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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 0207253F I Compass Call							
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	-	10.745	14.315	14.249	-	14.249	13.860	14.132	14.400	14.658	Continuing	Continuing
674804: Compass Call	-	10.745	14.315	14.249	-	14.249	13.860	14.132	14.400	14.658	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The EC-130H COMPASS CALL is the USAF's wide-area, airborne Command and Control Warfare/Information Operations (C2W /IO) weapon system. The employment of this system interdicts adversary's use of the electronic battlespace and is a key active component in the information battlespace and prosecution of Overseas Contingency Operations (OCO). EC-130H COMPASS CALL's sophisticated electronic combat system is capable of surgical denial or disruption of adversary radio frequency (RF) communications systems and sensors. The system was fielded in 1983 and to date has evolved through the fielding of the Baseline 2 configuration. Due to the rapid advances in electronic attack technology, the EC-130H COMPASS CALL was designed to be easily modified and must continue to modernize and evolve to keep pace with adversary tactics and emerging technologies. Continuous system development is required to maintain battlespace superiority.

The EC-130H COMPASS CALL is a level of effort funded program and employs an incremental development and fielding strategy that puts capability into the warfighter's hands as soon as practical and ensures each iteration of the weapon system is effective against the highest priority threats. To sustain that process requires a steady stream of system development funds. Development funds are required to accomplish subsystem additions and improvements such as the digital signal analysis and exciter subsystem (AXE), the Special Purpose Emitter Array (SPEAR), new modern communications receiver technologies, new IR and counter radar technologies, the Human-to-Machine Interface (HMI), digital cockpit avionics with multi-function displays (glass cockpits), network centric operations, phased array transmit and receive apertures and other classified hardware and software developments necessary to counter military and commercial communications evolutions, command and control operations enhancements, and new/emerging sensor developments. Funding in FY 2016 is required to support RDT&E efforts for Baseline 3 (BL3) upgrades to the EC-130H COMPASS CALL fleet and ground systems/simulators. The BL2 and BL3 programmed requirements have advanced significantly over the two previously fielded baselines. BL2 and BL3 upgrades will help cover the electronic attack shortfall in the foreseeable future. Obsolescence and diminishing manufacturing sources (DMS)/Vanishing Vendor Items (VVI) are addressed with each baseline upgrade as well as annually as part of the sustainment responsibilities. The two COMPASS CALL Mission Crew Simulators (CCMCS) are upgraded per the Baseline schedule to ensure training capacity keeps pace and matches the operational and technological upgrades delivered in the fielded aircraft. The Weapons System Trainer (WST) will mirror the capabilities of the fielded aircraft's cockpit avionics and communications equipment as well.

Activities also include studies and analysis to support both current and future program planning and execution.

Due to the rapidly changing threat environment encountered during our prolonged commitment to OCO, the acquisition program manager has the authority to redirect funding as necessary to meet current stated and emerging requirements.

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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. Program Change Summary (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget		10.745	14.411	14.344	-	14.344
Current President's Budget		10.745	14.315	14.249	-	14.249
Total Adjustments		-	-0.096	-0.095	-	-0.095
• Congressional General Reductions		-	-0.096			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-	-	-0.095	-	-0.095
Change Summary Explanation						
FY 2016 (-0.095M) adjustment required to fund other AF higher priorities						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2014	FY 2015	FY 2016
Title: Baseline Upgrade Development				10.745	14.315	14.249
Description: Supports Baseline development, integration and test, plus Special Purpose Emitter Array (SPEAR) Generation 3 for Baseline 2, and Baseline 3 non-recurring engineering (NRE).						
FY 2014 Accomplishments: Continued Baseline 3 development of new IR counter-measures and counter-radar technologies, new receiver technologies, Human-Machine Interface, New Array, New Target Development, Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, and Target Development.						
FY 2015 Plans: Continue Baseline 3 development of new counter-radar technologies, new receiver technologies, Human Machine Interface, New Array, New Target Development, Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, Target Development, and Digital Avionics (glass cockpit) enhancements.						
FY 2016 Plans: Plans to continue Baseline 3 development of new counter-radar technologies, new receiver technologies, Human Machine Interface, New Array, New Target Development, Advanced Commercial and Military Communications, and initiate Mid-Baseline						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
3 development to include Counter Radar and Counter Satellite Navigation Techniques, Target Development, and Digital Avionics (glass cockpit) enhancements.												
Accomplishments/Planned Programs Subtotals										10.745	14.315	14.249
D. 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# CALL00: Compass Call Mods	29.494	82.628	68.415	-	68.415	35.315	36.262	36.920	37.544	Continuing	Continuing	
• APAF: BA06: Line item# CALL00: Compass Call Mod Spares	10.222	12.458	10.529	-	10.529	11.015	11.014	10.792	10.974	Continuing	Continuing	
Remarks												
FY 2015 funding totals include \$24.8M of OCO to provide two shipsets of SPEAR Generation 3 pod sets.												
E. Acquisition Strategy												
EC-130H COMPASS CALL capability is maintained with incremental upgrades per the baseline acquisition strategy plus Quick Reaction Capability (QRC) developments acquired through the 645th Aeronautical Systems Group (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 procured supplies and services 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 Operations (OCO), the acquisition program manager has the authority to redirect funding as necessary to meet current stated and emerging Combatant Commander (COCOM) 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-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 0207253F / <i>Compass Call</i>				Project (Number/Name) 674804 / <i>Compass Call</i>					

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
Primary Mission Equipment	SS/CPFF	BAE Sytems : Nashua, NH	-	10.745	Nov 2013	14.315	Dec 2014	14.249	Dec 2015	-		14.249	Continuing	Continuing	TBD
Subtotal			-	10.745		14.315		14.249		-		14.249	-	-	-

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
Subtotal			-	-		-		-		-		-	-	-	-

			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			-	10.745	14.315	14.249	-	14.249	-	-	-

Remarks EC-130H Program Manager has determined that PMA will be funded with Compass Call's APAF appropriation and included in the P-3A, Mod 1001 & 1003.											
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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 0207253F / <i>Compass Call</i>		Project (Number/Name) 674804 / <i>Compass Call</i>	

	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
Baseline 2 Integration, Testing and Fielding																												
Baseline 3 Development, Integration, Testing and Fielding																												
EC-130H Conversion Fielding, Integration and Testing (EC #15)																												
Simulator CCMCS #1 (BL2) Integration and Testing																												
Simulator CCMCS #2 (BL2) Integration and Testing																												
Simulator CCMCS #2 (BL3) Integration and Testing																												
Simulator WST Delivery Integration and Testing																												
Simulator WST Avionics Upgrade Integration and Testing																												
IR Countermeasures Development, Integration and Test																												

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

Events	Start		End	
	Quarter	Year	Quarter	Year
Baseline 2 Integration, Testing and Fielding	1	2014	3	2016
Baseline 3 Development, Integration, Testing and Fielding	1	2015	4	2020
EC-130H Conversion Fielding, Integration and Testing (EC #15)	1	2014	3	2015
Simulator CCMCS #1 (BL2) Integration and Testing	1	2014	2	2014
Simulator CCMCS #2 (BL2) Integration and Testing	1	2014	4	2014
Simulator CCMCS #2 (BL3) Integration and Testing	1	2020	3	2020
Simulator WST Delivery Integration and Testing	3	2014	2	2015
Simulator WST Avionics Upgrade Integration and Testing	3	2015	1	2016
IR Countermeasures Development, Integration and Test	1	2014	2	2014