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 PE 0305145F: Arms Control Implementation

BA 7: Operational Systems Development

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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	-	0.000	4.000	1.430	-	1.430	15.100	7.640	0.760	0.000	Continuing	Continuing
675039: B-52 Modernization	-	0.000	4.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
675063: Open Skies Sensors	-	0.000	0.000	1.430	-	1.430	15.100	7.640	0.760	0.000	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

New Start Effort:

In FY14 675063, Open Skies Sensors includes new start efforts.

In FY14 funding totals include \$1.430M.

The Open Skies Sensor program is per the direction of the Presidential Policy Directive-15 (PPD-15).

A. Mission Description and Budget Item Justification

BA7 - These programs are in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have recieved approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

Strategic Plans & Policy Division (A5XP) Mission - Develops future national security strategy concepts including those involving space systems, nuclear weapons and other strategic and high consequence capabilities. Directs, integrates and synchronizes advances in USAF capability to combat Weapons of Mass Destruction. Focal point for USAF arms control policy, implementation and compliance with international treaties and agreements, diplomatic clearances and airspace/aircraft sovereignty issues. Defines and defends the USAF role in ballistic missile defense. Represents USAF in international, interagency, DoD, Joint, inter-Service, COCOM and MAJCOM forums and implementation groups on matters involving national security policy and strategy.

Open Skies Sensors - This program addresses the requirements in the Presidential Policy Directive-15 (PPD-15). The Open Skies Treaty allows signatories to conduct observation flights over each other's territory using fixed-wing, unarmed observation aircraft. The aircraft can use optical cameras, video cameras, sideways-looking synthetic aperture radar, and infrared line scanning devices. There are 34 participating states to the Open Skies Treaty. The Air Force is required to allow overflight of USAF bases per multilateral request; to acquire, operate, and maintain the aircraft and equipment utilized during overflights of partner countries; to provide required sensor media and initial media processing; and to provide airfield servicing, logistics, and maintenance for foreign overflights of the US.

Open Skies Sensors - The OC-135B aircraft supports the implementation of the United States Government (USG) Open Skies Treaty. Mission equipment on the OC-135B includes wet film optical framing and panoramic cameras. The installed cameras are nearly obsolete, frequently unreliable, hard and increasingly expensive to maintain, and repair parts must be individually manufactured. The wet film manufacturers are discontinuing production of the film stock. And, the ultimate imagery

PE 0305145F: Arms Control Implementation Air Force

Page 1 of 11

^{##} The FY 2014 OCO Request will be submitted at a later date

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

PE 0305145F: Arms Control Implementation

BA 7: Operational Systems Development

product customer desires digital format products. This camera replacement program will replace the wet film cameras with modern, digital cameras. Modern, digital cameras will be more reliable, maintainable and cost effective. The customer will be able to more readily use the imagery products. Equipment service life will be extended significantly.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	0.000	4.000	0.000	-	0.000
Current President's Budget	0.000	4.000	1.430	-	1.430
Total Adjustments	0.000	0.000	1.430	-	1.430
 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	0.000	0.000			
 Other Adjustments 	0.000	0.000	1.430	-	1.430

PE 0305145F: Arms Control Implementation Air Force

Page 2 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE
PE 0305145F: Arms Control Implementation
675039: B-52 Modernization

BA 7: Operational Systems Development

7												
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
675039: B-52 Modernization	-	0.000	4.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
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

A. Mission Description and Budget Item Justification

Arms Control Activities activation under the New Start Treaty drives the need to modify approximately 28 B-52s to a conventional only role by removing the Nuclear Code Enable Switch and associated equipment. This requires a complete design to remove the equipment from the aircraft and install metal plates prohibiting reinstallation of removed equipment to comply with treaty protocols.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Arms Control Activities	0.000	4.000	0.000
Description: Develops and validates modification to remove nuclear capability			
FY 2012 Accomplishments: N/A			
FY 2013 Plans: Develop hardware kit to de-mod B-52 aircraft removing the Nuclear Code Enable Switch including technical data.			
FY 2014 Plans: N/A			
Accomplishments/Planned Programs Subtotals	0.000	4.000	0.000

