Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-212

V-22 Osprey Joint Services Advanced Vertical Lift Aircraft (V-22)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

V-22 Osprey Joint Services Advanced Vertical Lift Aircraft (V-22)

DoD Component

Navy

Joint Participants

USMC; USN; USSOCOM; USAF

Responsible Office

Responsible Office

Col Gregory Masiello
Program Executive Office (PMA-275)
Air, Anti-Submarine Warfare, Assault & Special Mission Programs
47123 Buse Road Unit #IPT
Patuxent River, MD 20670-1547
greg.masiello@navy.mil

Phone 301-757-5161
Fax 301-757-7558
DSN Phone 757-5161
DSN Fax 757-7558

Date Assigned August 20, 2009

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated September 28, 2005

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 31, 2011

Mission and Description

The V-22 Joint Osprey Program is charged by the DoD with developing, testing, evaluating, procuring, fielding and supporting a tilt rotor, Vertical/Short Takeoff and Landing (V/STOL) aircraft for Joint Service application. The Navy was designated the Executive Agent with support from the United States Air Force (USAF) in the V-22 Joint Program Office located at the Naval Air Systems Command Headquarters, Naval Air Station Patuxent River, MD. The V-22 Program is designed to provide an aircraft to meet the amphibious/vertical assault needs of the United States Marine Corps (USMC), the strike rescue needs of the Navy, and the special operations needs of the USAF and United States Special Operations Command (USSOCOM). The MV-22 variant is replacing the CH-46E in the Marine Corps and will supplement the H-60 in the Navy. The CV-22 variant provides a new capability and augments the MC-130 in the USAF/USSOCOM inventory for special operations infiltration, exfiltration, and resupply missions. The V-22 is capable of flying over 2,100 nautical miles (NM) with a single refueling, giving the Services the advantage of a V/STOL aircraft able to rapidly self-deploy to any location in the world.

Block Descriptions:
V-22 capability is being increased and fielded over time via a Block upgrade acquisition strategy. MV-22 Block A provides a “Safe and Operational Test and Training Asset” configuration that supports developmental and operational flight tests, as well as fleet training. MV-22 Block B provides for correction of previously identified deficiencies and suitability improvements. MV-22 Block C provides mission enhancements, primarily in the areas of environmental control systems upgrades and mission systems improvements. Block 0/10 is a CV-unique configuration including radar and electronic countermeasures upgrades. Block 20 will provide an enhanced CV-unique configuration with communications and aircraft system performance upgrades.

Executive Summary

The V-22 Osprey continues to meet all Key Performance Parameters and excel operationally as it matures into its lifecycle. Across the MV/CV community, squadrons are currently deployed either shipboard or in support of Operation Enduring Freedom (OEF) and National Mission Tasking. During 2012, the first west coast squadron operationally deployed and the first overseas squadron stood up in Okinawa, Japan. The two services now have numerous consecutive and highly-successful deployments to their credit, and the V-22 platform continues to be in high demand to meet operational needs. As of March 1, 2013 the combined MV/CV fleet was at 201 aircraft and had flown more than 174,000 flight hours.

As the platform continues to excel operationally, the program has worked aggressively to improve readiness and reduce operating costs with positive results. The FY 2012 mission capable (MC) rate improved 8% over FY 2011. Costs continued to decrease as MV-22 FY 2012 cost per flight hour (CPFH) finished 6% below the FY 2011 CPFH. Since 2010, the Program has executed to the plan put in place in 2009; the MC rate has risen 28% and the MV-22 CPFH decreased 18.3%. These improvements are being achieved through team execution of a comprehensive plan which has included reliability and maintainability improvements, maintenance concept changes, standup of additional repair capability, improved repair turnaround times, repair price reductions, increased engine time-on-wing (TOW) and contract strategy changes.

Program production is at its peak and during the last calendar year, industry delivered 31 Marine and 8 Air Force V-22s (new Block C/20 configuration respectively). On December 28, 2012, the Program awarded a contract modification to Bell-Boeing for production of 21 additional aircraft; this contract modification included agreed-to terms and prices that, upon Congressional authorization and appropriation will allow definitization as a multi-year procurement (MYP) contract for aircraft across FY 2013-FY 2017. When definitized, this second MYP will save approximately $1B compared to single-year procurements. Program budgets for these years reflect the significant savings of the multi-year contract approach.

Development efforts continue to progress well. Follow-on test and evaluation for fielded aircraft continues to emphasize operational envelope expansion, system improvements/upgrades, and changes to increase component TOW. A biannual software update was fielded in January 2012 bringing increased performance in gross weight capability, improved handling qualities and enhanced built-in test operations. Additionally, developmental testing for expansion of fleet mission capabilities was conducted aboard two different class ships, the USS Mesa Verde (LPD-19) and USS George H.W. Bush (CVN-77).

Several tiltrotor aircraft unique capabilities were demonstrated in 2012. A V-22 performed its first at-sea landing in a seabasing logistics replenishment role aboard a Military Sealift Command dry cargo / ammunition ship. A second Osprey self-deployed from New Mexico to meet an Ohio-class ballistic missile submarine in the Atlantic and successfully performed a demo of a personnel medical evacuation. This non-stop round-trip of 2600NM was completed in 11.5 hours with three aerial re-fuelings. Certification of V-22 carrier operations commenced in February 2012, and by year end, V-22s had landed on five of ten CVNs with landing certifications completed on three. At least two more will be accomplished in 2013.

Work continues to expand the business base. The Program hosted a successful Embassy Day attended by over 50 foreign nationals representing 14 countries in May, and is currently supporting procurement interests from Israel and the United Arab Emirates as well as formal inquiries from other countries, including Canada, Singapore, United Kingdom, Qatar and India. Supplementing the international activity, the Program continues to support the Navy’s C-2 Carrier Onboard Delivery recapitalization requirement. In 2013, the in-service fleet will grow to 238 Ospreys operating worldwide, the Air Force will deliver the first overseas-based CVs to the squadron at Royal Air Force (RAF) Mildenhall United Kingdom (UK), Marine Helicopter Squadron One (HMX-1) will begin transition of greenside assets to MV-22Bs, the first reserve Vertical Marine Tilt Rotor (VMM) squadron will stand up and VMM-262 will

arrive in Okinawa as the second squadron home based in the Asia-Pacific region.

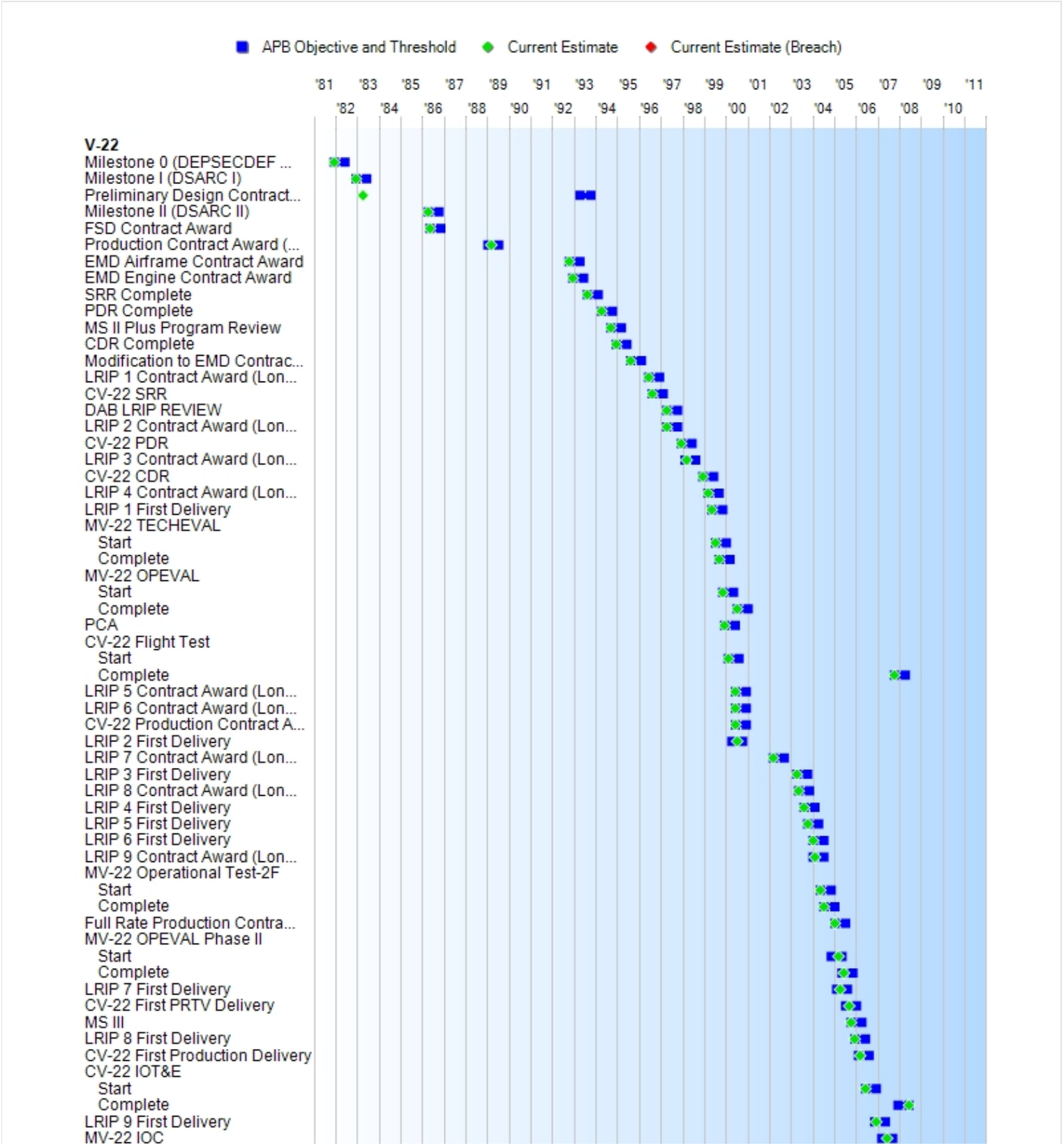
There are no significant software-related issues with this program at this time.

