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**Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / <i>Airborne SIGINT Enterprise</i>
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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	-	105.737	100.172	106.786	-	106.786	142.689	132.380	134.968	137.535	Continuing	Continuing
675180: <i>RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)</i>	-	33.791	29.331	15.007	-	15.007	29.996	30.436	37.157	37.864	Continuing	Continuing
675181: <i>High Altitude SIGINT Development - High Altitude</i>	-	-	4.066	5.930	-	5.930	7.094	7.199	7.340	7.479	Continuing	Continuing
675182: <i>Medium Altitude SIGINT Development - Medium Altitude</i>	-	35.293	5.880	37.684	-	37.684	14.829	22.770	33.512	34.150	Continuing	Continuing
675183: <i>Common Development (Airborne SIGINT Development - Common Development)</i>	-	29.400	53.544	38.203	-	38.203	78.544	60.028	36.561	37.257	Continuing	Continuing
675184: <i>RQ-4 (Airborne SIGINT Development - Global Hawk)</i>	-	0.937	-	-	-	-	-	-	-	-	Continuing	Continuing
675185: <i>Compass Bright (Airborne SIGINT Development - Compass Bright)</i>	-	6.316	7.351	7.740	-	7.740	7.776	8.035	8.192	8.347	Continuing	Continuing
675186: <i>Special Programs (Airborne SIGINT Development - Special Platforms)</i>	-	-	-	2.222	-	2.222	4.450	3.912	12.206	12.438	Continuing	Continuing

**MDAP/MAIS Code:** 375

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

**A. Mission Description and Budget Item Justification**

(U) This PE provides signals intelligence (SIGINT) development efforts for all USAF airborne platforms. The funds in this PE are distributed among all Airborne SIGINT Enterprise (ASE) projects based on the development priorities established by the USAF SIGINT Capabilities Working Group (SCWG) in order to build a total SIGINT capability. As a result, the USAF will move funds between projects periodically to develop the highest priority projects in response to urgent warfighter needs. This PE will participate in the development, integration, testing, and implementation of international and Air Force standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability. Modernization efforts include sensors for the platforms and their appropriate interfaces with the Air Force Distributed Common Ground System (AF DCGS). This approach supports a synergistic development effort providing a true Air Force-wide capability.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Air Force	<b>Date:</b> March 2014
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<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / <i>Airborne SIGINT Enterprise</i>
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(U) This enterprise will use the Air Force Cryptologic Architecture (AFCA) for planning and decision-making and, in turn, employ open architecture standards whenever possible to allow maximum ease of future upgrades and system interoperability. The primary goal of the ASE is to produce an architecture-based, capability-focused SIGINT investment strategy for the USAF. Funds in any project may be used to fund initiatives in other projects within this PE at the discretion of the SCWG. Funds in any project can also cover activities to include studies and analysis to support both current program planning and execution and future program planning.

(U) 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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>
Previous President's Budget	129.106	117.110	136.119	-	136.119
Current President's Budget	105.737	100.172	106.786	-	106.786
Total Adjustments	-23.369	-16.938	-29.333	-	-29.333
• Congressional General Reductions	-0.170	-0.277			
• Congressional Directed Reductions	-	-16.661			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-12.490	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-10.709	-	-29.333	-	-29.333

**Change Summary Explanation**

FY13 Reductions: -\$10.709M due to Sequestration, -\$12.490M reprogramming due to higher AF priorities.

FY14 -\$16.661M due to Congressional Directed Reduction.

FY15 reduction due to higher Air Force priorities.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)
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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
675180: RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)	-	33.791	29.331	15.007	-	15.007	29.996	30.436	37.157	37.864	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) This project supports design studies, engineering analysis, non-recurring engineering, and other efforts associated with the integration and modification of the RC-135 SIGINT sensors and their associated air and ground components. Through extensive utilization of commercial-off-the-shelf (COTS) based solutions to field needed capabilities, it also incurs a need for continuous Diminishing Manufacturing Sources and integration efforts consistent with the COTS technology cycle. These efforts provide required engineering for preliminary assessments of technical feasibility, operability, or military utility as well as specific engineering implementations integrated into the various baseline modifications. These funds will be split between the RC-135V/W RIVET JOINT, the RC-135U COMBAT SENT, and the RC-135S COBRA BALL programs. Funding reflects the SIGINT Capabilities Working Group (SCWG) priorities and the accomplishment of other Airborne SIGINT Enterprise (ASE) initiatives.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2013	FY 2014	FY 2015
<b>Title:</b> SIGINT Development	33.791	29.331	15.007
<b>Description:</b> Non-Recurring Engineering (NRE) for the RC-135 SIGINT Systems. See Classified Budget Exhibits (PE 0305207F)			
<b>FY 2013 Accomplishments:</b> Continued SIGINT development efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities.			
<b>FY 2014 Plans:</b> Continues SIGINT development efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities. Completes certain geolocation efforts and a processor upgrade.			
<b>FY 2015 Plans:</b> Will continue SIGINT development efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities.			
<b>Accomplishments/Planned Programs Subtotals</b>	33.791	29.331	15.007

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)

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

<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u>	
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	<u>Total Cost</u>
• APAF: BA05: Line Item # DARP01: RC-135	163.625	174.513	152.746	-	152.746	176.165	199.323	182.851	186.275	Continuing	Continuing

**Remarks**

(U) The funds within the PE 0305207F procure all necessary aircraft modifications for the RC-135 program and include those funds necessary to field SIGINT capabilities developed under Project 675180 of this Airborne SIGINT Enterprise (ASE). Not all Procurement funds in PE 0305207F are for ASE SIGINT projects.

