Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-176

Evolved Expendable Launch Vehicle (EELV)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

Evolved Expendable Launch Vehicle (EELV)

DoD Component

Air Force

Responsible Office

Responsible Office

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Date Assigned June 29, 2011

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 15, 1998

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated February 10, 2013

Mission and Description

The mission of the EELV program is to acquire launch services to provide critical space support required to satisfy DoD warfighter, national security, and other Government spacelift missions while fostering interagency and commercial cooperation. This mission includes the execution of flight worthiness certification processes and booster-to-satellite mission integration to maintain assured access to space and achieve 100% mission success.

The EELV system includes launch vehicles, launch capability, a standard payload interface, support systems, mission integration (includes mission unique requirements), flight instrumentation and range interfaces, special studies (alternative upper and lower stage rocket propulsion sub-systems, mission feasibility analysis, secondary payloads, dual manifesting, dual integration, special flight instrumentation, loads analysis, etc.), post-flight data evaluation and analysis, mission assurance, infrastructure, critical component engineering, Government Mission Director support, system/process and reliability improvements, training, and other technical support. The system also includes launch site operations activities, activities in support of assured access, systems integration and tests, and other related support activities. Previous launch services were provided by Titan II, Delta II, Atlas II, and Titan IV launch vehicle systems.

In accordance with Title 10 United States Code (USC) section 2273 and US Space Transportation Policy (National Security Presidential Directive-40) the Department of Defense is responsible for maintaining assured access to space. EELV is the foundation for the access for intermediate and larger class payloads for the foreseeable future. EELV is maintaining at least 2 families of space launch vehicles (currently Atlas & Delta) and providing the capability for the Secretary of Defense to annually fund fixed costs for both rocket families (United Launch Alliance provides both families).

Executive Summary

BACKGROUND:
This SAR is the first of a two phase process transitioning EELV from reporting as a Development program to reporting as a Production program. On February 10, 2013 EELV Milestone C and a new Acquisition Program Baseline (APB) were approved, establishing the program in Production.

This Phase 1 Transition SAR is the last report to include a number of baselines and comparisons that are no longer meaningful to the Current Production Estimates. These Development estimates include the 1998 SAR Baseline Development Estimate based on commercially competed launch services that were priced to include a robust global commercial marketplace that never materialized. The 1998 estimate, 2004 Original APB, 2006 APB, 2006 Prior Annual SAR and 2007 Prior APB were based on different: program durations, quantity of launch services, allocation of vehicle configurations, and commercial pricing assumptions. In addition, the 2006 and 2007 baselines included launch capability estimates below the actual cost of the requirements based reduced bills due to the impact of credits and withholds from the initial 1998 award. While the March 2012 Exception SAR is the best available baseline for comparison, similar launch manifest and fully budgeted launch capability costs, significant difference remain in program duration and services pricing data. Thus, this report's estimate comparisons do not represent an accurate state of the restructured program.

The Phase 2 Transition SAR will be the year-end 2013. In this report the baselines will be updated to Production estimates and allow for current and relevant comparisons of the program status. The 2013 SAR will include the 2013 APB, the SAR Baseline Production Estimate, and the 2012 Annual SAR. Each of these includes the extension of the program to 2030, additional 60 launch services, and a manifest of larger and more expensive configurations of vehicles.

SUMMARY OF ACQUISITION EVENTS AND CURRENT STATUS :
The Launch and Range Systems Directorate submitted an Exception SAR in March 2012. This was the first report since the program was moved into the Sustainment Phase in 2007. In the FY 2012 National Defense Authorization Act (NDAA), Congress enacted Section 838 requiring EELV to resume Major Defense Acquisition Program (MDAP) reporting. The Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) determined the best way to comply with Section 838 was to redesignate EELV as an Acquisition Category 1-Defense (ACAT-1D) program, not in Sustainment, with all required MDAP reporting and Title 10, United States Code (USC) requirements. On March 26, 2012, USD(AT&L) issued an Acquisition Decision Memorandum (ADM) implementing the FY 2012 NDAA, requiring the Program Manager to resume cost reporting with respect to Average Procurement Unit Cost (APUC) and Program Acquisition Unit Cost (PAUC).

In the March 2012 SAR, the program exceeded both APUC and PAUC critical cost thresholds compared to the original EELV APB dated July 26, 2004 and the current APB dated August 21, 2007, triggering a critical Nunn-McCurdy breach. The Secretary of Defense was notified of the critical Nunn-McCurdy breach on April 6, 2012 and Congress was notified on April 13, 2012.

On July 12, 2012, USD(AT&L) certified to Congress that: 1) the EELV program is essential to national security; 2) no alternative is available to provide acceptable capability at less cost; 3) new cost estimates evaluated by the Office of the Secretary of Defense Cost Assessment and Program Evaluation (OSD CAPE) are reasonable; 4) the management structure is adequate to control costs; and 5) the program is a higher priority than the program(s) whose funding must be reduced to accommodate the growth in program cost. USD(AT&L) also rescinded Milestone C as required by the Weapon System Acquisition Reform Act (WSARA).

To drive down program costs, the program restructured the contracting strategy for launch capability from Cost Plus

Award Fee (CPAF) to Cost Plus Incentive Fee (CPIF). This shift enabled the Government to implement Should Cost Initiatives during the fact finding and technical evaluation processes and contract negotiations. Additionally, a Mission Success Incentive was negotiated to incentivize the contractor's technical performance. Lastly, mechanisms were put into place to monitor United Launch Alliance's (ULA's) control accounts through Earned Value Management (EVM) reviews and increased face-to-face interaction. These actions allow for insight not previously available and pressured ULA to better manage costs. All realized and anticipated efficiencies have been incorporated into OSD CAPE's EELV Independent Cost Estimate (ICE). Based on that estimate, EELV funding in the FY 2014 President's Budget (PB) Future Years Defense Program (FYDP) was lower than FY 2013 PB FYDP funding.

The EELV Current and new Original APB based on OSD CAPE's ICE, extending the program from 2020 to 2030 and increasing launch services by 60, was approved by the USD(AT&L) on February 10, 2013 and is reported herein. The updated Acquisition Strategy Document (ASD) Amendment and ADM reinstating Milestone C were also approved by the Milestone Decision Authority (MDA), USD(AT&L), February 10, 2013. These documents fulfill all requirements as directed by Congress, USD(AT&L) and Title 10 USC.