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


APB Objective and Threshold
Current Estimate
Current Estimate (Breach)
'81 '82 '83 '84 '85 '86 '87 '88 '89 '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11
V-22
Milestone 0 (DEPSECDEF ...
Milestone I (DSARC I)
Preliminary Design Contract...
Milestone II (DSARC II)
FSD Contract Award
Production Contract Award (...
EMD Airframe Contract Award
EMD Engine Contract Award
SRR Complete
PDR Complete
MS II Plus Program Review
CDR Complete
Modification to EMD Contrac...
LRIP 1 Contract Award (Lon...
CV-22 SRR
DAB LRIP REVIEW
LRIP 2 Contract Award (Lon...
CV-22 PDR
LRIP 3 Contract Award (Lon...
CV-22 CDR
LRIP 4 Contract Award (Lon...
LRIP 1 First Delivery
MV-22 TECHEVAL
Start
Complete
MV-22 OPEVAL
Start
Complete
PCA
CV-22 Flight Test
Start
Complete
LRIP 5 Contract Award (Lon...
LRIP 6 Contract Award (Lon...
CV-22 Production Contract A...
LRIP 2 First Delivery
LRIP 7 Contract Award (Lon...
LRIP 3 First Delivery
LRIP 8 Contract Award (Lon...
LRIP 4 First Delivery
LRIP 5 First Delivery
LRIP 6 First Delivery
LRIP 9 Contract Award (Lon...
MV-22 Operational Test-2F
Start
Complete
Full Rate Production Contra...
MV-22 OPEVAL Phase II
Start
Complete
LRIP 7 First Delivery
CV-22 First PRTV Delivery
MS III
LRIP 8 First Delivery
CV-22 First Production Delivery
CV-22 IOT&E
Start
Complete
LRIP 9 First Delivery
MV-22 IOC

Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone 0 (DEPSECDEF MEMO)	DEC 1981	DEC 1981	JUN 1982	DEC 1981
Milestone I (DSARC I)	DEC 1982	DEC 1982	JUN 1983	DEC 1982
Preliminary Design Contract Award	APR 1993	APR 1993	OCT 1993	APR 1983
Milestone II (DSARC II)	APR 1986	APR 1986	OCT 1986	APR 1986
FSD Contract Award	MAY 1986	MAY 1986	NOV 1986	MAY 1986
Production Contract Award (Long Lead AAC)	JAN 1989	JAN 1989	JUL 1989	MAR 1989
EMD Airframe Contract Award	OCT 1992	OCT 1992	APR 1993	OCT 1992
EMD Engine Contract Award	DEC 1992	DEC 1992	JUN 1993	DEC 1992
SRR Complete	AUG 1993	AUG 1993	FEB 1994	AUG 1993
PDR Complete	APR 1994	APR 1994	OCT 1994	APR 1994
MS II Plus Program Review	SEP 1994	SEP 1994	MAR 1995	SEP 1994
CDR Complete	DEC 1994	DEC 1994	JUN 1995	DEC 1994
Modification to EMD Contract to Include CV-22 Efforts	AUG 1995	AUG 1995	FEB 1996	AUG 1995
LRIP 1 Contract Award (Long lead $)	JUN 1996	JUN 1996	DEC 1996	JUN 1996
CV-22 SRR	AUG 1996	AUG 1996	FEB 1997	AUG 1996
DAB LRIP REVIEW	APR 1997	APR 1997	OCT 1997	APR 1997
LRIP 2 Contract Award (Long lead $)	APR 1997	APR 1997	OCT 1997	APR 1997
CV-22 PDR	DEC 1997	DEC 1997	JUN 1998	DEC 1997
LRIP 3 Contract Award (Long Lead $)	FEB 1998	FEB 1998	AUG 1998	MAR 1998
CV-22 CDR	DEC 1998	DEC 1998	JUN 1999	DEC 1998
LRIP 4 Contract Award (Long Lead $)	MAR 1999	MAR 1999	SEP 1999	MAR 1999
LRIP 1 First Delivery	MAY 1999	MAY 1999	NOV 1999	MAY 1999
MV-22 TECHEVAL				
Start	JUL 1999	JUL 1999	JAN 2000	JUL 1999
Complete	SEP 1999	SEP 1999	MAR 2000	SEP 1999
MV-22 OPEVAL				
Start	NOV 1999	NOV 1999	MAY 2000	NOV 1999
Complete	JUL 2000	JUL 2000	JAN 2001	JUL 2000
PCA	DEC 1999	DEC 1999	JUN 2000	DEC 1999
CV-22 Flight Test				
Start	FEB 2000	FEB 2000	AUG 2000	FEB 2000
Complete	OCT 2007	OCT 2007	APR 2008	OCT 2007
LRIP 5 Contract Award (Long Lead $)	JUN 2000	JUN 2000	DEC 2000	JUN 2000
LRIP 6 Contract Award (Long Lead $)	JUN 2000	JUN 2000	DEC 2000	JUN 2000
CV-22 Production Contract Award (Long lead $)	JUN 2000	JUN 2000	DEC 2000	JUN 2000

LRIP 2 First Delivery	APR 2000	APR 2000	OCT 2000	JUL 2000
LRIP 7 Contract Award (Long Lead $)	MAR 2002	MAR 2002	SEP 2002	MAR 2002
LRIP 3 First Delivery	APR 2003	APR 2003	OCT 2003	APR 2003
LRIP 8 Contract Award (Long Lead $)	MAY 2003	MAY 2003	NOV 2003	MAY 2003
LRIP 4 First Delivery	AUG 2003	AUG 2003	FEB 2004	AUG 2003
LRIP 5 First Delivery	OCT 2003	OCT 2003	APR 2004	OCT 2003
LRIP 6 First Delivery	JAN 2004	JAN 2004	JUL 2004	JAN 2004
LRIP 9 Contract Award (Long Lead $)	JAN 2004	JAN 2004	JUL 2004	FEB 2004
MV-22 Operational Test-2F				
Start	MAY 2004	MAY 2004	NOV 2004	MAY 2004
Complete	JUL 2004	JUL 2004	JAN 2005	JUL 2004
Full Rate Production Contract Award (Long lead $)	JAN 2005	JAN 2005	JUL 2005	JAN 2005
MV-22 OPEVAL Phase II				
Start	NOV 2004	NOV 2004	MAY 2005	MAR 2005
Complete	MAY 2005	MAY 2005	NOV 2005	JUN 2005
LRIP 7 First Delivery	FEB 2005	FEB 2005	AUG 2005	APR 2005
CV-22 First PRTV Delivery	JUL 2005	JUL 2005	JAN 2006	SEP 2005
MS III	OCT 2005	OCT 2005	APR 2006	OCT 2005
LRIP 8 First Delivery	DEC 2005	DEC 2005	JUN 2006	DEC 2005
CV-22 First Production Delivery	FEB 2006	FEB 2006	AUG 2006	MAR 2006
CV-22 IOT&E				
Start	JUN 2006	JUN 2006	DEC 2006	JUN 2006
Complete	DEC 2007	DEC 2007	JUN 2008	JUN 2008
LRIP 9 First Delivery	NOV 2006	NOV 2006	MAY 2007	DEC 2006
MV-22 IOC	MAR 2007	MAR 2007	SEP 2007	JUN 2007
CV IOC	OCT 2009	OCT 2009	APR 2010	MAR 2009
GSD	DEC 2010	DEC 2010	JUN 2011	APR 2010

Acronyms And Abbreviations

AAC - Advanced Acquisition Contract
CDR - Critical Design Review
DAB - Defense Acquisition Board
DEPSECDEF - Deputy Secretary of Defense
DSARC - Defense Systems Acquisition Review Council
EMD - Engineering Manufacturing Development
FSD - Full Scale Development
GSD - Government Support Date
IOC - Initial Operational Capability
IOT&E - Initial Operational Test and Evaluation
LRIP - Low Rate Initial Production
MS - Milestone
OPEVAL - Operational Evaluation
PCA - Physical Configuration Audit
PDR - Program Design Review
PRTV - Production Representative Test Vehicle
SRR - System Requirements Review
TECHEVAL - Technical Evaluation