**D. Acquisition Strategy**

(U) Aircraft, aircraft sensor systems, and associated ground support system modifications planned include the procurement, fielding and logistical support for future RC-135V/W RIVET JOINT, RC-135U COMBAT SENT and RC-135S COBRA BALL baseline configurations. Development and integration is managed by the Big Safari Systems Group. They employ evolutionary acquisition approaches to field incremental capability improvements.

**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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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2015 Air Force</b>		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)



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## ASE RC-135 Development Efforts

	FY13	FY14	FY15	FY16	FY17	FY18	FY19
RIVET JOINT	<div style="background-color: #000080; color: #ffff00; padding: 5px; text-align: center;"> <b>Details are classified and are shown in the classified portion of 0305207F</b> </div>						
COMBAT SENT							
COBRABALL							

- |   |  |  |
|---|--|--|
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #0000ff; border: 1px solid black;"></span> Concept activities    | <span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; border: 1px solid black;"></span> Design / development | <span style="display: inline-block; width: 15px; height: 10px; background-color: #ffff00; border: 1px solid black;"></span> Integration / test   |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #ffa500; border: 1px solid black;"></span> Production / fielding | <span style="display: inline-block; width: 15px; height: 10px; background-color: #000080; border: 1px solid black;"></span> Pre-Production       | <span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 8px solid #000080;"></span> <span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 8px solid #000080;"></span> Key events |

*Integrity - Service - Excellence*

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force										<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise				<b>Project (Number/Name)</b> 675181 / High Altitude SIGINT Development - High Altitude			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675181: High Altitude SIGINT Development - High Altitude	-	-	4.066	5.930	-	5.930	7.094	7.199	7.340	7.479	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) This project will cover costs of SIGINT integration for high altitude intelligence, surveillance, and reconnaissance (ISR) beginning in FY14.

(U) This project supports sensor integration and test, flight test, design studies, engineering analysis, non-recurring engineering and other efforts associated with the insertion of new capabilities integrated into the Airborne Signals Intelligence Payload (ASIP) or other SIGINT sensors and their associated air and ground components for the High Altitude SIGINT platforms. The project also identifies suitable replacements for components affected by Diminishing Manufacturing Sources (DMS). This project provides the warfighter with a near-term, increased combat capability. Enhancements are implemented as soon as technology and risk achieve satisfactory levels. Capability improvements will be inserted into the sensors through individual development efforts that exploit signals of interest identified as service priorities by the Air Force SIGINT Capabilities Working Group (SCWG). Funding includes completion of developmental logistics tasks associated with the design, development, and integration of ASIP.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<b>Title:</b> High Altitude SIGINT	-	4.066	5.930
<b>Description:</b> Integration and test of SIGINT sensors into high altitude platforms including the Airborne Signals Intelligence Payload (ASIP) Incr 1 sensor, using an open system architecture.			
<b>FY 2013 Accomplishments:</b> FY 2013 efforts described in project 675184, RQ-4.			
<b>FY 2014 Plans:</b> Continues logistics efforts and development of new signals capabilities and enhancements of SIGINT sensors as necessary.			
<b>FY 2015 Plans:</b> Will continue logistics efforts and development of new signals capabilities and enhancements of SIGINT sensors as necessary.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	4.066	5.930

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675181 / High Altitude SIGINT Development - High Altitude

**C. 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: BA05: Line Item U200: <i>U-2 Mods</i>	83.803	-	-	-	-	-	-	-	-	-	-
• APAF: BA05 Line 470001: <i>Global Hawk Aircraft Mods</i>	-	8.813	21.354	-	21.354	46.127	34.493	89.248	67.265	-	-

**Remarks**

(U) Not all funds are associated with SIGINT.

**D. Acquisition Strategy**

(U) SIGINT capabilities will be integrated into high altitude platforms using an evolutionary approach.

