	104	104	104

Cost and Funding

Funding Summary

Appropriation Summary FY 2019 President's Budget / December 2017 SAR (TY$ M)									
Appropriation	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
RDT&E	37.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.8
Procurement	4443.8	156.9	271.6	216.3	465.8	586.9	766.2	2950.3	9857.8
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2019 Total	4481.6	156.9	271.6	216.3	465.8	586.9	766.2	2950.3	9895.6
PB 2018 Total	4479.1	156.9	211.3	197.0	121.7	225.6	545.2	3843.0	9779.8
Delta	2.5	0.0	60.3	19.3	344.1	361.3	221.0	-892.7	115.8

Quantity Summary FY 2019 President's Budget / December 2017 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	57	2	2	2	5	6	8	22	104
PB 2019 Total	0	57	2	2	2	5	6	8	22	104
PB 2018 Total	0	57	2	2	2	1	2	4	34	104
Delta	0	0	0	0	0	4	4	4	-12	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	22.4
2009	--	--	--	--	--	--	14.1
2010	--	--	--	--	--	--	1.3
Subtotal	--	--	--	--	--	--	37.8

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2010 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	22.7
2009	--	--	--	--	--	--	14.1
2010	--	--	--	--	--	--	1.3
Subtotal	--	--	--	--	--	--	38.1

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	3	162.6	--	--	162.6	38.9	201.5
1998	2	110.1	--	--	110.1	7.1	117.2
1999	2	107.0	--	--	107.0	4.1	111.1
2000	1	62.3	--	1.2	63.5	7.7	71.2
2001	3	195.8	--	--	195.8	53.5	249.3
2002	2	138.2	--	--	138.2	30.3	168.5
2003	4	284.6	--	--	284.6	45.1	329.7
2004	--	42.8	--	--	42.8	95.9	138.7
2005	4	289.5	--	--	289.5	52.7	342.2
2006	8	460.7	--	14.3	475.0	87.5	562.5
2007	3	176.9	--	14.3	191.2	53.1	244.3
2008	13	775.9	--	17.5	793.4	40.9	834.3
2009	2	103.2	--	3.0	106.2	38.6	144.8
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	1	69.6	--	1.9	71.5	14.8	86.3
2013	3	222.5	--	--	222.5	2.8	225.3
2014	1	86.5	--	1.5	88.0	12.7	100.7
2015	1	52.7	--	2.0	54.7	34.5	89.2
2016	2	152.9	--	4.1	157.0	73.5	230.5
2017	2	138.8	--	--	138.8	7.0	145.8
2018	2	138.7	--	8.0	146.7	10.2	156.9
2019	2	255.9	--	4.3	260.2	11.4	271.6
2020	2	207.8	--	1.6	209.4	6.9	216.3
2021	5	444.0	--	11.1	455.1	10.7	465.8
2022	6	545.0	--	13.7	558.7	28.2	586.9
2023	8	654.6	--	18.7	673.3	92.9	766.2
2024	3	376.0	--	7.1	383.1	42.6	425.7
2025	5	577.5	--	12.1	589.6	83.7	673.3
2026	5	594.0	--	12.4	606.4	92.1	698.5
2027	5	595.9	--	12.6	608.5	55.8	664.3
2028	4	441.0	--	10.3	451.3	37.2	488.5
Subtotal	104	8463.0	--	171.7	8634.7	1172.4	9807.1

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	BY 2010 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	3	199.2	--	--	199.2	47.6	246.8
1998	2	133.3	--	--	133.3	8.6	141.9
1999	2	127.9	--	--	127.9	4.9	132.8
2000	1	73.5	--	1.4	74.9	9.1	84.0
2001	3	228.3	--	--	228.3	62.4	290.7
2002	2	159.1	--	--	159.1	34.9	194.0
2003	4	321.3	--	--	321.3	50.9	372.2
2004	--	47.1	--	--	47.1	105.4	152.5
2005	4	309.7	--	--	309.7	56.3	366.0
2006	8	479.5	--	14.9	494.4	91.1	585.5
2007	3	179.9	--	14.5	194.4	54.1	248.5
2008	13	777.5	--	17.5	795.0	41.0	836.0
2009	2	102.0	--	3.0	105.0	38.1	143.1
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	1	65.1	--	1.8	66.9	13.9	80.8
2013	3	206.1	--	--	206.1	2.6	208.7
2014	1	79.1	--	1.4	80.5	11.6	92.1
2015	1	47.5	--	1.8	49.3	31.1	80.4
2016	2	135.4	--	3.6	139.0	65.1	204.1
2017	2	120.8	--	--	120.8	6.1	126.9
2018	2	118.6	--	6.8	125.4	8.7	134.1
2019	2	214.6	--	3.6	218.2	9.6	227.8
2020	2	170.9	--	1.3	172.2	5.7	177.9
2021	5	358.0	--	9.0	367.0	8.6	375.6
2022	6	430.8	--	10.8	441.6	22.3	463.9
2023	8	507.3	--	14.5	521.8	72.0	593.8
2024	3	285.7	--	5.4	291.1	32.3	323.4
2025	5	430.2	--	9.0	439.2	62.3	501.5
2026	5	433.8	--	9.1	442.9	67.2	510.1
2027	5	426.6	--	9.0	435.6	40.0	475.6
2028	4	309.6	--	7.2	316.8	26.1	342.9
Subtotal	104	7478.4	--	145.6	7624.0	1089.6	8713.6