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate	
MV-22						
Interoperability	Satisfy all top level IERs	Satisfy all top level IERs	Satisfy all top level IERS designated as critical	Satisfy all top level IERs designated as critical	Satisfy all top level IERs designated as critical	
Cruise Speed (kts)	270	270	240	255	281	
Mission Radius (nm)						
Land Trooplift	200X1	200X1	200X1	210x1	218x1	
Land External	110X1	110X1	50X1	69x1	52x1	
Sea Trooplift	110X2	110X2	50X2	53x2	98x2	
Sea External	110X1	110X1	50X1	89x1	112x1	
Amphibious Pre-Assault/Raid Ops (nm)	200X1	200X1	200X1	230x1	315x1	
Payload						
Troops	24	24	24	24	24	
External Lift (lbs)	15,000	15,000	10,000	10,000	12,500	
Aerial Refuel Capable	yes	yes	yes	yes	yes	
Self-Deployment (nm)	2100 w/no refuel	2100 w/no refuel	2100 w/1 refuel	2660 w/1 ariel refuel	2229 w/1 aerial refuel	
Shipboard Compatible	yes	yes	yes	yes	yes	
V/STOL Capable	yes	yes	yes	yes	yes	
Survivability (mm API @90%vel)	14.5	14.5	12.7	classified	classified	
Reliability						
MFHBF (log)	>=1.2	>=1.2	>=0.9	1.3	1.3	(Ch-1)
MFHBA	17 Hrs	17 Hrs	17 Hrs	28.2	28.2	(Ch-1)
CV-22						
Interoperability	Satisfy all top level IERs	Satisfy all top level IERs	Satisfy all top level IERs designated as critical	Satisfy all top level IERs designated as critical	Satisfy all top level IERs designated as critical	
Cruise Speed (kts)	270	270	230	264	256	
Mission Radius (nm)	750	750	500	538	558	
Payload - Troops	24	24	18	18	18	
Aerial Refuel Capable	yes	yes	yes	yes	yes	
Self-Deployment (nm)	2100 w/0 aerial refuel	2100 w/0 aerial refuel	2100 w/1 aerial refuel	2144 w/1 aerial refuel	2144 w/1 aerial refuel	

Shipboard Compatible	yes	yes	yes	yes	yes	
Operational Environment	100' TF/TA, Day/Night, VMC/IMC	100' TF/TA, Day/Night, VMC/IMC	300' TF/TA, Day/Night, VMC/IMC	100' TF/TA, Day/Night, VMC/IMC	100' TF/TA, Day/Night, VMC/IMC	
Precision Navigation (diameter @ MAX Combat Radius)	Locate LZ W/IN 1 Rotor	Locate LZ W/IN 1 Rotor	Locate LZ W/IN 2X Rotor	Locate LZ W/IN 2X Rotor	Locate LZ W/IN 2X Rotor	
Operational Enviroment						
DECM	SIRFC w/RF Jamming DIRCM	SIRFC w/RF Jamming DIRCM	SIRFC w/RWR, MW, CMDS	SIRFC w/RF, Jamming DIRCM	SIRFC w/RF, Jamming DIRCM	
MMR (TF/TA)	100 FT	100 FT	300 FT	100FT	100 FT	
Reliability						
MFHBF (LOG)	>=1.2	>=1.2	>=0.9	1.4	1.4	(Ch-2)
MFHBA	15 Hrs	15 Hrs	15 Hrs	23.0	23.0	(Ch-2)

Requirements Source: Capability Production Document (CPD) dated September 1, 2010

Acronyms And Abbreviations

API - Armor Piercing Incendiary
CMDS - Counter-Measures Dispenser System
DECM - Defensive Electronic Countermeasure
DIRCM - Directed Infrared Countermeasures
Ft - Feet
Hrs - Hours
IERs - Information Exchange Requirements
Kts - Knots
Lbs - Pounds
LZ w/IN - Landing Zone Within
MAX - Maximum
MFHBA - Mean Flight Hours Between Aborts
MFHBF - Mean Flight Hours Between Failures
mm - Millimeter
MMR - Multi-Mode Radar
MW - Missile Warning
nm - Nautical Miles
SIRFC - Suite of Integrated Radio Frequency Countermeasures
TF/TA - Terrain Following/Terrain Avoidance
V/STOL - Vertical/Short Takeoff and Landing
vel - Velocity
VMC/IMC - Visual Meteorological Conditions/Instrument Meteorological Conditions
w/RF - with Radio Frequency
w/RWR - with Radar Warning Receiver

Change Explanations

(Ch-1) The Current Estimate for MV-22 Mean Flight Hours Between Failures (MFHBF) has changed from >=1.4 to 1.3 and the Current Estimate for MV-22 Mean Flight Hours Between Aborts (MFHBA) has changed from 28 to 28.2 to reflect updated calculations from the V-22 Failure Reporting, Analysis and Corrective Action System database. This data is based on the Block B and C Aircraft operating in the Vertical Marine Medium Tilt-Rotor Squadron's through October 2012 with 88,839.5 flight hours.

(Ch-2) The Current Estimate for CV-22 MFHBF changed from >=1.4 to 1.4 and the Current Estimate for CV-22 MFHBA has changed from .>=25 to 23 to reflect updated calculations from the V-22 Failure Reporting, Analysis and Corrective Action System database. The data is based on operational aircraft at Hurlburt, Cannon and Kirtland through September 2012 with 22,180.7 flight hours.

Track To Budget

RDT&E				
APPN 1319	BA 05	PE 0604262N	(Navy)	
	Project 1425	USMC MV-22 Development and Test Activities		
APPN 3600	BA 05	PE 0401318F	(Air Force)	
	Project 654103	USAF CV-22 Development and Test Activities		
APPN 0400	BA 07	PE 1160403BB	(DoD)	
	Project SF200	Special Operations Command Development and Test Activities (FY 2014-FY 2015)	(Shared)	
APPN 0400	BA 07	PE 1160404BB	(DoD)	
	Project SF200			(Sunk)
	1985 Sunk (funded in prior years only)			
APPN 0400	BA 07	PE 1160421BB	(DoD)	
	Project SF200	Special Operations Command Development and Test Activities (funded through FY 2013)		(Sunk)

Procurement				
APPN 1506	BA 01	PE 0206121M	(Navy)	
	ICN 0164	USMC MV-22 Production Aircraft and Support		
	Spares are separately entered.			
APPN 1506	BA 06	PE 0206121M	(Navy)	
	ICN 0605	USMC MV-22 Initial Sparing Requirements	(Shared)	

APPN 3010	BA 06	PE 0401318F	(Air Force)
	ICN 000999	USAF CV-22 Initial Requirements	(Shared)
APPN 3010	BA 04	PE 0401318F	(Air Force)
	ICN V022A0	USAF CV-22 Production Aircraft and Support -	
	Spares are separately entered.		
APPN 0300	BA 02	PE 1160444BB	(DoD)
	ICN 1000CV2200	Special Operations Command Production Aircraft and Support	(Shared)
	Does not include retrofit funding.		

MILCON

APPN 1205	BA 01	PE 0204696N	(Navy)
	Project 1205	USMC MV-22 Facilites Support	
APPN 0500	BA 01	PE 1140494BB	(DoD)
	Project 0500	Special Operations Command Facilities Support	

Multiple MILCON projects are associated with each program element and are too numerous to list.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2005 $M			BY2005 $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	11446.5	11446.5	12591.2	12001.7	9891.7	9891.7	10538.2
Procurement	38562.8	38562.8	42419.1	38517.0	43099.3	43099.3	44410.8
Flyaway	31629.3	--	--	31154.1	35627.8	--	36135.9
Recurring	30407.1	--	--	29673.9	34358.6	--	34540.2
Non Recurring	1222.2	--	--	1480.2	1269.2	--	1595.7
Support	6933.5	--	--	7362.9	7471.5	--	8274.9
Other Support	4954.9	--	--	5490.9	5312.3	--	6221.9
Initial Spares	1978.6	--	--	1872.0	2159.2	--	2053.0
MILCON	241.1	241.1	265.2	102.8	262.4	262.4	112.8
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	50250.4	50250.4	N/A	50621.5	53253.4	53253.4	55061.8

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	2	2	2
Procurement	456	456	457
Total	458	458	459

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2014 President's Budget / December 2012 SAR (TY$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	9865.9	84.2	92.7	111.6	87.4	69.4	67.6	159.4	10538.2
Procurement	27931.1	2001.7	1851.1	1603.8	1535.7	1459.5	435.2	7592.7	44410.8
MILCON	96.8	10.6	0.0	5.4	0.0	0.0	0.0	0.0	112.8
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	37893.8	2096.5	1943.8	1720.8	1623.1	1528.9	502.8	7752.1	55061.8
PB 2013 Total	38012.5	2086.7	1963.3	1692.2	1587.1	1561.6	3754.2	2836.9	53494.5
Delta	-118.7	9.8	-19.5	28.6	36.0	-32.7	-3251.4	4915.2	1567.3

