PE NUMBER: 0207253F
PE TITLE: Compass Call

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2006
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call

Cost ($ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	3.952	9.907	4.469	0.000	0.000	4.942	4.994	Continuing	TBD
4804 Compass Call	3.952	9.907	4.469	0.000	0.000	4.942	4.994	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The EC-130H Compass Call aircraft is the USAF's wide-area coverage airborne electronic attack and offensive counter information weapon system. It disrupts or denies adversary voice and data communication as well as denies adversary radar reception, hampering the ability to gather information or control forces in the field. Compass Call has been a fielded capability since 1983, however, it must continue to evolve to keep pace with adversary developments in new communications and sensor technology as well as make use of rapidly advancing commercial technology. Compass Call's strength is in employing techniques that allow surgical disruption and denial of adversary systems while preserving use of the same electronic battlespace for friendly and neutral assets.

This program incorporates advanced capabilities into the operational system to include Block 30, Block 35, and related integration, testing, training, simulation and deploying systems. The evolution of the threat requires developmental investments in a wide range of activities and associated subsystems. These activities include significant effort in the development and operational fielding of the Human Machine Interface (HMI), Special Purpose Emitter Array (SPEAR), and other classified airborne electronic attack capabilities for Compass Call. Activities are also required in the related areas of software, testing and integration, signals analysis, systems engineering integration, countermeasure development for the evolving threat, mission planning development, Concept of Operations (CONOPS) development, and program planning. RDT&E articles include engineering and manufacturing development units necessary for these systems to evolve to counter emerging threats as well as other subsystems to counter the evolving threats.

Development funds are required to support the baseline development and upgrade strategy used to keep the mission equipment as current as possible in the face of rapidly advancing technology. New and upgraded communications and sensor systems are studied for vulnerabilities. Hardware and software techniques are developed and tested to add or upgrade disruption and denial capabilities to the mission equipment baseline. Rapid developments in support of urgent warfighter needs are fielded as quick reaction capabilities on specific aircraft.

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 because it provides for development of technologies and capabilities in support of operational system development.

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2006
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call

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

		FY 2005	FY 2006	FY 2007
(U)	Previous President's Budget	3.990	4.650	4.451
(U)	Current PBR/President's Budget	3.952	9.907	4.469
(U)	Total Adjustments	-0.038	5.257	
(U)	Congressional Program Reductions			
	Congressional Rescissions	-0.038	-0.143	
	Congressional Increases		5.400	
	Reprogrammings			
	SBIR/STTR Transfer			

(U) Significant Program Changes:

(U) Program RDT&E was zeroed out in FY08 and FY09 when a new PE was established for Airborne Electronic Attack. The Air Force is planning to re-instate funding levels (aproximately $4M per year) to restore PE to previous levels.

(U) FY06 Congressional Adds include: $1.4M for Radar Situational Awareness and Targeting (RSAT) demonstration concept; $4.0M for network centric information operations improvements

Exhibit R-2a, RDT&E Project Justification

DATE: February 2006

BUDGET ACTIVITY: 07 Operational System Development

PE NUMBER AND TITLE: 0207253F Compass Call

PROJECT NUMBER AND TITLE: 4804 Compass Call

Cost ($ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4804 Compass Call	3.952	9.907	4.469	0.000	0.000	4.942	4.994	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

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(U) B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U) Development, integration, and test of classified techniques and electronic attack infrastructure (Special Purpose Emitter Array)	1.976	1.344	0.447
(U) Development,integration, and test of Digital Signal Acqusition and Analysis Subsystem	0.395	1.563	2.234
(U) Integration and test of Block 35 Human Machine Interface (HMI)	1.581	1.600	1.788
(U) Congressional Add: Radar Situational Awareness and Targeting (RSAT) demonstration concept		1.400	
(U) Congressional Add: Network centric information operations improvements		4.000	

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call	PROJECT NUMBER AND TITLE 4804 Compass Call

(U) B. Accomplishments/Planned Program ($ in Millions)

	FY 2005	FY 2006	FY 2007
(U) Total Cost	3.952	9.907	4.469

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

	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
(U) PE 0207253F, Aircraft Modification (3010)	28.932	29.029	46.818	44.674	24.588	19.840	20.096	Continuing	TBD
(U) PE 0207253F, Aircraft Initial Spares (3010)	11.985	14.036	14.433	15.160	15.753	16.197	16.398	Continuing	TBD

(U) D. Acquisition Strategy

Compass Call baseline upgrade developments and quick reaction developments are acquired sole-source through the Big Safari Systems Group. Technique development is typically classified, due to the information required to support the analysis and the resulting techniques.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: **February 2006**

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 2005 Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 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		3.952	Nov-04	9.907	Oct-05	4.469	Nov-06	Continuing	TBD	TBD
Subtotal Product Development			0.000	3.952		9.907		4.469		Continuing	TBD	TBD
Remarks:												
(U) Test & Evaluation												
											0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	3.952		9.907		4.469		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile		DATE: February 2006
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207253F Compass Call	PROJECT NUMBER AND TITLE: 4804 Compass Call

