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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
3600: Research, Development, Test & Evaluation, Air Force BA 5: System Development & Demonstration (SDD)					PE 0604853F: Evolved Expendable Launch Vehicle Program (SPACE) - EMD							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	1,569.032	14.081	7.980	27.963	-	27.963	35.000	20.000	0.000	0.000	Continuing	Continuing
650004: Evolved Expendable Launch Vehicle	1,569.032	14.081	7.980	27.963	-	27.963	35.000	20.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
MDAP/MAIS Code(s): 176												
[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
^{##} The FY 2014 OCO Request will be submitted at a later date												
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 and studies; 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), dual launch capability, future flight safety strategy, development of replacement components, flight and ground instrumentation), 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.												
As of 26 March 2012, the EELV program was formally designated as a Major Defense Acquisition (MDAP) not in the sustainment phase. In addition, the EELV program was designated as an Acquisition Category ID (ACAT ID) program. 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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B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		14.524	7.980	7.963	-	7.963
Current President's Budget		14.081	7.980	27.963	-	27.963
Total Adjustments		-0.443	0.000	20.000	-	20.000
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		-0.443	0.000			
• Other Adjustments		0.000	0.000	20.000	-	20.000
Change Summary Explanation FY14: \$20M added to develop GPS III Dual Launch capability.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: EELV Pre-planned product improvement (P3I) and Special Studies				14.081	7.980	7.963
Description: Funded EELV product improvements, replacement components, system enhancements, and special studies to allow EELV to meet National Launch Forecast requirements through 2030.						
FY 2012 Accomplishments: Continued development and qualification of RL10C upper stage engine. Prime contractor transitioned the integration of the RL10C upper stage engine conversion program to Independent Research and Development (IR&D). Continued GPS metric tracking development and conducted flight certifications. Continued the P3I efforts of development of secondary payload standard service efforts, development of replacement components, flight and ground instrumentation to include upgraded space launch flight termination system (SLFTS), and special studies.						
FY 2013 Plans: Complete development and qualification of RL10C upper stage engine conversion program. Complete development of secondary payload standard service and GPS metric tracking system to include last flight certification. Continue P3I efforts, to include, but not limited to, development of replacement components, common upper stage engine, and conduct special studies.						
FY 2014 Plans:						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Continue P3I efforts to include, but not limited to, the advancement of secondary payload standard service. Conduct special studies to include, but not limited to, upper stage manufacturability and alternative manufacturing process.												
Title: P3I - Dual Launch Capability Development										0.000	0.000	20.000
Description: The specific P3I effort for GPS III dual launch capability development and subsequent qualification to launch 2 GPS satellites on a single launch vehicle. This effort is the launch vehicle unique development and modification effort.												
FY 2014 Plans: Initiation of dual launch development activities will occur, key components to include communication hardware, launch vehicle infrastructure, and adaptor equipment.												
Accomplishments/Planned Programs Subtotals										14.081	7.980	27.963
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• MPAF: BA05 Line Item # MSEELV: Evolved Expendable Launch Vehicle	1,681.673	1,679.856	1,852.900		1,852.900	1,961.200	1,827.400	1,838.900	2,072.500	23,514.598	44,154.301	
Remarks												
E. Acquisition Strategy												
<p>The Evolved Expendable Launch Vehicle (EELV) Acquisition Strategy restructures the approach of the EELV Program to address many challenges the program has experienced throughout the EELV system lifecycle. 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 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. This acquisition strategy directly addresses the Fiscal Year (FY) 2013 - 2019 (Phase 1) timeframe. Once a New Entrant demonstrates a successful launch of an EELV-class launch system the Air Force will award integration studies. RDT&E-funded projects are included on the contract as separate contract line items. The EELV system and certified new entrants will launch 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.</p> <p>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 26 March 2012, the EELV program was formally designated as a Major Defense Acquisition (MDAP) not in the sustainment phase. In addition, the EELV program was designated as an Acquisition Category ID (ACAT ID) program.</p>												

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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-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>System Development & Demonstration (SDD)</i>						R-1 ITEM NOMENCLATURE PE 0604853F: <i>Evolved Expendable Launch Vehicle Program (SPACE) - EMD</i>						PROJECT 650004: <i>Evolved Expendable Launch Vehicle</i>			
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Delta IV development	C/FFP	Boeing:Huntington Beach, CA	710.182	0.000		0.000		0.000		-		0.000	0.000	710.182	
Atlas V development	C/FFP	Lockheed Martin:Denver, CO	583.511	0.000		0.000		0.000		-		0.000	0.000	583.511	
United Launch Alliance (ULA) Development	SS/CPIF	United Launch Services:Denver, CO	134.077	12.752	Oct 2011	3.540	Oct 2012	21.398	Oct 2013	-		21.398	50.840	222.607	TBD
Subtotal			1,427.770	12.752		3.540		21.398		0.000		21.398	50.840	1,516.300	
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SPO Range Mission Spt	Various	Space and Missile Center:Los Angeles AFB, CA	43.617	0.000		0.000		0.000		-		0.000	0.000	43.617	
FFRDC Mission Assurance	SS/CPAF	Aerospace:El Segundo, CA	74.983	0.829	Oct 2011	0.980	Oct 2012	2.291	Oct 2013	-		2.291	3.190	82.273	
Special studies	Various	Various;	0.000	0.421		3.276	Mar 2013	3.576	Oct 2013	-		3.576	0.000	7.273	
Subtotal			118.600	1.250		4.256		5.867		0.000		5.867	3.190	133.163	
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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,	22.662	0.079	Oct 2011	0.184	Oct 2012	0.698	Oct 2013	-		0.698	0.970	24.593	