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	287	21	21	19	19	18	4	68	457
PB 2014 Total	2	287	21	21	19	19	18	4	68	459
PB 2013 Total	2	287	21	21	19	19	18	38	34	459
Delta	0	0	0	0	0	0	0	-34	34	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

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
1982	--	--	--	--	--	--	0.7
1983	--	--	--	--	--	--	34.4
1984	--	--	--	--	--	--	83.1
1985	--	--	--	--	--	--	169.5
1986	--	--	--	--	--	--	525.1
1987	--	--	--	--	--	--	421.7
1988	--	--	--	--	--	--	404.8
1989	--	--	--	--	--	--	269.9
1990	--	--	--	--	--	--	204.2
1991	--	--	--	--	--	--	212.2
1992	--	--	--	--	--	--	758.0
1993	--	--	--	--	--	--	713.3
1994	--	--	--	--	--	--	8.7
1995	--	--	--	--	--	--	451.8
1996	--	--	--	--	--	--	716.4
1997	--	--	--	--	--	--	605.5
1998	--	--	--	--	--	--	487.5
1999	--	--	--	--	--	--	335.8
2000	--	--	--	--	--	--	175.9
2001	--	--	--	--	--	--	217.9
2002	--	--	--	--	--	--	391.6
2003	--	--	--	--	--	--	387.4
2004	--	--	--	--	--	--	357.3
2005	--	--	--	--	--	--	246.9
2006	--	--	--	--	--	--	192.2
2007	--	--	--	--	--	--	251.6

2008	--	--	--	--	--	--	118.0
2009	--	--	--	--	--	--	65.7
2010	--	--	--	--	--	--	76.9
2011	--	--	--	--	--	--	40.3
2012	--	--	--	--	--	--	71.9
2013	--	--	--	--	--	--	54.4
2014	--	--	--	--	--	--	43.1
2015	--	--	--	--	--	--	69.8
2016	--	--	--	--	--	--	60.7
2017	--	--	--	--	--	--	53.3
2018	--	--	--	--	--	--	53.0
2019	--	--	--	--	--	--	27.5
2020	--	--	--	--	--	--	18.0
2021	--	--	--	--	--	--	10.8
2022	--	--	--	--	--	--	6.7
2023	--	--	--	--	--	--	4.6
2024	--	--	--	--	--	--	0.9
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**9399.0**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1982	--	--	--	--	--	--	1.2
1983	--	--	--	--	--	--	56.7
1984	--	--	--	--	--	--	132.1
1985	--	--	--	--	--	--	261.3
1986	--	--	--	--	--	--	786.9
1987	--	--	--	--	--	--	613.8
1988	--	--	--	--	--	--	570.1
1989	--	--	--	--	--	--	364.7
1990	--	--	--	--	--	--	265.1
1991	--	--	--	--	--	--	266.0
1992	--	--	--	--	--	--	923.2
1993	--	--	--	--	--	--	849.1
1994	--	--	--	--	--	--	10.2
1995	--	--	--	--	--	--	517.9
1996	--	--	--	--	--	--	807.6
1997	--	--	--	--	--	--	674.3
1998	--	--	--	--	--	--	538.5
1999	--	--	--	--	--	--	366.6
2000	--	--	--	--	--	--	189.3
2001	--	--	--	--	--	--	231.3
2002	--	--	--	--	--	--	411.5
2003	--	--	--	--	--	--	401.2
2004	--	--	--	--	--	--	360.0
2005	--	--	--	--	--	--	242.4
2006	--	--	--	--	--	--	183.0
2007	--	--	--	--	--	--	233.8
2008	--	--	--	--	--	--	107.7
2009	--	--	--	--	--	--	59.2
2010	--	--	--	--	--	--	68.3

2011	--	--	--	--	--	--	34.9
2012	--	--	--	--	--	--	61.0
2013	--	--	--	--	--	--	45.3
2014	--	--	--	--	--	--	35.2
2015	--	--	--	--	--	--	55.9
2016	--	--	--	--	--	--	47.7
2017	--	--	--	--	--	--	41.1
2018	--	--	--	--	--	--	40.1
2019	--	--	--	--	--	--	20.4
2020	--	--	--	--	--	--	13.1
2021	--	--	--	--	--	--	7.7
2022	--	--	--	--	--	--	4.7
2023	--	--	--	--	--	--	3.2
2024	--	--	--	--	--	--	0.6
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**10903.9**

FY 1983 dollars reflect $29.9M of Army funds (PE 0604222A). Funding totals include that received for Overseas Contingency Operations (OCO).

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
1985	--	--	--	--	--	--	0.8
1986	--	--	--	--	--	--	2.3
1987	--	--	--	--	--	--	3.0
1988	--	--	--	--	--	--	--
1989	--	--	--	--	--	--	--
1990	--	--	--	--	--	--	--
1991	--	--	--	--	--	--	--
1992	--	--	--	--	--	--	--
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	--
1995	--	--	--	--	--	--	--
1996	--	--	--	--	--	--	--
1997	--	--	--	--	--	--	--
1998	--	--	--	--	--	--	--
1999	--	--	--	--	--	--	--
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	--
2002	--	--	--	--	--	--	145.5
2003	--	--	--	--	--	--	5.9
2004	--	--	--	--	--	--	52.7
2005	--	--	--	--	--	--	14.2
2006	--	--	--	--	--	--	30.5
2007	--	--	--	--	--	--	12.8
2008	--	--	--	--	--	--	22.0
2009	--	--	--	--	--	--	16.1
2010	--	--	--	--	--	--	15.5
2011	--	--	--	--	--	--	17.6
2012	--	--	--	--	--	--	12.8
2013	--	--	--	--	--	--	28.0

2014	--	--	--	--	--	--	46.7
2015	--	--	--	--	--	--	41.6
2016	--	--	--	--	--	--	26.7
2017	--	--	--	--	--	--	16.1
2018	--	--	--	--	--	--	14.6
2019	--	--	--	--	--	--	17.5
2020	--	--	--	--	--	--	17.8
2021	--	--	--	--	--	--	18.2
2022	--	--	--	--	--	--	18.5
2023	--	--	--	--	--	--	18.9
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**616.3**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1985	--	--	--	--	--	--	1.2
1986	--	--	--	--	--	--	3.5
1987	--	--	--	--	--	--	4.3
1988	--	--	--	--	--	--	--
1989	--	--	--	--	--	--	--
1990	--	--	--	--	--	--	--
1991	--	--	--	--	--	--	--
1992	--	--	--	--	--	--	--
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	--
1995	--	--	--	--	--	--	--
1996	--	--	--	--	--	--	--
1997	--	--	--	--	--	--	--
1998	--	--	--	--	--	--	--
1999	--	--	--	--	--	--	--
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	--
2002	--	--	--	--	--	--	153.0
2003	--	--	--	--	--	--	6.1
2004	--	--	--	--	--	--	53.3
2005	--	--	--	--	--	--	14.0
2006	--	--	--	--	--	--	29.2
2007	--	--	--	--	--	--	11.9
2008	--	--	--	--	--	--	20.1
2009	--	--	--	--	--	--	14.5
2010	--	--	--	--	--	--	13.8
2011	--	--	--	--	--	--	15.4
2012	--	--	--	--	--	--	11.0
2013	--	--	--	--	--	--	23.5

2014	--	--	--	--	--	--	38.4
2015	--	--	--	--	--	--	33.6
2016	--	--	--	--	--	--	21.1
2017	--	--	--	--	--	--	12.5
2018	--	--	--	--	--	--	11.1
2019	--	--	--	--	--	--	13.1
2020	--	--	--	--	--	--	13.1
2021	--	--	--	--	--	--	13.1
2022	--	--	--	--	--	--	13.1
2023	--	--	--	--	--	--	13.1
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**557.0**

The FY 2002 Appropriations Act provided funding for two CV Production Representative Test Vehicles.

