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PE NUMBER: 0207253F
PE TITLE: Compass Call

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2005		
BUDGET ACTIVITY 07 Operational System Development					PE NUMBER AND TITLE 0207253F Compass Call					
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	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	8.386	3.955	4.650	4.451	0.000	0.000	4.867	4.918	Continuing	TBD
4804 Compass Call	8.386	3.955	4.650	4.451	0.000	0.000	4.867	4.918	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

COMPASS CALL is the USAF's airborne wide-area coverage offensive counter-information system. It denies, disrupts, degrades and deceives enemy voice and data communications, disrupting their ability to effectively command and control forces in the field. Although COMPASS CALL has been a fielded, operational capability since 1983, it continues to evolve and adapt to counter constantly changing enemy tactical communications. Most recently, this is reflected in a shift from traditional military communication systems to an increasing reliance on commercial and civil technologies.

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 enemy 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 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.

This program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure 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.

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	3.790	3.990	4.845	4.983
(U) Current PBR/President's Budget	8.386	3.955	4.650	4.451
(U) Total Adjustments	4.596	-0.035		
(U) Congressional Program Reductions	-0.010			
Congressional Rescissions	-0.074	-0.035		
Congressional Increases	5.000			
Reprogrammings	-0.064			
SBIR/STTR Transfer	-0.256			

(U) **Significant Program Changes:**

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
07 Operational System Development					0207253F Compass Call			4804 Compass Call		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	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	8.386	3.955	4.650	4.451	0.000	0.000	4.867	4.918	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

COMPASS CALL is the USAF's airborne wide-area coverage offensive counter-information system. It denies, disrupts, degrades and deceives enemy voice and data communications, disrupting their ability to effectively command and control forces in the field. Although COMPASS CALL has been a fielded, operational capability since 1983, it continues to evolve and adapt to counter constantly changing enemy tactical communications. Most recently, this is reflected in a shift from traditional military communication systems to an increasing reliance on commercial and civil technologies.

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

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Systems engineering, development, integration, and test of classified capabilities (to include subsystems added by Congress) such as TRACS, Analysis, and Special Purpose Emitter Array (SPEAR)	8.386	3.955	4.650	4.451
(U) Total Cost	8.386	3.955	4.650	4.451

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) PE 0207253F, Aircraft Modification (3010)	16.402	28.932	27.421	46.051	44.036	24.245	19.552	19.782	Continuing	TBD
(U) PE 0207253F, Aircraft Initial Spares (3010)	10.519	11.985	14.225	14.197	14.943	15.533	15.962	16.142	Continuing	TBD
(U) PE 0207253F, Other Charges	31.057									TBD

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Exhibit R-2a, RDT&E Project Justification		DATE February 2005			
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207253F Compass Call	PROJECT NUMBER AND TITLE 4804 Compass Call			
<p>(U) <u>C. Other Program Funding Summary (\$ in Millions)</u></p> <p>(3010)</p> <table><tr><td>(U) PE 0207253F, Support Equipment, (3010)</td><td>0.254</td><td>TBD</td></tr></table> <p>(U) <u>D. Acquisition Strategy</u></p> <p>COMPASS CALL evolutionary upgrades are acquired sole-source through the BIG SAFARI Program Office with L-3 Communications as the prime integrator.</p>			(U) PE 0207253F, Support Equipment, (3010)	0.254	TBD
(U) PE 0207253F, Support Equipment, (3010)	0.254	TBD			

Project 4804

R-1 Shopping List - Item No. 140-4 of 140-7

Exhibit R-2a (PE 0207253F)

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Exhibit R-3, RDT&E Project Cost Analysis

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07 Operational System Development

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u> Compass Call RDT&E	SS/FFP& CPFF	BAE Systems, Nashua NH		8.386	Feb-04	3.955	Dec-04	4.650	Dec-05	4.451		Continuing	TBD	TBD
Subtotal Product Development			0.000	8.386		3.955		4.650		4.451		Continuing	TBD	TBD
Remarks:														
(U) <u>Test & Evaluation</u>														
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) Total Cost			0.000	8.386		3.955		4.650		4.451		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

