Exhibit R-2, **RDT&E Budget Item Justification:** PB 2015 Air Force **Date:** March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System

PE 0604853F I Evolved Expendable Launch Vehicle Program (SPACE) - EMD

Development & Demonstration (SDD)

1 .												
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	1,583.113	29.949	24.938	-	-	-	-	-	-	-	-	1,638.000
650004: Evolved Expendable Launch Vehicle	1,583.113	29.949	24.938	-	-	-	-	-	-	-	-	1,638.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 176

Note

In FY 2014, 650004, Evolved Expendable Launch Vehicle, was completed.

A. Mission Description and Budget Item Justification

Evolved Expendable Launch Vehicle (EELV) is a Major Defense Acquisition Program (MDAP) Acquisition Category (ACAT) 1D program that procures launch services to deliver National Security Space (NSS) space vehicles (SVs) on orbit.

The program is completing research and developmental items including new entrant certification and studies, current RL10 and common upper stage development and integration; secondary payload adaptor standard service, and special studies (to include but not limited to upper stage manufacturability, alternative manufacturing process, and affordable upper stage engine studies, and other related support activities).

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) ... UNCLASSIFIED
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[#] The FY 2015 OCO Request will be submitted at a later date.

R-1 Program Element (Number/Name) Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System PE 0604853F I Evolved Expendable Launch Vehicle Program (SPACE) - EMD Development & Demonstration (SDD) FY 2013 FY 2014 FY 2015 Base FY 2015 OCO FY 2015 Total **B. Program Change Summary (\$ in Millions)** Previous President's Budget 7.980 27.963 35.000 35.000 Current President's Budget 29.949 24.938 **Total Adjustments** 21.969 -3.025 -35.000 -35.000 Congressional General Reductions -0.044 -0.025• Congressional Directed Reductions -3.000 Congressional Rescissions Congressional Adds 25.000 Congressional Directed Transfers Reprogrammings • SBIR/STTR Transfer -0.219 Other Adjustments -2.768 -35.000 -35.000 Congressional Add Details (\$ in Millions, and Includes General Reductions) FY 2013 FY 2014 Project: 650004: Evolved Expendable Launch Vehicle Congressional Add: RL10 upgrade 22.188 Congressional Add Subtotals for Project: 650004 22.188 Congressional Add Totals for all Projects 22.188 **Change Summary Explanation** FY13: -\$2.768M sequester reduction shown in other adjustments. FY14: -\$3M congressional directed reduction to hold support costs to fiscal year 2013 level.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: EELV Pre-planned product improvement (P3I) and Special Studies	7.761	4.938	-
Description: Funded EELV product improvements, replacement components, system enhancements, and special studies to allow EELV to meet National Launch Forecast requirements through 2030.			
FY 2013 Accomplishments:			

PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) ... Air Force

FY15: GPS III Dual Launch capability development cancelled.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

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Date: March 2014

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force					
Exhibit K-2, KD I &E Budget item Justinication. FB 2013 All Force			Date: N	/larch 2014	
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD) R-1 Program Element (Number/PE 0604853F I Evolved Expenda		Vehicle Pr	ogram (S	SPACE) - EMD)
C. Accomplishments/Planned Programs (\$ in Millions)		F	Y 2013	FY 2014	FY 2015
Continued development of secondary payload standard service and GPS metric tracking system to include last fli Continued P3I efforts, to include, but not limited to, development of replacement components, common upper star conducted special studies.					
FY 2014 Plans: Continue P3I efforts to include, but not limited to, the advancement of secondary payload standard service. Conceptudies to include, but not limited to, upper stage manufacturability and alternative manufacturing process.	luct special				
FY 2015 Plans: N/A					
Title: P3I - Dual Launch Capability Development			-	20.000	
Beautiful Theory (C. DOLOK) at the ODO III at all the order of the order of the beautiful to the order of the		200			
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launch		GPS			
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launch infrastructure, and adaptor equipment. FY 2015 Plans:		GPS			
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launch infrastructure, and adaptor equipment. FY 2015 Plans:	ch vehicle		7.761	24.938	
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launch infrastructure, and adaptor equipment. FY 2015 Plans: N/A	ch vehicle			24.938	
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launcinfrastructure, and adaptor equipment. FY 2015 Plans: N/A Accomplishments/Planned Programs Accomplishments/Planned Programs	ch vehicle grams Subt	otals		24.938	
Description: The specific P3I effort for GPS III dual launch capability development and subsequent qualification is satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launch infrastructure, and adaptor equipment. FY 2015 Plans: N/A Accomplishments/Planned Programs Congressional Add: RL10 upgrade FY 2013 Accomplishments: Complete development and qualification of RL10C upper stage engine conversion program.	grams Subt	otals		24.938	
satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort. FY 2014 Plans: Conduct dual launch development activities to include key components to include communication hardware, launcinfrastructure, and adaptor equipment. FY 2015 Plans: N/A Accomplishments/Planned Progressional Add: RL10 upgrade FY 2013 Accomplishments: Complete development and qualification of RL10C upper stage engine conversion	grams Subt	otals		24.938	

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0604853F I Evolved Expendable Launch Vehicle Program (SPACE) - EMD

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

	•	-	FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 MPAF: BA05 Line Item 	802.399	807.991	630.903	-	630.903	686.011	849.988	849.771	1,306.251	12,889.935	28,208.292
# 23: Evolved Expendable											
Launch Veh (Space)											
 MPAF: BA05: Line Item 	631.551	559.413	750.143	-	750.143	739.424	777.579	763.395	515.875	11,235.814	16,012.464
#22: Evolved Expendable											
Launch Veh (Infrast.)											

