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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0101126F / B-1B Squadrons							
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	-	13.126	12.774	5.353	-	5.353	4.040	1.945	-	-	-	37.238
675344: B-1B Modernization	-	13.126	12.774	5.353	-	5.353	4.040	1.945	-	-	-	37.238
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

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 United States Air Force inventory. The multi-mission B-1B is the backbone of America's long-range conventional 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 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.

Funds address upgrades to the Secure Line of Sight (SLOS) / Beyond Line of Sight (BLOS) / Air Radio Communication (ARC-210) voice capability. The SLOS/BLOS ARC 210 voice capability adds secure voice capabilities to the radio currently utilized only for secure data. This will add much needed capability to our forces currently operating in forward locations. This program is an Urgent Operational Need (UON).

B-1B training systems upgrades(both flight and maintenance simulators/trainers) are complementary to the aircraft Central Integrated Test System (CITS), Fully Integrated Data Link (FIDL), and Vertical Situational Display Upgrade (VSDU) modernization programs. These upgrades are required to bring the simulators up to the same configuration of the modernized aircraft. The B-1B training system provides the war fighter fully integrated, cost effective, high fidelity training in flight operations, weapons employment, and maintenance of the B-1B weapon system.

Aircraft RDT&E efforts include development of a Self-Contained Standby Attitude Indicator (SCAI). This development activity will replace three standby flight indicators (attitude indicator, altimeter, and airspeed indicator) with a more reliable/supportable commercial off-the-shelf display that combines all necessary flight information into one device. If the primary flight instruments are lost, SCAI will continue to provide the primary flight information needed to fly the aircraft. Standby instrumentation 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.

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, Manufacture, and Development (EMD) Line Replaceable Units (LRUs) for CITS, FIDL and VSDU. Replacement of the EMD LRUs is required to bring two flight test aircraft to fleet representative configuration. Maintenance and logistic support from the manufacturer is required until the Air Force supply chain is established. Replacement of the LRUs will ensure maximum supportability, maintainability, and reliability for continued and future flight tests.

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Additionally, program funds cover engineering/planning studies, related engineering efforts, and auxiliary equipment needed for development programs that have not yet fielded. Cost includes Program Management Administrative (PMA) costs and initiatives for anticipated 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.						
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 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		16.265	19.589	11.384	-	11.384
Current President's Budget		13.126	12.774	5.353	-	5.353
Total Adjustments		-3.139	-6.815	-6.031	-	-6.031
• Congressional General Reductions		-0.021	-			
• Congressional Directed Reductions		-	-6.815			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-1.573	-			
• SBIR/STTR Transfer		-0.467	-			
• Other Adjustments		-1.078	-	-6.031	-	-6.031
Change Summary Explanation						
FY13 change of -\$1.078M due to sequestration						
FY13 change of -\$1.573M due to reprogramming for higher USAF priority reprogramming						
FY14 change of -\$6.815M due to Congressional program decrease						
FY15 change of -\$6.031M due to higher USAF priorities						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: B-1B Secure Line of Sight (SLOS) / Beyond Line Of Sight (BLOS) ARC-210				2.500	-	-
Description: This is an upgrade to the Secure Line of Sight (SLOS) / Beyond Line of Sight (BLOS) Air Radio Communication (ARC) 210 voice capability.						
FY 2013 Accomplishments:						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Initiated upgrades to software and testing to support fielding of SLOS/BLOS ARC 210 voice capability.				
FY 2014 Plans: N/A				
Title: B-1B Vertical Situation Display Upgrade Description: Vertical Situation Display Upgrade (VSDU) is a program to replace the primary flight displays in the forward cockpit, which have become increasingly unsupportable due to Diminishing Manufacturing Sources (DMS). FY 2013 Accomplishments: Completed work on Vertical Situation Display Upgrade (VSDU) modification to test aircraft 0068, concluded Engineering Manufacturing and Development (EMD) activities, and began EMD contract closeout activities. FY 2014 Plans: N/A		3.622	-	-
Title: B-1B IBS Simulator Development Description: B-1B Integrated Battle Station (IBS) Simulator Development upgrades existing training systems (both flight and maintenance) to the IBS configuration (IBS is the combined production phase of CITS, FIDL, VSDU development efforts). FY 2013 Accomplishments: Simulator and training upgrades continued with software and hardware development and testing to support fielding of Vertical Situation Display Upgrade (VSDU), Central Integrated Test Systems (CITS), and Fully Integrated Data Link (FIDL). FY 2014 Plans: 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). FY 2015 Plans: Continue simulator and training upgrades		4.004	3.324	4.353
Title: B-1B Self-Contained Attitude Indicator Description: The B-1B Self-Contained Attitude Indicator (SCAI) program will replace the legacy standby attitude indicator that uses an obsolete spinning mass gyro with a reliable and supportable standby attitude indicator. FY 2013 Accomplishments:		3.000	5.200	-