Cost Quantity Information 1506 | Procurement | Aircraft Procurement, Navy		
Fiscal Year	**Quantity**	**End Item Recurring Flyaway (Aligned With Quantity) BY 2010 $M**
1997	3	199.2
1998	2	133.3
1999	2	128.0
2000	1	73.5
2001	3	228.3
2002	2	159.1
2003	4	313.9
2004	--	--
2005	4	309.9
2006	8	483.4
2007	3	181.6
2008	13	793.7
2009	2	132.0
2010	--	--
2011	--	--
2012	1	67.4
2013	3	186.4
2014	1	69.2
2015	1	51.2
2016	2	128.6
2017	2	128.2
2018	2	122.2
2019	2	144.2
2020	2	209.0
2021	5	347.4
2022	6	417.9
2023	8	560.5
2024	3	255.8
2025	5	430.2
2026	5	433.8
2027	5	437.5
2028	4	353.0
Subtotal	104	7478.4

Annual Funding 0350 | Procurement | National Guard and Reserve Equipment ,Defense							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2013	--	--	--	--	--	34.3	34.3
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	16.4	16.4
Subtotal	--	--	--	--	--	50.7	50.7

Annual Funding 0350 | Procurement | National Guard and Reserve Equipment ,Defense							
Fiscal Year	Quantity	BY 2010 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2013	--	--	--	--	--	31.8	31.8
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	14.8	14.8
Subtotal	--	--	--	--	--	46.6	46.6

Low Rate Initial Production

There is no LRIP for this program.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Description
Kuwait	8/11/2014		98.5	FMS Case KU-P-GGY, Kuwait KC-130J integrated logistics support and aircraft sustainment (follow-on case to provide support upon depletion of KU-P-SBF funds)
Kuwait	3/11/2014		47.9	FMS Case KU-P-GGU, Kuwait KC-130J and L-100 engine and propeller support
Kuwait	5/4/2010	3	569.6	FMS Case KU-P-SBF, three aircraft were procured through the Air Force production contract and deliveries were completed in FY 2014. This case includes the procurement of the three delivered KC-130Js, a training facility, one weapons system trainer, and operation and sustainment support.

Notes

There are no funding changes for FMS at this time. The Kuwait team has offered a case for Automatic Dependent Surveillance - Broadcast Out and is awaiting signature from the customer.

