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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0304260F I Airborne SIGINT Enterprise							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	83.972	74.072	112.775	-	112.775	89.930	106.944	124.019	142.094	Continuing	Continuing
675180: RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)	-	32.556	15.007	41.846	-	41.846	23.152	43.611	51.430	58.353	Continuing	Continuing
675181: High Altitude SIGINT Development - High Altitude	-	4.066	5.930	-	-	-	-	-	-	-	-	9.996
675182: Medium Altitude SIGINT Development - Medium Altitude	-	-	4.970	-	-	-	-	-	-	-	-	4.970
675183: Common Development (Airborne SIGINT Development - Common Development)	-	37.689	38.203	60.811	-	60.811	54.429	48.557	56.380	61.788	Continuing	Continuing
675185: Compass Bright (Airborne SIGINT Development - Compass Bright)	-	9.661	7.740	7.188	-	7.188	8.964	10.108	11.213	14.464	Continuing	Continuing
675186: Special Programs (Airborne SIGINT Development - Special Platforms)	-	-	2.222	2.930	-	2.930	3.385	4.668	4.996	7.489	Continuing	Continuing
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 where appropriate, their 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.												
(U) This enterprise will use the Air Force SIGINT Architecture (AFSA) 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.												

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Air Force	<b>Date:</b> February 2015
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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 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 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
Previous President's Budget	100.172	106.786	142.689	-	142.689
Current President's Budget	83.972	74.072	112.775	-	112.775
Total Adjustments	-16.200	-32.714	-29.914	-	-29.914
• Congressional General Reductions	-	-0.424			
• Congressional Directed Reductions	-	-32.290			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-16.200	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-29.914	-	-29.914

**Change Summary Explanation**

FY14 reduction due to termination of ASIP 2C and higher Air Force priorities.

FY15 Congressional reduction against Medium Altitude SIGINT for improving funds management: Medium Altitude on Hold

FY16 reduction due to higher Air Force priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0304260F / Airborne SIGINT Enterprise				Project (Number/Name) 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675180: RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)	-	32.556	15.007	41.846	-	41.846	23.152	43.611	51.430	58.353	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**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 identification of suitable replacements for components affected by 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)**

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> SIGINT Development	32.556	15.007	41.846
<b>Description:</b> Non-Recurring Engineering (NRE) for the RC-135 SIGINT Systems. See Classified Budget Exhibits (PE 0305207F)			
<b>FY 2014 Accomplishments:</b> Continued 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> Continues SIGINT development efforts for the RC-135 fleet to include new signal sets and upgrades to current capabilities.			
<b>FY 2016 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>	32.556	15.007	41.846

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force									Date: February 2015			
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0304260F / Airborne SIGINT Enterprise				Project (Number/Name) 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)				
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• APAF: BA05: Line Item # DARP01: RC-135	174.513	163.346	156.165	-	156.165	199.323	202.851	186.275	189.628	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-3, RDT&amp;E Project Cost Analysis: PB 2016 Air Force</b>													<b>Date:</b> February 2015		
<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)				

  

<b>Product Development (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
SIGINT Sensor Development and Integration	SS/ Various	L3COM : Greenville, TX	-	32.556	Jan 2014	15.007	Jan 2015	41.846	Jan 2016	-		41.846	Continuing	Continuing	-
<b>Subtotal</b>			-	32.556		15.007		41.846		-		41.846	-	-	-

  

**Remarks**  
Above contract method/type will be CPFF and FFP

  

<b>Support (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

			<b>Prior Years</b>	<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	32.556		15.007		41.846		-		41.846	-	-	-