07 Operational System Development

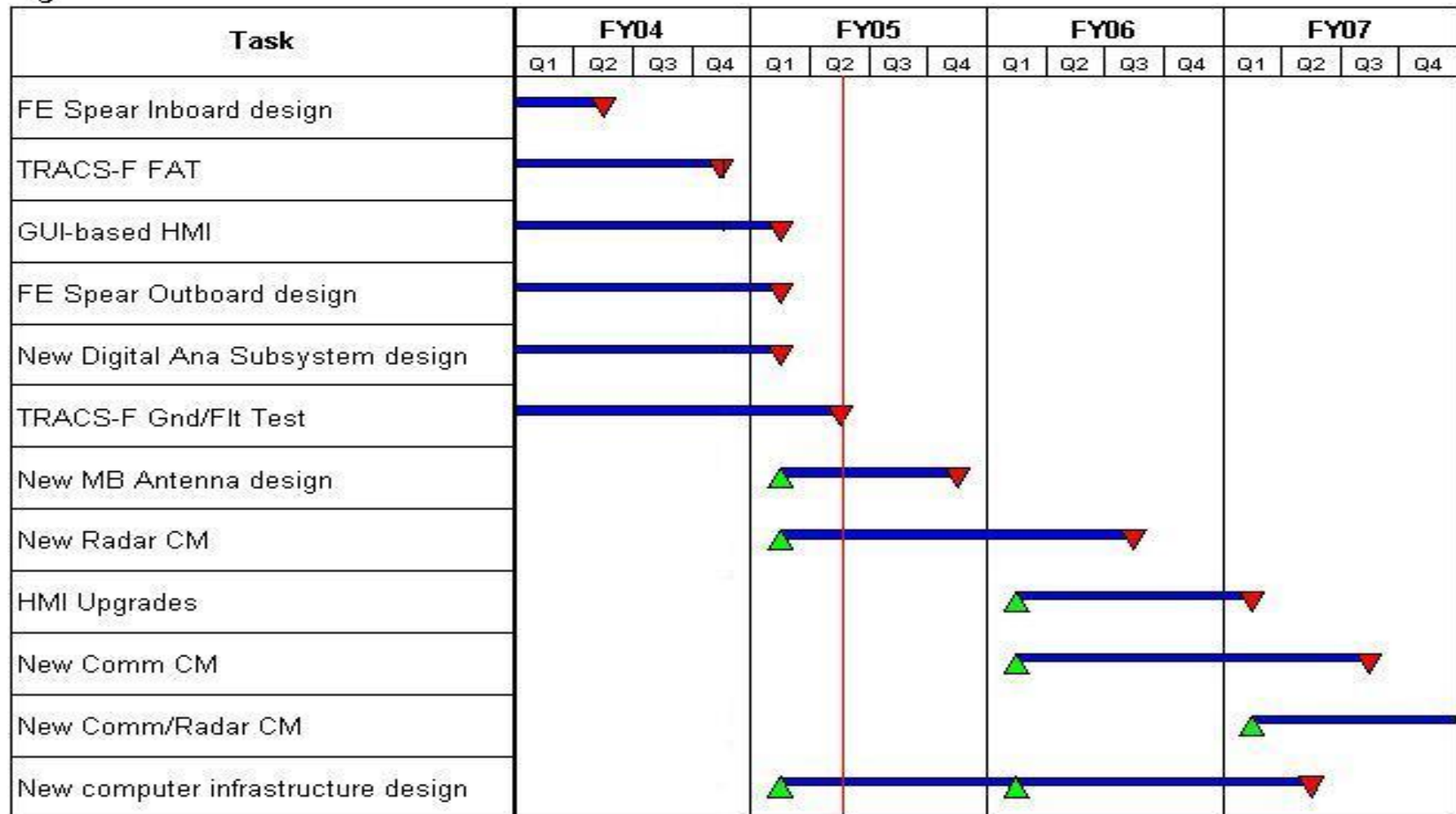
PE NUMBER AND TITLE

0207253F Compass Call

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Compass Call R&D Efforts



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Exhibit R-4a, RDT&E Schedule Detail			DATE	
			February 2005	
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE		
07 Operational System Development	0207253F Compass Call	4804 Compass Call		
(U) <u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Frequency extended SPEAR inboard design complete	2Q			
(U) TRACS-F factory acceptance test complete	4Q			
(U) Graphical user interface-based human machine interface (HMI) design complete		1Q		
(U) Frequency extended SPEAR outboard design complete		1Q		
(U) New digital Analysis subsystem design complete		1Q		
(U) TRACS-F ground/flight test complete		2Q		
(U) New mid-band antenna design starts		1Q		
(U) New mid-band antenna design complete		4Q		
(U) New radar counter-measures design starts		1Q		
(U) New radar counter-measures design complete			3Q	
(U) HMI upgrade design starts			1Q	
(U) HMI upgrade design complete				1Q
(U) New communications counter-measures design starts			1Q	
(U) New communications counter-measures design complete				3Q
(U) New radar/communications counter-measures design starts				1Q
(U) New computer infrastructure design starts		1Q		
(U) New computer infrastructure design complete				2Q