Remarks

E. Acquisition Strategy

The Air Force structured EELV with a new cost savings acquisition strategy that stabilizes the industrial base through a quantity and rate commitment to the current provider, provides predictability to maintain mission success, and enables on ramps for other launch vehicle companies referred to as New Entrants. The Air Force, National Reconnaissance Office (NRO), and the National Aeronautics and Space Administration (NASA) agreed to a coordinated strategy for certification of New Entrants to launch payloads in support of NSS requirements. If competition is not viable at the time of need, missions will be awarded to the incumbent.

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.

PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) ... UNCLASSIFIED
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					UN	ICLA33	סורובט								
Exhibit R-3, RDT&E F	roject C	ost Analysis: PB 2	2015 Air F	orce		-						Date:	March 20)14	
Appropriation/Budge 3600 / 5	t Activity	1				PE 060	ogram Ele 4853F / E Program	volved E	xpendabl				•	able Laun	ch
Product Developmen	t (\$ in Mi	illions)		FY 2	2013	FY 2	2014		2015 ase	FY 2		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Delta IV development	C/FFP	Boeing : Huntington Beach, CA	710.182	-		-		-		-		-	-	710.182	-
Atlas V development	C/FFP	Lockheed Martin : Denver, CO	583.511	-		-		-		-		-	-	583.511	-
United Launch Alliance (ULA) Development	SS/CPIF	United Launch Services : Denver, CO	146.829	27.988	Oct 2012	22.967	Oct 2013	-		-		-	-	197.784	ТВ
		Subtotal	1,440.522	27.988		22.967		-		-		-	-	1,491.477	-
Support (\$ in Millions	s)			FY 2	2013	FY 2	2014		2015 ase	FY 2		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
SPO Range Mission Spt	Various	Space and Missile Center: Los Angeles AFB, CA	43.617	-		-		-		-		-	-	43.617	-
FFRDC Mission Assurance	SS/CPAF	Aerospace : El Segundo, CA	75.812	0.800	Oct 2012	0.780	Oct 2013	-		-		-	-	77.392	-
Special studies	Various	Various : ,	0.421	1.145	Mar 2013	1.151	Oct 2013	-		-		-	-	2.717	-
		Subtotal	119.850	1.945		1.931		-		-		-	-	123.726	-
Test and Evaluation (\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ase	FY 2		FY 2015 Total			
	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Cost Category Item	_ α Type	Activity & Location	Icars	0031	Date	0000	Date	0031	Date	0031	Date		Complete	0031	

PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) ... UNCLASSIFIED Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air F	orce				Date: March 2014	
Appropriation/Budget Activity	R-	-1 Program Element (Number/N	ame) I	Project (N	umber/Name)	
3600 <i>f</i> 5	PE	E 0604853F I Evolved Expendable	e Launch	650004 <i>I E</i>	Evolved Expendable Launch	
	Ve	ehicle Program (SPACE) - EMD	1	Vehicle		

Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 Ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Other Cntr Spt (PMA)	Various	Various : Various,	22.741	0.016	Oct 2012	0.040	Oct 2013	-		-		-	-	22.797	-
		Subtotal	22.741	0.016		0.040		-		-		-	-	22.797	-

	Prior Years	FY 2	2013	FY 2	2014	FY 2 Ba	FY 2	2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	1,583.113	29.949		24.938		-	-		-	-	1,638.000	-

Remarks

N/A

PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) ... UNCLASSIFIED Air Force

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Exhibit R-4. RDT&E Schedule Profile: PB 2015 Air Force Date: March 2014

Appropriation/Budget Activity

3600 / 5

R-1 Program Element (Number/Name) PE 0604853F / Evolved Expendable Launch 650004 / Evolved Expendable Launch

Project (Number/Name)

Vehicle

Vehicle Program (SPACE) - EMD



EELV FY15 PB Schedule

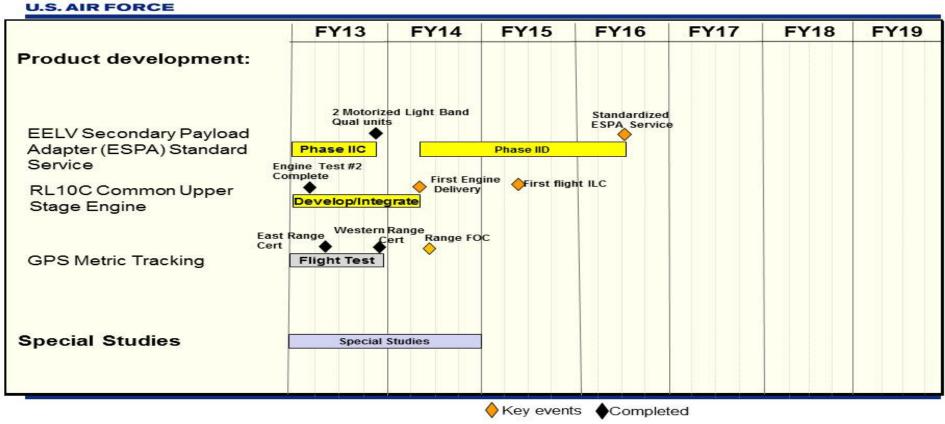


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 5	PE 0604853F I Evolved Expendable Launch	650004 <i>I E</i>	volved Expendable Launch
	Vehicle Program (SPACE) - EMD	Vehicle	

Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
EPSA Phase IIC	1	2013	4	2013
ESPA Phase IID	2	2014	3	2016
RL10C Engine Test #2	1	2013	2	2013
RL10C First Engine Delivery	4	2013	2	2014
GPS MT Certification Flights	1	2013	4	2013
GPS MT Eastern and Western Range Full Operational Capability	2	2013	2	2014
Special Studies (SS) Upper Stage Engine Risk Reduction	2	2013	4	2014