**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

Date: March 2014

Appropriation/Budget Activity  
3600 / 7

R-1 Program Element (Number/Name)  
PE 0304260F / Airborne SIGINT Enterprise

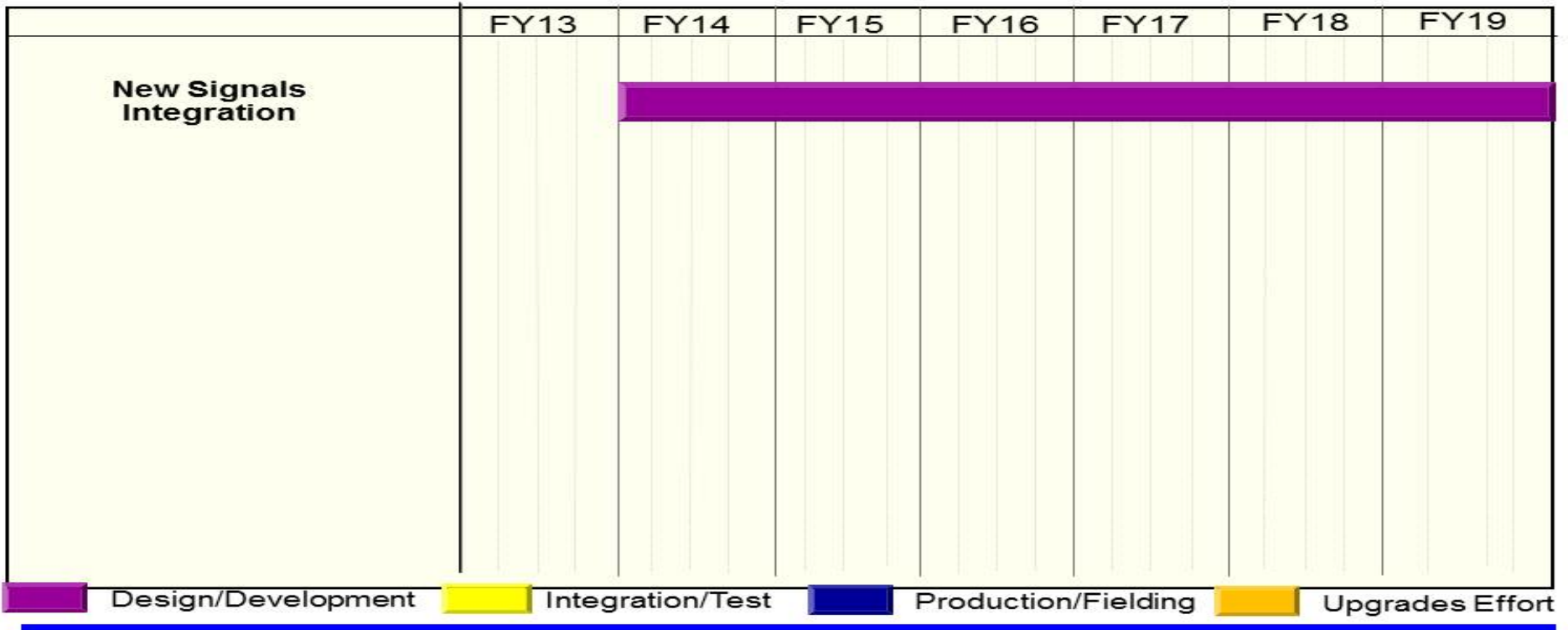
Project (Number/Name)  
675181 / High Altitude SIGINT Development  
- High Altitude



# High Altitude ASIP Schedule



*Birthplace, Home & Future of Aerospace*



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force										<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise				<b>Project (Number/Name)</b> 675182 / Medium Altitude SIGINT Development - Medium Altitude			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675182: <i>Medium Altitude SIGINT Development - Medium Altitude</i>	-	35.293	5.880	37.684	-	37.684	14.829	22.770	33.512	34.150	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) This project supports design studies, engineering analysis, non-recurring engineering, program management administration, and other efforts associated with the integration and modification of medium altitude platforms as required with SIGINT sensors and their associated air and ground components. This RDT&E effort integrates SIGINT capability on medium altitude platforms as required. The sensors will be capable of collecting technical data and geolocating signals of interest and providing sensor data to a workstation. The design effort will include the use of existing sensor suites to the maximum extent possible to minimize design costs and reduce development timelines.

(U) Design efforts specific to medium altitude systems may include, but not be limited to, antennas, electromagnetic interference reduction, encryption techniques, and changes to the aircraft, ground station, data link, and simulator necessary to accommodate a SIGINT payload and its data throughput. Funding will support efforts to develop antennas, receivers, processors, software development, aircraft integration and ground station upgrades to allow a persistent reconnaissance, surveillance, targeting, and acquisition capability against mission specific threats. Development of a networked capability for medium altitude systems will also be initiated. These upgrades are designed to exploit signals of interest identified as service priorities by the Air Force SIGINT Capabilities Working Group (SCWG). These development activities will continue through future years, to include but not be limited to, integrating capabilities developed under separate efforts.

(U) This project provides the warfighter with near term increased combat capability. Enhancements are implemented as soon as technology and risk achieve satisfactory levels and exploit signals of interest identified as Service priorities by the AF SCWG.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<b>Title:</b> Development	35.293	5.880	37.684
<b>Description:</b> Develop and test SIGINT systems for multiple platforms using the Airborne Signals Intelligence Payload (ASIP) sensor, including the ASIP Processor Upgrade Chassis (APUC), using an open system architecture.			
<b>FY 2013 Accomplishments:</b> Continued SIGINT payload development and integration activities and incorporated upgrades as appropriate. Continued Ground Station modification to align integration and flight test.			
<b>FY 2014 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675182 / Medium Altitude SIGINT Development - Medium Altitude

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
FY 14 will see the end of ASIP 2C development efforts. We will work with our mission partners to instead begin upgrades to the already fielded QRC systems on teh MQ-1 and 9. Continue Ground Station modification to align integration and flight test.  <b>FY 2015 Plans:</b> Will continue payload development and integration activities and incorporate upgrades as appropriate. Continue Ground Station modification to align integration and flight test. New signal sets will be brought in as appropriate.			
<b>Accomplishments/Planned Programs Subtotals</b>	35.293	5.880	37.684

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

N/A

**Remarks**

**D. Acquisition Strategy**

(U) SIGINT capabilities will be integrated onto medium altitude platforms using an evolutionary acquisition approach.

