PE TITLE: Combat Survivor Evader Locator

	Exhibit R-2, RDT&E Budget Item Justification										2005
BUDGET ACTIVITY 05 System Development and Demonstration (SDD) PE NUMBER AND TITLE 0305176F Combat Survivor Evader Locator											
	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	13.862	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	50.950
4522	CSAR EMD	13.862	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	50.950

(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 survivor 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 approved in February 2000. Block 1 will meet threshold requirements for Initial Operational Capability and Block 2 will add technical interoperability enhancements. This program is in Budget Activity 5, System Development and Demonstration, because it is in the development and demonstration phase and has not received Full-Rate Production (FRP) approval.

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

	<u>FY 2004</u>	FY 2005	<u>FY 2006</u>	FY 2007
(U) Previous President's Budget	14.684			
(U) Current PBR/President's Budget	13.862	0.000		
(U) Total Adjustments	-0.822	0.000		
(U) Congressional Program Reductions	-0.167			
Congressional Rescissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer	-0.655			
(II) C' C' A D Cl				

(U) Significant Program Changes:

R-1 Shopping List - Item No. 100-2 of 100-7

	Exhibit R-2a, RDT&E Project Justification February 2005										
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)						BER AND TITLE 6F Combat r	Survivor Ev		ROJECT NUMBE 522 CSAR EN		
	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
4522	CSAR EMD	13.862	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	50.950
	Quantity of RDT&E Articles	0	0	0	0	0	0	(0		

(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 survivor 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 approved in February 2000. Block 1 will meet threshold requirements for Initial Operational Capability and Block 2 will add technical interoperability enhancements. This program is in Budget Activity 5, System Development and Demonstration, because it is in the development and demonstration phase and has not received Full-Rate Production (FRP) approval.

((U) B. Accomplishments/Planned Program (\$ in Millions)	<u>FY 2004</u>	FY 2005	FY 2006	FY 2007
((U) CSEL Engineering and Manufacturing Development	11.828			
((U) Government Test and Operational Assessment	1.004			
((U) Other Government Support	1.030			
((U) Total Cost	13.862	0.000	0.000	0.000

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

	<u>FY 2004</u> <u>Actual</u>	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	<u>Γotal Cost</u>
PE 35176F, Other										
(U) Procurement, Air Force - WSC 837170 (Budget	7.384	13.882	24.726	27.380	27.165	27.453	28.137	28.595	51.993	236.715

Activity 3)

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

(U) D. Acquisition Strategy

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

Project 4522 R-1 Shopping List - Item No. 100-3 of 100-7

Exhibit R-2a (PE 0305176F)