Annual Funding TY$
0400 | RDT&E | Research, Development, Test, and Evaluation, 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
1990	--	--	--	--	--	--	36.1
1991	--	--	--	--	--	--	8.0
1992	--	--	--	--	--	--	15.0
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	14.7
1995	--	--	--	--	--	--	--
1996	--	--	--	--	--	--	--
1997	--	--	--	--	--	--	--
1998	--	--	--	--	--	--	--
1999	--	--	--	--	--	--	--
2000	--	--	--	--	--	--	33.5
2001	--	--	--	--	--	--	40.1
2002	--	--	--	--	--	--	104.1
2003	--	--	--	--	--	--	32.2
2004	--	--	--	--	--	--	68.4
2005	--	--	--	--	--	--	53.1
2006	--	--	--	--	--	--	23.7
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	21.9
2009	--	--	--	--	--	--	30.5
2010	--	--	--	--	--	--	12.2
2011	--	--	--	--	--	--	14.0
2012	--	--	--	--	--	--	10.5
2013	--	--	--	--	--	--	1.8
2014	--	--	--	--	--	--	2.9
2015	--	--	--	--	--	--	0.2
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**522.9**

Annual Funding BY$
0400 | RDT&E | Research, Development, Test, and Evaluation, Defense-Wide

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1990	--	--	--	--	--	--	46.9
1991	--	--	--	--	--	--	10.0
1992	--	--	--	--	--	--	18.2
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	17.2
1995	--	--	--	--	--	--	--
1996	--	--	--	--	--	--	--
1997	--	--	--	--	--	--	--
1998	--	--	--	--	--	--	--
1999	--	--	--	--	--	--	--
2000	--	--	--	--	--	--	36.0
2001	--	--	--	--	--	--	42.5
2002	--	--	--	--	--	--	109.3
2003	--	--	--	--	--	--	33.3
2004	--	--	--	--	--	--	69.1
2005	--	--	--	--	--	--	52.1
2006	--	--	--	--	--	--	22.6
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	20.0
2009	--	--	--	--	--	--	27.5
2010	--	--	--	--	--	--	10.8
2011	--	--	--	--	--	--	12.2
2012	--	--	--	--	--	--	9.0
2013	--	--	--	--	--	--	1.5
2014	--	--	--	--	--	--	2.4
2015	--	--	--	--	--	--	0.2
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**540.8**

Annual Funding TY$
1506 | Procurement | Aircraft Procurement, Navy

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
1989	--	--	--	--	--	231.4	231.4
1990	--	--	--	--	--	--	--
1991	--	--	--	--	--	--	--
1992	--	--	--	--	--	--	--
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	--
1995	--	--	--	--	--	--	--
1996	--	41.1	--	--	41.1	--	41.1
1997	5	552.1	--	25.0	577.1	132.3	709.4
1998	7	622.1	--	20.4	642.5	66.2	708.7
1999	7	561.4	--	18.0	579.4	104.1	683.5
2000	11	768.5	--	31.0	799.5	187.8	987.3
2001	9	753.1	--	99.2	852.3	157.9	1010.2
2002	9	660.6	--	21.6	682.2	204.6	886.8
2003	11	844.2	--	109.4	953.6	129.6	1083.2
2004	9	651.9	--	59.9	711.8	167.5	879.3
2005	8	584.4	--	115.8	700.2	321.8	1022.0
2006	12	868.2	--	146.4	1014.6	367.1	1381.7
2007	14	1129.2	--	222.8	1352.0	244.3	1596.3
2008	23	1656.8	--	153.3	1810.1	303.7	2113.8
2009	30	1857.0	--	70.6	1927.6	295.2	2222.8
2010	30	1866.0	--	70.1	1936.1	335.7	2271.8
2011	30	1876.0	--	11.2	1887.2	292.6	2179.8
2012	30	1938.5	--	83.1	2021.6	254.1	2275.7
2013	17	1293.6	--	15.8	1309.4	163.9	1473.3
2014	18	1267.5	--	19.8	1287.3	211.2	1498.5
2015	19	1350.9	--	14.5	1365.4	214.5	1579.9
2016	19	1364.5	--	7.6	1372.1	149.8	1521.9
2017	18	1283.6	--	7.6	1291.2	167.1	1458.3

2018	4	349.5	--	8.3	357.8	77.4	435.2
2019	16	1517.0	--	16.5	1533.5	170.6	1704.1
2020	16	1467.7	--	18.4	1486.1	238.7	1724.8
2021	18	1695.3	--	22.7	1718.0	282.5	2000.5
2022	18	1616.5	--	23.1	1639.6	459.7	2099.3
2023	--	--	--	--	--	64.0	64.0
Subtotal	**408**	**30437.2**	**--**	**1412.1**	**31849.3**	**5995.3**	**37844.6**

Annual Funding BY$
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1989	--	--	--	--	--	299.8	299.8
1990	--	--	--	--	--	--	--
1991	--	--	--	--	--	--	--
1992	--	--	--	--	--	--	--
1993	--	--	--	--	--	--	--
1994	--	--	--	--	--	--	--
1995	--	--	--	--	--	--	--
1996	--	45.8	--	--	45.8	--	45.8
1997	5	609.6	--	27.6	637.2	146.1	783.3
1998	7	679.0	--	22.3	701.3	72.3	773.6
1999	7	605.0	--	19.4	624.4	112.2	736.6
2000	11	817.4	--	33.0	850.4	199.7	1050.1
2001	9	791.5	--	104.3	895.8	166.0	1061.8
2002	9	685.6	--	22.4	708.0	212.4	920.4
2003	11	859.1	--	111.3	970.4	131.9	1102.3
2004	9	646.3	--	59.4	705.7	166.1	871.8
2005	8	563.5	--	111.7	675.2	310.3	985.5
2006	12	814.6	--	137.4	952.0	344.4	1296.4
2007	14	1035.3	--	204.3	1239.6	224.0	1463.6
2008	23	1496.5	--	138.5	1635.0	274.2	1909.2
2009	30	1653.7	--	62.9	1716.6	262.8	1979.4
2010	30	1624.6	--	61.0	1685.6	292.3	1977.9
2011	30	1595.1	--	9.5	1604.6	248.8	1853.4
2012	30	1616.7	--	69.3	1686.0	212.0	1898.0
2013	17	1058.5	--	12.9	1071.4	134.1	1205.5
2014	18	1017.8	--	15.9	1033.7	169.6	1203.3
2015	19	1064.5	--	11.4	1075.9	169.1	1245.0
2016	19	1055.2	--	5.9	1061.1	115.8	1176.9
2017	18	974.1	--	5.8	979.9	126.8	1106.7

2018	4	260.3	--	6.2	266.5	57.6	324.1
2019	16	1108.7	--	12.1	1120.8	124.7	1245.5
2020	16	1052.7	--	13.2	1065.9	171.2	1237.1
2021	18	1193.3	--	16.0	1209.3	198.8	1408.1
2022	18	1116.6	--	16.0	1132.6	317.5	1450.1
2023	--	--	--	--	--	43.4	43.4
Subtotal	**408**	**26041.0**	**--**	**1309.7**	**27350.7**	**5303.9**	**32654.6**

Funding totals include that received for Overseas Contingency Operations (OCO).

Cost Quantity Information
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2005 $M
1989	--	--
1990	--	--
1991	--	--
1992	--	--
1993	--	--
1994	--	--
1995	--	--
1996	--	--
1997	5	593.7
1998	7	675.2
1999	7	612.8
2000	11	800.2
2001	9	791.5
2002	9	722.7
2003	11	834.8
2004	9	670.4
2005	8	549.7
2006	12	803.9
2007	14	921.0
2008	23	1493.3
2009	30	1757.4
2010	30	1627.7
2011	30	1602.7
2012	30	1629.2
2013	17	985.5
2014	18	1099.5
2015	19	1075.5

2016	19	1051.2
2017	18	992.1
2018	4	279.6
2019	16	1037.0
2020	16	1042.5
2021	18	1192.9
2022	18	1199.0
2023	--	--
Subtotal	**408**	**26041.0**

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
1999	--	--	--	--	--	21.9	21.9
2000	--	--	--	19.5	19.5	21.3	40.8
2001	--	--	--	26.7	26.7	22.6	49.3
2002	--	--	--	--	--	--	--
2003	--	9.8	--	--	9.8	79.1	88.9
2004	2	147.6	--	--	147.6	42.0	189.6
2005	3	209.1	--	7.2	216.3	113.9	330.2
2006	2	136.6	--	18.6	155.2	94.1	249.3
2007	3	219.6	--	9.3	228.9	156.2	385.1
2008	10	659.4	--	7.0	666.4	272.4	938.8
2009	6	352.5	--	16.4	368.9	103.4	472.3
2010	5	314.3	--	18.8	333.1	240.0	573.1
2011	6	392.5	--	8.5	401.0	178.8	579.8
2012	5	332.0	--	4.0	336.0	62.6	398.6
2013	4	280.0	--	3.4	283.4	116.2	399.6
2014	3	204.6	--	2.1	206.7	56.0	262.7
2015	--	--	--	--	--	12.2	12.2
2016	--	--	--	--	--	6.0	6.0
Subtotal	**49**	**3258.0**	**--**	**141.5**	**3399.5**	**1598.7**	**4998.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1999	--	--	--	--	--	23.6	23.6
2000	--	--	--	20.7	20.7	22.6	43.3
2001	--	--	--	28.0	28.0	23.8	51.8
2002	--	--	--	--	--	--	--
2003	--	10.0	--	--	10.0	80.9	90.9
2004	2	147.0	--	--	147.0	41.8	188.8
2005	3	202.3	--	7.0	209.3	110.2	319.5
2006	2	128.7	--	17.5	146.2	88.8	235.0
2007	3	201.6	--	8.5	210.1	143.4	353.5
2008	10	595.7	--	6.3	602.0	246.1	848.1
2009	6	312.9	--	14.6	327.5	91.8	419.3
2010	5	273.4	--	16.4	289.8	208.7	498.5
2011	6	335.1	--	7.3	342.4	152.6	495.0
2012	5	277.9	--	3.3	281.2	52.5	333.7
2013	4	228.1	--	2.8	230.9	94.6	325.5
2014	3	163.5	--	1.7	165.2	44.8	210.0
2015	--	--	--	--	--	9.6	9.6
2016	--	--	--	--	--	4.6	4.6
Subtotal	**49**	**2876.2**	**--**	**134.1**	**3010.3**	**1440.4**	**4450.7**

Funding totals include that received for Overseas Contingency Operations (OCO).

