Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0604853F: Evolved Expendable Launch Vehicle - EMD

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	53.786	14.524	7.980	-	7.980	7.963	-	-	-	Continuing	Continuing
650004: Evolved Expendable Launch Vehicle	53.786	14.524	7.980	-	7.980	7.963	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Evolved Expendable Launch Vehicle (EELV) program is a space launch system that satisfies the government's National Launch Forecast (NLF) requirements. EELV is a launch service, not a weapon system, primarily funded with procurement funds.

EELV is responsible for launching government manifested payloads. EELV supports military, intelligence, and international partnership mission requirements. The program also supports development and qualification of new entrants for launching government manifested payloads.

The program has research and developmental items including: new entrant certification; fleet standardization of the RS-68 main engine upgrade; current RL10 and common upper stage development; integration of space vehicles for research and development purposes; Pre-Planned Product Improvements (P3I) to ensure sustainability (includes, but is not limited to, secondary payload adaptor standard service, Global Positioning System (GPS) Metric Tracking capability, space launch flight termination system (SLFTS), future flight safety strategy, development of replacement components, flight and ground instrumentation); special studies (to include, but not limited to affordable upper stage engine studies), and other related support activities.

As of 21 August 2007, the EELV Program formally entered the sustainment phase. As of 31 October 2007, Air Force Space Command formally extended the EELV Program an additional 10 years, from 2020 through 2030. This program element is in Budget Activity 5, System Development and Demonstration, because it supports development and demonstration of the EELV concept leading to deployment of a lower cost expendable launch vehicle system.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force PE 0604853F: Evolved Expendable Launch Vehicle - EMD

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	30.245	20.028	7.965	-	7.965
Current President's Budget	53.786	14.524	7.980	-	7.980
Total Adjustments	23.541	-5.504	0.015	-	0.015
 Congressional General Reductions 	-	-0.504			
 Congressional Directed Reductions 	-	-5.000			
 Congressional Rescissions 	-	-			
Congressional Adds	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.872	-			
Other Adjustments	24.413	-	0.015	-	0.015

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 650004: Evolved Expendable Launch Vehicle

Congressional Add: Common Upper Stage

	FY 2011	FY 2012
	25.000	-
Congressional Add Subtotals for Project: 650004	25.000	-
Congressional Add Totals for all Projects	25.000	-

Change Summary Explanation

FY11 adjustments (Congressional General Reductions -\$0.587M, Congressional Adds \$25.0M) are reflected in the Other Adjustment Row.

FY12: -\$5.0M Congressional reduction for program underexecution.

FY13: No significant program changes.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: EELV RDT&E	28.786	14.524	7.980
Description: Fund EELV product improvements, replacement components, system enhancements, and special studies to allow EELV to meet National Launch Forecast requirements through 2030.			
FY 2011 Accomplishments: Continued fleet-wide integration and certification of RS-68 upgrade. Continued development of GPS metric tracking system.			

PE 0604853F: Evolved Expendable Launch Vehicle - EMD

Air Force

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0604853F: Evolved Expendable Launch Vehicle - EMD

Accomplishments/Planned Programs Subtotals

BA 5: Development & Demonstration (SDD)

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continued P3I efforts to include but not limited to development of secondary payload standard service efforts, development of replacement components, flight and ground instrumentation, and special studies.			
FY 2012 Plans: Complete fleet-wide integration and certification of RS-68 upgrade. Continue development of secondary payload standard service and GPS metric tracking development and conduct flight certifications. Continue P3I efforts, to include, but not limited to, development of replacement components, common upper stage engine, flight and ground instrumentation to include upgraded flight termination system (SLFTS), and conduct special studies.			
N/A			
FY 2013 Plans: Continue P3I efforts on upgraded secure launch flight termination system (SLFTS), common upper stage engine, and conduct special studies. FFRDC support of new entrant certification analysis as required. Complete development of secondary payload standard service and GPS metric tracking.			

	FY 2011	FY 2012
Congressional Add: Common Upper Stage	25.000	-
FY 2011 Accomplishments: Continued Development of RL-10C to achieve a Common Upper Stage.		
Congressional Adds Subtotals	25.000	-

D. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
• P-24: <i>MPAF, PE 0305953F,</i>	1,144.500	1,701.673	1,679.856	0.000	1,679.856	1,960.941	2,064.937	2,241.296	2,243.353	Continuing	Continuing

Evolved Expendable Launch Vehicle

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E. Acquisition Strategy

The current acquisition strategy separates the launch service price from the launch infrastructure costs. The Evolved Expendable Launch Vehicle (EELV) Acquisition Strategy, approved 24 Nov 2011, restructures the approach of the EELV Program to address many challenges the program has experienced throughout the EELV system lifecycle. This acquisition strategy directly addresses the Fiscal Year (FY) 2013 -2019 (Phase 1) timeframe. In cooperation with the NRO, the Air Force will commit to an annual production rate of launch vehicles establishing better predictability to maintain mission success, stabilize the industrial base, reduce costs, allow

PE 0604853F: Evolved Expendable Launch Vehicle - EMD Air Force

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28.786

14.524

7.980

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604853F: Evolved Expendable Launch Vehicle - EMD

competition, prevent or mitigate any cost or redesign impacts to space vehicles, and sustain the program to assure access to space. This strategy will continue to allow the Department of Defense to reliably place medium-, intermediate-, and heavy-class National Security Space (NSS) space vehicles into earth orbit. RDT&E-funded projects are included on the contract as separate contract line items. The acquisition approach supports the 2004 National Space Transportation Policy. The EELV system will launch the majority of the government portion of the NLF through 2030 and the government will continue to work to partner with industry to continuously improve products and processes to enhance reliability and reduce both the contractor's and government's total costs. In October 2011, the Air Force, NRO, and NASA signed a coordinated strategy for certification of commercial new entrants in order to compete to launch EELV-class payloads.

As of 21 August 2007, the EELV program formally entered the sustainment phase. Section 838 of the FY2012 National Defense Authorization Act requires EELV Selected Acquisition Report submittals.

As of 31 Oct 2007, Air Force Space Command formally extended the EELV Program an additional 10 years, from 2020 through 2030.

F. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE : February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force	R-1 ITEM NOMENCLATURE PE 0604853F: Evolved Expendable Launch	PROJECT 650004: Evolved Expendable Launch Vehicle
BA 5: Development & Demonstration (SDD)	Vehicle - EMD	

PE 0604853F: Evolved Expendable Launch Vehicle - EMD Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0604853F: Evolved Expendable Launch 650004: Evolved Expendable Launch Vehicle

BA 5: Development & Demonstration (SDD) Vehicle - EMD

Schedule Details

	Start		E	nd
Events	Quarter	Year	Quarter	Year
Pre-Planned Product Improvement (P3I): Secondary Payload Standard Service Design Certification Review (DCR)	3	2011	3	2011
Pre-Planned Product Improvement (P3I): GPS Metric Tracking Certification flights	2	2012	4	2013
Delta IV main engine Fleet Standardization - Metallic Lox Skirt Critical Design Review	1	2011	2	2011
Pre-Planned Product Improvement (P3I): RL-10C Engine Critical Design Review (CDR)	3	2011	4	2011
Pre-Planned Product Improvement (P3I): Secure Flight Termination System Requirements Definition	3	2011	1	2013
Pre-Planned Product Improvement (P3I): Secure Flight Termination System Requirements Review (SRR)	1	2012	2	2012

PE 0604853F: Evolved Expendable Launch Vehicle - EMD Air Force