PE NUMBER: 0207253F
PE TITLE: Compass Call

Exhibit R-2, RDT&E Budget Item Justification	DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207253F Compass Call

	Cost ($ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
	Total Program Element (PE) Cost	13.470	4.657	13.019	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
4804	Compass Call	13.470	4.657	13.019	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) 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. It interdicts adversary use of the electronic battlespace and is a key active component in the information battlespace and global war on terror. 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 technology, EC-130H COMPASS CALL was designed to be easily modified and must continue to modernize and evolve to keep pace with adversary tactics and technology. Continuous development is required to maintain battlespace superiority. EC-130H COMPASS CALL employs a spiral development and fielding strategy IAW AFPD 63-1 that puts capability into the warfighters hands as soon as practical and ensures each iteration of the weapon sysem is effective against the highest priority threats. That process requires a steady stream of 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), the IED Defeat subsystem (NOVA), the human 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, C2 and sensor developments.

Funding in FY10-15 is required to support RDT&E efforts for Baseline 2 (BL2) and Baseline 3 (BL3) upgrades to the EC-130H COMPASS CALL fleet. The BL2 and BL3 requirements have advanced significantly over the two previous baselines. The "Initial Perspectives" report from House Armed Services Committee's Panel on Roles and Missions (Jan 08) stated, "The Air Force must also address emerging shortfalls and readiness concerns in the COMPASS CALL program . . . it is important that the Air Force dedicate necessary funding to sustain the airframe and upgrade its mission and operating systems." 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 program planning and execution and future program planning.

This program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to pursue joint, allied, and coalition interoperability.

This program is categorized as Budget Activity 7, Operational Systems Development, because it provides for development of technologies necessary to field esssential opertional capabilities.

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call

(U) B. Program Change Summary ($ in Millions)

		FY 2008	FY 2009	FY 2010
(U)	Previous President's Budget	8.549	4.670	13.242
(U)	Current PBR/President's Budget	13.470	4.657	13.019
(U)	Total Adjustments	4.921	-0.013	
(U)	Congressional Program Reductions		-0.013	
	Congressional Rescissions			
	Congressional Increases	5.161		
	Reprogrammings			
	SBIR/STTR Transfer	-0.240		

(U) Significant Program Changes:

FY2008 funding total includes $5.161M in supplemental funding

Exhibit R-2a, RDT&E Project Justification			DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207253F Compass Call	PROJECT NUMBER AND TITLE: 4804 Compass Call	

Cost ($ in Millions)		FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
4804	Compass Call	13.470	4.657	13.019	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) 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. It interdicts adversary use of the electronic battlespace and is a key active component in the information battlespace and global war on terror. 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.

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This program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to pursue joint, allied, and coalition interoperability.

This program is categorized as Budget Activity 7, Operational Systems Development, because it provides for development of technologies necessary to field esssential opertional capabilities.

Exhibit R-2a, RDT&E Project Justification		DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207253F Compass Call	PROJECT NUMBER AND TITLE: 4804 Compass Call

	B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010
(U)	FY08 Congressional Add: Network centric information operations improvements	4.000	0.000	0.000
(U)	Development, integration and test of Network Centric Operations and Reachback Connectivity Capability	0.000	0.520	1.052
(U)	FY08 GWOT Supplemental: Develop Block 35/Baseline 0 Upgrade to COMPASS CALL Mission Crew Simulator (CCMCS)	5.161	0.000	0.000
(U)	Development, integration, and test of classified techniques and electronic attack infrastructure (Special Purpose Emitter Array, a.k.a. SPEAR)	0.643	0.800	1.069
(U)	Development, integration, and test of Digital Signal Acquisition and Analysis Subsystem and the Digital Exciter Subsystem	0.806	1.148	1.345
(U)	Integration and test of Block 35/Baseline 1 Human Machine Interface (HMI)	0.660	0.589	0.700
(U)	Development, integration and test of Commercial Band Phased Array New Target Development	1.000	1.100	1.300
(U)	Development, integration and test of Advanced Commercial and Military Communications, Counter Radar and Counter Satellite Navigation Techniques, and Target Development	1.200	0.500	2.210
(U)	Baseline 2 Development	0.000	0.000	5.343
(U)	Total Cost	13.470	4.657	13.019

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

(U) C. Other Program Funding Summary ($ in Millions)

		FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total Cost
(U)	PE 0207253F, APAF	65.215	36.942	47.223						Continuing	TBD
(U)	PE 0207253F, O&M	200.194	96.963	257.552						Continuing	TBD

(U) D. Acquisition Strategy

EC-130H COMPASS CALL baseline / incremental upgrades and quick reaction capabilities (QRC) developments are acquired through the 645th Aeronautical Systems Group (AESG -- BIG SAFARI Program Office) in accordance with the Program Management Directive (PMD) for BIG SAFARI Programs, and the BIG SAFARI Class Justification and Approval (J&A) document for acquisition of supplies and services using other than full and open competition. The supplies and services procured by 645th AESG under their J&A to satisfy National Security (FAR 6.302-6) or Unusual and Compelling Urgency (FAR 6.302-2) requirements include the full range of system life cycle management support (LCMP) from developmental engineering to system retirement. Due to the rapidly changing threat environment of the long Overseas Contingency Operations (OCO), the acquisition program manager has the authority to redirect funding as necessary to meet the requirements.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: May 2009