SIGNIFICANT EVENTS SINCE LAST SAR (March 2012):

Since the last SAR in March 2012, there were five successful National Security Space (NSS) EELV program launches. Of those, three were Atlas V launch vehicles and two were Delta IV launch vehicles: National Reconnaissance Office Launch (NROL)-38 on June 20, 2012, NROL-15 on June 29, 2012, NROL-36 on September 13, 2012, Global Positioning System (GPS) IIF-3 on October 4, 2012, and Space-Based Infrared System in geosynchronous orbit-2 (SBIRS GEO-2) on March 19, 2013. The remaining calendar year 2013 NSS mission manifest includes eight launches: six from the Eastern Range and two from the Western Range.

Design changes to the Delta IV Heavy were implemented to mitigate the heating plume experienced during ignition on the January 20, 2011 NROL-49 launch. The long-term solution on all Delta IV Heavy launch vehicles is a staggered engine start (SES) sequence for the three main engines to minimize the heating plume during ignition. The new SES sequence will be implemented for the August 2013 launch of NROL-65.

The Atlas V team completed validation of the Booster and Centaur tank testing activity as part of the Atlas V production operations relocation from Denver, CO (Booster) and San Diego, CA (Centaur) to Decatur, AL. No outstanding issues remain.

During the October 4, 2012 launch of GPS IIF-3, the Delta IV RL-10B-2 second stage engine did not perform as expected. Per standard procedure, the Air Force (AF) is reviewing all flight data. While the Delta IV delivered the GPS IIF-3 satellite into its proper orbit, the Air Force Space Command Commander (AFSPC/CC) directed a discretionary Accident Investigation Board (AIB) to review the anomaly. When the anomaly investigation is completed and the AIB completes its report to AFSPC/CC, corrective action will be taken.

The USD(AT&L) issued an ADM on November 27, 2012 directing the AF to aggressively introduce a competitive procurement strategy with initial contract awards for up to 14 launch missions as early as FY 2015. The EELV program has taken actions to execute that direction. To facilitate competition, the program is engaged with multiple potential launch providers as they accomplish the New Entrant Certification process based on requirements outlined in the AF New Entrant Certification Guide dated October 27, 2011. On November 30, 2012, the AF awarded an EELV-class launch service, Space Test Program-2, to Space Exploration Technologies (SpaceX), in an effort to support the demonstration of their capabilities as part of the certification process.

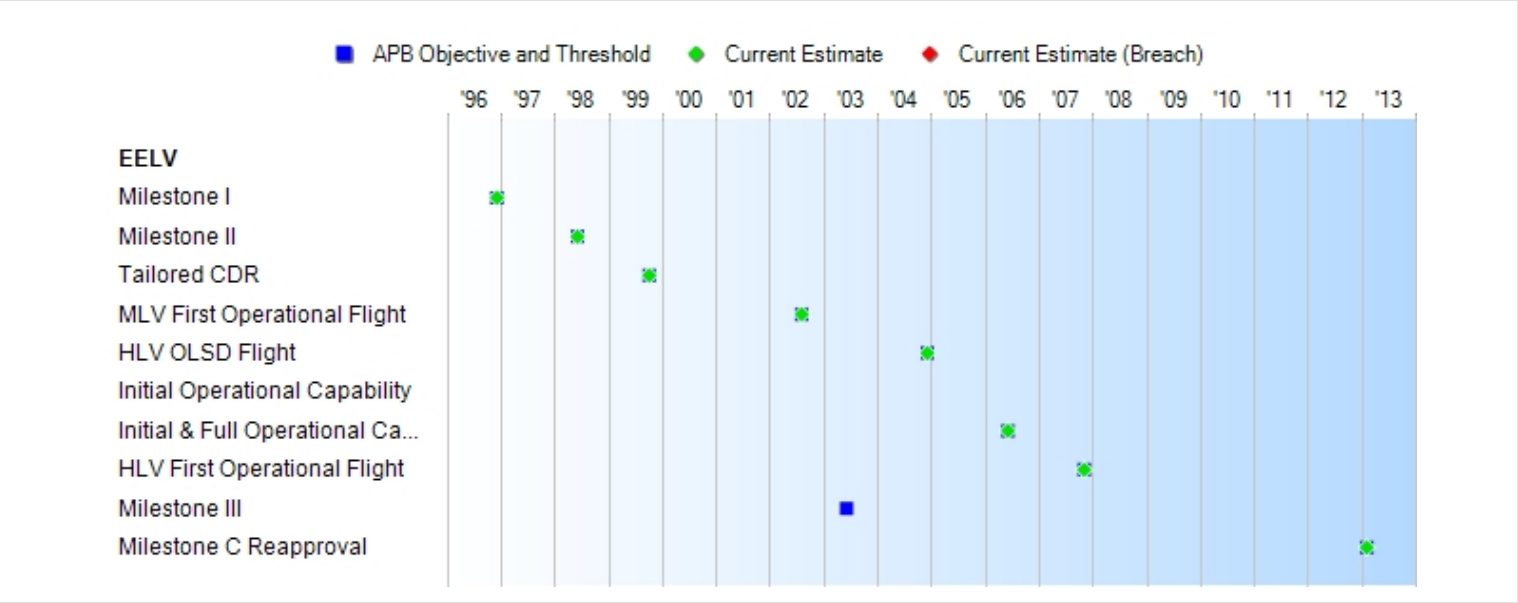
There are no significant software-related issues with this program at this time.