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0304260F / Airborne SIGINT Enterprise		Project (Number/Name) 675180 / RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Development of RIVET JOINT mission sensors																												
Development of COMBAT SENT mission sensors																												
Development of COBRA BALL mission sensors																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Air Force			<b>Date:</b> February 2015
<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> 675180 / <i>RC-135 (Airborne SIGINT Development - RC-135 Rivet Joint)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development of RIVET JOINT mission sensors	1	2014	4	2020
Development of COMBAT SENT mission sensors	1	2014	4	2020
Development of COBRA BALL mission sensors	1	2014	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
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			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675181: High Altitude SIGINT Development - High Altitude	-	4.066	5.930	-	-	-	-	-	-	-	-	9.996
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note (U) In FY 2016, PE 0304260F, Airborne SIGINT Enterprise, Project 675181, High Altitude SIGINT Development - High Altitude efforts are transferred to PE 0304260F, Airborne SIGINT Enterprise, Project 675183, Common Development (Airborne SIGINT Development - Common Development) in order to simplify contracts as there will be only one High Altitude platform going forward.												
A. Mission Description and Budget Item Justification (U) This project covers the costs of SIGINT integration for high altitude intelligence, surveillance, and reconnaissance (ISR) platforms.  (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)									FY 2014	FY 2015	FY 2016	
Title: High Altitude SIGINT									4.066	5.930	-	
Description: 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.												
FY 2014 Accomplishments: Continued logistics efforts and development of new signals capabilities and enhancements of SIGINT sensors as necessary.												
FY 2015 Plans: Will continue logistics efforts and development of new signals capabilities and enhancements of SIGINT sensors as necessary.												
FY 2016 Plans:												



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Air Force			<b>Date:</b> February 2015
<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>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
No activity planned.			
<b>Accomplishments/Planned Programs Subtotals</b>	4.066	5.930	-

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

<b>Line Item</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APAF: BA05 Line Item # HAWK00: RQ-4 Mods	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	Continuing	Continuing

**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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2016 Air Force													<b>Date:</b> February 2015		
<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>Product Development (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
SIGINT Sensors Development	SS/ Various	Northrop Grumman : San Jose, CA	-	3.666	Jan 2014	5.930	Feb 2015	-		-		-	-	9.596	-
<b>Subtotal</b>			-	3.666		5.930		-		-		-	-	9.596	-
<b>Support (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-
<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
PMA	Various	TBD : Dayton, OH	-	0.400	Jan 2014	-		-		-		-	-	0.400	-
<b>Subtotal</b>			-	0.400		-		-		-		-	-	0.400	-
			<b>Prior Years</b>	<b>FY 2014</b>	<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Project Cost Totals</b>			-	4.066	5.930	-		-		-	-	-	9.996	-	
<b>Remarks</b>															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force		Date: February 2015
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

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
New signals integration																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
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

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
New signals integration	1	2014	4	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
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			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675182: Medium Altitude SIGINT Development - Medium Altitude	-	-	4.970	-	-	-	-	-	-	-	-	4.970
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note (U) In FY 2016, PE 0304260F, Airborne SIGINT Enterprise, Project 675182, Medium Altitude SIGINT Development - Medium Altitude, was terminated.												
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.  (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. Applicable design efforts for the ASIP Processor Upgrade Chassis (APUC) are planned to be migrated to the baseline ASIP sensor to provide new signals capabilities and enhancements to counter specific threats. FY15 funding is planned to mature technology developed under APUC for application on the ASIP sensor.  (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)									FY 2014	FY 2015	FY 2016	
Title: Development									-	4.970	-	
Description: 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.												
FY 2014 Accomplishments:												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Air Force		<b>Date:</b> February 2015	
<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 2014</b>	<b>FY 2015</b>
FY14 saw the end of ASIP 2C and the ASIP Processor Upgrade Chassis (APUC) development efforts.			
<b>FY 2015 Plans:</b> FY15 funds were originally meant for ASIP 2C and APUC development efforts. With these efforts terminated, the FY15 funds will be used for continual new signal capabilities and enhancements for the ASIP sensor.			
<b>FY 2016 Plans:</b> No activity planned.			
<b>Accomplishments/Planned Programs Subtotals</b>		-	4.970
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b> (U) SIGINT capabilities will be integrated onto medium altitude platforms using an evolutionary acquisition approach.			
<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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2016 Air Force													<b>Date:</b> February 2015		
<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				

  

Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SIGINT Sensors Development	SS/CPIF	Northrop Grumman ESL : San Jose, CA	-	-		4.970	Mar 2015	-		-		-	-	4.970	-
<b>Subtotal</b>			-	-		4.970		-		-		-	-	4.970	-

  

<b>Remarks</b> FY14: APUC Terminated.															
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Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			-	-	4.970	-	-	-	-	4.970	-

  

