

UNCLASSIFIED

PE NUMBER: 0305207F
 PE TITLE: Manned Reconnaissance System

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0305207F Manned Reconnaissance System
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	37.015	21.387	12.819	13.130	13.318	13.572	13.842	Continuing	TBD
4754 COBRA BALL	37.015	21.387	12.819	13.130	13.318	13.572	13.842	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

Note 1: FY07 GWOT Supplemental Add of \$20.54M was provided for a quick reaction capability to exploit personal communication devices.

Note 2: FY08 funding does not include any GWOT Supplemental requested amounts.

The RC-135 Operational Systems Development and enhancement activities project supports design studies, engineering analysis, non-recurring engineering, and other efforts associated with the integration and modification of the RC-135 and its mission systems - both air and ground. Extensive utilization of commercial-off the-shelf (COTS) based solutions allows rapid fielding of needed capabilities through continuous technology refresh cycles and vanishing-vendor logistics mitigation efforts.

The results of these efforts provide for preliminary assessments of technical feasibility, operability, or military utility as well as specific engineering implementations for integration into the various systems baseline configurations.

These activities are managed by the Air Force through the 645th Aeronautical System Group (645th AESG, a.k.a. BIG SAFARI Program Office), 303rd Reconnaissance System Wing, Aeronautical Systems Center, Air Force Materiel Command. BIG SAFARI manages engineering, ground and support system modifications, integration, flight testing, product assurance, acceptance testing, logistics, and training activities. Aircraft, aircraft sensor systems, and associated ground support system modifications planned for FY09-FY13 include support for three distinct RIVET JOINT configurations [Baselines 8, 9 & 10], two distinct COMBAT SENT configurations [Baselines 3 & 4] and three distinct COBRA BALL configurations [Baselines 2, 3 & 4]. SEE CLASSIFIED Congressional budget exhibits.

The world-wide challenge of keeping pace against technologically agile targets used by both nation and non-nation-state adversaries and the rapid evolution of COTS technologies demands a responsive and adaptive acquisition strategy for fielding 'baseline capabilities' that are logistically supportable at all locations. The BIG SAFARI program office uses an incremental 'baseline' strategy to mitigate risk, find affordable solutions and field needed capabilities.

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 effort is equivalent to RDT&E budget activity 7, Operational Systems Development, because it involves Air Force R&D necessary to field essential operational capabilities.

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BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305207F Manned Reconnaissance System

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	16.669	12.672	12.819
(U) Current PBR/President's Budget	37.015	21.387	12.819
(U) Total Adjustments	20.346	8.715	
(U) Congressional Program Reductions		-0.185	
Congressional Rescissions			
Congressional Increases	20.540	8.900	
Reprogrammings	-0.194		
SBIR/STTR Transfer			

(U) **Significant Program Changes:**

FY07 Reprogramming of \$3.6M: Revises initial appropriation amount to correct MIP appropriation error.

FY07 GWOT Supplemental Add: \$20.54M provided for a quick reaction capability to exploit personal communication devices

FY08 Congressional Adds totaling \$8.9M includes: \$6.4M for a RIVET JOINT Network Interface Growth, and \$2.5M for COBRA BALL Sensor Gimbal Stabilization

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0305207F Manned Reconnaissance System			PROJECT NUMBER AND TITLE 4754 COBRA BALL		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4754 COBRA BALL	37.015	21.387	12.819	13.130	13.318	13.572	13.842	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)

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continues Non-Recurring Engineering (NRE) for the development and installation of improved mission capabilities - see classified submission.	10.069	12.487	12.819
(U) Congressional Add: COMBAT SENT Tactical ELINT System modernization study (two year effort)	3.000		
(U) Congressional Add: RIVET JOINT Reachback	5.000		

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0305207F Manned Reconnaissance System	PROJECT NUMBER AND TITLE 4754 COBRA BALL
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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Congressional Add: Apertures for Modern Threat Environments	10.000		
(U) Congressional Add: RC-135 Processing Forward Network	5.346		
(U) Congressional Add: Advanced IR technologies for COBRA BALL	3.600		
(U) Congressional Add: RIVET JOINT Network Interface Growth		6.400	
(U) Congressional Add: COBRA BALL Sensor Gimbal Stabilization		2.500	
(U) Total Cost	37.015	21.387	12.819

(U) <u>C. Other Program Funding Summary (\$ in Millions)</u>									
	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</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>Complete</u>	
(U) PE 0305207F, APAF	137.994	135.110	143.083	156.539	159.488	223.248	227.686	Continuing	TBD
(U) PE 0305207F, OPAF	23.609	22.380	22.924	23.468	23.835	24.358	24.892	Continuing	TBD
(U) PE 0305207F, O&M	417.185	343.338	298.188	234.905	289.145	331.648	246.543	Continuing	TBD

(U) **D. Acquisition Strategy**
 The RC-135 RIVET JOINT, COBRA BALL, and COMBAT SENT aircraft are maintained and upgraded by the 645th AESG (BIG SAFARI Program Office) through an evolutionary acquisition strategy.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0305207F Manned Reconnaissance System	PROJECT NUMBER AND TITLE 4754 COBRA BALL
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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> L-3 Communications	CPFF/CPIF /FFP	L-3 Com, Greenville TX		37.015	Nov-06	21.387	Nov-07	12.819	Nov-08	Continuing	TBD	TBD
Subtotal Product Development			0.000	37.015		21.387		12.819		Continuing	TBD	TBD
Remarks:	All activity is based around the Programmed Depot Maintenance (PDM) airframe schedule which includes multiple contracts and organizations with overlapping and continuous periods of performance.											
(U) Total Cost			0.000	37.015		21.387		12.819		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0305207F Manned Reconnaissance System

PROJECT NUMBER AND TITLE
4754 COBRA BALL

Manned Reconnaissance Program

PB 09

	FY07	FY08	FY09	FY10	FY11	FY12	FY13
	*COMBAT SENT TAC ELINT System Modernization Study						
	*RIVET JOINT Reachback	*RIVET JOINT Network Interface Growth					
	*Apertures for Modern Threats						
	*Processing Forward Network	*COBRA BALL Sensor Gimbal Stablization					
**	Mission Sensors	Mission Sensors	Mission Sensors	Mission Sensors	Mission Sensors	Mission Sensors	Mission Sensors
	\$37.02M	\$21.39M	\$12.82M	\$13.13M	\$13.31M	\$13.57M	\$13.84M

* Congressional Adds

** See CLASSIFIED for detailed breakout

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2008
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	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <u>Schedule Profile</u>			
(U) Initiate mission support systems efforts	1Q		
(U) * Classified Mission Systems Development	1-4Q	1-4Q	1-4Q
* See Classified Budget Submission for further breakout			