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

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2005 $M
1999	--	--
2000	--	--
2001	--	--
2002	--	--
2003	--	--
2004	2	142.0
2005	3	206.8
2006	2	130.2
2007	3	185.2
2008	10	584.1
2009	6	337.3
2010	5	274.0
2011	6	335.6
2012	5	272.8
2013	4	232.5
2014	3	175.7
2015	--	--
2016	--	--
Subtotal	**49**	**2876.2**

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
1999	--	--	--	--	--	4.0	4.0
2000	--	--	--	--	--	2.0	2.0
2001	--	--	--	--	--	6.8	6.8
2002	--	--	--	--	--	15.9	15.9
2003	--	5.0	--	--	5.0	36.9	41.9
2004	--	41.9	--	--	41.9	35.5	77.4
2005	--	54.5	--	0.2	54.7	58.6	113.3
2006	--	40.7	--	1.9	42.6	55.0	97.6
2007	--	113.9	--	--	113.9	79.9	193.8
2008	--	190.5	--	2.3	192.8	125.6	318.4
2009	--	90.2	--	6.7	96.9	29.8	126.7
2010	--	57.1	--	6.2	63.3	35.2	98.5
2011	--	80.2	--	10.0	90.2	29.5	119.7
2012	--	61.5	--	4.3	65.8	46.8	112.6
2013	--	63.2	--	3.8	67.0	61.8	128.8
2014	--	46.3	--	6.7	53.0	36.9	89.9
2015	--	--	--	--	--	11.7	11.7
2016	--	--	--	--	--	7.8	7.8
2017	--	--	--	--	--	1.2	1.2
Subtotal	**--**	**845.0**	**--**	**42.1**	**887.1**	**680.9**	**1568.0**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 $M	Non End Item Recurring Flyaway BY 2005 $M	Non Recurring Flyaway BY 2005 $M	Total Flyaway BY 2005 $M	Total Support BY 2005 $M	Total Program BY 2005 $M
1999	--	--	--	--	--	4.3	4.3
2000	--	--	--	--	--	2.1	2.1
2001	--	--	--	--	--	7.2	7.2
2002	--	--	--	--	--	16.5	16.5
2003	--	5.1	--	--	5.1	37.6	42.7
2004	--	41.5	--	--	41.5	35.2	76.7
2005	--	52.5	--	0.2	52.7	56.5	109.2
2006	--	38.2	--	1.8	40.0	51.7	91.7
2007	--	104.8	--	--	104.8	73.5	178.3
2008	--	172.6	--	2.1	174.7	113.8	288.5
2009	--	80.6	--	6.0	86.6	26.7	113.3
2010	--	50.1	--	5.4	55.5	31.0	86.5
2011	--	69.2	--	8.6	77.8	25.4	103.2
2012	--	52.0	--	3.6	55.6	39.6	95.2
2013	--	52.4	--	3.2	55.6	51.2	106.8
2014	--	37.7	--	5.5	43.2	30.0	73.2
2015	--	--	--	--	--	9.3	9.3
2016	--	--	--	--	--	6.1	6.1
2017	--	--	--	--	--	0.9	0.9
Subtotal	**--**	**756.7**	**--**	**36.4**	**793.1**	**618.6**	**1411.7**

Quantities for the CV-22 are shown under appropriation 3010. In accordance with the approved program plan, the Air Force is funding the majority of the procurement cost for the CV-22. United States Special Operations Command (USSOCOM) is funding delta costs above the baseline (MV-22) aircraft for Special Operations Forces (SOF) unique equipment.

Funding totals include that received for Overseas Contingency Operations (OCO).

Cost Quantity Information
0300 | Procurement | Procurement, Defense-Wide

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2005 $M
1999	--	--
2000	--	--
2001	--	--
2002	--	--
2003	--	--
2004	--	40.0
2005	--	56.4
2006	--	38.2
2007	--	46.1
2008	--	226.7
2009	--	83.9
2010	--	50.2
2011	--	69.3
2012	--	53.4
2013	--	53.0
2014	--	39.5
2015	--	--
2016	--	--
2017	--	--
Subtotal	**--**	**756.7**

Annual Funding TY$
1205 | MILCON | Military Construction, Navy and Marine Corps

Fiscal Year	Total Program TY $M
2003	0.8
2004	10.9
2005	14.5
2006	22.4
2007	--
2008	--
2009	--
2010	7.2
2011	--
2012	6.2
2013	4.1
2014	--
2015	5.4
Subtotal	**71.5**

Annual Funding BY$
1205 | MILCON | Military Construction, Navy and Marine Corps

Fiscal Year	Total Program BY 2005 $M
2003	0.8
2004	10.8
2005	13.9
2006	21.0
2007	--
2008	--
2009	--
2010	6.2
2011	--
2012	5.1
2013	3.3
2014	--
2015	4.2
Subtotal	**65.3**

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

Fiscal Year	Total Program TY $M
2000	0.2
2001	0.3
2002	8.5
2003	1.9
2004	--
2005	--
2006	1.8
2007	1.9
2008	0.7
2009	7.9
2010	11.6
2011	--
2012	--
2013	6.5
Subtotal	**41.3**

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

Fiscal Year	Total Program BY 2005 $M
2000	0.2
2001	0.3
2002	8.8
2003	1.9
2004	--
2005	--
2006	1.7
2007	1.7
2008	0.6
2009	7.0
2010	10.0
2011	--
2012	--
2013	5.3
Subtotal	**37.5**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	4/25/1997	5/6/2002
Approved Quantity	25	58
Reference	Acquisition Decision Memorandum (ADM)	ADM
Start Year	1997	1997
End Year	2001	2009

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the Milestone (MS) III slip and program restructure.

Foreign Military Sales

None

Nuclear Cost

None

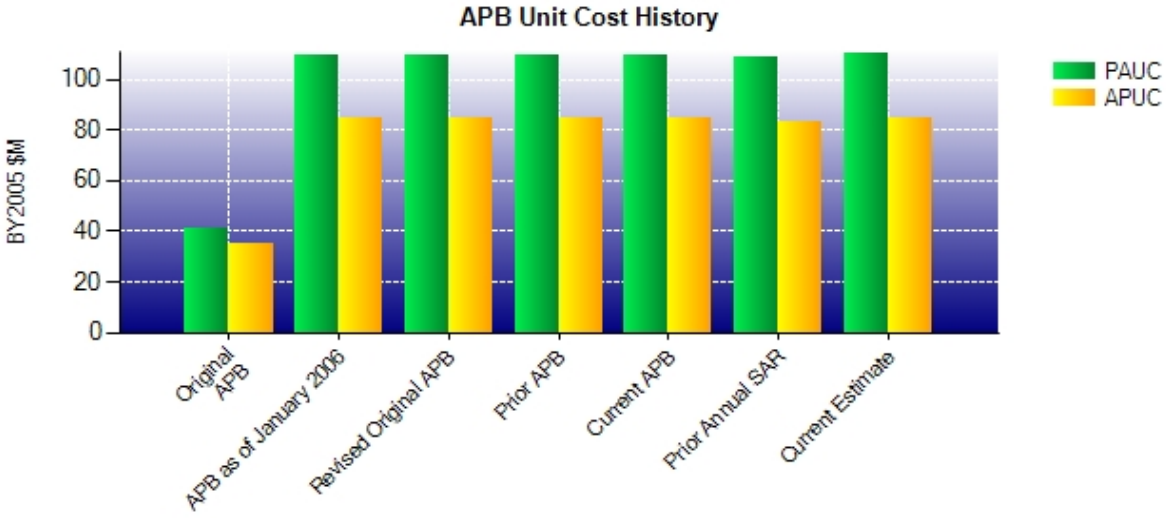
Unit Cost

Unit Cost Report

Unit Cost	BY2005 $M Current UCR Baseline (OCT 2011 APB)	BY2005 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	50250.4	50621.5	
Quantity	458	459	
Unit Cost	109.717	110.286	+0.52
Average Procurement Unit Cost (APUC)			
Cost	38562.8	38517.0	
Quantity	456	457	
Unit Cost	84.568	84.282	-0.34

Unit Cost	BY2005 $M Revised Original UCR Baseline (SEP 2005 APB)	BY2005 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	50250.4	50621.5	
Quantity	458	459	
Unit Cost	109.717	110.286	+0.52
Average Procurement Unit Cost (APUC)			
Cost	38562.8	38517.0	
Quantity	456	457	
Unit Cost	84.568	84.282	-0.34

