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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305207F I Manned Reconnaissance Systems							
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	-	12.205	13.491	13.516	-	13.516	13.767	14.037	14.311	14.584	Continuing	Continuing
674754: RC-135 Systems	-	12.205	13.491	13.516	-	13.516	13.767	14.037	14.311	14.584	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

The RC-135 Operational Systems Development and enhancement activities project supports design studies, engineering analysis, non-recurring engineering, and other efforts associated with the integration and modification of the RC-135 programs and their specialized mission systems, both air and ground. Extensive utilization of Commercial-Off-The-Shelf (COTS) based solutions allows rapid fielding of needed capabilities through continuous technology refresh cycles and Diminishing Manufacturing Sources (DMS)/Vanishing Vendor Items (VVI) logistics mitigation efforts. The results of these efforts provide for preliminary assessments of technical feasibility, operability, or military utility as well as specific engineering implementations for integration into the various systems baseline configurations.

These activities are managed by the Air Force through the 645th Aeronautical System Group (645 AESG), BIG SAFARI Systems Program Office (SPO), Aeronautical Systems Center, Air Force Materiel Command, Wright Patterson AFB, OH. BIG SAFARI manages engineering, ground and support systems modifications, integration, flight testing, product assurance, acceptance testing, logistics, and training activities.

Aircraft, sensor systems, and associated ground support system engineering planned for FY 2015 include support for the RC-135V/W RIVET JOINT Baseline 12, the RC-135U COMBAT SENT Baseline 5 and the RC-135S COBRA BALL Baseline 5 configurations. The world-wide challenge of keeping pace against technologically agile targets used by both nation and non-nation-state adversaries and the rapid evolution of COTS technologies demands a responsive and adaptive acquisition strategy for fielding baseline capabilities that are logistically supportable at all locations. BIG SAFARI uses an incremental baseline strategy to mitigate risk, find affordable solutions and field needed capabilities on the aircraft and ground support and training systems. Obsolescence and Diminished Manufacturing Sources/ Vanishing Vendor Items (DMS/VVI) are addressed with each baseline upgrade and annually as part of the sustainment responsibilities.

RIVET JOINT Baseline 12 upgrades consist of, but are not limited to, increased digital signal exploitation, increased digital signal recorder bandwidth, enhanced spatial processing/exploitation, enhanced weather radar, AF-DCGS interoperability, operator work station 3-D map projection, and new steerable beam antenna.

COMBAT SENT Baseline 5 upgrades consist of, but are not limited to, continued Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) and Required Navigational Performance (RNP) compliant cockpit avionics enhancements, active ranging and geolocation capability, cooling duct improvements, precision electronic intelligence (ELINT) (CORVUS system) super wideband compressive receiver, RJ Baseline 11 COMINT, wideband global satellite (WGS) communications enhanced integration, and communications upgrade to include Multifunctional Information Distribution System Joint Tactical Radio System (MIDS-J).

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COBRA BALL Baseline 5 upgrades consist of, but are not limited to, RJ Baseline 11 COMINT, Medium-Wave Infra-Red Acquisition (MIRA) sensor/processor upgrade, MASINT Collection System (MCS) optical upgrade, WGS communications enhanced integration, communications upgrade to include MIDS-J, continued CNS/ATM and RNP compliant cockpit avionics enhancements.						
Activities also include studies and analysis to support both current program planning and execution and future program planning.						
This program is in Budget Activity 7, Operational Systems 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 fielding in the current or subsequent fiscal year.						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		13.316	13.491	13.685	-	13.685
Current President's Budget		12.205	13.491	13.516	-	13.516
Total Adjustments		-1.111	-	-0.169	-	-0.169
• Congressional General Reductions		-0.017	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-1.094	-	-0.169	-	-0.169
Change Summary Explanation						
FY13 reduction in Other Adjustments was due to Sequestration.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: Baseline Configuration Development				12.205	13.491	13.516
Description: Non-recurring engineering (NRE) for Baseline system developments and enhancements to improve mission capabilities						
FY 2013 Accomplishments: Supported design studies, engineering analysis, NRE and other efforts associated with the integration and modification of the RC-135 aircraft programs (RJ BL-12, CS BL-5, and CB BL-5) and their specialized mission systems for the collection of both air and ground signals.						
FY 2014 Plans:						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2013	FY 2014	FY 2015
Continue to support design studies, engineering analysis, NRE and other efforts associated with the integration and modification of the RC-135 programs (RJ BL-12, CS BL-5, and CB BL-5) and their specialized mission systems for the collection of both air and ground signals.												
FY 2015 Plans: Will continue to support design studies, engineering analysis, NRE and other efforts associated with the integration and modification of the RC-135 programs and their specialized mission systems for the collection of both air and ground signals.												
Accomplishments/Planned Programs Subtotals										12.205	13.491	13.516
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• APAF: BA05: DARP01: Modification of Inservice Aircraft	165.625	174.513	152.746	-	152.746	176.165	199.323	182.851	186.275	Continuing	Continuing	
• APAF: BA06: DARP01: Aircraft Spares and Repair Parts	41.047	28.280	57.119	-	57.119	54.106	48.632	49.407	50.331	Continuing	Continuing	
• OPAF: BA04: 846070: Defense Airborne Recce Projects (DARP) RC-135	22.282	20.577	24.710	-	24.710	25.237	25.700	26.153	26.620	Continuing	Continuing	
• RDT&E: BA07: PE 0304260F: RC-135 Airborne SIGINT Enterprise Development	33.858	29.331	15.007	-	15.007	29.996	30.436	37.157	37.864	Continuing	Continuing	
Remarks												
FY 2013 APAF, BA05, DARP01, Modification of Inservice Aircraft funding totals does not include an \$8.0M Below Threshold Reprogramming approved 18 Nov 2013.												
E. Acquisition Strategy												
The RC-135 RIVET JOINT, COBRA BALL, and COMBAT SENT aircraft are maintained and kept technologically relevant through a baseline/incremental upgrade acquisition strategy. Technology refresh and quick reaction capability (QRC) developments are acquired through the 645th Aeronautical Systems Group (AESG) (BIG SAFARI Systems Program Office) in accordance with the BIG SAFARI Program Management Directive (PMD), and the BIG SAFARI Class Justification and Approval (J&A) document for acquisition of supplies and services using "other than full and open competition" criteria. The supplies and services procured by 645 AESG under their standing J&A to satisfy National Security (FAR 6.302-6) or individually prepared J&A for Unusual and Compelling Urgency (FAR 6.302-2) requirements are supported by the BIG SAFARI Life Cycle Management Plan (LCMP) across the full spectrum of system life cycle management from developmental engineering to system retirement ("cradle to grave") support. Due to the rapidly changing threat environment encountered during our prolonged commitment to Overseas Contingency												

