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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0101126F: <i>B-1B Squadrons</i>
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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	-	32.087	16.265	19.589	-	19.589	11.384	0.086	0.000	0.000	0.000	79.411
675344: <i>B-1B Modernization</i>	-	32.087	16.265	19.589	-	19.589	11.384	0.086	0.000	0.000	0.000	79.411
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] 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

Note

FY14 New Start to replace EMD LRUs for CITS, FIDL and VSDU on two RDT&E funded test jets.

A. Mission Description and Budget Item Justification

The B-1B Lancer is a swing-wing, supersonic, long-range, conventional bomber. It carries the largest payload of both guided and unguided weapons in the Air Force inventory. The multi-mission B-1B is the backbone of America's long-range bomber force and can rapidly deliver massive quantities of precision and non-precision weapons against any adversary, anywhere in the world, at any time. The current service life extends beyond 2040.

This Research, Development, Test & Engineering (RDT&E) effort provides funding for B-1B modernization programs. These modernization programs alleviate aircraft obsolescence issues due to Diminishing Manufacturing Sources (DMS) while at the same time providing improved capabilities to the B-1B weapon system that require significant hardware and software development and testing. B-1B RDT&E efforts include development of the Self-Contained Standby Attitude Indicator (SCAI). If the primary flight instruments are lost due to electrical failure, the SCAI will remain powered by the backup battery and continue to provide the primary flight information needed to keep the aircraft in stable flight providing attitude, altitude, and airspeed/Mach. This development activity will replace three standby flight indicators (attitude indicator, altimeter, and airspeed indicator) with a more reliable/supportable off-the-shelf display that combines all necessary flight information into one device. SCAI must be functional and reliable in the event of primary flight display failure, and is a Mission-Essential Subsystem List (MESL) item required for flight. RDT&E funding will also provide upgrades to the B-1B training systems (both flight and maintenance simulators/trainers) that are included in the modernization programs to bring the training systems to the same configuration as the Central Integrated Test System (CITS), Fully Integrated Data Link (FIDL), and Vertical Situation Display Upgrade (VSDU) programs. The B-1B training system provides the war fighter fully integrated, cost effective, high fidelity training in the operation, weapons employment, and maintenance of the B-1B weapon system. Upgrades to the B-1B flight test aircraft are included in the modernization programs to keep the test flight systems current. RDT&E funded test jets are currently configured with Engineering Manufacturing and Development (EMD) Line Replaceable Units (LRUs) for CITS, FIDL and VSDU. Replacement of the EMD LRUs are required to bring two flight test aircraft to a fleet-representative configuration to ensure maximum supportability, maintainability and reliability for continued and future flight tests. In addition, program funds cover engineering/planning studies, related engineering efforts, and auxiliary requirement for development programs that have not yet fielded due to diminishing manufacturing sources. Cost includes program management administrative (PMA) costs and initiatives for anticipant weapon system enhancements, including efforts to improve weapon system operational capabilities, safety, supportability, maintainability, reliability, and total ownership cost. All B-1B development programs support planned requirements for unique identification in their production phases.

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This program is in Budget Activity 7, Operational System Development, budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipated production funding in the current or subsequent fiscal year.						
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		33.011	16.265	19.589	-	19.589
Current President's Budget		32.087	16.265	19.589	-	19.589
Total Adjustments		-0.924	0.000	0.000	-	0.000
• 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		-0.924	0.000			
• Other Adjustments		0.000	0.000	0.000	-	0.000
Change Summary Explanation No Significant Changes						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: B-1B Modernization				29.387	3.865	0.000
Description: Various efforts for continued B-1B Modernization						
FY 2012 Accomplishments: Vertical Situation Display Upgrade (VSDU) completed flight test and released qualified software. VSDU also completed a Functional Configuration Audit (FCA) and began modification of test aircraft 0068. Inertial Navigation Systems (INS) and Fully Integrated Data Link (FIDL) concluded. General development related support for the flight test efforts will continue.						
FY 2013 Plans: Vertical Situation Display Upgrade (VSDU) will complete modification to test aircraft 0068. VSDU EMD activities will conclude.						
FY 2014 Plans: N/A						
Title: B-1B Development of Simulators for CITS, FIDL and VSDU				2.700	10.400	11.089
Description: B-1B Development of Simulators for CITS, FIDL and VSDU						