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BA 5: System Development & Demonstration (SDD)															
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			22.662	0.079		0.184		0.698		0.000		0.698	0.970	24.593	
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1,569.032	14.081		7.980		27.963		0.000		27.963	55.000	1,674.056	
Remarks															
N/A															

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

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

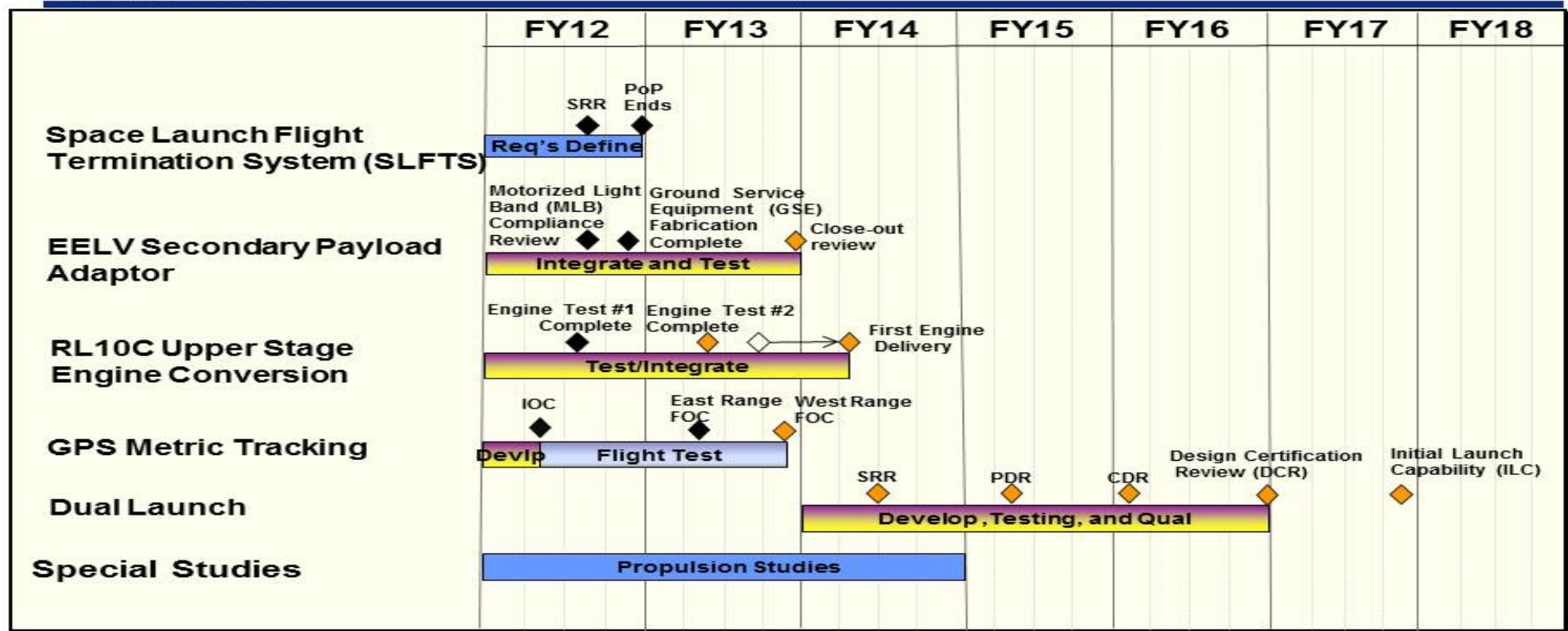
PROJECT

650004: Evolved Expendable Launch Vehicle



U.S. AIR FORCE

EELV RDT&E Program Schedule



◆ Key events ◆ Completed

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
EELV Secondary Payload Adapter (ESPA) Motorized Light Band Compliance Review	3	2012	3	2012
ESPA Ground Support Equipment Fabrication Complete	4	2012	4	2012
EPESA Close Out Review	4	2013	4	2013
RL10C Engine Test #1	2	2012	3	2012
RL10C Engine Test #2	4	2012	2	2013
RL10C First Engine Delivery	4	2013	2	2014
GPS MT Initial Operational Capability	2	2012	2	2012
GPS MT Certification Flights	2	2012	4	2013
GPS MT Eastern Range Full Operational Capability	2	2013	2	2013
GPS MT Western Range Full Operational Capability	4	2013	4	2013
Dual Launch SRR	3	2014	3	2014
Dual Launch Preliminary Design Review (PDR)	2	2015	2	2015
Dual Launch CDR	1	2016	1	2016
Dual Launch Qualification Testing	3	2016	4	2016
Dual Launch Capability Initial Launch Capability (ILC)	4	2017	1	2018
Special Studies (SS): Upper Stage Engine Risk Reduction	2	2013	2	2014
SS: Low Cost Manufacturing	3	2013	4	2014
SS: Booster Engine Risk Reduction	2	2014	4	2014