

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

February 2002

BUDGET ACTIVITY 4 - Demonstration/validation	PE NUMBER AND TITLE 0603856A - SCAMP Block II						PROJECT 389		
COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
389 SCAMP BLK II	19493	6895	21006	28028	15366	19066	2191	Continuing	Continuing

A. Mission Description and Budget Item Justification: The Single Channel Anti-Jam Manpackable (SCAMP) Block II Program has been restructured to support the Advanced Extremely High Frequency (AEHF) Satellite Program. The restructured SCAMP Block II program consists of two terminals, the SCAMP Manportable System Enhancement Program (SEP) terminal and the SCAMP Manpackable terminal. Each terminal supports the requirements in the Joint AEHF Operational Requirements Document (ORD) and provides worldwide anti-jam, low probability of intercept and detection and assured voice and data communications for the joint warfighter. Both terminals will transmit in the Extremely High Frequency (EHF) band and receive in the Super High Frequency (SHF) band and will operate over MILSTAR, other MIL-STD-1582 compatible payloads, and the future AEHF payload, providing secure voice and data services. The terminals will transmit and receive intelligence, situational awareness, as well as command and control traffic.

Under the restructured program, the existing SCAMP Block I terminal will be upgraded to support the AEHF Satellite Program. In support of the Joint AEHF ORD dated 1 Aug 00, the Manportable SEP will provide up to 64 Kbps Uplink (narrowband) and up to 128 Kbps Downlink AEHF capability to units, Division Headquarters and Above, and Special Operations Forces, that require increased data rates for range extended command and control communications.

The SCAMP Manpackable terminal supports the Joint ORD requirements for a Manpackable AEHF terminal which is lightweight (12 - 15 lbs) and provides for increased data rates and extended battery life. The Manpackable terminal will support lower echelon battalions and below, and priority ground tactical users, including Special Operations Forces. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

This program is designated as a DoD Space Program.

FY 2001 Accomplishments:

- 10672 Initiated development of modification kits for AEHF Manportable SEP Terminal
- 458 Procured 6 Government Furnished Equipment Articles for SCAMP SEP development testing
- 6456 Continued development and test of prototype components for the AEHF Manpackable Terminal: RDTE Test Qty - 2
- 1807 Supported Joint AEHF Satellite Program, Baseband Working Groups, Technical Interchange Meetings and SEP acquisition documentation

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FY 2001 Accomplishments: (Continued)

- 100 Army Battle Command System (ABCS) system engineering and integration efforts

Total 19493

FY 2002 Planned Program

- 5554 Continue AEHF Manportable SEP modification kit development
- 1117 Continue development, test and evaluation of prototype components for the AEHF Manpackable Terminal
- 224 Continue support to AEHF Satellite Program and Baseband Working Groups and Technical Interchange Meetings

Total 6895

FY 2003 Planned Program

- 16441 Continue AEHF Manportable SEP modification kit development
- 3102 Continue development and test of 2 AEHF Manpackable prototypes and conduct MS B decision
- 1463 Continue support to AEHF Satellite Program and Baseband Working Groups and Technical Interchange Meetings

Total 21006

<u>B. Program Change Summary</u>	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2002 PB)	20135	9895	21056
Appropriated Value	20277	6895	0
Adjustments to Appropriated Value	0	0	0
a. Congressional General Reductions	0	0	0
b. SBIR / STTR	-598	0	0
c. Omnibus or Other Above Threshold Reduction	0	0	0
d. Below Threshold Reprogramming	0	0	0
e. Rescissions	-186	0	0
Adjustments to Budget Years Since FY2002 PB	0	0	-50
Current Budget Submit (FY 2003 PB)	19493	6895	21006

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FY 2002 - \$3.0M Congressional Reduction

<u>C. Other Program Funding Summary</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
SCAMP BLK II Other Procurement	0	0	0	0	13063	25908	42799	Continue	Continue

D. Acquisition Strategy: The SCAMP Block II acquisition strategy is based upon an evolutionary development approach which allows for the incremental design, development and test of system requirements.