Threshold Breaches

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

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone I	DEC 1996	DEC 1996	DEC 1996	DEC 1996	
Milestone II	JUN 1998	JUN 1998	JUN 1998	JUN 1998	
Tailored CDR	JUL 1999	OCT 1999	OCT 1999	OCT 1999	
MLV First Operational Flight	DEC 2001	AUG 2002	AUG 2002	AUG 2002	
HLV OLSD Flight	N/A	DEC 2004	DEC 2004	DEC 2004	
Initial Operational Capability	TBD	N/A	N/A	N/A	(Ch-1)
Initial & Full Operational Capability	N/A	JUN 2006	JUN 2006	JUN 2006	(Ch-1)
HLV First Operational Flight	JUL 2003	NOV 2007	NOV 2007	NOV 2007	
Milestone III	JUN 2003	N/A	N/A	N/A	
Milestone C Reapproval	N/A	FEB 2013	FEB 2013	FEB 2013	(Ch-2)

Acronyms And Abbreviations

CDR - Critical Design Review
HLV - Heavy-Lift Vehicle
MLV - Medium-Lift Vehicle
NA - Not Applicable
OLSD - Operational Launch Service Demonstration
TBD - To Be Determined

Change Explanations

(Ch-1) The Initial Operational Capability (IOC) Milestone was replaced by the Initial & Full Operational Capability (IOC/FOC) Milestone. IOC and FOC, originally defined in the 1998 Operational Requirements Document, were readdressed in the Air Force Space Command (AFSPC) memorandum dated September 8, 2004, to clarify that IOC and FOC have the same criteria. In the memorandum dated December 12, 2006, AFSPC Commander declared IOC/FOC completed as of June 27, 2006.

(Ch-2) New Milestone: following a critical Nunn-McCurdy breach that was reported in the March 2012 SAR, the Under Secretary of Defense for Acquisition, Technology and Logistics granted Milestone C reapproval for EELV on February 10, 2013, pursuant to section 2433a of title 10, United States Code.

Memo

Current Estimates are the actual dates the Milestones were met.

Performance

Characteristics	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Performance Mass to Orbit					
LEO: 100nm X 100nm 63.4 deg (lbs)	19,550	19,550	17,000	TBD	17,000
POLAR 1: 450nm x 450nm, 98.2 deg (lbs)	5,060-8, 050 (15%)	5,060-8,050 (15%)	4,400-7,000	TBD	4,400-7,000
POLAR 2: 100nm x 100nm, 90 deg (lbs)	43,050	43,050	41,000	TBD	41,000
SEMI-SYNC: 10,998nm x 100nm, 55.0 deg (lbs)	2,875-5, 152 (15%)	2,875-5,152 (15%)	2,500-4,725	TBD	2,500-4,725
GTO: 19,324nm x 90nm, 27 deg (lbs)	7,015-9, 775 (15%)	7,015-9,775 (15%)	6,100-8,500	TBD	6,100-8,500
MOLNIYA: 21,150nm x 650nm, 63.4 deg (lbs)	8,050	8,050	7,000	TBD	7,000
GEO: 19,323nm x19,323nm, 0 deg (lbs)	14,175	14,175	13,500	TBD	13,500
Vehicle Design Reliability (%)	>98	>98	98	TBD	98
Standardization					
Launch Pads	Standardized and able to launch all conf igs of EELV for that site	Standardized and able to launch all configs of EELV for that site	Standardized and able to launch all configs of EELV for that site	All NSS mission required variants of the Atlas V launch vehicle configs have successfully flown. Variants included the 401, 411, 421, 501, 531, and 551 configs. For Delta IV the variants	Standardized and able to launch all configs of EELV for that site

				required for NSS missions flown are Heavy, Medium+ (5,4), Medium+ (4,2), Medium (4,0) and Medium+ (5,2) configs. Successful launches have occurred for each launch vehicle family from both the Eastern and Western launch bases.	
Payload interfaces	One std payload interface	One std payload interface	Std payload interface for each vehicle class (add'l interface rqmts met by payload adapter)	Std payload inter face for each vehicle class (add'l interface rqmts met by payload adapter)	Std payload inter face for each vehicle class (add'l interface rqmts met by payload adapter)

Requirements Source: Operational Requirements Document (ORD) II dated September 15, 1998

Acronyms And Abbreviations

add'l - additional
configs - configurations
deg - degree
GEO - Geosynchronous Earth Orbit
GTO - Geosynchronous Transfer Orbit
lbs - pounds
LEO - Low Earth Orbit
MOLNIYA - A highly inclined, highly elliptical orbit first used by the Russian MOLNIYA satellite
nm - nautical mile
NSS - National Security Space
POLAR - Polar Orbit
rqmts - requirements
SEMI-SYNC - Semi-Sychronous Orbit
Std - Standard
TBD - To Be Determined

Change Explanations

None

Memo

Standardization of Launch Pads performance is by launch vehicle family.

Though there have been 58 successful launches (33 NSS, and 25 National Aeronautics and Space Administration (NASA) and commercial), the "Demonstrated Performance" section remains TBD (except the Standardization of Launch Pads), these launches were not designed to validate any specific performance characteristic, but to accomplish a mission.

Track To Budget

RDT&E

APPN 3600	BA 04	PE 0603853F	(Air Force)	
	Project 0006 1995-1998	EELV Pre-EMD		(Sunk)
APPN 3600	BA 05	PE 0604853F	(Air Force)	
	Project 0004	EELV EMD		

The program also received funding from Defense Advanced Research Projects Agency (Defense-Wide PE 0603226E) and National Reconnaissance Office (Sunk).

Procurement

APPN 3020	BA 05	PE 0305953F	(Air Force)
	ICN MSEELV	Evolved Expendable Launch Vehicle	

The program also receives funding from Navy for procurement of EELV Launch Services (ELS) for Mobile User Objective System (MUOS) spacecraft (APPN 1507, BA 02, PE 0303109N, ICN 243300), as well as from the National Reconnaissance Office and international customers.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2012 $M			BY2012 $M	TY $M		
	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Production Objective	Current Estimate
RDT&E	1801.7	2365.1	2601.6	2365.1	1451.1	1962.1	1963.2
Procurement	15781.9	59078.3	64986.1	59078.4	15896.7	67367.3	68721.9
Flyaway	15781.9	--	--	59078.4	--	--	68721.9
Recurring	15781.9	--	--	59078.4	--	--	68721.9
Non Recurring	0.0	--	--	0.0	--	--	0.0
Support	0.0	--	--	0.0	--	--	0.0
Other Support	0.0	--	--	0.0	--	--	0.0
Initial Spares	0.0	--	--	0.0	--	--	0.0
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	17583.6	61443.4	N/A	61443.5	17347.8	69329.4	70685.1

Confidence Level for Current APB Cost 50% -

This Independent Cost Estimate (ICE), like all life cycle cost estimates developed by the Office of the Secretary of Defense Cost Assessment and Program Evaluation (OSD CAPE), is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

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

The Base Year for the program has been updated from FY 1995 to FY 2012 using the following deflators:

Appn Category	Deflation Factor
RDT&E	1.34055896
Procurement	1.34055896

This SAR is a Phase 1 Transition report moving EELV from a Development Baseline to a Production Baseline.