BUDGET ACTIVITY: 07 Operational System Development

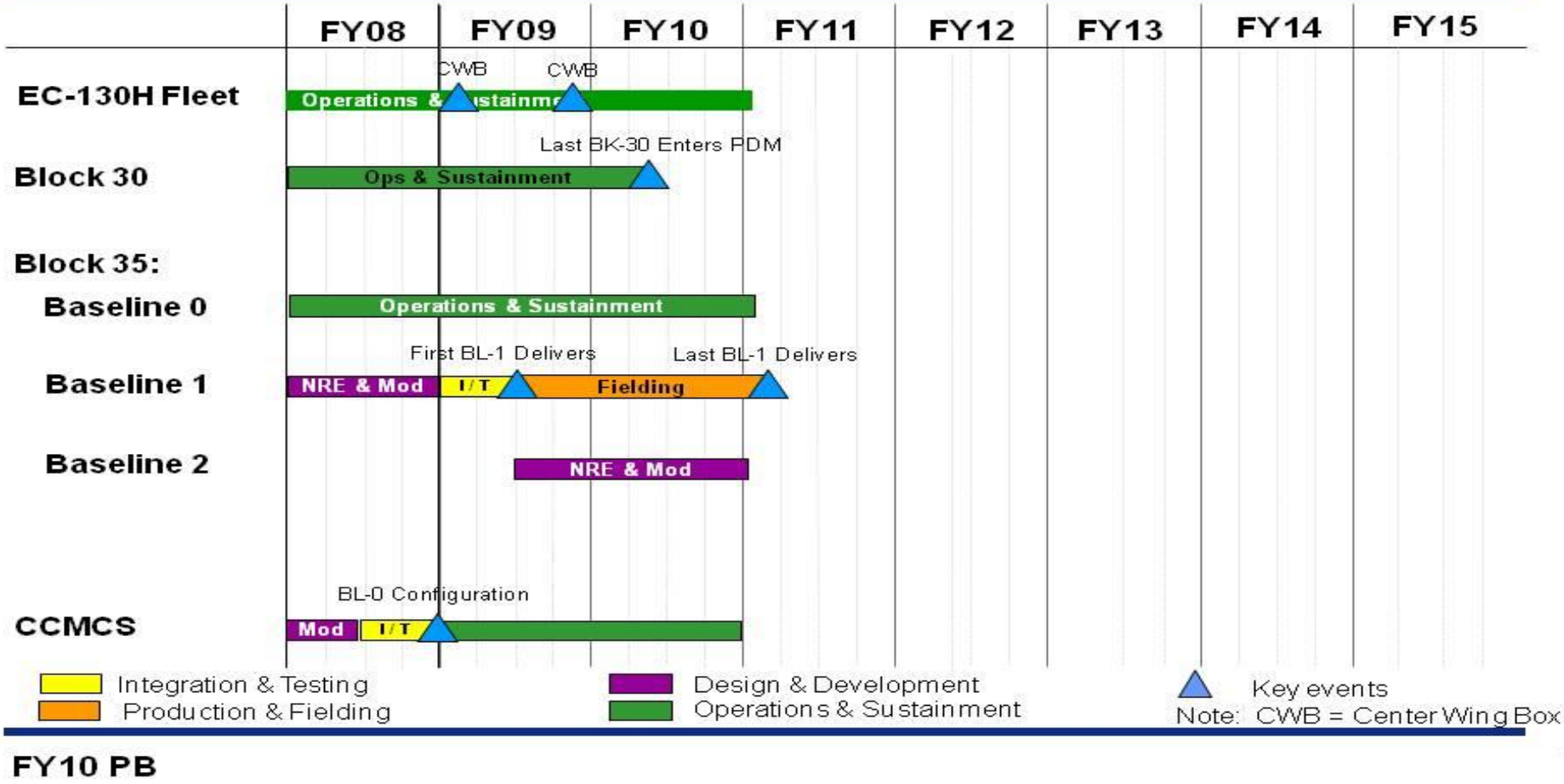
PE NUMBER AND TITLE: 0207253F Compass Call

PROJECT NUMBER AND TITLE: 4804 Compass Call

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) ($ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2008 Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
COMPASS CALL RDT&E	SS/FFP&C PFF	BAE Systems, Nashua NH	4.000	9.260	Dec-07	0.000		7.676	Dec-09	Continuing	TBD	TBD
Subtotal Product Development			4.000	9.260		0.000		7.676		Continuing	TBD	TBD
Remarks:												
(U) Test & Evaluation												
				0.000		0.000		0.000			0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Primary Mission Equipment												
COMPASS CALL RDT&E	CPFF	BAE Systems, Nashua NH	4.549	4.210	Dec-07	4.657	Dec-08	5.343	Dec-09	Continuing	TBD	TBD
Subtotal Primary Mission Equipment			4.549	4.210		4.657		5.343		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			8.549	13.470		4.657		13.019		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile		DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207253F Compass Call	PROJECT NUMBER AND TITLE: 4804 Compass Call

EC-130H COMPASS CALL Schedule



FY10 PB

Exhibit R-4a, RDT&E Schedule Detail		DATE May 2009
BUDGET ACTIVITY **07 Operational System Development**	PE NUMBER AND TITLE **0207253F Compass Call**	PROJECT NUMBER AND TITLE **4804 Compass Call**

(U)	**Schedule Profile**	FY 2008	FY 2009	FY 2010
(U)	Baseline 1 Sub-System Additions and Emerging Technologies Enhanced Targeting Techniques Development / Integration	1-4Q	1-2Q	
(U)	Baseline 2 Sub-System Additions and Emerging Technologies Enhanced Targeting Techniques Development / Integration		3-4Q	1-4Q
(U)	Compass Call Mission Crew Simulator (CCMCS) Baseline Operating System and Sub-Systems Modification / Upgrades	1-4Q		

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