Unit Cost History



		BY2005 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	FEB 1988	41.101	35.309	34.657	30.541
APB as of January 2006	SEP 2005	109.717	84.568	116.274	94.516
Revised Original APB	SEP 2005	109.717	84.568	116.274	94.516
Prior APB	FEB 2008	109.717	84.568	116.274	94.516
Current APB	OCT 2011	109.717	84.568	116.274	94.516
Prior Annual SAR	DEC 2011	108.894	83.036	116.546	94.027
Current Estimate	DEC 2012	110.286	84.282	119.960	97.179

SAR Unit Cost History

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

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
40.180	-12.793	50.391	-4.762	8.157	30.121	0.000	4.980	76.094	116.274

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
116.274	-0.038	-0.098	4.586	0.664	-2.893	0.000	1.465	3.686	119.960

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

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
36.641	-12.349	47.964	-4.862	5.134	16.986	0.000	5.002	57.875	94.516

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
94.516	-0.081	-0.049	4.606	0.467	-3.751	0.000	1.471	2.663	97.179

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	DEC 1982	DEC 1982	DEC 1982	DEC 1982
Milestone II	MAY 1985	APR 1986	APR 1986	APR 1986
Milestone III	JUL 1989	N/A	OCT 2005	OCT 2005
IOC	DEC 1991	N/A	MAR 2007	JUN 2007
Total Cost (TY $M)	24467.0	29662.3	53253.4	55061.8
Total Quantity	609	919	458	459
Prog. Acq. Unit Cost (PAUC)	40.176	32.277	116.274	119.960

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	9891.7	43099.3	262.4	53253.4
Previous Changes				
Economic	+10.8	-373.9	-0.1	-363.2
Quantity	--	+71.8	--	+71.8
Schedule	--	+1096.9	--	+1096.9
Engineering	--	+213.2	--	+213.2
Estimating	+503.3	-1680.0	-144.0	-1320.7
Other	--	--	--	--
Support	--	+543.1	--	+543.1
Subtotal	+514.1	-128.9	-144.1	+241.1
Current Changes				
Economic	+8.1	+337.1	+0.4	+345.6
Quantity	--	--	--	--
Schedule	--	+1008.2	--	+1008.2
Engineering	+91.5	--	--	+91.5
Estimating	+32.8	-34.2	-5.9	-7.3
Other	--	--	--	--
Support	--	+129.3	--	+129.3
Subtotal	+132.4	+1440.4	-5.5	+1567.3
Total Changes	+646.5	+1311.5	-149.6	+1808.4
CE - Cost Variance	10538.2	44410.8	112.8	55061.8
CE - Cost & Funding	10538.2	44410.8	112.8	55061.8

Summary Base Year 2005 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	11446.5	38562.8	241.1	50250.4
Previous Changes				
Economic	--	--	--	--
Quantity	--	+59.1	--	+59.1
Schedule	--	+528.2	--	+528.2
Engineering	--	+157.1	--	+157.1
Estimating	+480.7	-1785.0	-133.4	-1437.7
Other	--	--	--	--
Support	--	+425.1	--	+425.1
Subtotal	+480.7	-615.5	-133.4	-268.2
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	+568.6	--	+568.6
Engineering	+73.3	--	--	+73.3
Estimating	+1.2	-3.2	-4.9	-6.9
Other	--	--	--	--
Support	--	+4.3	--	+4.3
Subtotal	+74.5	+569.7	-4.9	+639.3
Total Changes	+555.2	-45.8	-138.3	+371.1
CE - Cost Variance	12001.7	38517.0	102.8	50621.5
CE - Cost & Funding	12001.7	38517.0	102.8	50621.5

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+8.1
Addition of Improved Inlet for increased Time on Wing (TOW) (Navy). (Engineering)	+32.8	+42.1
Addition of Improved Inlet for increased TOW (Air Force). (Engineering)	+40.5	+49.4
Adjustment for current and prior escalation. (Estimating)	-1.6	-1.8
Revised estimate to reflect the application of new inflation indices (Navy). (Estimating)	-3.8	-5.0
Revised estimate to reflect the application of new inflation indices (Air Force). (Estimating)	-1.0	-1.1
Revised estimate to reflect the application of new inflation indices (DoD). (Estimating)	-0.1	-0.1
Revised estimate to reflect actuals (Navy). (Estimating)	-22.4	-25.8
Revised estimate to reflect actuals (Air Force). (Estimating)	-36.7	-26.0
Increase due to revised estimated cost beyond the Future Years Defense Program (FYDP) for follow-on test and evaluation (Air Force). (Estimating)	+65.5	+90.9
Increase due to revised estimate for follow-on test and evaluation (DoD). (Estimating)	+1.3	+1.7
RDT&E Subtotal	+74.5	+132.4

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+337.1
Stretch-out of the procurment buy profile from FY 2018 - FY 2019 to FY 2020 - FY 2022 (Navy). (Schedule)	0.0	+204.5
Additional schedule impacts due to stretch-out of the prcurement buy profile from FY 2018 - FY 2019 to FY 2020 - FY 2022 (Navy). (Schedule)	+568.6	+803.7
Adjustment for current and prior escalation. (Estimating)	-67.7	-80.2
Revised estimate to reflect the application of new inflation indices (Navy). (Estimating)	-145.2	-192.0
Revised estimate to reflect the application of new inflation indices (Air Force). (Estimating)	-3.8	-4.7
Revised estimate to reflect the application of new inflation indices (DoD). (Estimating)	-0.1	-0.1
Revised estimate to reflect actuals (Navy). (Estimating)	+127.3	+120.4
Increase attributed to incorporation of production shutdown costs (Navy). (Estimating)	+38.8	+55.5
Increase attributed to Government Furnished Equipment, Engine, Ancillary, and Non-Recurring cost estimate updates (Navy). (Estimating)	+39.2	+57.3
Increase attributed to Government Furnished Equipment, Engine, Ancillary, and Non-Recurring cost estimate updates (Air Force). (Estimating)	+7.3	+8.9
Increase attributed to Government Furnished Equipment, Engine, Ancillary, and Non-Recurring cost estimate updates (DoD). (Estimating)	+1.0	+0.7
Adjustment for current and prior escalation. (Support)	-11.4	-14.1
Increase in Other Support attributed to the change in the procurement profile (Navy). (Support)	+15.3	+131.3
Decrease in Other Support due to revised estimate of Production Engineering Support and Peculiar Training Equipment (Air Force). (Support)	-9.7	-11.5

Increase in Other Support due to revised estimate of Production Engineering Support and Avionics Peculiar Support Equipment (DoD). (Support)	+9.3	+11.1
Increase in Initial Spares due to refinement of cost estimate (Navy). (Support)	+14.4	+27.6
Decrease in Initial Spares due to refinement of cost estimate (Air Force). (Support)	-9.5	-11.2
Decrease in Initial Spares due to refinement of cost estimate (DoD). (Support)	-4.1	-3.9
Procurement Subtotal	+569.7	+1440.4

MILCON	**$M**	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+0.4
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
Refinement of cost estimate (Navy). (Estimating)	-2.3	-2.5
Refinement of cost estimate (DoD). (Estimating)	-2.5	-3.3
MILCON Subtotal	-4.9	-5.5

Contracts

Appropriation: Procurement	
Contract Name	**FY08 FRP Lot 12 Airframe**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-07-C-0001/1, FPIF
Award Date	April 02, 2007
Definitization Date	March 28, 2008

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
84.9	N/A	26	2314.3	2438.3	33	2181.4	2314.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+29.0	-15.2
Previous Cumulative Variances	+17.8	-20.3
Net Change	+11.2	+5.1

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to material cost associated with several work breakout structure (WBS) elements being received at a lower cost than originally budgeted.

The favorable net change in the schedule variance is due to Lot 12 being 95% complete. As a contract nears completion, schedule variance will trend towards zero. Once a contract is >95% complete, schedule variance is not a reliable indicator of performance.

Contract Comments

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

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of advance procurement funded items only. The current contract price reflects the full airframe value.

The aircraft associated with the initial contract completed delivery in CY 2010. Seven supplemental aircraft were added to this procurement after award of the initial contract. Five of the seven supplemental aircraft have been delivered to the Government. All deliveries projected to complete by the end of CY 2013.

Appropriation: Procurement

Contract Name	**FY10 FRP Lot 14 Airframe**
Contractor	Bell-Boeing, JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-07-C-0001/3, FPIF
Award Date	March 28, 2008
Definitization Date	March 28, 2008

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
81.5	N/A	35	2120.6	2237.7	35	2108.4	2115.5

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/31/2012)	+18.6	-16.7
Previous Cumulative Variances	+14.9	-96.3
Net Change	+3.7	+79.6

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to material cost associated with several work breakout structure (WBS) elements being received at a lower cost than originally budgeted.

The favorable net change in the schedule variance is due to Lot 14 being 99% complete. As a contract nears completion, schedule variance will trend towards zero. Once a contract is >95% complete, schedule variance is not a reliable indicator of performance.

General Contract Variance Explanation

Last reporting period for this contract was December 31, 2012

Contract Comments

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

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of advance procurement funded items only. The current contract price reflects the full airframe value.