<b>Remarks</b>											
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**Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force**

**Date:** February 2015

**Appropriation/Budget Activity**

3600 / 7

**R-1 Program Element (Number/Name)**

PE 0304260F / Airborne SIGINT Enterprise

Project (Number/Name)	Start Date	End Date	Status	Manager	Budget (USD)	Actual Cost (USD)	Progress (%)	Risk Level	Notes
P001 / Project Alpha	2023-01-15	2023-06-30	Completed	J. Doe	150,000	148,500	100	Low	Exceeded budget by 1.5%
P002 / Project Beta	2023-02-01	2023-09-15	In Progress	A. Smith	200,000	180,000	90	Medium	Minor delays in procurement
P003 / Project Gamma	2023-03-10	2023-12-31	On Hold	M. Johnson	300,000	50,000	15	High	Waiting for client approval
P004 / Project Delta	2023-04-01	2024-03-31	Planned	S. Lee	400,000	0	0	Low	Initial planning phase
P005 / Project Epsilon	2023-05-15	2023-11-30	Completed	K. Brown	120,000	122,000	100	Low	Minor budget overrun
P006 / Project Zeta	2023-06-01	2024-06-30	On Hold	D. Wilson	250,000	20,000	10	Medium	Resource allocation issues
P007 / Project Eta	2023-07-10	2023-10-31	Completed	R. Taylor	80,000	78,000	100	Low	Successful completion
P008 / Project Theta	2023-08-01	2024-01-31	In Progress	L. Garcia	180,000	160,000	85	Medium	Scope creep managed
P009 / Project Iota	2023-09-15	2023-12-31	Completed	C. Martinez	90,000	91,000	100	Low	Minor budget variance
P010 / Project Kappa	2023-10-01	2024-03-31	Planned	H. Anderson	350,000	0	0	Low	Initial planning phase

675182 / Medium Altitude SIGINT  
Development - Medium Altitude

[illegible]

## Medium Altitude SIGINT Development



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
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

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Medium Altitude SIGINT Development	1	2015	4	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
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)			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675183: Common Development (Airborne SIGINT Development - Common Development)	-	37.689	38.203	60.811	-	60.811	54.429	48.557	56.380	61.788	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

(U) In FY 2016, PE 0304260F, Airborne SIGINT Enterprise, Project 675181, High Altitude SIGINT Development - High Altitude efforts are transferred to PE 0304260F, Airborne SIGINT Enterprise, Project 675183, Common Development (Airborne SIGINT Development - Common Development) in order to simplify contracts as there will be only one High Altitude platform going forward.

**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. 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 SIGINT Architecture (AFSA) maintenance, modeling and simulation efforts, and NATO SIGINT efforts.

(U) Sensors development supports Airborne Signals Intelligence Payloads (ASIPs) high altitude payload upgrades. 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 sensor is designed to be a common SIGINT system that will allow for 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 sensor 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 through individual development efforts that exploit signals of interest identified as Service priorities by the USAF SCWG. Sensors will be integrated and tested on the various platforms as funding permits.

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

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> SIGINT Development	37.689	38.203	60.811

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Air Force		<b>Date:</b> February 2015
<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 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<p><b>Description:</b> Develop and test a common SIGINT system for multiple SIGINT platforms including ASIP incremental upgrades using an open system architecture.</p> <p><b>FY 2014 Accomplishments:</b> Continued new signals capabilities and enhancements for the ASIP sensor. including ASIP Upgrade Increments 1 and Increment 2. Continued integration activities, and incorporate upgrades as appropriate. Details are classified.</p> <p><b>FY 2015 Plans:</b> Continues new signals capabilities and enhancements for the ASIP FoS. Continues integration activities and incorporate upgrades as appropriate. Details are classified.</p> <p><b>FY 2016 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>	37.689	38.203	60.811

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

<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF: BA05 Line Item # HAWK00: RQ-4 Mods	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	Continuing	Continuing