Manportable SEP Terminal: The SCAMP Manportable SEP acquisition strategy will recapitalize the legacy Block I SCAMP to meet the Manportable AEHF requirement in the Joint AEHF ORD. A development modification to the existing Rockwell Collins contract was awarded on 28 Feb 01 to implement AEHF capability.

Manpackable Terminal: Throughout Engineering Feasibility, Lincoln Labs is designing, developing and testing prototype components for the Manpackable SCAMP. Lincoln Labs design data is also provided to industry through the distribution of technical information. This design information is provided to encourage industry participation in the bidding process for System Development Demonstration (SDD). Following Milestone B, one contractor will be selected to develop and test SDD terminals. Lincoln Labs will continue to work with industry during SDD. Following Operational Testing, Full Rate Production of Manpackable SCAMPs will begin.

<u>E. Schedule Profile</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
MANPORTABLE (SEP) TERMINAL:							
Decision Brief	1Q						
Development Contract	2-4Q	1-4Q	1-4Q	1-4Q			
Complete System Development/Test/Integration					1Q		

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E. Schedule Profile (continued)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Build Prototype Kits - AEHF					1-4Q		
Limited User Test - AEHF - LDR Mode					2Q		
Complete Retrofit Prototype Kits - AEHF						1Q	
Award Production Contract					2Q		
Complete Retrofit Production Kits							4Q
MANPACKABLE TERMINAL:							
Initiate AEHF Component Development	1Q						
Continue AEHF Prototype Development		1-4Q	1-4Q	1-2Q			
Complete AEHF Prototype				3Q			
Milestone B Decision					1Q		
Award Development Contract					2Q		
Complete Development of Terminals							3Q
Complete IOT&E							4Q

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . System Development	MIPR	Lincoln Labs Lexington, MA	13831	5093	1Q	1395	2Q	2950	2Q	Continue	Continue	Continue
b . Other Contracts	Various	Various	2470	342	2Q	236	2Q	150	2Q	Continue	Continue	Continue
c . Govt Eng Support	MIPR	Various	1961	725	2Q	103	2Q	1288	2Q	Continue	Continue	Continue
d . Major Contract	SS/CPAF	Rockwell Collins, Cedar Rapids, IA	0	9892	2Q	4226	2Q	13007	2Q	Continue	Continue	Continue
e . GFE	MIPR	PM MILSATCOM	0	458	2Q	0		0		0	458	458
f . ABCS SE&I	PWD	TRW Carson, CA	0	100	2Q	0		0		0	100	100
Subtotal:			18262	16610		5960		17395		Continue	Continue	Continue

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Labs/OGAs	MIPR	Various	396	17	2Q	0		0		0	413	413
b . Support Contracts	Various	Various	1906	338	2Q	0		460	2Q	Continue	Continue	Continue
Subtotal:			2302	355		0		460		Continue	Continue	Continue

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test Demonstration	MIPR	Lincoln Labs Lexington, MA	1525	0		0		0		0	1525	1525
b . DT&E	Various	Various	397	0		0		74	2Q	Continue	Continue	Continue
c . Major Contracts	SS/CPAF	Rockwell Collins Cedar Rapids, IA	0	0		0		655	2Q	Continue	Continue	Continue
d . LL DT&E	MIPR	Lincoln Labs Lexington, MA	964	763	1Q	392	2Q	152	2Q	Continue	Continue	Continue
Subtotal:			2886	763		392		881		Continue	Continue	Continue

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Govt Program Support	MIPR	Various	1733	1616	2Q	543	2Q	1844	2Q	Continue	Continue	Continue
b . Support Contracts	Various	Various	872	149	2Q	0		426	2Q	Continue	Continue	Continue
Subtotal:			2605	1765		543		2270		Continue	Continue	Continue
Project Total Cost:			26055	19493		6895		21006		Continue	Continue	Continue