**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.

Appropriation/Budget Activity  
3600 / 7

R-1 Program Element (Number/Name)  
PE 0304260F / Airborne SIGINT Enterprise

Project (Number/Name)  
675182 / Medium Altitude SIGINT  
Development - Medium Altitude

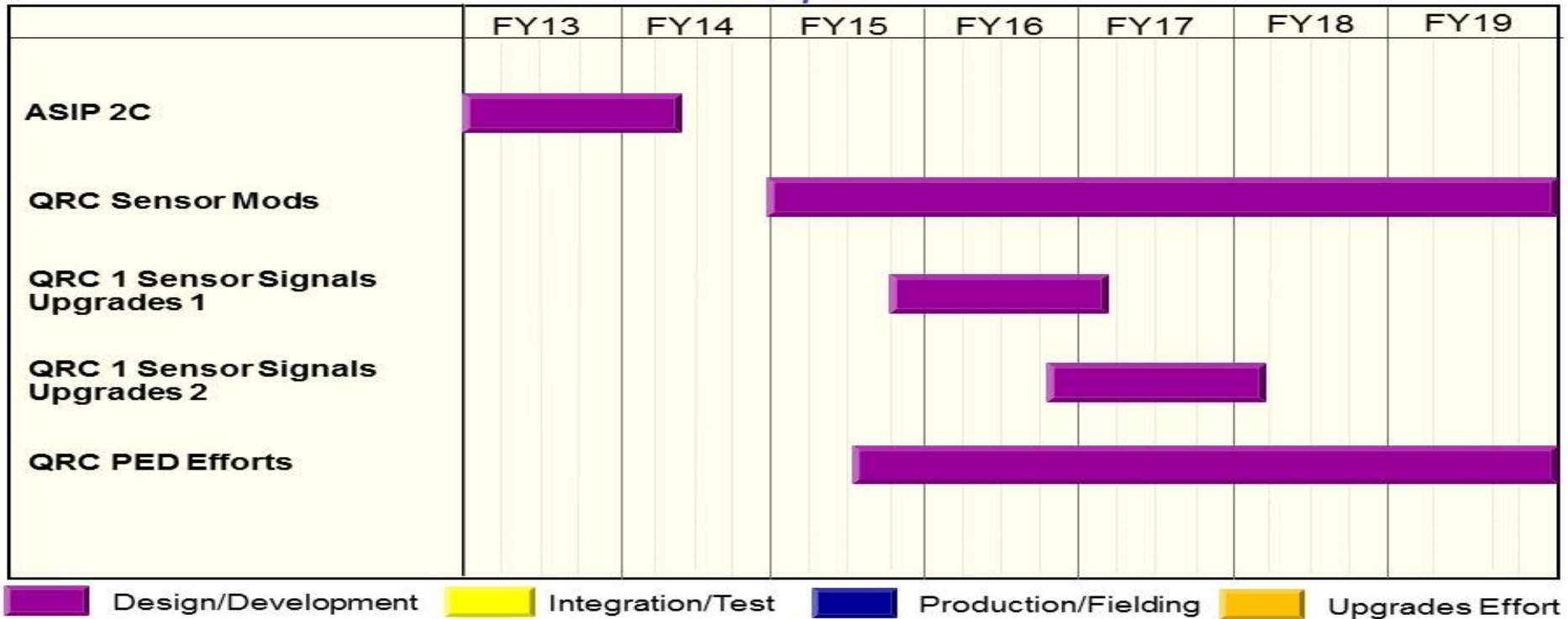


U.S. AIR FORCE

# Medium Altitude SIGINT



*Birthplace, Home & Future of  
Aerospace*



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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675183 / Common Development (Airborne SIGINT Development - Common Development)
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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
675183: <i>Common Development (Airborne SIGINT Development - Common Development)</i>	-	29.400	53.544	38.203	-	38.203	78.544	60.028	36.561	37.257	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) This project supports design studies, engineering analysis, non-recurring engineering, program management administration and other efforts associated with the insertion of new capabilities integrated into ASIP and other sensors and their associated air and ground components that will be used on/by more than one platform. The common development SIGINT project also supports development of new sensors capabilities, normalization of quick reaction capabilities, and identifies suitable replacements for components affected by Diminishing Manufacturing Sources (DMS). New capabilities are developed by separate projects. This project also supports the development of projects common to the Airborne SIGINT Enterprise (ASE) Program Element (PE) overall to include, but not limited to: the Air Force Cryptologic Architecture (AFCA) maintenance, modeling and simulation efforts, and NATO SIGINT efforts.

(U) Sensors development supports scalable Airborne Signals Intelligence Payloads (ASIPs) for medium altitude platforms and upgrades for ASIP high altitude payloads. The systems' open architecture and Joint Airborne SIGINT Architecture (JASA)/ Unified Cryptologic System Technical View 1 (UCS StdY-1) compliant design supports streamlined integration of ASIP onto additional ISR platforms. The ASIP Family of Sensors (FoS) will design and build a common/scalable SIGINT system designed for maximum coverage of the electromagnetic spectrum through the use of an integrated high and low band system.

(U) Capability improvements will be inserted into the ASIP Family of Sensors through individual development efforts that exploit signals of interest identified as service priorities by the Air Force SIGINT Capabilities Working Group (SCWG). This project provides the warfighter near term increased combat capability. Enhancements are implemented as soon as technology and risk achieve satisfactory levels. Compatability improvements will be inserted into the ASIP FoS through individual development efforts that exploit signals of interest identified as Service priorities by the AF SCWG. Sensors will be integrated and tested on the various platforms as funding permits.