**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-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
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)					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ASIP Upgrades Development	SS/CPIF	Northrop Grumman : San Jose, CA	-	24.191	Jan 2014	0.516	Jan 2015	5.911	Jan 2016	-		5.911	Continuing	Continuing	-
ASIP Global Hawk Increment 1	SS/CPFF	Northrop Grumman : San Jose, CA	-	0.500	Feb 2015	13.487	Feb 2015	11.000	Jan 2016	-		11.000	Continuing	Continuing	-
ASIP Increment 2 - Pre EMD	SS/CPIF	Northrop Grumman : San Jose, CA	-	4.100	Jun 2014	14.800	Mar 2015	-		-		-	-	18.900	-
ASIP Increment 2 - EMD	SS/CPIF	Northrop Grumman : San Jose, CA	-	-		1.400	Nov 2015	37.000	Nov 2015	-		37.000	Continuing	Continuing	-
ASIP Processor Upgrade Chassis	SS/CPIF	Northrop Grumman : San Jose, CA	-	3.031	Nov 2013	-		-		-		-	-	3.031	-
Various SIGINT Efforts	Various	Northrop Grumman : San Jose, CA	-	3.200	Mar 2014	3.500	Dec 2014	3.500	Dec 2015	-		3.500	Continuing	Continuing	-
Subtotal			-	35.022		33.703		57.411		-		57.411	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
(U) Various Integration Efforts, & Flight Test (U-2)	Various	Various : San Jose, CA	-	1.167	Jan 2014	2.400	Jan 2015	-		-		-	-	3.567	-
Subtotal			-	1.167		2.400		-		-		-	-	3.567	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2016 Air Force												<b>Date:</b> February 2015		
<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)				

  

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	Various : Dayton, OH	-	1.500	Jan 2014	2.100	Oct 2014	3.400	Nov 2015	-		3.400	Continuing	Continuing	-
<b>Subtotal</b>			-	1.500		2.100		3.400		-		3.400	-	-	-

  

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	-	37.689	38.203	60.811	-	60.811	-	-	-

  

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2016 Air Force			<b>Date:</b> February 2015		
<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)	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ASIP Upgrades Increment 1 - U-2 Field Release 3.1.2																												
ASIP Upgrades Increment 1 - U-2 Field Release 3.2																												
ASIP Upgrades Increment 1 - Global Hawk																												
ASIP Upgrades Increment 2 - Pre EMD																												
ASIP Upgrades Increment 2 - EMD																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Air Force			<b>Date:</b> February 2015
<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)	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
ASIP Upgrades Increment 1 - U-2 Field Release 3.1.2	1	2014	4	2014
ASIP Upgrades Increment 1 - U-2 Field Release 3.2	1	2014	1	2016
ASIP Upgrades Increment 1 - Global Hawk	2	2015	1	2017
ASIP Upgrades Increment 2 - Pre EMD	3	2014	2	2015
ASIP Upgrades Increment 2 - EMD	1	2016	1	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
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)			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675185: Compass Bright (Airborne SIGINT Development - Compass Bright)	-	9.661	7.740	7.188	-	7.188	8.964	10.108	11.213	14.464	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

(U) The COMPASS BRIGHT program develops, demonstrates, and rapidly transitions advanced Air Force specific Signals Intelligence (SIGINT) capabilities against emerging and future target signals. The COMPASS BRIGHT program includes the newer Operational Reconnaissance (Ops Recce). This program pursues SIGINT and Ops Recce technologies for program transition, to include Communications Intelligence (COMINT), Electronic Intelligence (ELINT), Audio, Analytics, Special Signals of Interest, and Radio Frequency (RF) Measurement and Signature Intelligence (MASINT). The COMPASS BRIGHT program objective is to develop technologies for application in SIGINT and MASINT systems or 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 laboratories and industry partners, to select those projects that are most promising. This program includes total government and contractor costs for these projects.

