Selected Acquisition Report (SAR)

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

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

As of FY 2020 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Sensitivity Originator

No originator information is 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)
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)

Program Information

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

DoD Component
Navy

Responsible Office

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PMA-207, Tactical Airlift Program Office
Program Executive Office - Air, Anti-Submarine Warfare, Assault & Special Mission Programs
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Date Assigned: April 26, 2018

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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

Program Highlights Since Last Report

PMA-207 Tactical Airlift Program Office remains focused on sustaining fleet aircraft, reducing operating costs and increasing readiness while delivering new production aircraft. On February 5, 2018 a requirements letter was signed by Deputy Commandant for Aviation to increase the United States Marine Corps (USMC) warfighter requirement from 104 to 111 aircraft consisting of 86 USMC and 25 United States Navy (USN) aircraft. As of January 2019, 54 USMC KC-130Js have been delivered.

A five-year Multi-Year Procurement (MYP III) was approved by the FY 2019 National Defense Authorization Act (NDAA) in May 2018. The combined USN/USMC and USAF Advance Procurement and Economic Order Quantity payments were awarded via Undefinitized Contract Action (UCA), July 19, 2018, with definitization planned for March 2020.

High Combatant Command demand has accelerated the need to complete the Program of Record (POR) and retire the remaining aging legacy fleet aircraft. 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. The Program has initiated a plan to determine possible reliability and maintainability improvements, including improved repair turnaround times and contract changes 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. The Program Office has successfully received Automatic Dependent Surveillance – Broadcast Out federal interim solution certification, and fleet installations began fourth quarter 2018. Other modifications include upgrades to 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 (HH)).

The Program continues to support 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.

History of Significant Developments Since Program Initiation

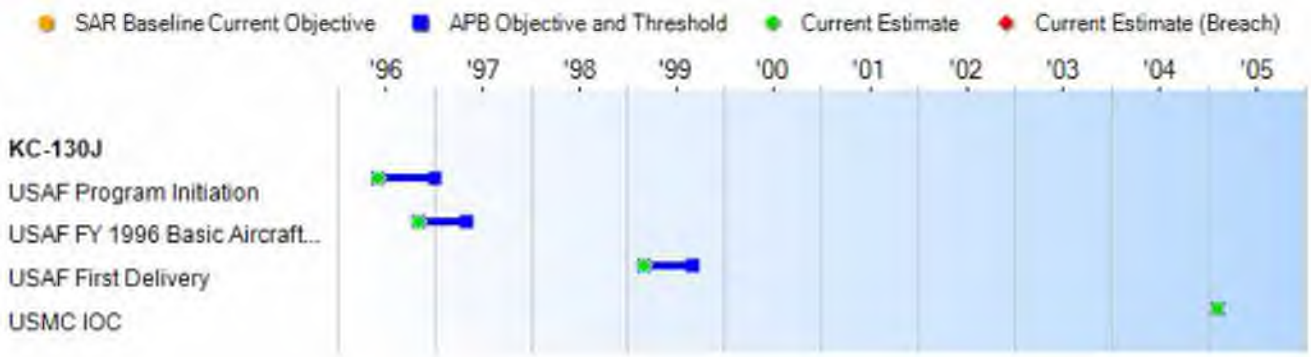
History of Significant Developments Since Program Initiation	
Date	**Significant Development Description**
April 2010	KC-130J program was designated as ACAT IC by the USD(AT&L).
February 2011	KC-130J APB approved.
2nd Quarter FY 2013	FY 2014 PB included United States Air Force Multi-Year Procurement (MYP) II for FY 2014 - FY 2018.
2nd Quarter FY 2013	Congressional reductions in the FY 2014 appropriated budget resulted in the decrease of one aircraft. Total aircraft quantity remained unchanged.
December 2015	MYP II contract awarded for C-130J aircraft on December 30, 2015. The MYP II contract covers FY 2014 - FY 2018 procurements.
December 2015	Three FY 2013 United States Marine Corps (USMC) Congressional added aircraft were definitized.
2nd Quarter FY 2018	Completed Automatic Dependent Surveillance – Broadcast Out federal interim solution certification.
February 2018	FY 2019 PB included United States Air Force MYP III for FY 2019 - FY 2023.
April 2018	Requirements letter signed by Deputy Commandant for Aviation to increase USMC KC-130J Program of Record from 79 to 86 aircraft.