		Fxhih	it R-3, RD	T&F Proi	ect Co	st Ana	lvsis					DATE			
		LAIID	it it-0, itD											uary 200)5
	OGET ACTIVITY System Development and De	emonstration	(SDD)			030	IUMBER A 5176F C ator			Evader		CSAR	BER AND T	TITLE	
(U)	Cost Categories	Contract	Performing	<u>Total</u>	FY 2004	FY 2004	FY 2005	FY 2005	FY 2006	FY 2006	FY 2007	FY 2007	Cost to	Total Cost	Target
	(Tailor to WBS, or System/Item	Method &	Activity &	Prior to FY	Cost	<u>Award</u>	Cost	<u>Award</u>	Cost	<u>Award</u>	Cost	<u>Award</u>	Complete		Value of
	Requirements)	<u>Type</u>	Location	<u>2004</u>		<u>Date</u>		<u>Date</u>		<u>Date</u>		<u>Date</u>			Contract
	(\$ in Millions) Product Development			Cost											
(0)	Boeing Boeing	CPAF	Anaheim, CA	75.795	11 828	Mar-04							0.000	87.623	
	SMC (COBRA)	Multiple	Multiple	4.000	11.020	14141 01							0.000	4.000	
	Subtotal Product Development	•	•	79.795	11.828		0.000		0.000		0.000		0.000	91.623	0.000
	Remarks:														
	Support SPAWAR	MIPR	San Diago												
	SPAWAR	MIPK	San Diego, CA	3.059	0.230	Dec-03							0.000	3.289	
	PRC/ARINC/BD Systems	CPAF	Multiple	3.003									0.000	3.003	
	FFRDC (MITRE/Aerospace)	CPAF	Multiple	5.688	0.800	Jan-04							0.000	6.488	
	MANTECH	CPAF	Alliant Tech												
			Systems	0.600									0.000	0.600	
	SMC	CPAF	Hopkins, MN Los Angeles,												
	Sivic	CIAI	CA	0.777									0.000	0.777	
	JPRA	MIPR	Ft. Belvoir,	0.200									0.000	0.200	
			VA												
	Miscellaneous	Multiple	various	0.801	1.000		0.000		0.000		0.000		0.000	0.801	0.000
	Subtotal Support Remarks:			14.128	1.030		0.000		0.000		0.000		0.000	15.158	0.000
	Test & Evaluation														
(0)	AFOTEC	MIPR	Kirtland	0.257									0.000	0.257	
			AFB, NM	0.357									0.000	0.357	
	746TS	MIPR	Kitrland	1.308									0.000	1.308	
	I-i-t Coto Coto	CDAE	AFB, NM												
	Joint Spectrum Center	CPAF	IIT Research Institute	0.514									0.000	0.514	
			Chicago, IL	0.514									0.000	0.514	
	ESC (TBMCS SPO)	CPAF	Lockheed												
			Martin	0.500									0.000	0.500	
			Colorado	0.000									0.000	0.200	
	EPG	MIPR	Springs, CO Ft. Huachuca,												
	ыU	WIIFK	AZ	1.380	0.904	Nov-03							0.000	2.284	
	JITC	MIPR	Multiple	0.940	0.100	Oct-03							0.000	1.040	
	DISA	MIPR	•	0.000									0.000	0.000	
	CECOM	MIPR		0.000									0.000	0.000	
	SPAWAR	MIPR	San Diego,	0.077									0.000	0.077	
	Army Research Labs	MIPR	CA White Sands,	0.030									0.000	0.030	
•	•	WIIFK	winte Sanus,		oppina Lie	t Itam Na	100 4 of 4	100.7							DOE176E\
Pr	oject 4522			K-T SN	opping LIS	1 - Item INO	. 100-4 of 1	100-7					⊏XNIDI	t R-3 (PE 03	0001765)

Exhibit R-3, RDT&E Project Cost Analysis									February 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TIT 0305176F Comba Locator	PROJECT NUMBER AND TITLE 4522 CSAR EMD					
GCCS-A (Integration Support) GCCS-M	MIPR MIPR	NM SPAWAR San Diego, CA	0.200					0.000 0.000	0.000 0.200		
PRMS Subtotal Test & Evaluation Remarks: (U) Management	MIPR	CA	5.306	1.004	0.000	0.000	0.000	0.000 0.000	0.000 6.310	0.000	
Subtotal Management Remarks: (U) Total Cost			0.000 99.229	0.000 13.862	0.000	0.000	0.000	0.000	0.000 0.000 113.091	0.000	

Project 4522

R-1 Shopping List - Item No. 100-5 of 100-7

Exhibit R-3 (PE 0305176F)

Exhibit R-4, RDT8	DATE February 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0305176F Combat Survivor Evader Locator	PROJEC 4522 C	T NUMBER AND TITLE SAR EMD
Project 4522	2.1 Shanning List Itom No. 100 6 of 100 7		Evhibit P. 4 (PE 0205176E)

Exhibit R-4a, RDT&E Schedule	DATE Feb	oruary 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0305176F Combat Surviv Locator	PROJECT NUMBER AN 4522 CSAR EMD		
(U) Schedule Profile (U)	FY 2004	FY 2005	FY 2006	<u>FY 2007</u>
Project 4522	Itom No. 100 7 of 100 7			ibit P 40 (PE 02051765)