(U) Some parts of ASIP Upgrades are funded within the Common Development project of this PE and some parts are funded within the High Altitude SIGINT project (675181). Parts that have applicability to other platforms are funded in the Common Development project.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2013	FY 2014	FY 2015
<b>Title:</b> SIGINT Development	29.400	53.544	38.203

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<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675183 / Common Development (Airborne SIGINT Development - Common Development)

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<p><b>Description:</b> Develop and test a common/scalable SIGINT system for multiple SIGINT platforms (high and medium altitude) including ASIP Incr 1 using an open system architecture.</p> <p><b>FY 2013 Accomplishments:</b> Continued new signals capabilities and enhancements for the ASIP sensor. Continue ASIP Processor Upgrade development, integration activities, and incorporate upgrades as appropriate. Details are classified.</p> <p><b>FY 2014 Plans:</b> Continues new signals capabilities and enhancements for the ASIP sensor. Will complete ASIP Upgrade Increments 1. Continues Increment 2. Will continue integration activities, and incorporate upgrades as appropriate. Details are classified.</p> <p><b>FY 2015 Plans:</b> Will continue new signals capabilities and enhancements for the ASIP FoS. Will continue integration activities and incorporate upgrades as appropriate. Details are classified.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	29.400	53.544	38.203

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APAF: BA05: Line Item # 11U200: U-2 Mods	83.803	-	-	-	-	-	-	-	-	-	-
• APAF: BA05 Line #470001: Global Hawk Aircraft Mods	-	8.813	21.354	-	21.354	46.127	34.493	89.248	67.265	487.907	-

**Remarks**  
Not all funds are associated with SIGINT.

**D. Acquisition Strategy**  
Signals Intelligence capabilities will be developed and integrated onto various platforms using an evolutionary acquisition approach.

**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

Date: March 2014

Appropriation/Budget Activity  
3600 / 7

R-1 Program Element (Number/Name)  
PE 0304260F / Airborne SIGINT Enterprise

Project (Number/Name)  
675183 / Common Development (Airborne SIGINT Development - Common Development)

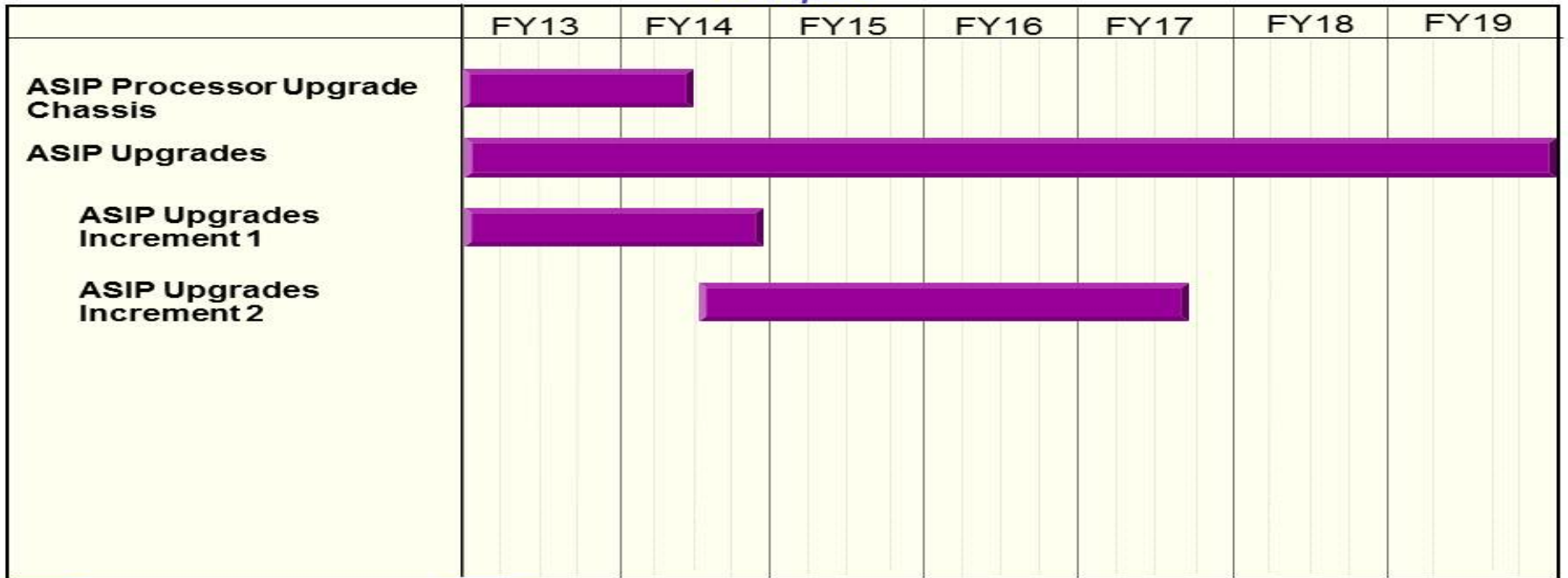


U.S. AIR FORCE

# ASIP Upgrades



*Birthplace, Home & Future of  
Aerospace*



Design/Development
  Integration/Test
  Production/Fielding
  Upgrades Effort

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675184 / RQ-4 (Airborne SIGINT Development - Global Hawk)
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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
675184: RQ-4 (Airborne SIGINT Development - Global Hawk)	-	0.937	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) This project covered the costs of integration for high altitude ISR for the RQ-4.