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)

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	(Sunk)

Notes

PE 0502379N 0605 has been restored to an active appropriation. The National Guard Reserve Equipment has been listed as sunk.

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	9601.0	9846.3	9846.3	10990.5
Flyaway	--	--	--	8391.9	--	--	9662.4
Recurring	--	--	--	8237.5	--	--	9479.2
Non Recurring	--	--	--	154.4	--	--	183.2
Support	--	--	--	1209.1	--	--	1328.1
Other Support	--	--	--	780.8	--	--	858.6
Initial Spares	--	--	--	428.3	--	--	469.5
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	9639.1	9881.8	9881.8	11028.3

Cost Notes

No cost estimate for the program has been completed in the previous year.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	104	104	111
Total	104	104	111

Cost and Funding

Funding Summary

Appropriation Summary FY 2020 President's Budget / December 2018 SAR (TY$ M)									
Appropriation	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
RDT&E	37.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.8
Procurement	4943.4	253.6	309.0	448.4	474.6	454.8	303.7	3803.0	10990.5
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 2020 Total	4981.2	253.6	309.0	448.4	474.6	454.8	303.7	3803.0	11028.3
PB 2019 Total	4638.5	271.6	216.3	465.8	586.9	766.2	425.7	2524.6	9895.6
Delta	342.7	-18.0	92.7	-17.4	-112.3	-311.4	-122.0	1278.4	1132.7

Quantity Summary FY 2020 President's Budget / December 2018 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	63	2	3	5	5	5	3	25	111
PB 2020 Total	0	63	2	3	5	5	5	3	25	111
PB 2019 Total	0	59	2	2	5	6	8	3	19	104
Delta	0	4	0	1	0	-1	-3	0	6	7

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	6	467.5	--	16.5	484.0	15.6	499.6
2019	2	237.9	--	4.2	242.1	11.5	253.6
2020	3	305.9	--	--	305.9	3.1	309.0
2021	5	430.5	--	11.2	441.7	6.7	448.4
2022	5	436.4	--	11.4	447.8	26.8	474.6
2023	5	412.6	--	11.7	424.3	30.5	454.8
2024	3	290.7	--	7.1	297.8	5.9	303.7
2025	12	1544.2	--	29.1	1573.3	266.4	1839.7
2026	13	1720.9	--	32.2	1753.1	210.2	1963.3
Subtotal	111	9479.2	--	183.2	9662.4	1277.4	10939.8

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	206.0	--	--	206.0	2.6	208.6
2014	1	79.0	--	1.4	80.4	11.6	92.0
2015	1	47.4	--	1.8	49.2	31.1	80.3
2016	2	134.8	--	3.6	138.4	64.9	203.3
2017	2	120.0	--	--	120.0	6.0	126.0
2018	6	396.1	--	14.0	410.1	13.2	423.3
2019	2	197.6	--	3.5	201.1	9.6	210.7
2020	3	249.1	--	--	249.1	2.5	251.6
2021	5	343.7	--	8.9	352.6	5.4	358.0
2022	5	341.6	--	8.9	350.5	21.0	371.5
2023	5	316.6	--	9.0	325.6	23.4	349.0
2024	3	218.7	--	5.4	224.1	4.4	228.5
2025	12	1139.0	--	21.5	1160.5	196.5	1357.0
2026	13	1244.5	--	23.3	1267.8	152.0	1419.8
Subtotal	111	8237.5	--	154.4	8391.9	1162.5	9554.4

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	67.3
2013	3	186.3
2014	1	69.2
2015	1	51.1
2016	2	128.2
2017	2	127.4
2018	6	399.5
2019	2	134.5
2020	3	280.1
2021	5	344.0
2022	5	341.7
2023	5	337.8
2024	3	251.0
2025	12	1139.0
2026	13	1244.5
Subtotal	111	8237.5

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	4/2/2018		3.9	Kuwait KU-P-LCR, Kuwait KC-130J upgrade to ADS-B Out and Mode 5 capability including upgrade of Identification Friend or Foe (IFF) and installation.
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 KC-130J Kuwait 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

The Kuwait team has added an additional agreement to support the ADS-B Out and Mode 5 capability including upgrade of IFF and installation.