Appropriation: Procurement

Contract Name	**FY11 FRP Lot 15 Airframe**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-07-C-0001/4, FPIF
Award Date	March 28, 2008
Definitization Date	March 28, 2008

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
93.9	N/A	35	2131.6	2248.3	35	2120.0	2131.7

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+42.7	-94.8
Previous Cumulative Variances	-1.9	-10.9
Net Change	+44.6	-83.9

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to material cost associated with several work breakout structure (WBS) elements being received at a lower cost than originally budgeted and labor efficiencies.

The unfavorable net change in the schedule variance is due to issues on the production line causing parts to be delivered to the line not in accordance with the contractor's baseline plan. Despite this variance, aircraft are expected to be delivered in accordance with the contract schedule.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of advance procurement funded items only. The current contract price reflects the full airframe value.

Appropriation: Procurement

Contract Name	**FY12 FRP Lot 16 Airframe**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-07-C-0001/5, FPIF
Award Date	March 28, 2008
Definitization Date	March 28, 2008

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
86.4	N/A	35	2267.5	2390.5	36	2284.6	2269.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/31/2013)	+1.5	-16.4
Previous Cumulative Variances	--	--
Net Change	+1.5	-16.4

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to favorable material pricing and manufacturing labor efficiencies.

The unfavorable cumulative schedule variance is due to several issues on the production line causing parts to be delivered to the line not in accordance with the contractors internal building plan. Despite this variance, aircraft are expected to be delivered in accordance with the contract schedule.

General Contract Variance Explanation

The most current reporting period for this contract is January 31, 2012.

Contract Comments

This is the first time this contract is being reported.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of advance procurement funded items only. The current contract price reflects the full airframe value.

Appropriation: Procurement

Contract Name	**FY13 FRP Lot 17 Airframe**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-12-C-2001/1, FPIF
Award Date	December 29, 2011
Definitization Date	

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
81.9	N/A	21	1448.7	N/A	21	1448.7	1448.7

Variance	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

Cost and schedule reporting will commence against this contract upon definitization.

Contract Comments

This is the first time this contract is being reported.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of advance procurement funded items only. The current contract price reflects the full airframe value.

On December 28, 2012, the Program awarded a contract modification to Bell-Boeing for production of 21 additional aircraft; this contract modification included agreed-to terms and prices that, upon Congressional authorization and appropriation will allow definitization as a multi-year procurement (MYP) contract for aircraft across FY 2013-FY 2017. When definitized, this second MYP will save approximately $1B compared to single-year procurements. Program budgets for these years reflect the significant savings of the multi-year contract approach.

Appropriation: RDT&E

Contract Name	**CV-22 Block 20**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-08-C-0025, CPFF
Award Date	December 21, 2007
Definitization Date	December 21, 2007

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
8.5	N/A	N/A	199.4	N/A	N/A	182.4	119.2

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+3.4	-2.7
Previous Cumulative Variances	+5.3	-2.7
Net Change	-1.9	+0.0

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to increased labor hours needed for the software efforts performed during CY 2012.

General Contract Variance Explanation

There was no net change in schedule variance in 2012. Unfavorable schedule variance is driven by late delivery of software for flight test. Despite this variance, efforts are expected to be completed on time to the contract schedule.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the additions of Block 20 Increments I, II and III.

Appropriation: Procurement

Contract Name	**V-22 AE 1107C Turboshaft Engine**
Contractor	Rolls Royce
Contractor Location	2355 S. Tibbs Avenue Indianapolis, IN 46206-0420
Contract Number, Type	N00019-07-C-0060, FFP
Award Date	September 25, 2007
Definitization Date	September 25, 2007

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
84.1	N/A	41	847.4	N/A	407	847.4	847.4

Cost And Schedule Variance Explanations

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

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of the base year award. The current contract price represents the sum of the base year award plus the sum of the first, second and third options.

The engine contract provides for a base year and four option years for procurement of engines for production install and spares requirements through FY 2011, for the MV and CV-22 weapons systems. This contract is a commercial Federal Acquisition Regulation Part 12 contract.

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

Appropriation: Procurement

Contract Name	**V-22 AE 1107C Turboshaft Engine**
Contractor	Rolls Royce
Contractor Location	2355 S. Tibbs Avenue Indianapolis, IN 46206-0420
Contract Number, Type	N00019-12-C-0007, FFP
Award Date	March 30, 2012
Definitization Date	March 30, 2012

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
150.9	N/A	70	234.7	N/A	108	234.7	234.7

Cost And Schedule Variance Explanations

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

Contract Comments

This is the first time this contract is being reported.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the initial contract price reflecting the value of the base year award. The current contract price represents the sum of the base year award plus the sum of the first option.

The engine contract provides for a base year and four option years for procurement of engines for production install and spares FY 2012 through FY 2016 requirements forthe MV and CV-22 weapons systems. To date the base year (FY 2012) was awarded and the first option (FY 2013) has been exercised. This contract is a Commercial Federal Acquisition Regulation Part 12 contract.

Appropriation: Acq O&M

Contract Name	**PBL**
Contractor	Bell-Boeing JPO
Contractor Location	401 Tiltrotor Drive Amarillo, TX 79111
Contract Number, Type	N00019-09-D-0008, CPIF
Award Date	January 22, 2009
Definitization Date	January 22, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
96.1	N/A	N/A	660.4	N/A	N/A	642.6	642.6

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+7.5	0.0
Previous Cumulative Variances	+7.3	0.0
Net Change	+0.2	+0.0

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to lower actual labor costs than originally planned.

General Contract Variance Explanation

There is no schedule variance on this contract because the efforts procured under the discrete delivery orders either a) level of effort or b) requirements contracts.

The variances set forth above reflect cumulative information across all delivery orders subject to earned value reporting requirements.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to issuance of additional delivery orders over time. The Initial Contract Price values are based on the value of delivery order 0001 only; the Current Contract price values are based on the cumulative value of all delivery orders issued through December 31, 2012.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	2	2	2	100.00%
Production	218	218	457	47.70%
Total Program Quantities Delivered	220	220	459	47.93%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	55061.8	Years Appropriated	32
Expenditures To Date	33515.1	Percent Years Appropriated	74.42%
Percent Expended	60.87%	Appropriated to Date	39990.3
Total Funding Years	43	Percent Appropriated	72.63%

The above data is current as of 3/1/2013.

Operating and Support Cost

V-22

Assumptions and Ground Rules

Cost Estimate Reference:

The following Ground Rules and Assumptions are based on the Operating and Support (O&S) costs estimate as of the October 2012 Acquisition Program Baseline update combined with updates from the latest programmatic inputs where available.

	MV-22	MV-22 Navy	CV-22
Aircraft Service Life (hrs)	10,000hrs	10,000hrs	10,000hrs
Aircraft Attrition Rate	1%	1%	0.6%
Aircraft Pipeline Rate	5%	10%	8%
Total Aircraft Inventory (TAI)	360	48	50
Primary Authorized Aircraft (PAA)	299	37	46
Flight Hours per Month	35	35	36
Flight Hours per Year	420	420	432
Total Aircraft Operating Years	7467	905	1031

Sustainment Strategy:

The V-22 program office is in the process of executing a Joint Sustainment Strategy that provides support for all logistics elements for the current Marine Corps MV-22 and the Air Force CV-22. The sustainment strategy addresses all three levels of maintenance (O,I and D). The cornerstone of the Joint Sustainment Strategy is the Performance Based Agreements (PBAs) between the program office and the war fighters. The PBAs clearly define the war fighter's logistic support requirements to be achieved through the execution of the V-22 Joint Sustainment Strategy. The Joint Sustainment Strategy is executed via a myriad of processes and organizations to include DoD organic activities and commercial contractors. Paramount to the Joint Sustainment Strategy is the use of Performance Based Logistics (PBL). Multiple PBL contracts are used to support the V-22, however the preponderance of PBL support is provided under two contracts.

Antecedent Information:

There is no antecedent for the V-22 program.

Unitized O&S Costs BY2005 $M		
Cost Element	**V-22 Average Annual Cost Per Aircraft**	**N/A (Antecedent) N/A**
Unit-Level Manpower	1.4	0.0
Unit Operations	0.3	0.0
Maintenance	4.7	0.0
Sustaining Support	0.5	0.0
Continuing System Improvements	0.2	0.0
Indirect Support	0.8	0.0
Other	0.0	0.0
Total	7.9	--

Unitized Cost Comments:

The total aircraft inventory listed above equals 458 aircraft. The program shows a total of 459 aircraft in the total acquisition cost and summary section of this report due to the authorization of one combat loss replacement aircraft.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		**Current Estimate**	
	V-22		**V-22**	**N/A (Antecedent)**
Base Year	75022.5	82524.8	75022.5	N/A
Then Year	121543.7	N/A	121543.7	N/A

Total O&S Costs Comments:

Since 2010, the Program has executed to the plan put in place in 2009 which was reflected in the 2009 and subsequent SAR O&S estimates.

Disposal Costs

Based on the Life Cycle Sustainment Plan, the estimated cost of the demil/disposal phase for the remaining aircraft is $28.8M.