(U) This project supported sensor integration and test, flight test, design studies, engineering analysis and non-recurring engineering of the air and ground components for the High Altitude SIGINT sensors. This project also identified suitable replacements for components affected by diminishing manufacturing sources and provided the warfighter with a near-term, increased combat capability. Funding completed developmental logistics tasks associated with the design, development, and integration of ASIP and the ASIP Depot standup to include all 12 Product Support Elements. Additional requirements include the Logistics Support Analysis (LSA) taskings which consist of design and development of support equipment, technical orders, training courses/aids/devices, and shipping containers common to ASIP.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2013	FY 2014	FY 2015
<b>Title:</b> RQ-4 SIGINT	0.937	-	-
<b>Description:</b> Design, develop, and test SIGINT capabilities for ASIP sensors, support equipment, technical orders, training, shipping containers, and support the ASIP depot stand-up.			
<b>FY 2013 Accomplishments:</b> Continued logistics efforts, including updating technical data, test and support equipment, and related activities in support of High Altitude programs. Continue system integration.			
<b>Accomplishments/Planned Programs Subtotals</b>	0.937	-	-

**C. 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: BA04: Line Item # HAEUAV: RQ-4	192.451	28.747	-	-	-	-	-	-	-	-	1,464.995

**Remarks**

Note: Not all of the above funding is for ASIP. Procurement funding shown represents all PE 0305220F Procurement funding and includes production and mods.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / <i>Airborne SIGINT Enterprise</i>	<b>Project (Number/Name)</b> 675184 / <i>RQ-4 (Airborne SIGINT Development - Global Hawk)</i>

**D. Acquisition Strategy**

(U) N/A.

**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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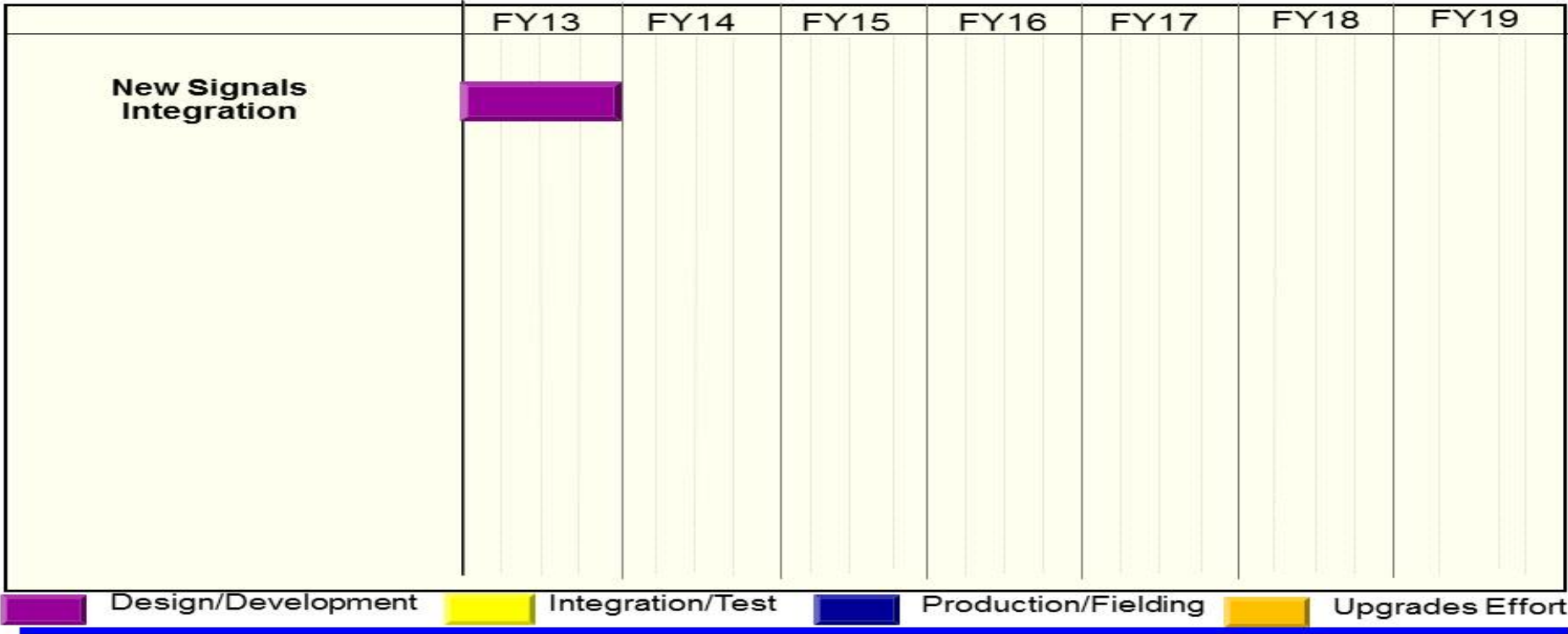
<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2015 Air Force</b>		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675184 / RQ-4 (Airborne SIGINT Development - Global Hawk)



# RQ-4 SIGINT Development Schedule



*Birthplace, Home & Future of Aerospace*



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force										<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise				<b>Project (Number/Name)</b> 675185 / Compass Bright (Airborne SIGINT Development - Compass Bright)			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675185: <i>Compass Bright (Airborne SIGINT Development - Compass Bright)</i>	-	6.316	7.351	7.740	-	7.740	7.776	8.035	8.192	8.347	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**A. Mission Description and Budget Item Justification**

(U) The COMPASS BRIGHT program develops, demonstrates, and rapidly transitions advanced Air Force-specific SIGINT and Radio Frequency (RF) measurement and signature intelligence (MASINT) capabilities against emerging and future target signals. It is the only USAF program that pursues SIGINT and RF MASINT technology transition. The COMPASS BRIGHT program objective is to develop technologies for application in SIGINT and RF MASINT systems/subsystems. Acquisition and production of these developed technologies will occur within the appropriate platform programs. COMPASS BRIGHT projects are selected through a data call process whereby the USAF evaluates proposals from the labs and industry to select those projects that are most promising. This program includes total government and contractor costs for these projects.

