

**UNCLASSIFIED**

PE NUMBER: 0305176F  
 PE TITLE: Combat Survivor Evader Locator

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>May 2009</b>
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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0305176F Combat Survivor Evader Locator</b>
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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	4.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.341
4522 CSAR EMD	4.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.341

FY2009 does not show \$12.5 million reprogramming from OPAF approved by Congress in March 2009.

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

The Combat Survivor Evader Locator (CSEL) joint program, with the Air Force as lead service, will provide enhanced Combat Search and Rescue (CSAR) communications and location capabilities by replacing antiquated PRC-90 and -112 survival radios with a new end-to-end system. The CSEL system will be used by all the services and, potentially, non-DoD government agencies. Components of the system include a hand-held radio (HHR), radio loading equipment, four Ultra-High Frequency Base Stations (UBS), and workstations installed in rescue coordination centers. CSEL features include a new hand-held radio that incorporates secure two-way over-the-horizon messaging, line-of-sight voice, near-real time geopositioning, verification of evader identity and condition, and low probability of intercept/low probability of detection communications. The system is now being developed in an evolutionary fashion per the Operational Requirements Document (ORD) approved in February 2000. Acquisition Block A, which corresponds to ORD Block 1, meets threshold requirements. In FY06 Congress reprogrammed funds for the development of Terminal Area Communication and Terminal Area Guidance (TAC/TAG). FY08 funds programmed to complete TAC/TAG and Block 1B and development efforts.

This program is in Budget Activity 5, System Development and Demonstration, because it funds the development of TAC/TAG.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget	0.000	0.000	
(U) Current PBR/President's Budget	4.900	0.000	
(U) Total Adjustments	4.900	0.000	
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings	4.900		
SBIR/STTR Transfer			

**(U) Significant Program Changes:**

FY08: \$4.9 million reprogrammed into program to support critical upgrades to the current system. FY2009 does not show \$12.5 million reprogramming from OPAF approved by Congress in March 2009 for development of the Portable Combat Search and Rescue Interegator Unit (PCIU).

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**May 2009**

BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>					PE NUMBER AND TITLE <b>0305176F Combat Survivor Evader Locator</b>			PROJECT NUMBER AND TITLE <b>4522 CSAR EMD</b>		
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
4522 CSAR EMD	4.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	130.341
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

FY2009 does not show \$12.5 million reprogramming from OPAF approved by Congress in April 2009.

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

The Combat Survivor Evader Locator (CSEL) joint program, with the Air Force as lead service, will provide enhanced Combat Search and Rescue (CSAR) communications and location capabilities by replacing antiquated PRC-90 and -112 survival radios with a new end-to-end system. The CSEL system will be used by all the services and, potentially, non-DoD government agencies. Components of the system include a hand-held radio (HHR), radio loading equipment, four Ultra-High Frequency Base Stations (UBS), and workstations installed in rescue coordination centers. CSEL features include a new hand-held radio that incorporates secure two-way over-the-horizon messaging, line-of-sight voice, near-real time geopositioning, verification of evader identity and condition, and low probability of intercept/low probability of detection communications. The system is now being developed in an evolutionary fashion per the Operational Requirements Document (ORD) approved in February 2000. Acquisition Block A, which corresponds to ORD Block 1, meets threshold requirements. In FY06 Congress reprogrammed funds for the development of Terminal Area Communication and Terminal Area Guidance (TAC/TAG). FY08 funds programmed to complete TAC/TAG and Block 1B and development efforts.

This program is in Budget Activity 5, System Development and Demonstration, because it funds the development of TAC/TAG.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) CSEL Engineering and Manufacturing Development	4.250		
(U) Government Test and Operational Assessment	0.650		
(U) Other Government Support	0.000		
(U) Total Cost	4.900	0.000	0.000

FY08: \$4.9 million reprogrammed into program to support critical upgrades to the current system. FY2009 does not show \$12.5 million reprogramming from OPAF approved by Congress in March 2009 for development of the Portable Combat Search and Rescue Interegator Unit (PCIU).