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

			FY 2014	FY 2014	FY 2014					Cost 10	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
APAF: BA05: Line Item #	0.000	0.000	0.500		0.500	0.200	0.100	0.200	0.000	0.000	1.000
D05000 D 50											

B05200: *B-52*

PE 0305145F: Arms Control Implementation

Air Force

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0305145F: Arms Control Implementation 675039: B-52 Modernization

BA 7: Operational Systems Development

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

Line Item FY 2012 FY 2013 Base OCO Total FY 2015 FY 2016 FY 2017 FY 2018 Complete Total Cost

Remarks

D. Acquisition Strategy

Arms Control Activities will be Sole Source to Boeing on the Engineering Sustainment Program (ESP) Contract

E. 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 0305145F: Arms Control Implementation Air Force

UNCLASSIFIED
Page 4 of 11

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0305145F: Arms Control Implementation 675039: B-52 Modernization BA 7: Operational Systems Development FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 oco FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type **Activity & Location** Years Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Arms Control. New Start SS/CPFF Boeing:Wichita, KS 0.000 4.000 Jan 2013 0.000 0.000 0.000 4.000 4.000 Treaty Subtotal 0.000 0.000 4.000 0.000 0.000 0.000 0.000 4.000 4.000 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Award Method Performing All Prior Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of Cost Cost Complete Contract **Cost Category Item** & Type **Activity & Location** Years Date Cost Date Cost Date Cost Date Cost Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Cost To Method Performing All Prior Award Award Award Award Total Value of **Activity & Location Cost Category Item** & Type Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 Target All Prior FY 2014 FY 2014 FY 2014 **Cost To** Value of **Total** Years FY 2012 FY 2013 Base oco Total Complete Cost Contract 4.000 0.000 0.000 0.000 0.000 4.000 **Project Cost Totals** 0.000 0.000 4.000

Remarks

PE 0305145F: Arms Control Implementation

Air Force

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 0305145F: Arms Control Implementation 675039: B-52 Modernization

PROJECT

Arms Control Activities, New Start Treaty

FY11 FY12 FY13 **FY14 FY15 FY16 FY17**

B-52 Kit Development

PE 0305145F: Arms Control Implementation Air Force

UNCLASSIFIED Page 6 of 11

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

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

3600: Research, Development, Test & Evaluation, Air Force PE 0305145F: Arms Control Implementation 675039: B-52 Modernization

BA 7: Operational Systems Development

Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
Kit Development	1	2013	4	2013	

PE 0305145F: Arms Control Implementation Air Force

UNCLASSIFIED Page 7 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0305145F: Arms Control Implementation 675063: Open Skies Sensors

BA 7: Operational Systems Development

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
675063: Open Skies Sensors	-	0.000	0.000	1.430	-	1.430	15.100	7.640	0.760	0.000	Continuing	Continuing
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

Note

Air Force

In FY14 675063, Open Skies Sensors includes new start efforts.

In FY14 funding totals include \$1.430M per the direction of the Presidential Policy Directive-15 (PPD-15).

A. Mission Description and Budget Item Justification

The OC-135B Support implementation of the United States Government (USG) Open Skies Treaty commitment. Mission equipment includes wet film optical framing and panoramic cameras. Installed cameras are nearly obsolete, frequently unreliable, hard and increasingly expensive to maintain, and repair parts must be individually manufactured. In addition, the web film manufacturers are discontinuing production of the film stock. And, the ultimate imagery product customer desires digital format products. This camera replacement program will replace the wet film cameras with modern, digital cameras. This program will result in modern, digital cameras with higher reliability, maintainability and cost effective. The customer of the imagery will be able to more readily use the imagery products. Equipment service life will be extended significantly.