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APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0101126F: <i>B-1B Squadrons</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
<i>FY 2012 Accomplishments:</i> Simulator and training upgrades began the software and hardware development and testing to support fielding of VSDU, Central Integrated Test System (CITS), and Fully Integrated Data Link (FIDL). <i>FY 2013 Plans:</i> Simulator and training upgrades will continue the software and hardware development and testing to support fielding of VSDU, Central Integrated Test System (CITS), and Fully Integrated Data Link (FIDL). <i>FY 2014 Plans:</i> Simulator and training upgrades will continue software and hardware development, integration and testing to support fielding of VSDU, Central Integrated Test Systems (CITS), and Fully Integrated Data Link (FIDL).				
<i>Title:</i> B-1B Attitude Indicator <i>Description:</i> Development of the Self Contained Standby Attitude Indicator. <i>FY 2012 Accomplishments:</i> Not Applicable <i>FY 2013 Plans:</i> Development of a replacement for the B-1 Self Contained Standby Attitude Indicator will begin. <i>FY 2014 Plans:</i> Self Contained Standby Attitude Indicator(SCAI) will accomplish prototype, installation,ground and flight testing. SCAI EMD activities will conclude.		0.000	2.000	5.000
<i>Title:</i> B-1 Flight Test Aircraft <i>Description:</i> FY14 New STart. Upgrades to the B-1B flight test aircraft. <i>FY 2012 Accomplishments:</i> Not Applicable <i>FY 2013 Plans:</i> Not Applicable <i>FY 2014 Plans:</i> Replace EMD LRUs for CITS, FIDL and VSDU on two RDT&E funded test jets.		0.000	0.000	3.500
Accomplishments/Planned Programs Subtotals		32.087	16.265	19.589

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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
• APAF: BA05: B01B00: Training Support to Units, Mods	0.301	0.269	0.333		0.333	0.431	0.442	0.450	0.458	Continuing	Continuing
• APAF: BA05: B01B00: Bomber Tactical Data Link, Mods	0.000	0.000	0.000		0.000	0.225	0.140	0.129	0.000	Continuing	Continuing
• APAF: BA06: B01B00: B-1B Squadrons, Spares	2.121	17.988	17.291		17.291	23.902	17.504	13.405	13.646	Continuing	Continuing
• APAF: BA06: B01B00: PE0101126F: Bomber Tactical Data Link, Spares	0.000	0.000	0.696		0.696	1.048	1.004	0.000	0.000	Continuing	Continuing
• APAF: BA07: B00100, B-1: B-1B Squadrons, Post Production Support	4.743	0.965	3.683		3.683	0.000	0.000	0.000	0.000	Continuing	Continuing
Remarks											
(U) Program Element 0208006F, Air Force Mission Planning Systems (AFMPS), Joint Mission Planning System (JMPS)											
(U) Program Element 0207446F, Bomber Tactical Data Link											
E. Acquisition Strategy											
Key elements of the overall B-1B Modernization acquisition strategy include: use of sole source contract with a prime/integrating contractor (Boeing); installed performance responsibility; use of Cost Plus Incentive Fee (CPIF) development contracts; and combining developmental upgrades with software sustainment blocks to minimize the number of software releases, aircraft downtime and differences in fielded configurations.											
Self Contained Standby Attitude Indicator (SCAI) acquisition strategy will consist of two years EMD, three years Production and Installation. Contract will be a Firm Fixed Price (FFP).											
The acquisition strategy for Simulator Upgrades for VSDU, Central Integrated Test Systems (CITS), and Fully Integrated Data Link (FIDL) is a Fixed Price Incentive Firm (FPIF) competitive award contract.											
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: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0101126F: B-1B Squadrons				PROJECT 675344: B-1B Modernization					
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
Vertical Situation Display Upgrade (VSDU)	SS/CPFF	Boeing:Long Beach, CA	-	19.947	Oct 2011	3.421	Jan 2013	0.000		-		0.000	Continuing	Continuing	
Inertial Navigation System (INS)	SS/CPIF	Boeing:Long Beach, CA	-	0.315	Jan 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Fully Integrated Data Link (FIDL)	SS/CPIF	Boeing:Long Beach, CA	-	2.200	Oct 2011	0.000		0.000		-		0.000	Continuing	Continuing	
Self Contained Attitude Indicator	C/FFP	General Electric:Grand Rapids, MI	-	0.000		1.950	Jun 2013	5.000	Mar 2014	-		5.000	Continuing	Continuing	
Simulator Upgrades for CITS, FIDL and VSDU	C/FPIF	AAI:Goose Creek, SC	-	2.700	Apr 2012	9.325	Apr 2013	10.393	Apr 2014	-		10.393	Continuing	Continuing	
Upgrades to B-1B Flight Test Aircraft	SS/FFP	Boeing:Long Beach, CA	-	0.000		0.000		3.500	Feb 2014	-		3.500	Continuing	Continuing	
DMS Redesign	SS/CPIF	Boeing:Long Beach, CA	-	0.000		0.000		0.200		-		0.200	Continuing	Continuing	
Subtotal			0.000	25.162		14.696		19.093		0.000		19.093			
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
Studies & Analyses	Various	Various:Various,	-	0.000		0.089	Apr 2013	0.089	Apr 2014	-		0.089	Continuing	Continuing	
Subtotal			0.000	0.000		0.089		0.089		0.000		0.089			
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
AFFTC	PO	Not specified.:	-	2.818	Oct 2011	1.000	Apr 2013	0.000		-		0.000	Continuing	Continuing	
Subtotal			0.000	2.818		1.000		0.000		0.000		0.000			