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2013	FY 2014	FY 2015
Developed and tested a replacement standby attitude indicator for the B-1B.												
FY 2014 Plans: Accomplish prototype development, ground / flight testing, and complete EMD activities.												
Title: B-1B Flight Test Upgrades										-	4.250	1.000
Description: B-1B Flight Test Upgrades modifies the two flight test aircraft at Edwards AFB to the production IBS configuration; the EMD LRUs that are currently on the aircraft will be removed and replaced with production units.												
FY 2013 Accomplishments: N/A												
FY 2014 Plans: Replace EMD LRUs with production kits on test aircraft and provided interim contract support for CITS, FIDL, VSDU EMD LRUs on RDT&E funded test jets.												
FY 2015 Plans: Provides interim contractor support for CITS, FIDL and VSDU EMD LRUs for RDT&E funded test jets.												
Accomplishments/Planned Programs Subtotals										13.126	12.774	5.353
D. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• APAF: BA05: Line Item # B01B00: Training Support to Units, Mods	0.269	0.333	0.427	-	0.427	0.438	0.447	0.455	0.463	-	-	
• APAF: BA05: Line Item # B01B00: Bomber Tactical Data Link, Mods	-	-	0.223	-	0.223	0.138	1.319	1.490	-	-	-	
• APAF: BA05: Line Item # B01B00: B-1B Squadrons, Mods	136.025	104.135	140.252	-	140.252	129.338	114.507	71.220	88.128	-	-	
• APAF: BA05: Line Item # B01B00 S...: B-1B Squadrons, Spares	16.735	14.267	9.793	-	9.793	18.883	8.960	3.224	3.470	-	-	
• APAF: BA05: Line Item # B01B00:: Bomber Tactical Data Link, Spares PE0207446F	-	0.696	1.038	-	1.038	0.995	-	-	-	-	-	

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D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF: BA07: Line Item # B00100: <i>B-1B Squadrons, Post Production Support</i>	0.964	3.683	-	-	-	-	-	-	-	-	-
• APAF: BA07: Line Item #B00100: <i>B-1 Aircraft Common/ Peculiar Support Equipment</i>	6.505	-	-	-	-	-	-	-	-	-	-
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 Upgrades to the B-1B flight test will use a sole source Cost Plus Firm Fixed (CPFF) contract with a prime / integrating contractor (Boeing). Self-Contained Standby Attitude Indicator (SCAI) acquisition strategy will consist of two years EMD, three years production and installation. The EMD portion of the Contract will be a Cost Plus Fixed Fee with A Performance Incentive (CPFF PI) with Firm Fixed Price (FFP) for production. The acquisition strategy for simulator upgrades for Vertical Situation Display Upgrade (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-4, RDT&E Schedule Profile: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0101126F / B-1B Squadrons

Project (Number/Name)
675344 / B-1B Modernization