The SAR Baseline Development Estimate was established in 1998 and based on commercially competed launch services that were priced to include a robust global commercial marketplace that never materialized. The 1998 estimate was also based on different program durations, quantity of launch services, and allocation of vehicle configurations. In contrast the 2013 estimate includes the extension of the program to 2030, additional 60 launch services, and a manifest of larger and more expensive configurations of vehicles. Thus this comparison is no longer applicable to the program's current Production structure and strategy. The SAR Baseline will be updated from Development to Production in the year-end 2013 SAR allowing for current and relevant analysis of program costs.

Unit cost figures reported above are a combination of each of three different launch vehicle configurations and fixed annual launch capability payments. Unit cost will vary due to shifts in payload weight and volume, mission-unique services, number of missions per year and other factors.

Quantity	SAR Baseline Dev Est	Current APB Production	Current Estimate
RDT&E	0	1	1
Procurement	181	151	151
Total	181	152	152

Unit of measure is a launch service. A launch service is the delivery of specified payload(s) to a specified orbit.

The 1998 SAR Baseline Development Estimate of 181 procurement units represented the National Mission Model (NMM) from Air Force Space Command (AFSPC) through 2020. The Current 2013 APB Production Baseline of 151 represents the AFSPC estimate for National Security Space (NSS) launch services required through 2030. The March SAR reported 91 units which represented the NSS requirements through 2019. The decrease in launch service requirements is due to delays in satellite vehicle delivery, increased life span of satellites on orbit, and the cancellation of satellite constellation programs.

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	1871.1	8.1	28.3	35.4	20.3	0.0	0.0	0.0	1963.2
Procurement	14866.4	2528.3	2733.7	2715.5	3030.5	2929.1	3268.1	36650.3	68721.9
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 2014 Total	16737.5	2536.4	2762.0	2750.9	3050.8	2929.1	3268.1	36650.3	70685.1
SEP 2007 Total	15654.1	1949.0	3675.9	3569.7	2948.5	2813.2	2530.2	2588.3	35728.9
Delta	1083.4	587.4	-913.9	-818.8	102.3	115.9	737.9	34062.0	34956.2

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.

The To-Complete and Delta above is due to 10 additional years of launch service funding. As of September 2007, program life was through 2020; the President’s Budget (PB) Fiscal Year 2014 is through 2030. The EELV program was extended to 2030 by the Air Force Space Command Commander (AFSPC/CC) in the Strategic Master Plan dated 2009 and is reflected in the Under Secretary of Defense (Acquisition, Technology and Logistics) approved current Acquisition Program Baseline (APB).

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	1	0	0	0	0	0	0	0	0	1
Production	0	55	7	7	8	8	8	8	50	151
PB 2014 Total	1	55	7	7	8	8	8	8	50	152
SEP 2007 Total	1	64	6	17	15	12	12	10	1	138
Delta	0	-9	1	-10	-7	-4	-4	-2	49	14

Cost and Funding

Annual Funding By Appropriation

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

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
1994	--	--	--	--	--	--	9.8
1995	--	--	--	--	--	--	30.0
1996	--	--	--	--	--	--	110.6
1997	--	--	--	--	--	--	62.9
1998	--	--	--	--	--	--	92.3
1999	--	--	--	--	--	--	242.0
2000	--	--	--	--	--	--	321.8
2001	--	--	--	--	--	--	382.8
2002	--	--	--	--	--	--	321.8
2003	--	--	--	--	--	--	55.8
2004	--	--	--	--	--	--	7.5
2005	--	--	--	--	--	--	21.0
2006	--	--	--	--	--	--	19.1
2007	--	--	--	--	--	--	29.9
2008	--	--	--	--	--	--	18.3
2009	--	--	--	--	--	--	33.3
2010	--	--	--	--	--	--	43.9
2011	--	--	--	--	--	--	53.8
2012	--	--	--	--	--	--	14.5
2013	--	--	--	--	--	--	8.1
2014	--	--	--	--	--	--	28.3
2015	--	--	--	--	--	--	35.4
2016	--	--	--	--	--	--	20.3
Subtotal	**1**	**--**	**--**	**--**	**--**	**--**	**1963.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2012 $M	Non End Item Recurring Flyaway BY 2012 $M	Non Recurring Flyaway BY 2012 $M	Total Flyaway BY 2012 $M	Total Support BY 2012 $M	Total Program BY 2012 $M
1994	--	--	--	--	--	--	13.2
1995	--	--	--	--	--	--	39.7
1996	--	--	--	--	--	--	143.8
1997	--	--	--	--	--	--	80.7
1998	--	--	--	--	--	--	117.6
1999	--	--	--	--	--	--	305.2
2000	--	--	--	--	--	--	399.8
2001	--	--	--	--	--	--	468.9
2002	--	--	--	--	--	--	390.0
2003	--	--	--	--	--	--	66.7
2004	--	--	--	--	--	--	8.7
2005	--	--	--	--	--	--	23.9
2006	--	--	--	--	--	--	21.1
2007	--	--	--	--	--	--	32.2
2008	--	--	--	--	--	--	19.3
2009	--	--	--	--	--	--	34.7
2010	--	--	--	--	--	--	45.1
2011	--	--	--	--	--	--	54.2
2012	--	--	--	--	--	--	14.3
2013	--	--	--	--	--	--	7.8
2014	--	--	--	--	--	--	26.8
2015	--	--	--	--	--	--	32.9
2016	--	--	--	--	--	--	18.5
Subtotal	**1**	**--**	**--**	**--**	**--**	**--**	**2365.1**

Quantity of one represents the Heavy-Lift Vehicle (HLV) Operational Launch Service Demonstration (OLSD), also referred to as the Heavy Demo, launched in December 2004.