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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
A&AS	Various	Various:Various,	-	1.265	Jan 2012	0.000		0.000		-		0.000	Continuing	Continuing	
PMA	Various	Various:Various,	-	2.842	Jan 2012	0.480	Jan 2013	0.407	Jan 2014	-		0.407	Continuing	Continuing	
Subtotal			0.000	4.107		0.480		0.407		0.000		0.407			

	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	0.000	32.087		16.265		19.589		0.000		19.589			

Remarks

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

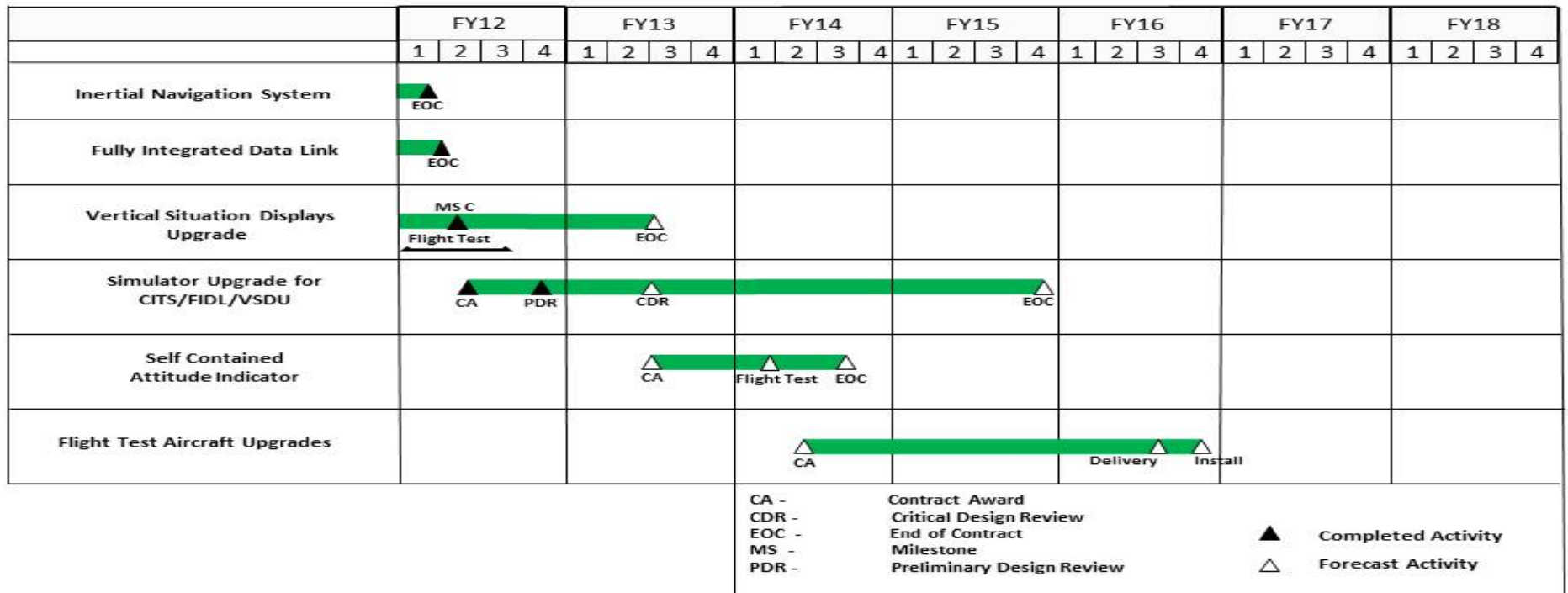
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0101126F: B-1B Squadrons

PROJECT

675344: B-1B Modernization



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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
INS End of Contract	1	2012	1	2012
FIDL End of Contract	2	2012	2	2012
VSDU Flight Test	1	2012	3	2012
VSDU Milestone (MS) C	2	2012	2	2012
VSDU End of Contract	2	2013	3	2013
Simulator Upgrades FIDL/VSDU/CITS Contract Award	2	2012	2	2012
Simulator Upgrades FIDL/VSDU/CITS Preliminary Design Review	4	2012	4	2012
Simulator Upgrades FIDL/VSDU/CITS Critical Design Review	3	2013	3	2013
Simulator Upgrades FIDL/VSDU/CITS End of Contract	4	2015	4	2015
Self Contained Attitude Indicator (SCAI) Replacement CA	3	2013	3	2013
Self Contained Attitude Indicator (SCAI) Flight Test	1	2014	1	2014
Self Contained Attitude Indicator (SCAI) End of Contract	3	2014	3	2014
Flight Test Aircraft Upgrades Contract Award	2	2014	2	2014
Flight Test Aircraft Upgrades Deliveries	3	2016	3	2016
Flight Test Aircraft Upgrades Installs	4	2016	4	2016