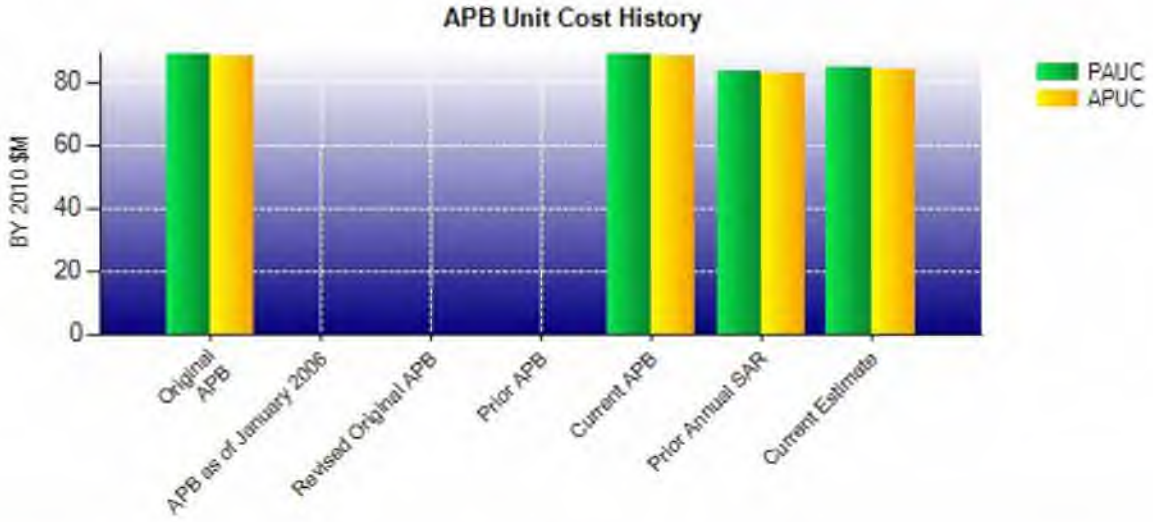
Nuclear Costs

None

Unit Cost

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2010 $M Current UCR Baseline (Feb 2011 APB)	BY 2010 $M Current Estimate (Dec 2017 SAR)	% Change
Program Acquisition Unit Cost			
Cost	9233.9	8798.3	
Quantity	104	104	
Unit Cost	88.788	84.599	-4.72
Average Procurement Unit Cost			
Cost	9198.3	8760.2	
Quantity	104	104	
Unit Cost	88.445	84.233	-4.76

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2010 $M Original UCR Baseline (Feb 2011 APB)	BY 2010 $M Current Estimate (Dec 2017 SAR)	% Change
Program Acquisition Unit Cost			
Cost	9233.9	8798.3	
Quantity	104	104	
Unit Cost	88.788	84.599	-4.72
Average Procurement Unit Cost			
Cost	9198.3	8760.2	
Quantity	104	104	
Unit Cost	88.445	84.233	-4.76



APB Unit Cost History					
Item	Date	BY 2010 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Feb 2011	88.788	88.445	95.017	94.676
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	N/A	N/A	N/A	N/A	N/A
Current APB	Feb 2011	88.788	88.445	95.017	94.676
Prior Annual SAR	Dec 2016	83.137	82.770	94.037	93.673
Current Estimate	Dec 2017	84.599	84.233	95.150	94.787

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
95.017	0.943	0.000	7.526	2.337	-8.820	0.000	-1.853	0.133	95.150

Current SAR Baseline to Current Estimate (TY $M)									
Initial APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
94.676	0.945	0.000	7.526	2.337	-8.844	0.000	-1.853	0.111	94.787

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	N/A	N/A	N/A
Milestone III	N/A	N/A	Jun 1996	Jun 1996
IOC	N/A	N/A	Feb 2005	Feb 2005
Total Cost (TY $M)	N/A	N/A	9881.8	9895.6
Total Quantity	N/A	N/A	104	104
PAUC	N/A	N/A	95.017	95.150

Cost Variance

Summary TY $M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	35.5	9846.3	--	9881.8
Previous Changes				
Economic	-0.2	+132.6	--	+132.4
Quantity	--	--	--	--
Schedule	--	+876.2	--	+876.2
Engineering	--	+243.0	--	+243.0
Estimating	+2.5	-1269.9	--	-1267.4
Other	--	--	--	--
Support	--	-86.2	--	-86.2
Subtotal	+2.3	-104.3	--	-102.0
Current Changes				
Economic	--	-34.3	--	-34.3
Quantity	--	--	--	--
Schedule	--	-93.5	--	-93.5
Engineering	--	--	--	--
Estimating	--	+350.1	--	+350.1
Other	--	--	--	--
Support	--	-106.5	--	-106.5
Subtotal	--	+115.8	--	+115.8
Total Changes	+2.3	+11.5	--	+13.8
CE - Cost Variance	37.8	9857.8	--	9895.6
CE - Cost & Funding	37.8	9857.8	--	9895.6

Summary BY 2010 $M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	35.6	9198.3	--	9233.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	+345.0	--	+345.0
Engineering	--	+177.1	--	+177.1
Estimating	+2.5	-1016.8	--	-1014.3
Other	--	--	--	--
Support	--	-95.5	--	-95.5
Subtotal	+2.5	-590.2	--	-587.7
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-23.8	--	-23.8
Engineering	--	--	--	--
Estimating	--	+258.8	--	+258.8
Other	--	--	--	--
Support	--	-82.9	--	-82.9
Subtotal	--	+152.1	--	+152.1
Total Changes	+2.5	-438.1	--	-435.6
CE - Cost Variance	38.1	8760.2	--	8798.3
CE - Cost & Funding	38.1	8760.2	--	8798.3