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

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> SIGINT Tech Development	9.661	7.740	7.188
<b>Description:</b> Develops projects in the Signals Intelligence and Radio Frequency Measurement and Signature Intelligence areas for transition to the RC-135 fleet, other ISR platforms and Operational Reconnaissance (Ops Recce).			
<b>FY 2014 Accomplishments:</b> Continued/completed various SIGINT projects to include search and intercept improvements, enhanced ELINT exploitation, and real time communications systems.			
<b>FY 2015 Plans:</b> Continues and completes various SIGINT projects to include enhanced ELINT exploitation, COMINT, Audio exploitation, Operational Reconnaissance (Ops Recce), Signals of interest prosecution, and Non-Traditional ISR (NTISR).			
<b>FY 2016 Plans:</b> Will initiate, continue, and complete various SIGINT projects to include enhanced ELINT exploitation, COMINT, Audio exploitation, Operational Reconnaissance (Ops Recce), Signals of interest prosecution, and NTISR.			
<b>Accomplishments/Planned Programs Subtotals</b>	9.661	7.740	7.188



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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
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)
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy (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.		
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-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
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)					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Compass Bright	Various	Multiple : Various, V	-	8.842	Jan 2014	7.243	Jan 2015	6.691	Jan 2016	-		6.691	Continuing	Continuing	-
Subtotal			-	8.842		7.243		6.691		-		6.691	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	Various : Dayton, OH	-	0.819	Oct 2013	0.497	Oct 2014	0.497	Oct 2015	-		0.497	Continuing	Continuing	-
Subtotal			-	0.819		0.497		0.497		-		0.497	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	9.661		7.740		7.188		-		7.188	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
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)	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SIGINT Technologies																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
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)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SIGINT Technologies	1	2014	4	2020

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Air Force										<b>Date:</b> February 2015		
<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 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675186: Special Programs (Airborne SIGINT Development - Special Platforms)	-	-	2.222	2.930	-	2.930	3.385	4.668	4.996	7.489	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
<b>A. Mission Description and Budget Item Justification</b> (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, 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: new signal sets, antenna improvements, sensitivity upgrades, and data distribution upgrades. This project provides the warfighter with near term combat capabilities with increased capability improvements accomplished as technologies and risks achieve satisfactory levels. Sensors will be integrated and tested on various platforms including the MQ-1B/ MQ-9A Remotely Piloted Aircraft (RPA) as funding permits.												
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>									<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	
<b>Title:</b> SIGINT Development <b>Description:</b> Develop, update, and test SIGINT capabilities for QRC and normalized special programs SIGINT projects. <b>FY 2014 Accomplishments:</b> N/A <b>FY 2015 Plans:</b> Begin to modernize systems already integrated on various aircraft including the MQ-1B/9B RPA <b>FY 2016 Plans:</b> Continue to modernize SIGINT systems on the MQ-1B/9A RPA.									-	2.222	2.930	
<b>Accomplishments/Planned Programs Subtotals</b>									-	2.222	2.930	
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A <b>Remarks</b>												

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
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)

### D. Acquisition Strategy

(U) SIGINT capabilities will be integrated to various classified platforms using an evolutionary acquisition approach. Capabilities and prototypes will be developed by Other Government Agencies (OGA) and transitioned to select vendors as production needs develop.

### 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-3, RDT&amp;E Project Cost Analysis: PB 2016 Air Force</b>													<b>Date:</b> February 2015		
<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>Product Development (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
MQ-1/9 SIGINT Upgrades	Various	Various : Various,	-	-		1.422	Jan 2015	0.700	Jan 2016	-		0.700	Continuing	Continuing	-
<b>Subtotal</b>			-	-		1.422		0.700		-		0.700	-	-	-

  

**Remarks**  
Upgrades the QRC sensors already on the MQ-1/9 fleet

  

<b>Support (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Flight Test	Various	Various : Various,	-	-		0.800	Jan 2015	2.230	Jan 2016	-		2.230	Continuing	Continuing	-
<b>Subtotal</b>			-	-		0.800		2.230		-		2.230	-	-	-

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

			<b>Prior Years</b>	<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	-		2.222		2.930		-		2.930	-	-	-

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force						Date: February 2015					
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)			
3600 / 7				PE 0304260F / Airborne SIGINT Enterprise				675186 / Special Programs (Airborne SIGINT Development - Special Platforms)			

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MQ-1/9 Sensor 1 Modernization																												
MQ-1/9 Sensor 2 Modernization																												
MQ-1/9 Sensor Upgrades																												



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Air Force			<b>Date:</b> February 2015
<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)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MQ-1/9 Sensor 1 Modernization	1	2015	4	2020
MQ-1/9 Sensor 2 Modernization	1	2015	4	2020
MQ-1/9 Sensor Upgrades	1	2016	4	2020