

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force	<b>DATE:</b> April 2013
--	-------------------------

<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207253F: <i>Compass Call</i>
--	--

<b>COST (\$ in Millions)</b>	<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013<sup>#</sup></b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO <sup>##</sup></b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	19.229	12.094	10.782	-	10.782	13.263	13.193	12.831	13.062	Continuing	Continuing
674804: <i>Compass Call</i>	-	19.229	12.094	10.782	-	10.782	13.263	13.193	12.831	13.062	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**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 our adversary's use of the electronic battlespace and is a key active component in the information battlespace and prosecution of Overseas Contingency Operations. 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 Block 35/Baseline 1 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 program employs an incremental development and fielding strategy that puts capability into the warfighters 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), Integrated Modern Communication Receiver, the Human-to-Machine Interface (HMI), 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 2014 is required to support RDT&E efforts for Baseline 3 (BL3) upgrades to the EC-130H COMPASS CALL fleet. 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 coming years. Obsolescence and diminishing manufacturing sources (DMS) are addressed with each baseline upgrade as well as annually as part of the sustainment responsibilities.

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

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.

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207253F: Compass Call				
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		18.509	12.094	12.222	-	12.222
Current President's Budget		19.229	12.094	10.782	-	10.782
Total Adjustments		0.720	0.000	-1.440	-	-1.440
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• Other Adjustments		0.720	0.000	-1.440	-	-1.440
Change Summary Explanation						
FY 2012 additional funding (\$0.720M) provided to the Rand Corporation for the EC-130H Capabilities Based Assessment/Study. FY 2014 reduction in funding (-\$1.440M) assessed for higher priority Air Force needs.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Baseline Upgrade Development				18.509	12.094	10.782
Description: Supports Baseline 2 development, integration and test, plus SPEAR Generation 3 for Baseline 2, and Baseline 3 non-recurring engineering (NRE) leading into development.						
FY 2012 Accomplishments: Supported Baseline 2 development, integration, and test of SPEAR classified techniques and electronic attack infrastructure, Network Centric Operations and Reachback Connectivity Capability, Digital Signal Acquisition and Analysis Subsystem and Digital Exciter Subsystem. Initiate Baseline 3 development of Modern Communications Receiver technologies, Human to Machine Interface, Commercial Band Phased Array New Target Development, Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, and Target Development.						
FY 2013 Plans: Continues Baseline 2 integration, and test of SPEAR classified techniques and electronic attack infrastructure, Network Centric Operations and Reachback Connectivity Capability, Digital Signal Acquisition and Analysis Subsystem and Digital Exciter Subsystem. Continue Baseline 3 development of Modern communications receiver technologies, Human Machine Interface,						

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0207253F: Compass Call							
C. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Commercial Band Phased Array New Target Development, Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, and Target Development.												
FY 2014 Plans: Will continue Baseline 3 development of Modern communications receiver technologies, Human Machine Interface, Commercial Band Phased Array New Target Development, Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, and Target Development.												
Title: EC-130H Study Description: RAND Corporation Study										0.720	0.000	0.000
FY 2012 Accomplishments: EC-130H Capabilities Based Assessment (CBA)												
Accomplishments/Planned Programs Subtotals										19.229	12.094	10.782
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• APAF: BA05: CALL00: Compass Call	302.154	50.024	34.494		34.494	66.262	63.967	56.562	57.580	Continuing	Continuing	
• APAF: BA06: CALL00: Compass Call	71.883	28.663	11.890		11.890	20.967	19.596	17.652	17.970	Continuing	Continuing	
Remarks												
E. Acquisition Strategy												
EC-130H COMPASS CALL capability is maintained with incremental upgrades per the baseline acquisition strategy plus any quick reaction capabilities (QRC) developments acquired through the 645th Aeronautical Systems Group (BIG SAFARI 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 requirements.												

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207253F: <i>Compass Call</i>	
<b>F. 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.		