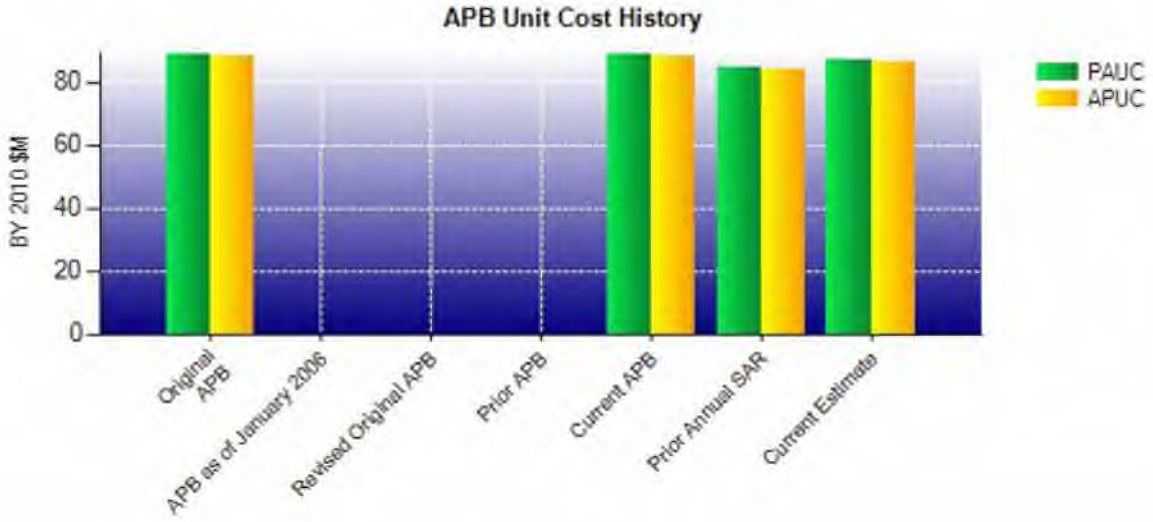
Nuclear Costs

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 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	9233.9	9639.1	
Quantity	104	111	
Unit Cost	88.788	86.839	-2.20
Average Procurement Unit Cost			
Cost	9198.3	9601.0	
Quantity	104	111	
Unit Cost	88.445	86.495	-2.20

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 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	9233.9	9639.1	
Quantity	104	111	
Unit Cost	88.788	86.839	-2.20
Average Procurement Unit Cost			
Cost	9198.3	9601.0	
Quantity	104	111	
Unit Cost	88.445	86.495	-2.20



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 2017	84.599	84.233	95.150	94.787
Current Estimate	Dec 2018	86.839	86.495	99.354	99.014

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	1.381	1.624	6.550	2.189	-6.571	0.000	-0.836	4.337	99.354

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	1.383	1.646	6.550	2.189	-6.594	0.000	-0.836	4.338	99.014

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	11028.3
Total Quantity	N/A	N/A	104	111
PAUC	N/A	N/A	95.017	99.354

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	+98.3	--	+98.1
Quantity	--	--	--	--
Schedule	--	+782.7	--	+782.7
Engineering	--	+243.0	--	+243.0
Estimating	+2.5	-919.8	--	-917.3
Other	--	--	--	--
Support	--	-192.7	--	-192.7
Subtotal	+2.3	+11.5	--	+13.8
Current Changes				
Economic	--	+55.2	--	+55.2
Quantity	--	+845.4	--	+845.4
Schedule	--	-55.7	--	-55.7
Engineering	--	--	--	--
Estimating	--	+187.9	--	+187.9
Other	--	--	--	--
Support	--	+99.9	--	+99.9
Subtotal	--	+1132.7	--	+1132.7
Total Changes	+2.3	+1144.2	--	+1146.5
CE - Cost Variance	37.8	10990.5	--	11028.3
CE - Cost & Funding	37.8	10990.5	--	11028.3