(U) FY15 will continue to enhance search and intercept capabilities, improve single aircraft geolocation, and improve real time communications systems.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<b>Title:</b> SIGINT Tech Development	6.316	7.351	7.740
<b>Description:</b> Develops projects in the Signals Intelligence and Radio Frequency Measurement & Signature Intelligence areas for transition to the RC-135 fleet and other ISR platforms.			
<b>FY 2013 Accomplishments:</b> Initiated, continued or completed various SIGINT projects to include search and intercept improvements, enhanced electronic intelligence (ELINT) exploitation, Open Set ID, and real time communications systems. Includes total government and contractor costs for this project.			
<b>FY 2014 Plans:</b> Initiates, continues or completes various SIGINT projects to include search and intercept improvements, enhanced ELINT exploitation, and real time communications systems. Includes total government and contractor costs for this project.			
<b>FY 2015 Plans:</b> Will initiate, continue, and complete various SIGINT projects to include enhanced ELINT exploitation, Audio exploitation, and Signals of interest			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise	<b>Project (Number/Name)</b> 675185 / Compass Bright (Airborne SIGINT Development - Compass Bright)		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
prosecution. Includes total government and contractor costs for this project.				
<b>Accomplishments/Planned Programs Subtotals</b>		6.316	7.351	7.740
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>D. Acquisition Strategy</b>				
(U) Ongoing COMPASS BRIGHT technology development and demonstration contracts will continue through existing laboratory relationships and other existing contractual vehicles, with future development projects emphasizing full and open competition.				
<b>E. Performance Metrics</b>				
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

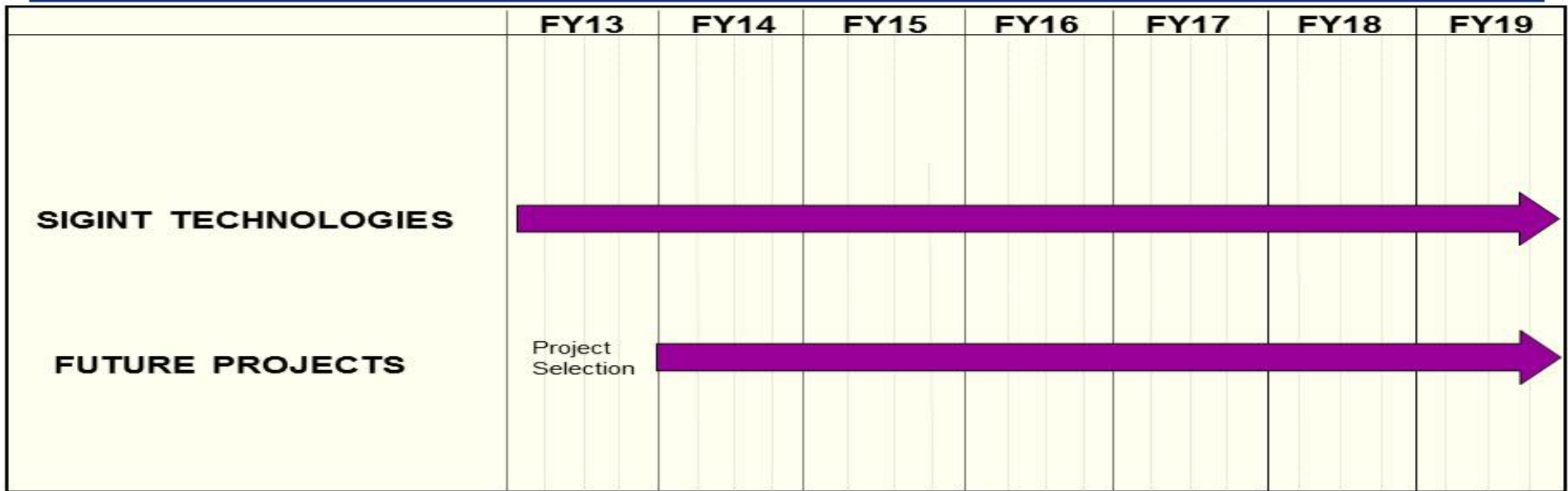
R-1 Program Element (Number/Name)  
PE 0304260F / Airborne SIGINT Enterprise

Project (Number/Name)  
675185 / Compass Bright (Airborne SIGINT Development - Compass Bright)



**U.S. AIR FORCE**

# Compass Bright Schedule



- Concept activities
- Production
- Design / Development
- Fielding / Operations / sustainment
- Integration / test

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force										<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0304260F / Airborne SIGINT Enterprise				<b>Project (Number/Name)</b> 675186 / Special Programs (Airborne SIGINT Development - Special Platforms)			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675186: <i>Special Programs (Airborne SIGINT Development - Special Platforms)</i>	-	-	-	2.222	-	2.222	4.450	3.912	12.206	12.438	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

**Note**

This project did have funding in previous years, but no new upgrades were necessary in FY13 and 14. RDT&E efforts begin again in FY 15 to modernize the existing QRC SIGINT sensors that were fielded on the MQ-1/9 previously.