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

	<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>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) PE 35176F, Other Procurement, Air Force - WSC 837170 (Budget Activity 3)	26.938	26.753	35.029							

Note: Army and Navy procurement of CSEL radios is funded separately by those Services.

## Exhibit R-2a, RDT&amp;E Project Justification

DATE

May 2009

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

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Locator

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4522 CSAR EMD

(U) **D. Acquisition Strategy**

The Full Rate Production (FRP) contract is a Sole Source award to Boeing; however, all previous major contracts within this Program Element were awarded after full and open competition.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**May 2009**

<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0305176F Combat Survivor Evader Locator</b>	<b>PROJECT NUMBER AND TITLE</b> <b>4522 CSAR EMD</b>
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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Product Development</u>												
Boeing	CPAF	Huntington Beach, CA	100.194	4.250						0.000	104.444	
SMC (COBRA)	Multiple	Multiple	4.000					0.000		0.000	4.000	
Subtotal Product Development			104.194	4.250		0.000		0.000		0.000	108.444	0.000
Remarks:												
<u>(U) Support</u>												
SPAWAR	MIPR	San Diego, CA	3.289							0.000	3.289	
PRC/ARINC/BD Systems	CPAF	Multiple	3.304							0.000	3.304	
FFRDC (MITRE/Aerospace)	CPAF	Multiple	6.488							0.000	6.488	
MANTECH	CPAF	Alliant Tech Systems	0.600							0.000	0.600	
SMC	CPAF	Hopkins, MN Los Angeles, CA	0.777							0.000	0.777	
JPRA	MIPR	Ft. Belvoir, VA	0.200							0.000	0.200	
Miscellaneous	Multiple	various	0.801							0.000	0.801	
Subtotal Support			15.459	0.000		0.000		0.000		0.000	15.459	0.000
Remarks:												
<u>(U) Test &amp; Evaluation</u>												
AFOTEC	MIPR	Kirtland AFB, NM	0.357							0.000	0.357	
746TS	MIPR	Kirtland AFB, NM	1.308							0.000	1.308	
18FTS			1.500	0.200							1.700	
SMC Test Support	CPAF	Los Angeles AFB, CA									0.000	
Joint Spectrum Center	CPAF	IIT Research Institute	0.514							0.000	0.514	
ESC (TBMCS SPO)	CPAF	Chicago, IL Lockheed Martin	0.500							0.000	0.500	
EPG	MIPR	Colorado Springs, CO Ft. Huachuca, AZ	2.284	0.400						0.000	2.684	
JITC	MIPR	Multiple	1.040	0.050						0.000	1.090	
DISA	MIPR									0.000	0.000	
CECOM	MIPR									0.000	0.000	

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Exhibit R-3 (PE 0305176F)

Project 4522

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**May 2009**

BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE		
<b>05 System Development and Demonstration (SDD)</b>				<b>0305176F Combat Survivor Evader Locator</b>				<b>4522 CSAR EMD</b>		
SPAWAR	MIPR	San Diego, CA	0.077					0.000	0.077	
Army Research Labs	MIPR	White Sands, NM	0.030					0.000	0.030	
GCCS-A (Integration Support)	MIPR							0.000	0.000	
GCCS-M	MIPR	SPAWAR San Diego, CA	0.200					0.000	0.200	
PRMS	MIPR							0.000	0.000	
Subtotal Test & Evaluation			7.810	0.650	0.000	0.000		0.000	8.460	0.000
Remarks:										
(U) <u>Management</u>										0.000
Subtotal Management			0.000	0.000	0.000	0.000		0.000	0.000	0.000
Remarks:										
(U) Total Cost			127.463	4.900	0.000	0.000		0.000	132.363	0.000