Previous Estimate: December 2016

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-34.3
Acceleration of procurement buy profile which shifted 12 aircraft from FY 2024 - FY 2028 to FY 2021 - FY 2023 as part of Multi-Year Procurement III (MYP III) contract. (Schedule)	0.0	-56.8
Additional Schedule Variance due to acceleration of the procurement buy profile. (Schedule)	-23.8	-36.7
Adjustment for current and prior escalation. (Estimating)	+1.5	+1.8
Revised estimate to reflect the application of new outyear escalation indices. (Estimating)	+24.6	+32.7
Revised Airframe estimate in FY 2020 - FY 2028 to reflect impact of Lockheed Martin annual production rate reduction from 24 to 16 aircraft. (Estimating)	+459.9	+607.6
Revised estimate to incorporate Airframe pricing and Economic Order Quantity savings projected for an FY 2019 - FY 2023 MYP III. (Estimating)	-224.4	-289.0
Revised estimate for Non-Recurring Engineering, Government Furnished Equipment, and Advance Procurement phasing. (Estimating)	-2.8	-3.0
Adjustment for current and prior escalation. (Support)	+0.2	+0.1
Decrease in Other Support to correct an accounting anomaly for United States Navy replacement aircraft (Navy). (Support)	-24.1	-28.6
Decrease in Initial Spares due to delays in incorporating estimates to support 12 accelerated aircraft in the FYDP and updated estimate in the outyears (Navy). (Support)	-59.0	-78.0
Procurement Subtotal	+152.1	+115.8

Contracts

Contract Identification

Appropriation: Procurement
Contract Name: Multi-Year Procurement (MYP) II Contract
Contractor: Lockheed Martin Corporation
Contractor Location: 86 South Cobb Drive
Marietta, GA 30060
Contract Number: FA8625-14-C-6450/1
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Firm Fixed Price (FFP)
Award Date: December 09, 2013
Definitization Date: November 10, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
19.0	19.0	0	526.1	535.5	8	535.5	535.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modifications for the procurement of eight aircraft.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FPIF/FFP) contract.

Notes

The Initial Contract Target Price $18.964M, which is the base contract value awarded on December 9, 2013, for Advance Procurement funding for two United States Marine Corps aircraft (one FY 2014 and one FY 2015) only.

The Current Contract Price Target is $526.1M, which is based on the value of the contract modification awarded on January 17, 2018, that included two additional FY 2018 aircraft.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	104	53	104	50.96%
Total Program Quantity Delivered	104	53	104	50.96%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	9895.6	Years Appropriated	22
Expended to Date	4046.6	Percent Years Appropriated	68.75%
Percent Expended	40.89%	Appropriated to Date	4638.5
Total Funding Years	32	Percent Appropriated	46.87%

The above data is current as of February 12, 2018.

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	January 31, 2018
Source of Estimate:	POE
Quantity to Sustain:	104
Unit of Measure:	Aircraft
Service Life per Unit:	40.00 Years
Fiscal Years in Service:	FY 2001 - FY 2070

This is the seventh update for the KC-130J O&S cost estimate since the Navy SCP was established in 2010. Naval Visibility and Management of Operating and Support Costs (VAMOSC) Aircraft Type Model Series Report (ATMSR) data from FY 2001 through FY 2016 was used to establish the KC-130J baseline. Projections based on the historical costs in ATMSR provide the majority of the out-year estimates. A phased approach estimate includes the ramp-up of aircraft as they are introduced to the fleet through the retirement of the KC-130J aircraft from service with a total aircraft procurement of 104 (maximum Program Aircraft Authorized (PAA) of 94).

Sustainment Strategy

The KC-130J Sustainment Strategy is based on three main pillars.

The first pillar concerns KC-130J Depot Source of Repair. The Air Logistics Complex (ALC) located at Hill Air Force Base in Ogden, UT is the primary depot-level maintenance facility for the aircraft. Aircraft Inspection, Repair, and Overhaul Depot Corporation in Kuala Lumpur, Malaysia is the current depot-level maintenance facility that supports aircraft located in the western pacific (Marine Corps Air Station Iwakuni, Japan). Completed core logistics and level-of-repair analyses favor this approach. Industrial capabilities are sufficient to provide comprehensive support at all levels.

The second pillar is the use of commercial sustainment contracts to help support the KC-130J airframe and propulsion systems. Support of fielded aircraft is currently accomplished through three sole source Naval Air Systems Command sustainment contracts. The airframe sustainment contract is with Lockheed Martin Aero, Marietta, GA and the propulsion sustainment contracts are with Rolls Royce Corporation, Indianapolis, IN and Dowty Propellers, Sterling, VA. The original equipment manufacturers assert restrictions on the government's right to use and release their proprietary technical data due the commercial origin of their products. Lack of rights to proprietary data precludes establishment of organic repair capability which require sole source of the engine and propeller repair, Repair of Repairables, logistics and engineering services to Rolls Royce and Dowty Propellers. Rolls Royce Corporation was the competitively selected provider for engine repair, priced based on reason for removal vice cost per engine hour and excluded repairs.