Open Skies Sensors - This program addresses the requirements in the Presidential Policy Directive-15 (PPD-15). The Open Skies Treaty allows signatories to conduct observation flights over each other's territory using fixed-wing, unarmed observation aircraft. The aircraft can use optical cameras, video cameras, sideways-looking synthetic aperture radar, and infrared line scanning devices. There are 34 participating states to the Open Skies Treaty. The Air Force is required to allow over flight of USAF bases per multilateral request; to acquire, operate, and maintain the aircraft and equipment utilized during over flights of partner countries; to provide required sensor media and initial media processing; and to provide airfield servicing, logistics, and maintenance for foreign over flights of the US.

Open Skies Sensors - The OC-135B aircraft supports the implementation of the United States Government (USG) Open Skies Treaty. Mission equipment on the OC-135B includes wet film optical framing and panoramic cameras. The installed cameras are nearly obsolete, frequently unreliable, hard and increasingly expensive to maintain, and repair parts must be individually manufactured. The wet film manufacturers are discontinuing production of the film stock. And, the ultimate imagery product customer desires digital format products. This camera replacement program will replace the wet film cameras with modern, digital cameras. Modern, digital cameras will be more reliable, maintainable and cost effective. The customer will be able to more readily use the imagery products. Equipment service life will be extended significantly.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Open Skies Sensors	0.000	0.000	1.430

PE 0305145F: Arms Control Implementation

Page 8 of 11

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force	DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
3600: Research, Development, Test & Evaluation, Air Force	PE 0305145F: Arms Control Implementation	675063: Open Skies Sensors
BA 7: Operational Systems Development		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Description: Replace existing Open Skies aircraft with digital cameras.			
FY 2014 Plans:			
Conduct research supporting design and intergration of the new digital cameras.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	1.430

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

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
• RDTE: BA07: PE0305145F:	0.000	0.000	0.000		0.000	0.000	3.684	8.100	5.045	Continuing	Continuing

Open Skies Sensors

Remarks

D. Acquisition Strategy

Open Skies Sensors - The strategy is a full and open competition contract to accomplish the task of performing analysis, testing, software development, prototypes, documentation of source data, and integrating a new digital camera system on the OC-135B and updating the Open Skies Medial Processing Facility (OSMPF). Undetermined industry provider will be responsible for acquiring the necessary information and personnel to integrate each item stated above into the OC-135B legacy systems and for developing and subcontracting the components.

E. 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 0305145F: Arms Control Implementation

Air Force

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0305145F: Arms Control Implementation 675063: Open Skies Sensors BA 7: Operational Systems Development FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Open Skies Sensors - NRE, Engineering, Development and C/FFP Various: Various, 0.000 0.000 0.500 May 2014 0.500 Continuing Continuing 15.500 Prototype Subtotal Product Development Subtotal 0.000 0.000 0.000 0.500 0.000 0.500 15 500 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Cost To Method Performing All Prior Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Sub Total Support 0.000 0.000 Various Various: Various, 0.430 Apr 2014 0.430 Continuing Continuing 1.900 0.000 0.000 0.000 0.430 0.000 Subtotal 0.430 1.900 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method All Prior **Cost To** Performing Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Open Skies Sensor development ground and PΩ Various: Various. 0.000 0.000 0.000 0.000 Continuing Continuing 2.500 flight testing for imagery collection Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 2.500 FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method Performing All Prior Award Award Award **Cost To** Value of Award Total **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Open Skies Sensors TDY (PMA) SubTotal Various Various: Various. 0.000 0.000 0.500 Mar 2014 0.500 Continuing Continuing 1.550 Management Services

PE 0305145F: Arms Control Implementation

Air Force

UNCLASSIFIED

Page 10 of 11 R-1 Line #200

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

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

PE 0305145F: Arms Control Implementation 675063: Open Skies Sensors

BA 7: Operational Systems Development

Management Servic	agement 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
		0.000	0.000		0.000		0.500		0.000		0.500			1.550	
		All Prior Years	FY 2	2012	FY 2	2013	1	2014 ase	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract	
Project Cost Totals 0.0		0.000	0.000		0.000		1.430		0.000		1.430			21.450	

Remarks

PE 0305145F: Arms Control Implementation Air Force

Page 11 of 11