Exhibit R-4, RDT&E Schedule Profile

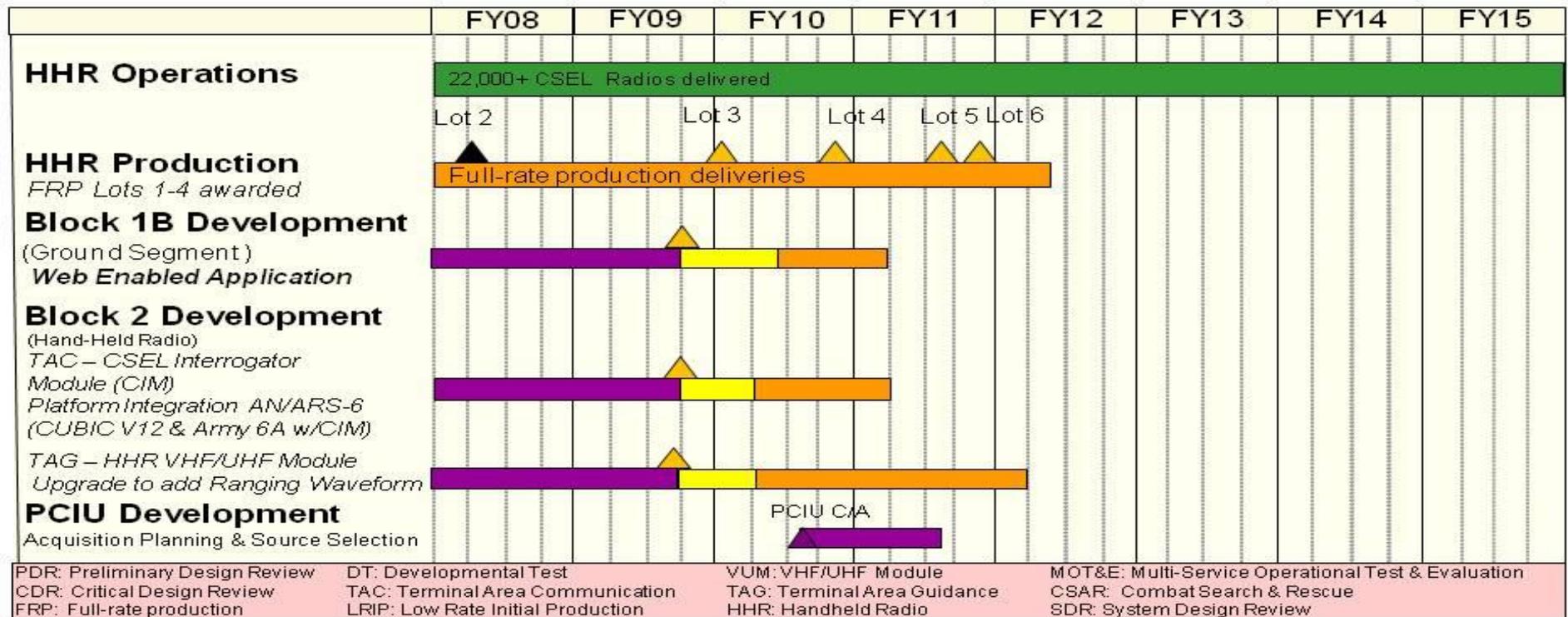
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**Exhibit R-4a, RDT&E Schedule Detail**

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**05 System Development and Demonstration (SDD)**

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**0305176F Combat Survivor Evader  
Locator**

PROJECT NUMBER AND TITLE

**4522 CSAR EMD**

**(U) Schedule Profile**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Block 1B development	1-4Q	1-3Q	
(U) Block 1B Integration and Test	4Q	4Q	
(U) Block 1B Test			1-2Q
(U) TAC Development	1-4Q	1-3Q	
(U) TAC Integration and Test		4Q	1Q
(U) TAG Development	1-4Q	1-3Q	
(U) TAG CDR	2Q		
(U) TAG Integration and Test		4Q	

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