**A. Mission Description and Budget Item Justification**

(U) This project supports special Signals Intelligence (SIGINT) studies as well as the development and integration of advanced SIGINT capabilities for special programs including, but not limited to: Quick Reaction Capability (QRC) sensors, Network Centric Collaborative Targeting (NCCT) SIGINT specific projects, the Processing, Exploitation, and Dissemination (PED) associated with these systems, and other efforts approved by the USAF SIGINT Capabilities Working Group (SCWG). Development efforts will include, but are not limited to such things as new signal sets, antenna improvements, sensitivity upgrades, and radio frequency distribution upgrades. Additionally, these funds will develop the capability to allow networking with other SIGINT assets to increase collection capabilities. This project provides the warfighter with a near term combat capability with increased capability improvements accomplished as soon as technology and risk achieve satisfactory levels. Sensors will be integrated and tested on various platforms as funding permits.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<b>Title:</b> SIGINT Development	-	-	2.222
<b>Description:</b> Develops SIGINT capabilities for special programs such as Quick Reaction Capabilities, Network Centric Collaborative Targeting (NCCT) SIGINT projects, and others.			
<b>FY 2013 Accomplishments:</b> Continued signal detection capabilities.			
<b>FY 2014 Plans:</b> N/A			
<b>FY 2015 Plans:</b> Will continue to modernize systems already integrated onto various aircraft including the MQ-1/9			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	2.222

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Air Force		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0304260F / <i>Airborne SIGINT Enterprise</i>	<b>Project (Number/Name)</b> 675186 / <i>Special Programs (Airborne SIGINT Development - Special Platforms)</i>

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

N/A

**Remarks**

**D. Acquisition Strategy**

(U) SIGINT capabilities will be integrated on to various classified platforms using an evolutionary acquisition approach.

**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.

Appropriation/Budget Activity  
3600 / 7

R-1 Program Element (Number/Name)  
PE 0304260F / Airborne SIGINT Enterprise

Project (Number/Name)  
675186 / Special Programs (Airborne SIGINT Development - Special Platforms)

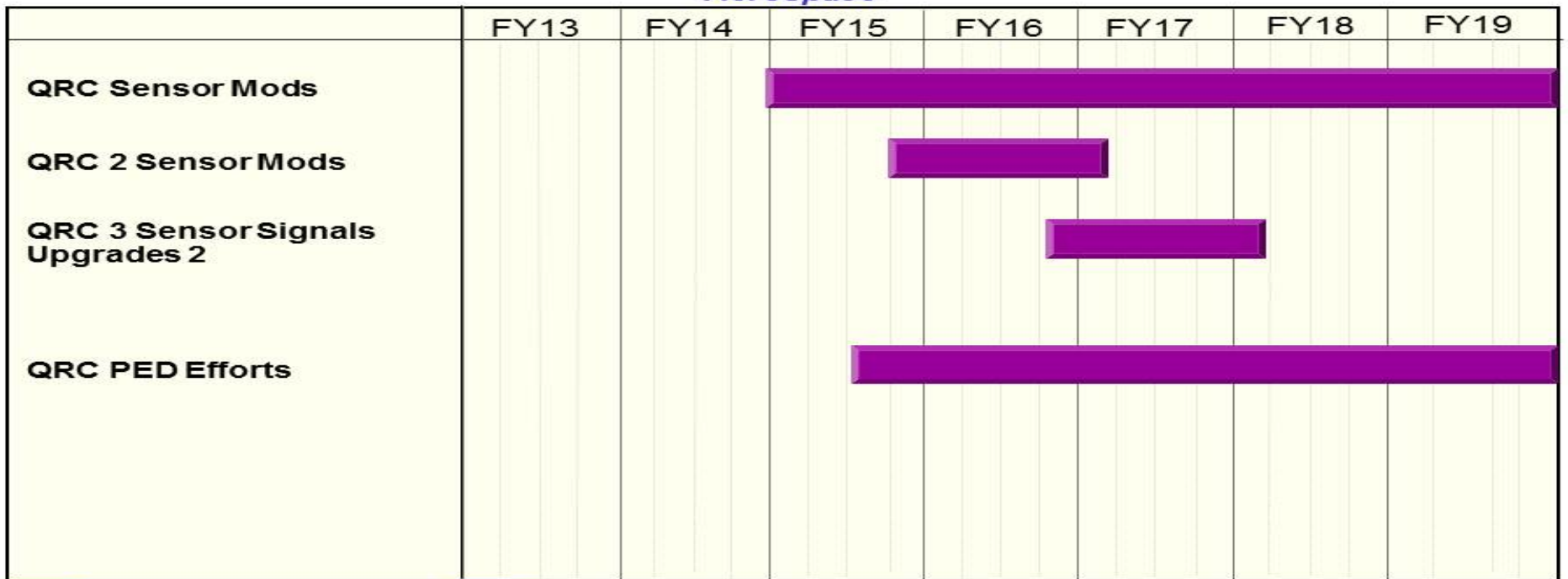


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# Special Projects SIGINT



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Design/Development
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  Upgrades Effort