Included in the funds above are Defense Advanced Research Projects Agency (DARPA) and National Reconnaissance Office (NRO) provided funding. Previously stated in past SARs as Advanced Research Projects Agency (ARPA) and National User.

Annual Funding TY$
3020 | Procurement | Missile 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
2000	1	68.1	--	--	68.1	--	68.1
2001	5	518.4	--	--	518.4	--	518.4
2002	--	--	6.1	--	6.1	--	6.1
2003	1	200.2	--	--	200.2	--	200.2
2004	7	1094.2	--	--	1094.2	--	1094.2
2005	4	670.6	--	--	670.6	--	670.6
2006	1	721.7	--	--	721.7	--	721.7
2007	3	1013.3	--	--	1013.3	--	1013.3
2008	5	1586.0	--	--	1586.0	--	1586.0
2009	6	2213.2	--	--	2213.2	--	2213.2
2010	5	1558.5	--	--	1558.5	--	1558.5
2011	8	2097.9	--	--	2097.9	--	2097.9
2012	9	3118.2	--	--	3118.2	--	3118.2
2013	7	2528.3	--	--	2528.3	--	2528.3
2014	7	2733.7	--	--	2733.7	--	2733.7
2015	8	2715.5	--	--	2715.5	--	2715.5
2016	8	3030.5	--	--	3030.5	--	3030.5
2017	8	2929.1	--	--	2929.1	--	2929.1
2018	8	3268.1	--	--	3268.1	--	3268.1
2019	7	3605.3	--	--	3605.3	--	3605.3
2020	6	2727.7	--	--	2727.7	--	2727.7
2021	4	2875.0	--	--	2875.0	--	2875.0
2022	5	2919.6	--	--	2919.6	--	2919.6
2023	7	3621.6	--	--	3621.6	--	3621.6
2024	4	2866.2	--	--	2866.2	--	2866.2
2025	7	4292.4	--	--	4292.4	--	4292.4
2026	4	3149.9	--	--	3149.9	--	3149.9
2027	4	3620.8	--	--	3620.8	--	3620.8
2028	2	2719.2	--	--	2719.2	--	2719.2

2029	--	2078.2	--	--	2078.2	--	2078.2
2030	--	2174.4	--	--	2174.4	--	2174.4
Subtotal	**151**	**68715.8**	**6.1**	**--**	**68721.9**	**--**	**68721.9**

Annual Funding BY$
3020 | Procurement | Missile Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2012 $M	Non End Item Recurring Flyaway BY 2012 $M	Non Recurring Flyaway BY 2012 $M	Total Flyaway BY 2012 $M	Total Support BY 2012 $M	Total Program BY 2012 $M
2000	1	83.7	--	--	83.7	--	83.7
2001	5	630.3	--	--	630.3	--	630.3
2002	--	--	7.3	--	7.3	--	7.3
2003	1	236.7	--	--	236.7	--	236.7
2004	7	1265.8	--	--	1265.8	--	1265.8
2005	4	754.3	--	--	754.3	--	754.3
2006	1	789.0	--	--	789.0	--	789.0
2007	3	1080.6	--	--	1080.6	--	1080.6
2008	5	1660.9	--	--	1660.9	--	1660.9
2009	6	2284.4	--	--	2284.4	--	2284.4
2010	5	1584.9	--	--	1584.9	--	1584.9
2011	8	2086.2	--	--	2086.2	--	2086.2
2012	9	3038.7	--	--	3038.7	--	3038.7
2013	7	2389.8	--	--	2389.8	--	2389.8
2014	7	2535.8	--	--	2535.8	--	2535.8
2015	8	2471.9	--	--	2471.9	--	2471.9
2016	8	2707.2	--	--	2707.2	--	2707.2
2017	8	2567.9	--	--	2567.9	--	2567.9
2018	8	2811.6	--	--	2811.6	--	2811.6
2019	7	3043.9	--	--	3043.9	--	3043.9
2020	6	2260.0	--	--	2260.0	--	2260.0
2021	4	2337.6	--	--	2337.6	--	2337.6
2022	5	2329.6	--	--	2329.6	--	2329.6
2023	7	2835.9	--	--	2835.9	--	2835.9
2024	4	2202.5	--	--	2202.5	--	2202.5
2025	7	3237.0	--	--	3237.0	--	3237.0
2026	4	2331.1	--	--	2331.1	--	2331.1
2027	4	2629.7	--	--	2629.7	--	2629.7
2028	2	1938.0	--	--	1938.0	--	1938.0

2029	--	1453.6	--	--	1453.6	--	1453.6
2030	--	1492.5	--	--	1492.5	--	1492.5
Subtotal	**151**	**59071.1**	**7.3**	**--**	**59078.4**	**--**	**59078.4**

All EELV launch services are fully funded in the year ordered, two or three years prior to launch, depending on vehicle configuration, and are fixed price. Launch support and capability costs are funded on an annual basis.

The Air Force missions, purchased with Missile Procurement (3020) funds, comprise 90 of the 151 total launches. The remaining missions in the table above include funding and quantities from other sources to include the National Reconnaissance Office, the Department of the Navy and one Cooperative Agreement purchase by the Australian Government. Navy funding is for procurement of launch services for 11 Mobile User Objective System (MUOS) spacecraft. Navy procurement funding and quantities were first included in the December 2003 EELV SAR; however, the MUOS program baseline also includes these funds. There is one additional Air Force mission, the Heavy-Lift Vehicle Demonstration mission, that was purchased with RDT&E (3600) funds.

Cost Quantity Information
3020 | Procurement | Missile Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2012 $M
2000	1	83.7
2001	5	630.3
2002	--	--
2003	1	236.7
2004	7	1265.8
2005	4	754.3
2006	1	1790.5
2007	3	2126.9
2008	5	1636.4
2009	6	2096.1
2010	5	1516.3
2011	8	2432.5
2012	9	3406.5
2013	7	2323.3
2014	7	2416.5
2015	8	2516.4
2016	8	2738.4
2017	8	2624.0
2018	8	2742.3
2019	7	2922.8
2020	6	2303.6
2021	4	2321.7
2022	5	2315.2
2023	7	2962.8
2024	4	2239.5
2025	7	3206.8
2026	4	2362.6

2027	4	2667.5
2028	2	2431.7
2029	--	--
2030	--	--
Subtotal	**151**	**59071.1**

Low Rate Initial Production

Low Rate Initial Production (LRIP) does not apply to the EELV Program.

