**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 7:

PE 0305145F I Arms Control Implementation

Operational Systems Development

, ,												
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	3.666	1.430	13.222	-	13.222	8.569	1.431	-	-	Continuing	Continuing
675039: B-52 Modernization	-	3.666	-	-	-	-	-	-	-	-	Continuing	Continuing
675063: OC-135 Open Skies Sensors	-	-	1.430	13.222	-	13.222	8.569	1.431	-	-	-	24.652

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### 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 - The OC-135B aircraft supports the implementation of the United States Government (USG) Open Skies Treaty. The Open Skies Treaty allows signatories to conduct observation flights over each other's territory using fixed-wing, unarmed observation aircraft. Mission equipment on the OC-135B includes wet film optical framing and panoramic cameras. Open Skies Sensors program addresses the requirements in the Presidential Policy Directive-15 (PPD-15), which states," The United States shall begin budgeting no later than Fiscal Year 2014 to upgrade the sensors on the current aircraft by replacing film-based cameras with available electro-optical sensors. (U)" Additionally, current 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.

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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 0305145F I Arms Control Implementation

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	4.000	1.430	15.100	-	15.100
Current President's Budget	3.666	1.430	13.222	-	13.222
Total Adjustments	-0.334	-	-1.878	-	-1.878
<ul> <li>Congressional General Reductions</li> </ul>	-0.005	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Other Adjustments</li> </ul>	-0.329	-	-1.878	-	-1.878

## **Change Summary Explanation**

FY 13 decrease in other adjustments due to sequestration.

FY 15 decrease due to higher AF priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force										Date: March 2014			
Appropriation/Budget Activity 3600 / 7					_	am Elemen 15F / Arms ( ation	•	•		Project (Number/Name) 675039 / B-52 Modernization			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
675039: B-52 Modernization	-	3.666	-	-	-	-	-	-	-	-	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

<sup>\*</sup>The FY 2015 OCO Request will be submitted at a later date.

## 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 2013	FY 2014	FY 2015
Title: Arms Control Activities	3.666	-	-
Description: Develops and validates modification to remove nuclear capability			
FY 2013 Accomplishments:  Develop hardware kit to de-mod B-52 aircraft removing the Nuclear Code Enable Switch including technical data.			
<b>FY 2014 Plans:</b> N/A			
<b>FY 2015 Plans:</b> N/A			
Accomplishments/Planned Programs Subtotals	3.666	-	-

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	<b>Base</b>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	<b>Complete</b>	<b>Total Cost</b>
<ul> <li>APAF: BA05: Line</li> </ul>	_	0.500	0.200	-	0.200	0.100	0.200	_	-	-	1.000

Item # B05200: *B-52* 

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air	Force	Date: March 2014
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305145F I Arms Control Implementation	Project (Number/Name) 675039 / B-52 Modernization
D. Acquisition Strategy		
Arms Control Activities will be Sole Source to Boeing on th	e Engineering Sustainment Program (ESP) Contract	
E. Performance Metrics		
	ook for information on how Air Force recourses are applied and	now those recourses are contributing to Air
Force performance goals and most importantly, how they c	ook for information on how Air Force resources are applied and h	low those resources are contributing to Air
roice performance goals and most importantly, now they c	contribute to our mission.	

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0305145F / Arms Control
Implementation

PC 0305145F / Arms Control

## **Arms Control Activities, New Start Treaty**

FY11 FY12 FY13 FY14 FY15 FY16 FY17

B-52 Kit Development

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force  Date: March 2014												
Appropriation/Budget Activity 3600 / 7	/Budget Activity				R-1 Program Element (Number/Name) PE 0305145F I Arms Control Implementation				Project (Number/Name) 675063 / OC-135 Open Skies Sensors			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
675063: OC-135 Open Skies Sensors	-	-	1.430	13.222	-	13.222	8.569	1.431	-	-	-	24.652
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

<sup>\*</sup> The FY 2015 OCO Request will be submitted at a later date.

#### 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 aircraft supports the implementation of the United States Government (USG) Open Skies Treaty. 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 - Mission equipment on the OC-135B includes wet film optical framing and panoramic cameras. Open Skies Sensors program addresses the requirements in the Presidential Policy Directive-15 (PPD-15), which states," The United States shall begin budgeting no later than Fiscal Year 2014 to upgrade the sensors on the current aircraft by replacing film-based cameras with available electro-optical sensors. (U)" Additionally, current 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. Furthermore, 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.

Test articles will be procured for the purpose of developental testing and to support Treaty certification of the sensors.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Open Skies Sensors	-	1.430	13.222
Description: Replace existing Open Skies aircraft with digital sensors.			
FY 2013 Accomplishments:			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		Date: March 2014				
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305145F I Arms Control Implementation		ect (Number/Name) 63 / OC-135 Open Skies Sensor			
B. Accomplishments/Planned Programs (\$ in Millions)  N/A			FY 2013	FY 2014	FY 2015	
FY 2014 Plans: Conduct research supporting design and intergration of the new di	igital cameras.					
FY 2015 Plans: Develop, procure and install prototype sensor system.						
	Accomplishments/Planned Programs Su	btotals	-	1.430	13.222	

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	<b>Base</b>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	<b>Total Cost</b>
<ul> <li>APAF:BA05: Line Item</li> </ul>	-	-	-	-	-	3.680	8.100	5.050	-	-	16.830
#1900: Open Skies											

#### 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.

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Appropriation/Budget Activity

3600 *I* 7

R-1 Program Element (Number/Name)

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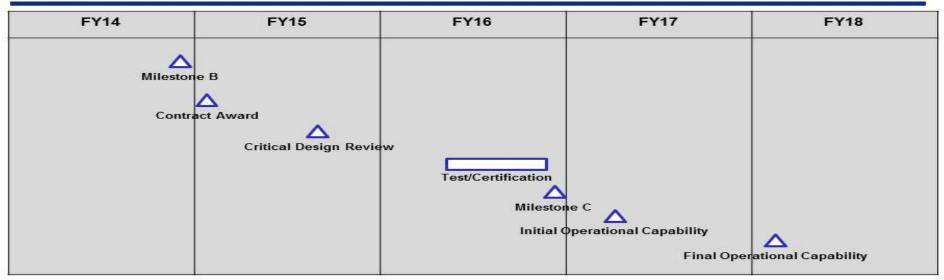
Date: March 2014

Project (Number/Name)

675063 / OC-135 Open Skies Sensors



# Open Skies Sensors



Delivering advanced, multi-mission tankers on-time, on-cost ... ready for war on day one!

PE 0305145F: Arms Control Implementation Air Force

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