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0207253F: Compass Call				PROJECT 674804: Compass Call					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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	-	18.509	Nov 2011	12.094	Nov 2012	10.782	Nov 2013	-		10.782	Continuing	Continuing	TBD
Subtotal			0.000	18.509		12.094		10.782		0.000		10.782			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
EC-130H Studies	C/T&M	RAND:Santa Monica, CA	-	0.720		0.000	Oct 2012	0.000		-		0.000	Continuing	Continuing	
Subtotal			0.000	0.720		0.000		0.000		0.000		0.000			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
			All Prior Years	FY 2012	FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			0.000	19.229	12.094		10.782		0.000		10.782				
Remarks EC-130H Program Manager has determined that PMA will be funded with Compass Call's APAF appropriation and included in the P-Doc, Mod 1001.															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

**APPROPRIATION/BUDGET ACTIVITY**

3600: Research, Development, Test & Evaluation, Air Force  
BA 7: Operational Systems Development

**R-1 ITEM NOMENCLATURE**

PE 0207253F: Compass Call

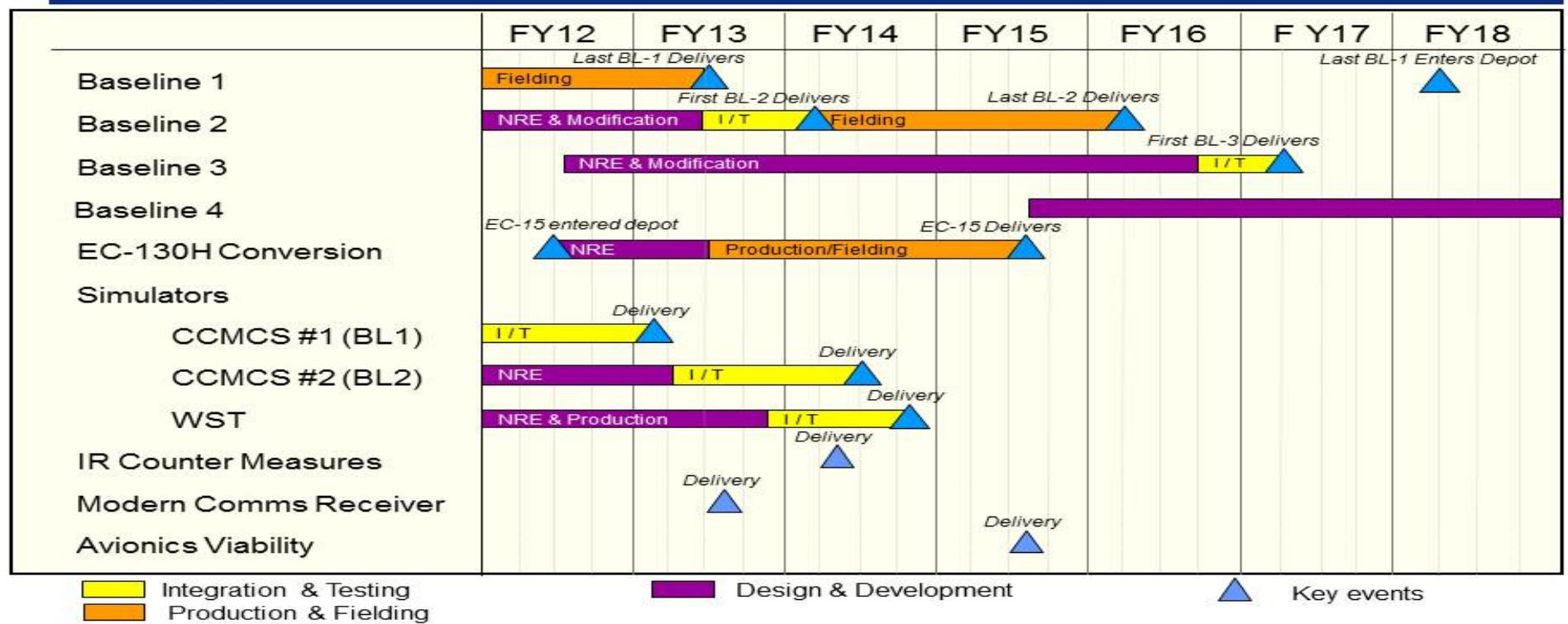
**PROJECT**

674804: Compass Call



U.S. AIR FORCE

# COMPASS CALL Schedule



FY14 Staffer Brief

1

UNCLASSIFIED

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207253F: <i>Compass Call</i>	<b>PROJECT</b> 674804: <i>Compass Call</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Baseline 1	1	2012	3	2013
Baseline 2	1	2012	1	2014
Baseline 3	3	2012	2	2017
Baseline 4	3	2015	4	2018
EC-130H Conversion	2	2012	3	2015
Simulators: CCMCS #1 (BL1)	1	2012	1	2013
Simulators: CCMCS #2 (BL2)	1	2012	3	2014
Simulators: WST	1	2012	4	2014
IR Countermeasures	2	2014	2	2014
Modern Comms Receiver	3	2013	3	2013
Avionics Viability	3	2015	3	2015