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

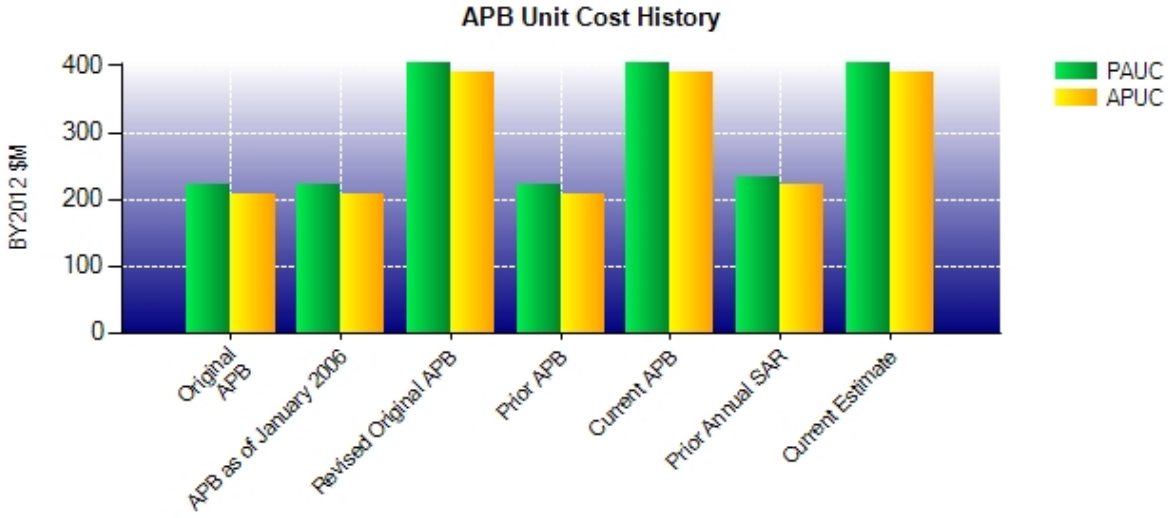
Unit Cost Report

	BY2012 $M	BY2012 $M	
Unit Cost	**Current UCR Baseline (FEB 2013 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	61443.4	61443.5	
Quantity	152	152	
Unit Cost	404.233	404.234	0.00
Average Procurement Unit Cost (APUC)			
Cost	59078.3	59078.4	
Quantity	151	151	
Unit Cost	391.247	391.248	0.00

	BY2012 $M	BY2012 $M	
Unit Cost	**Revised Original UCR Baseline (FEB 2013 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	61443.4	61443.5	
Quantity	152	152	
Unit Cost	404.233	404.234	0.00
Average Procurement Unit Cost (APUC)			
Cost	59078.3	59078.4	
Quantity	151	151	
Unit Cost	391.247	391.248	0.00

Unit cost figures reported above are a combination of each of three different launch vehicle configurations and fixed annual launch capability payments. Unit cost will vary due to shifts in payload weight and volume, mission-unique services, number of missions per year and other factors.

Unit Cost History



		BY2012 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUL 2004	220.644	207.884	230.358	219.571
APB as of January 2006	JUL 2004	220.644	207.884	230.358	219.571
Revised Original APB	FEB 2013	404.233	391.247	456.114	446.141
Prior APB	AUG 2007	220.644	207.884	230.358	219.571
Current APB	FEB 2013	404.233	391.247	456.114	446.141
Prior Annual SAR	DEC 2006	232.178	220.558	258.905	249.191
Current Estimate	DEC 2012	404.234	391.248	465.034	455.112

This Phase 1 Transition SAR is the last report to include a number of baselines and comparisons that are no longer meaningful to the Current Production Estimates. These Development estimates including the 2004 Original Acquisition Program Baseline (APB), 2006 APB, 2006 Prior Annual SAR and 2007 Prior APB, were based on different program durations, quantity of launch services, allocation of vehicle configurations, and commercial pricing assumptions. In addition, the 2006 and 2007 baselines included launch capability estimates below the actual cost of the requirements based reduced bills due to the impact of credits and withholds from the initial 1998 award.

The Phase 2 Transition SAR will be the year-end 2013. In this report the baselines will be updated to Production estimates and allow for current and relevant comparisons of the program status. The 2013 SAR will include the 2013 APB, the SAR Baseline Production Estimate, and the 2012 Annual SAR. Each of these includes the extension of the program to 2030, additional 60 launch services, and a manifest of larger and more expensive configurations of vehicles.

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
95.844	2.132	55.829	-1.019	1.510	310.651	0.087	0.000	369.190	465.034

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
87.827	2.183	54.306	-1.026	0.000	311.822	0.000	0.000	367.285	455.112

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	DEC 1996	DEC 1996	N/A	DEC 1996
Milestone II	JUN 1998	N/A	N/A	N/A
Milestone III	JUL 2003	N/A	N/A	N/A
IOC	TBD	TBD	N/A	N/A
Total Cost (TY $M)	2000.0	17347.8	N/A	70685.1
Total Quantity	N/A	181	N/A	152
Prog. Acq. Unit Cost (PAUC)	N/A	95.844	N/A	465.034

This Phase 1 Transition SAR is the last report to include a number of baselines and comparisons that are no longer meaningful to the Current Production Estimates. These estimates were based on different program durations, quantity of launch services, allocation of vehicle configurations, and commercial pricing assumptions. This SAR includes the extension of the program to 2030, additional 60 launch services, and a manifest of larger and more expensive configurations of vehicles.