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Operations (OCO), the acquisition program manager has the authority to redirect funding as necessary to meet current stated and emerging Combatant Commander requirements.		
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.		

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

Date: March 2014

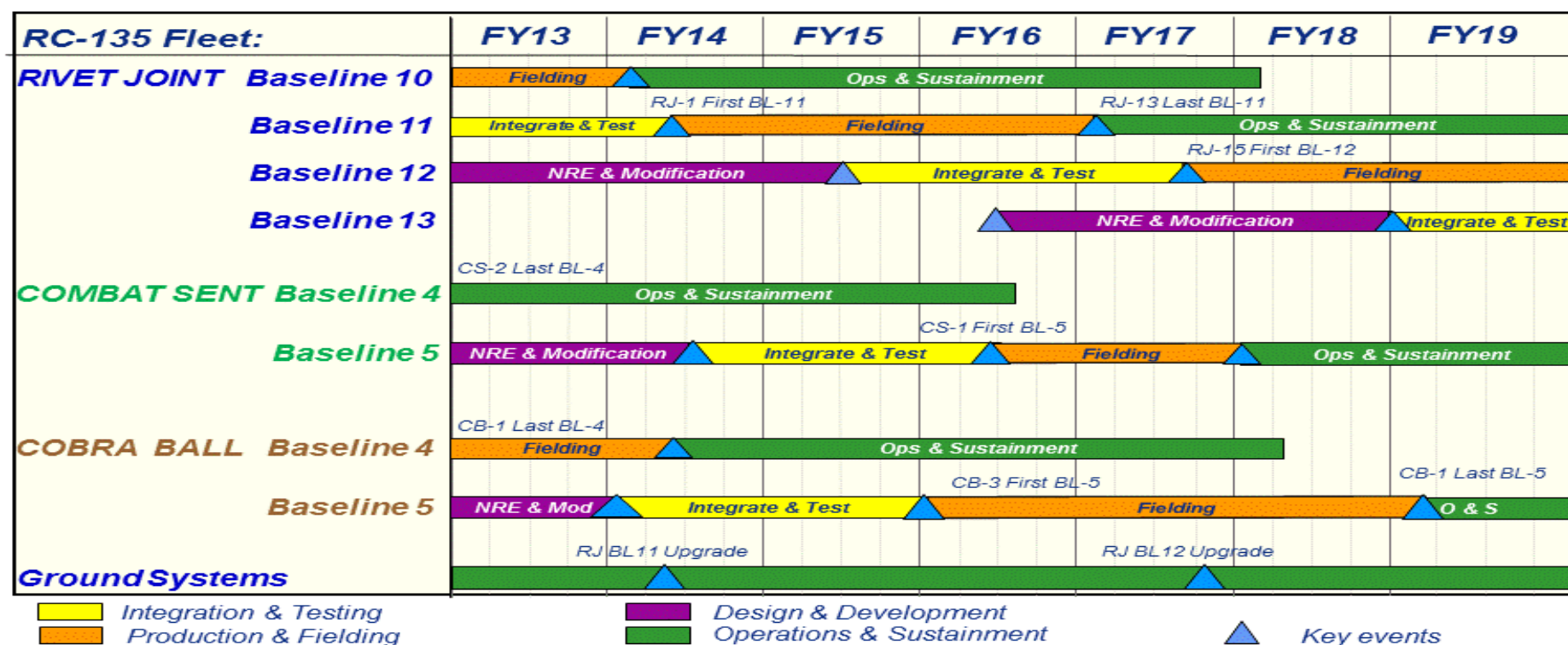
Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0305207F / Manned Reconnaissance
Systems

Project (Number/Name)
674754 / RC-135 Systems

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Manned Reconnaissance Systems (RC-135) Schedule



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