Compass Call R&D Efforts

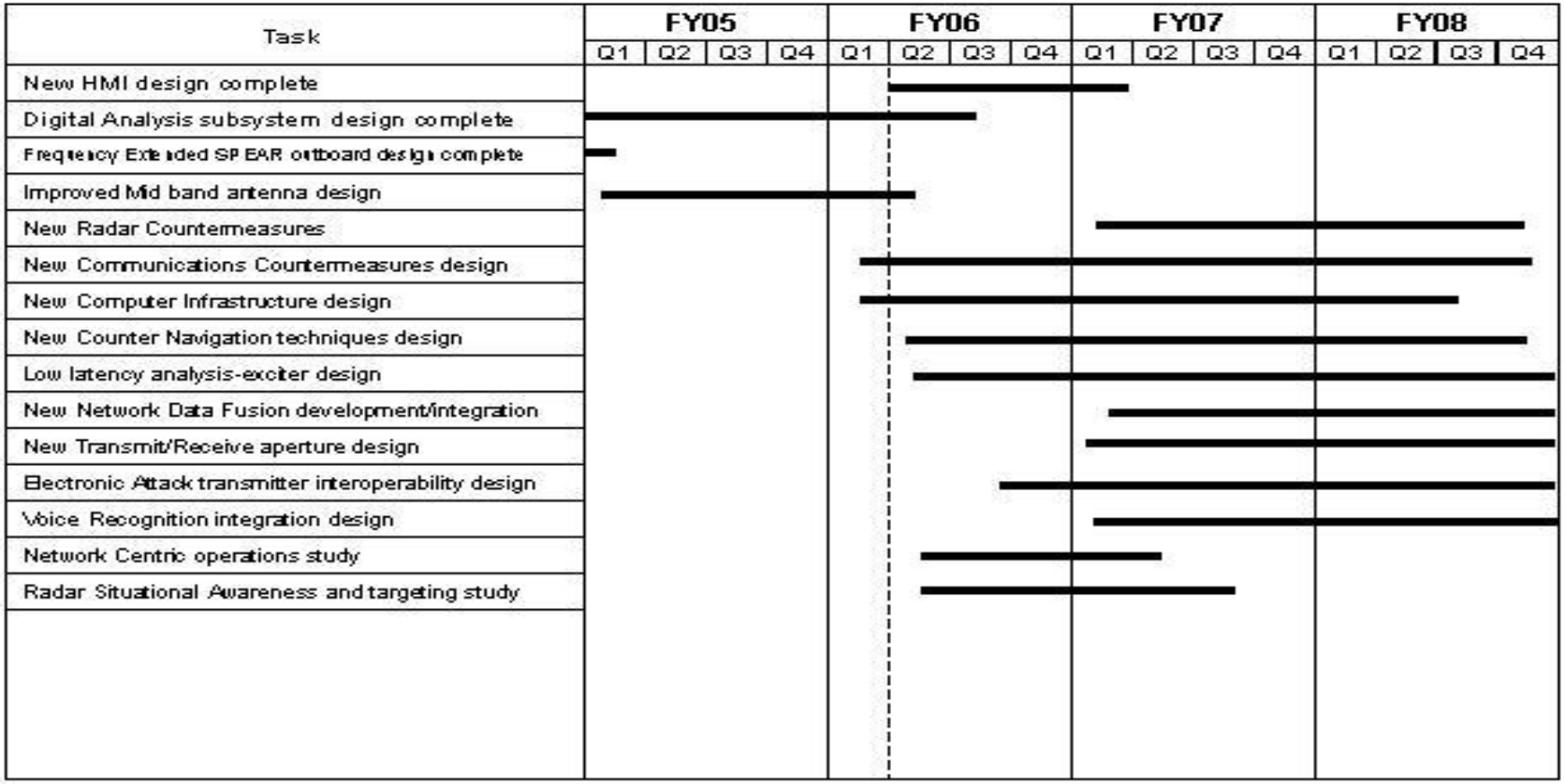

Exhibit R-4a, RDT&E Schedule Detail

DATE: February 2006

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
07 Operational System Development	0207253F Compass Call	4804 Compass Call

(U) Schedule Profile	FY 2005	FY 2006	FY 2007
(U) Frequency extended SPEAR inboard design complete	1Q		
(U) New digital analysis subsystem design complete		3Q	
(U) New mid-band antenna design starts	1Q		
(U) New mid-band antenna design complete		2Q	
(U) HMI upgrade design starts		1Q	
(U) HMI updgrade design complete			1Q
(U) New communications counter-measures design starts		1Q	
(U) New computer infrastructure design starts		1Q	
(U) New counter-Nav techniques design start		2Q	
(U) Low-latency analysis-exciter (AXE) development starts		2Q	
(U) New radar CM development starts			1Q
(U) New Network Data Fusion development/integration starts			1Q
(U) New Transmit/Receive Aperture Design starts			1Q
(U) New EA Transmitter Interoperability Design Starts		3Q	
(U) New Voice Recognition Integration Starts			1Q
(U) Radar Situational Awareness and Targeting Study Starts		2Q	
(U) Radar Situational Awareness and Targeting Study Complete			3Q
(U) Network Centric Operations Study Starts		2Q	
(U) Network Centric Operations Study Complete			3Q