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1451.1	15896.7	--	17347.8
Previous Changes				
Economic	-2.0	-11.0	--	-13.0
Quantity	+141.1	-10475.1	--	-10334.0
Schedule	--	-128.9	--	-128.9
Engineering	+229.5	--	--	+229.5
Estimating	+54.2	+27799.3	--	+27853.5
Other	+13.2	--	--	+13.2
Support	--	--	--	--
Subtotal	+436.0	+17184.3	--	+17620.3
Current Changes				
Economic	-3.6	+340.6	--	+337.0
Quantity	--	+16040.5	--	+16040.5
Schedule	--	-26.0	--	-26.0
Engineering	--	--	--	--
Estimating	+79.7	+19285.8	--	+19365.5
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+76.1	+35640.9	--	+35717.0
Adjustments	--	--	--	--
Total Changes	+512.1	+52825.2	--	+53337.3
CE - Cost Variance	1963.2	68721.9	--	70685.1
CE - Cost & Funding	1963.2	68721.9	--	70685.1

Summary Base Year 2012 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1801.7	15781.9	--	17583.6
Previous Changes				
Economic	--	--	--	--
Quantity	+170.1	-10022.0	--	-9851.9
Schedule	--	-1011.9	--	-1011.9
Engineering	+241.8	--	--	+241.8
Estimating	+60.4	+27432.4	--	+27492.8
Other	+16.1	--	--	+16.1
Support	--	--	--	--
Subtotal	+488.4	+16398.5	--	+16886.9
Current Changes				
Economic	--	--	--	--
Quantity	--	+12637.1	--	+12637.1
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+75.0	+14260.9	--	+14335.9
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+75.0	+26898.0	--	+26973.0
Adjustments	--	--	--	--
Total Changes	+563.4	+43296.5	--	+43859.9
CE - Cost Variance	2365.1	59078.4	--	61443.5
CE - Cost & Funding	2365.1	59078.4	--	61443.5

Previous Estimate: March 2012

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-3.6
Adjustment for current and prior escalation. (Estimating)	+4.2	+3.6
Additional funding required to meet new operational requirement to develop Dual Launch capability directed by Air Force Space Command (AFSPC) in Memorandum dated April 19, 2012. (Estimating)	+70.8	+76.1
RDT&E Subtotal	+75.0	+76.1

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+340.6
Quantity increase of 60 launch service procurements from 91 to 151 launch services due to the extension of the program's procurement life from FY 2018 to FY 2028. This estimate incorporates cost savings methodologies already implemented in the current revised contracting strategy. (Quantity) (QR)	+12637.1	+16040.5
Net overall shift of launch service procurements. (Schedule)	0.0	-26.0
Adjustment for current and prior escalation. (Estimating)	-26.1	-30.1
Program life extension from FY 2020 to FY 2030 as directed by Air Force Space Command Commander (AFSPC/CC) in the Strategic Master Plan dated FY 2009. The program extension estimate is based on and incorporates cost savings realized from incentivizing the contractor through the restructured contracting strategy enabling the Government to implement Should Cost Initiatives during technical evaluations and contract negotiations, and adding mechanisms for increased insight to monitor contractors' costs and enforce better cost management. (Estimating)	+15811.6	+20987.5
Cost savings realized in the FY 2014 President's Budget (PB) Future Years Defense Program (FYDP) due to EELV's revised Acquisition Strategy enabling the Government to implement Should Cost Initiatives such as revised contract structure to incentivize contractor efficiencies, and increased insight to enable the government to better enforce cost management. (Estimating)	-1524.6	-1671.6
Procurement Subtotal	+26898.0	+35640.9

(QR) Quantity Related

Contracts

Appropriation: Procurement	
Contract Name	**Launch Capability (ELC-3 FY13)**
Contractor	United Launch Services, LLC
Contractor Location	Centennial, CO 80112
Contract Number, Type	FA8811-13-C-0001, CPIF
Award Date	October 01, 2012
Definitization Date	September 30, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1167.8	N/A	0	1167.8	N/A	0	1167.8	1169.4

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+3.1	-12.3
Previous Cumulative Variances	--	--
Net Change	+3.1	-12.3

Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to Level-of-Effort accounts that earned budget with less than anticipated actuals, primarily in operation and maintenance and business accounts.

The unfavorable cumulative schedule variance is due to near-term launch delays.

Contract Comments

This is the first time this contract is being reported.

This Contract is currently in the process of being definitized with an estimated completion date of September 2013.

Appropriation: Procurement

Contract Name	**FY12 EELV Launch Services (ELS4)**
Contractor	United Launch Services, LLC.
Contractor Location	Centennial, CO, CO 80112
Contract Number, Type	FA8811-13-C-0002, FFP
Award Date	May 02, 2011
Definitization Date	September 30, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1787.0	N/A	10	1381.0	N/A	10	1381.0	1381.0

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 successful completion of negotiations on the price for the portion of the contract.

In November 2012 the FY11/12 EELV Launch Services (ELS4) contract, FA8811-11-C-0001, was de-scoped and 10 missions were moved to this new FY12 EELV Launch Services (ELS4) contract.

Of the 10 missions none have been launched. Contract completion is estimated to be in 2016.

This Contract is currently in the process of being definitized with an estimated completion date of Sepember 2013.

Appropriation: Procurement

Contract Name	**FY11 EELV Launch Services (ELS4)**
Contractor	United Launch Services, LLC.
Contractor Location	Centennial, CO 80112
Contract Number, Type	FA8811-11-C-0001, FFP
Award Date	May 02, 2011
Definitization Date	April 04, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
575.0	N/A	3	634.7	N/A	5	634.7	634.7

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 an increase in the quantity of missions included in the contract.

In November 2012 the contract was de-scoped to remove 10 missions onto a new contract, FY12 EELV Launch Services (ELS4) FA8811-13-C-0002. Thus, this contract Current and Estimated Quantity and Price are lower than reported in the last SAR.

Of the 5 missions none have been launched. Contract completion is estimated to be in 2016.

Appropriation: Procurement

Contract Name	**Launch Service**
Contractor	United Launch Services, LLC.
Contractor Location	Centennial, CO 80127
Contract Number, Type	FA8816-06-C-0004, FFP
Award Date	February 28, 2007
Definitization Date	February 28, 2007

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
227.0	N/A	2	733.7	N/A	7	733.7	733.7

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 an increase in the quantity of missions included in the contract.