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	--	+321.2	--	+321.2
Engineering	--	+177.1	--	+177.1
Estimating	+2.5	-758.0	--	-755.5
Other	--	--	--	--
Support	--	-178.4	--	-178.4
Subtotal	+2.5	-438.1	--	-435.6
Current Changes				
Economic	--	--	--	--
Quantity	--	+612.9	--	+612.9
Schedule	--	+21.2	--	+21.2
Engineering	--	--	--	--
Estimating	--	+133.8	--	+133.8
Other	--	--	--	--
Support	--	+72.9	--	+72.9
Subtotal	--	+840.8	--	+840.8
Total Changes	+2.5	+402.7	--	+405.2
CE - Cost Variance	38.1	9601.0	--	9639.1
CE - Cost & Funding	38.1	9601.0	--	9639.1

Previous Estimate: December 2017

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+55.2
Adjustment for current and prior escalation. (Estimating)	-4.9	-5.6
Quantity variance resulting from an increase of seven aircraft from 104 to 111 (Navy). (Quantity)	+516.5	+714.2
Additional Quantity Variance resulting from Program of Record increase from 104 to 111 aircraft. (Quantity)	+96.4	+131.2
Acceleration of procurement buy profile driven by post-Future Years Defense Program (FYDP) United States Navy (USN) aircraft buy ramp up assumptions (Navy). (Schedule)	0.0	-85.9
Additional Schedule Variance accounting for the assumed rate reduction in the outyears as the procurement buy profile is accelerated. (Schedule)	+21.2	+30.2
Revised estimate to reflect the application of new outyear escalation indices. (Estimating)	-37.0	-49.2
Revised Airframe estimates driven by cost increases for the assumed outyear Minimum Sustaining Rate reduction after Multi-Year Procurement III contract completes in FY 2023. (Estimating)	+175.7	+242.7
Adjustment for current and prior escalation. (Support)	-0.5	-0.6
Increase in Other Support driven by added requirements for additional Trainers (Navy). (Support)	+13.4	+19.4
Increase in Initial Spares due to refined cost estimate for outyear USN site standups (Navy). (Support)	+60.0	+81.1
Procurement Subtotal	+840.8	+1132.7

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	527.6	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 to support FY 2016 KC-130J aircraft 'Estimates at Completion'. Funding reflects both ceiling price for quantity three aircraft already delivered and current estimates at completion (target price) for quantity eight aircraft on contract combined.

Cost and Schedule Variance Explanations

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

Contract Identification

Appropriation: Procurement
Contract Name: FYOC D.O. 7027
Contractor: Lockheed Martin Corporation
Contractor Location: 86 South Cobb Drive Southeast
Marietta, GA 30063
Contract Number: FA8625-18-F-7027/1
Contract Type: Firm Fixed Price (FFP)
Award Date: July 19, 2018
Definitization Date:

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
20.0	N/A	0	114.0	N/A	0	114.0	114.0

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modification for the funding of Advanced Procurement (AP) and Economic Order Quantities (EOQ) for FY 2019 - FY 2023 aircraft.

Estimated price at completion will be updated once the contract is definitized.

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost and Schedule Variance Explanations

None

General Contract Variance Explanation

Schedule variance is not reported for this contract, because it is not required for FFP contract.

Cost variance is not reported for this contract, because it is not required for FFP contract.

Notes

This is the first time this contract is being reported.

FYOC Delivery Order (D.O.) 7027 is an undefinitized contract to support the procurement and long lead items for KC-130J aircraft.

Contract Identification

Appropriation: Procurement
Contract Name: FYOC D.O. 7028
Contractor: Lockheed Martin Corporation
Contractor Location: 86 South Cobb Drive Southeast
Marietta, GA 30063
Contract Number: FA8625-18-F-7028/2
Contract Type: Fixed Price Incentive(Firm Target) (FPIF)
Award Date: July 18, 2018
Definitization Date:

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
124.9	337.7	4	130.1	337.7	4	337.7	337.7

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to modifications in support of partial funding for four KC-130J aircraft in the Block 8.1/LAIRCM Configuration.