The last pillar involves KC-130J component supply support. This support is provided through the normal military supply system which includes Naval Supply Systems Command, United States Air Force ALC, and Defense Logistics Agency.

Antecedent Information

The antecedent systems are the KC-130F, KC-130R, and C/KC-130T aircraft. The KC-130F and KC-130R were used in a blended analysis to compare to the KC-130J. C/KC-130T reserve squadron aircraft data is not included in the Antecedent Average Annual Cost per Aircraft, and it should be noted that the KC-130F/R models were in ramp-down phase during the time that data was available. Additionally, both the KC-130F and KC-130R were ACAT II programs that relied heavily on United States Air Force program sustainment. KC-130J aircraft will replace the KC-130F, KC-130R, and C/KC-130T aircraft one-for-one.

The capture of O&S data in available reporting systems has changed significantly over time. Antecedent systems began

their service life before continuous, reliable recording systems were available. Naval Visibility and Management of Operating and Support Costs (VAMOSC) provides costs for FY 1997 to present. The cost data for platforms in existence prior to 1997 is either unavailable or incomplete. In summary, sufficient historical data and resources do not exist to create a credible comparison of Total O&S Costs.

A data pull from the VAMOSC ATMSR was made to obtain Maintenance, Sustaining Support, and Continuing System Improvements cost data. The steady state average of this data from 1999 to 2001 was used. The VAMOSC total aircraft number for these years was 47, 48, and 48, respectively. The Unit Level Manpower and Indirect Support costs were assumed to be the same as for the KC-130J. The Unit Operations costs were calculated using Cost Adjustment and Visibility Tracking System data from 1995 to 2009 to obtain the fuel consumption ratio of the antecedent aircraft to the KC-130J. The antecedent average annual cost was then multiplied by the KC-130J total operating aircraft years to find the total BY antecedent cost.

For comparison purposes, the BY Antecedent Total O&S Cost is the product of the Antecedent's Average Annual Cost per Aircraft and the Operational Aircraft Years of the KC-130J.

Annual O&S Costs BY2010 $M		
Cost Element	**KC-130J Average Annual Cost Per Aircraft**	**KC-130 F/R/T (Antecedent) Average Annual Cost Per Aircraft**
Unit-Level Manpower	2.044	2.044
Unit Operations	1.513	1.226
Maintenance	3.462	1.869
Sustaining Support	0.192	0.124
Continuing System Improvements	0.694	0.293
Indirect Support	0.814	0.814
Other	--	--
Total	8.719	6.370

Item	Total O&S Cost $M			
	KC-130J			KC-130 F/R/T (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	43344.2	47678.6	33978.1	24823.3
Then Year	77520.4	N/A	59087.4	N/A

Equation to Translate Annual Cost to Total Cost

The Average Annual Cost per Aircraft for the KC-130J is calculated by dividing the Total O&S Cost by the Total Operational Aircraft Years for the program. Total Operational Aircraft Years is 3,897 years. $33,978.1M / 3,897 years = $8.719M/year.

The Total Operational Aircraft Years is calculated by summing the annual total active aircraft constrained by the maximum PAA excluding the one test wing aircraft (93 aircraft maximum). The primary input for this is the Aircraft Program Data File produced by Office of the Chief of Naval Operations (N98).

O&S Cost Variance

Category	BY 2010 $M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2016 SAR	34159.6	
Programmatic/Planning Factors	-573.9	Updated procurement schedule and aircraft procurement modification schedule per FY 2019 PB
Cost Estimating Methodology	1026.9	Changed methodology for hardware modification estimate from a fixed FY 2010 - FY 2013 average to a rolling five year average, and updated to include sun-down rules
Cost Data Update	-367.3	Updated historical cost information to include FY 2016 actuals, indirect rates, and preventative maintenance interval costs
Labor Rate	-64.0	Updated current military rates
Energy Rate	-203.2	Updated cost per gallon for fuel
Technical Input	0.0	
Other	0.0	
Total Changes	-181.5	
Current Estimate	33978.1	

Disposal Estimate Details

Date of Estimate: January 16, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2010 $M): Total costs for disposal of all Aircraft are 25.0

This rough order of magnitude estimate will be refined as the System Disposal Plan Annex to the Life Cycle Sustainment Plan is developed.