Of the 7 missions 6 have been launched. Contract completion is estimated to be 2013.

Appropriation: Procurement

Contract Name	**Initial Launch Services**
Contractor	United Launch Services, LLC
Contractor Location	Centennial, CO 80127
Contract Number, Type	F04701-98-D-0001, FFP
Award Date	October 16, 1998
Definitization Date	October 16, 1998

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
649.0	N/A	9	1504.5	N/A	16	1504.5	1504.5

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 an increase in the quantity, 7 missions, included in the contract.

Of the 16 missions 9 have been launched. Contract completion is estimated to be in 2016.

Appropriation: Procurement

Contract Name	**EELV Launch Capability (ELC) Bridge**
Contractor	United Launch Services, LLC.
Contractor Location	Centennial, CO 80112
Contract Number, Type	FA8811-11-C-0002, CPIF/FFP
Award Date	July 01, 2011
Definitization Date	July 01, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1131.1	N/A	N/A	1172.9	N/A	N/A	1067.1	1124.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/28/2013)	+10.5	-28.9
Previous Cumulative Variances	+12789.0	-6622.0
Net Change	-12778.5	+6593.1

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to nearing completion of the contract.

The favorable net change in the schedule variance is due to nearing completion of the contract.

General Contract Variance Explanation

The Previous Cumulative Variance was misreported due to an error in placement of a decimal point, thus the Net Change shown is incorrect.

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 increases in scope for studies/mission unique effort as well as some awards for mission performance incentives.

Appropriation: Procurement

Contract Name	**EELV Launch Services (ELS) NROL-15**
Contractor	United Launch Services, LLC.
Contractor Location	Centennial, CO 80112
Contract Number, Type	FA8811-09-C-0003, FFP
Award Date	April 06, 2009
Definitization Date	August 17, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
184.0	N/A	1	155.5	N/A	1	155.5	155.5

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 a change in the final negotiated price.

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

Appropriation: Procurement	
Contract Name	**Launch Capability**
Contractor	Boeing Launch Services
Contractor Location	Huntington Beach, CA 92647
Contract Number, Type	FA8816-06-C-0001, CPAF
Award Date	November 15, 2006
Definitization Date	November 15, 2006

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
674.0	N/A	0	677.9	N/A	0	677.9	677.9

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/31/2013)	0.0	0.0
Previous Cumulative Variances	-24.0	-22.8
Net Change	+24.0	+22.8

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to deactivation on September 30, 2009 and moving the effort onto contract FA8811-06-C0002 .

The favorable net change in the schedule variance is due to deactivation on September 30, 2009 and moving the effort onto contract FA8811-06-C0002.

Contract Comments

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

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Contract value increased from $674.0M to $677.9M due to GPS Metric Tracking.

As a result of the Boeing and Lockheed Martin government launch activities being merged into United Launch Services (ULS), this contract was deactivated on September 30, 2009 and the effort moved onto contract FA8811-06-C0002 .

Appropriation: Procurement

Contract Name	**Initial Launch Services**
Contractor	United Launch Services, LLC
Contractor Location	Centennial, CO 80127
Contract Number, Type	F04701-98-D-0002, FFP
Award Date	October 16, 1998
Definitization Date	October 16, 1998

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1378.0	N/A	19	1135.7	N/A	11	1140.0	1140.0

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 a decrease in the quantity, 8 missions, included in the contract.

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

Appropriation: RDT&E

Contract Name	**Prototype Dev. Agreement**
Contractor	McDonnell Douglas Corp.
Contractor Location	Huntington Beach, CA 90627
Contract Number, Type	F04701-98-9-0005, OTA
Award Date	October 16, 1998
Definitization Date	October 16, 1998

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
500.0	N/A	0	896.7	N/A	1	896.7	896.7

Cost And Schedule Variance Explanations

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

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to a series of contract modifications.

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

McDonnell Douglas Corporation is a wholly-owned subsidiary of The Boeing Company.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	1	1	1	100.00%
Production	33	33	151	21.85%
Total Program Quantities Delivered	34	34	152	22.37%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	70685.1	Years Appropriated	20
Expenditures To Date	14039.2	Percent Years Appropriated	54.05%
Percent Expended	19.86%	Appropriated to Date	19273.9
Total Funding Years	37	Percent Appropriated	27.27%

The above data is current as of 4/8/2013.

Operating and Support Cost

EELV

Assumptions and Ground Rules

Cost Estimate Reference:

Cost Estimate is based on the Office of the Secretary of Defense Cost Assessment and Program Evaluation (OSD CAPE) Independent Cost Estimate (ICE) approved by the Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) February 10, 2013. The relevant costs are 3400 funds which fund the EELV dedicated infrastructure to include security, utilities, and operation & maintenance of critical infrastructure at the East and Western Ranges. Also supplies daily operating funds for 30th & 45th Launch Groups. Daily operating funds provide computer equipment, network support, travel, training, base support, government purchase card funds, General Services Administration (GSA) vehicles, and Scientific Engineering and Technically Assistance (SETA) support. All other costs are within Total Acquisition Cost.

Sustainment Strategy:

EELV is a launch service. The estimate includes 31 years of costs.

Antecedent Information:

No previous antecedent system covered EELV's combined launch capabilities.

Unitized O&S Costs BY2012 $M		
Cost Element	**EELV Average Cost per Year**	**None (Antecedent) None**
Unit-Level Manpower	0.0	0.0
Unit Operations	0.0	0.0
Maintenance	0.0	0.0
Sustaining Support	0.0	0.0
Continuing System Improvements	0.0	0.0
Indirect Support	0.0	0.0
Other	40.5	0.0
Total	40.5	--

Unitized Cost Comments:

O&S funds support critical infrastructure at the East and Western Ranges.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	EELV		EELV	None (Antecedent)
Base Year	1256.8	1382.5	1255.5	N/A
Then Year	1388.3	N/A	1381.1	N/A

Total O&S Costs Comments:
Total Cost Estimate is based on the OSD CAPE ICE. The increase from the March 2012 SAR reflects the extension of the program life frrom 2020 to 2030.

Disposal Costs

EELV is a launch service and therefore has no disposal costs.