

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)								February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604823A - FIREFINDER				PROJECT L85			
COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
L85	FIREFINDER AN/TPQ-47	25875	24913	27107	28515	5206	0	0	0	0	220276
<p><u>A. Mission Description and Budget Item Justification:</u> On 27 Dec 2002, the Department of the Army approved request for popular name "Phoenix Battlefield Sensor System (PBS2)" as the official designation for the AN/TPQ-47 Radar. The AN/TPQ-47 will extend the artillery range performance out to 60km (double current capabilities.) It will improve the target throughput to 50 targets per minute in a highly mobile, C-130 transportable and survivable system. The AN/TPQ-47 will provide a new capability of missile and rocket detection at ranges of 150-300km and will be capable of alerting Theater Missile Defense Systems. Crew size of 12 for the AN/TPQ-37 will be reduced to 9 for the AN/TPQ-47. This program will leverage the AN/TPQ-36(V)8 Electronics Upgrade program by using the same man-machine interface. The AN/TPQ-47 will be integrated into the Army's Interim Force, Future Combat Systems (FCS), and Objective Force's Fires and Effects network. The AN/TPQ-47 will replace the AN/TPQ-37 Artillery Locating Radar. This program is in response to a need for a longer range, more accurate and less manpower intensive radar.</p> <p>This system supports the Interim and Objective transition path of the Transformation Campaign Plan (TCP).</p> <p>FY04/FY05 funding completes the development of the AN/TPQ-47. Funding is also required to conduct Developmental Testing (DT) and Limited User Testing (LUT) which is required to support a Milestone C Low Rate Initial Production (LRIP) decision.</p>											
<u>Accomplishments/Planned Program</u>							FY 2002	FY 2003	FY 2004	FY 2005	
Develop a Radar Environmental Simulator System (RESS). Efforts include development, continual refinement during system developmental test, independent Validation & Verification (V&V) and maintenance.							474	635	450	550	
Build, integration and contractor test of System #1. Efforts include design, materials, labor, and contractor acceptance test.							19307	10784	0	0	
Build, integration and contractor test of System #2. Efforts include design, materials, labor, and contractor acceptance test.							5410	9148	12870	0	
Prime contractor activities to support Developmental Test. Efforts include contractor conduct of Live Ammunition Tests at Yuma Proving Ground (YPG) and White Sands Missile Range (WSMR) and required fixes to hardware/software.							0	2132	6932	8037	
Government Test Costs. Efforts include cost of range times at YPG and WSMR, gun crews, ammunition and missiles, and government manpower to support system test.							684	2214	6855	8117	
Development of Training Devices. Efforts include development of Computer Based Training (CBT) and modification of System Development and Demonstration (SDD) prototypes as maintenance trainers.							0	0	0	10958	

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Accomplishments/Planned Program (continued)

Conduct Milestone C (MS C). Efforts include preparation of program documentation necessary to support a successful MS C decision.

FY 2002

FY 2003

FY 2004

FY 2005

0

0

0

853

Totals

25875

24913

27107

28515

B. Program Change Summary

FY 2002

FY 2003

FY 2004

FY 2005

Previous President's Budget (FY 2003)

26732

26122

7249

10714

Current Budget (FY 2004/2005 PB)

25875

24913

27107

28515

Total Adjustments

-857

-1209

19858

17801

Congressional program reductions

-372

Congressional rescissions

-164

-143

Congressional increases

Reprogrammings

-1

SBIR/STTR Transfer

-726

-694

Adjustments to Budget Years

19858

17801

Change Summary Explanation: FY04/05 funds support the FY03 program restructure of the System Development and Demonstration (SDD) phase.

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C. Other Program Funding Summary	<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>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
SSN: BA5100 Firefinder AN/TPQ-47	0	0	0	0	61757	82352	103976	164833	Continue	Continue
<p>D. Acquisition Strategy: Two (2) Systems Development and Demonstration (SDD) systems were awarded sole source to Raytheon Systems. The SDD systems will undergo Developmental Testing (DT) and a Limited User Test (LUT). The results of the DT/LUT will support a MS C Low Rate Initial Production decision in FY05.</p>										

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604823A - FIREFINDER					PROJECT L85		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Primary Hardware Dev	C/CPIF	Thales-Raytheon Sys, CA/MS/RSL	113793	21323	1-2Q	17331	1Q	8037	1Q	0	160484	0
b . Ancillary Hardware Dev	TBD	Various	4945	450	1-2Q	1567	1Q	1865	1Q	Continue	Continue	0
c . Trainers Dev	SS/TBD	Thales-Raytheon Sys, CA/MS/RSL	0	0		0		9833	1Q	Continue	9833	0
d . Sys Engrg (Contractor)	SS/FP	Various	2286	160	2Q	200	1Q	300	1Q	Continue	Continue	0
e . Sys Engrg (Government)	MIPR	Various	3196	489	1-2Q	425	1Q	425	1Q	Continue	Continue	0
f . Software Engineering	C/CPAF	Telos, OK	1542	300	1-2Q	525	1Q	525	1Q	Continue	Continue	0
g . SSEB/MS C	MIPR	Various	227	0		0		300	2Q	0	527	0
Subtotal:			125989	22722		20048		21285		Continue	Continue	0

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Development Support - Government	MIPR	Various	930	226	1-2Q	248	1-2Q	274	1-2Q	Continue	Continue	0
b . Integrated Logistics Spt (ILS) - Contractor	TBD	Various	589	0	2Q	50	2Q	100	1-2Q	0	739	0
c . ILS Support -Government	MIPR	CECOM, Fort Monmouth, NJ	425	0	2Q	98	2Q	210	1-2Q	Continue	Continue	0
d . Configuration Mgmt Spt- Government	MIPR	CECOM, Fort Monmouth, NJ	600	119	1Q	150	1Q	150	1Q	Continue	Continue	0
Subtotal:			2544	345		546		734		Continue	Continue	0

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Development Test & Evaluation (DT&E)	MIPR	Yuma, AZ WSMR, NM	0	0		2050	1Q	1500	1Q	0	3550	0
b . Verification Testing	MIPR	Various	202	600	1-2Q	1925	1-2Q	200	1Q	0	2927	0
c . Test Support	MIPR	Various	1336	230	1-2Q	325	1Q	2700	1-2Q	0	4591	0
d . Limited User Test	MIPR	Various	0	0		0		531	2Q	0	531	0
e . Logistics/Training	MIPR	Various	0	0		250	1Q	0		0	250	0
Subtotal:			1538	830		4550		4931		0	11849	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management - Contractor	C/FP	Various	1633	325	1-2Q	973	1Q	460	1Q	Continue	Continue	0
b . Program Management - Government Matrix Spt	MIPR	CECOM, Fort Monmouth, NJ	439	103	1Q	150	1Q	210	1Q	Continue	Continue	0
c . Product Manager Office - Internal Support		PM NV/RSTA	2426	588	1-4Q	840	1-4Q	895	1-4Q	Continue	Continue	0

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IV. Management Services (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			4498	1016		1963		1565		Continue	Continue	0
Project Total Cost:			134569	24913		27107		28515		Continue	Continue	0

Schedule Profile Detail (R-4a Exhibit)							February 2003	
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<u>Schedule Detail</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>FY 2008</u>	<u>FY 2009</u>
MS B for FCS		3Q						
Conduct Developmental Testing (DT)		4Q	1-4Q					
Develop Training Devices				1-4Q	1-3Q			
Conduct Limited User Test (LUT)				2-3Q				
Milestone C for LRIP				4Q				
Operation Control Shelter - FCS					4Q			
Conduct IOT&E						4Q		