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost and Schedule Variance Explanations

None

General Contract Variance Explanation

Schedule variance is not reported for this contract, because it is not required for FPIF contracts.

Cost variance is not reported for this contract, because it is not required for FPIF contracts.

Notes

This is the first time this contract is being reported.

FYOC D.O. 7028 is an undefinitized contract for the procurement of KC-130J aircraft.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	54	54	111	48.65%
Total Program Quantity Delivered	54	54	111	48.65%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	11028.3	Years Appropriated	23
Expended to Date	4282.9	Percent Years Appropriated	76.67%
Percent Expended	38.84%	Appropriated to Date	5234.8
Total Funding Years	30	Percent Appropriated	47.47%

The above data is current as of March 11, 2019.

Notes

On February 5, 2018 a requirements letter was signed by Deputy Commandant for Aviation to increase the United States Marine Corps (USMC) warfighter requirement. The Program of Record (POR) increased from 104 to 111 aircraft consisting of 86 USMC and 25 United States Navy (USN) aircraft.

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	January 29, 2019
Source of Estimate:	POE
Quantity to Sustain:	111
Unit of Measure:	Aircraft
Service Life per Unit:	40.00 Years
Fiscal Years in Service:	FY 2001 - FY 2070

This is the eighth 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 2017 was used to establish the KC-130J baseline. Projections based on the historical costs in ATMSR provide the majority of the out-year estimates. The variable Flying Hour Program and Engine Sustainment estimates are based on the most recent pricing and reliability data available.

The total aircraft procurement of 111 includes the maximum Program Aircraft Authorized (PAA) of 108 and three test aircraft. The PAA includes 51 USMC Active aircraft at three squadrons, 32 USMC Reserve aircraft at two squadrons, 24 Navy Reserve aircraft at five squadrons, and one aircraft ("Fat Albert") to support the Blue Angels.

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	2.319	2.319
Unit Operations	1.463	1.226
Maintenance	4.363	1.869
Sustaining Support	0.260	0.124
Continuing System Improvements	0.651	0.293
Indirect Support	0.794	0.794
Other	--	--
Total	9.850	6.625

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	41350.7	27813.3
Then Year	77520.4	N/A	76809.7	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 4,198 years. $41,350.7M / 4,198 years = $9.850M/year.

The Total Operational Aircraft Years is calculated by summing the annual total active aircraft constrained by the maximum PAA excluding the three test wing aircraft (108 aircraft maximum). The primary inputs for this are the Aircraft Program Data File produced by Office of the Chief of Naval Operations (N98) and the FY 2020 PB procurement profile.

O&S Cost Variance		
Category	**BY 2010 $M**	**Change Explanations**
Prior SAR Total O&S Estimates - Dec 2017 SAR	33978.1	
Programmatic/Planning Factors	3568.5	Updated procurement schedule per FY 2020 PB, adding seven United States Marine Corp (USMC) aircraft and shifting United States Navy (USN) aircraft outside the Future Years Defense Plan. Increased USN Flight Hours to 60/aircraft/month. Manpower update to account for additional aircraft to USMC squadrons and the current squadron plans for USN.
Cost Estimating Methodology	3331.6	AVDLR and Aviation Fleet Maintenance updated using three year post-Material Support Date pricing and reliability. Engine Sustainment updated with current contract pricing and updated removal/repair quantity assumptions. General Inflation Index utilized for deflating actuals.
Cost Data Update	333.7	Updated historical cost information to include FY 2016 - FY 2017 actuals. Updated to current OSD inflation indices.
Labor Rate	-183.5	Updated with FY 2019 military rates.
Energy Rate	322.3	Updated to FY 2020 PB fuel rates and inflation guidance.
Technical Input	0.0	
Other	0.0	
Total Changes	7372.6	
Current Estimate	41350.7	

Disposal Estimate Details

Date of Estimate: January 16, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2010 $M): 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.