

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2 Exhibit)</b>							<b>February 2004</b>					
<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>				<b>PE NUMBER AND TITLE</b> <b>0604823A - FIREFINDER</b>			<b>PROJECT</b> <b>L85</b>					
COST (In Thousands)				FY 2003 Actual	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				28401	26825	18516	10717	5757	0	0	0	161557
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> The AN/TPQ-47 will replace the AN/TPQ-37 Artillery Locating Radar. 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 Stryker Force, Future Combat Systems (FCS), and Future Force's Fires and Effects network. 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 Future transition path of the Transformation Campaign Plan (TCP).</p> <p>FY05 funding allows completion of the System Development and Demonstration (SDD) phase of this program.</p>												
<b><u>Accomplishments/Planned Program</u></b>									<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	
Develop a Radar Environmental Simulator System (RESS). Efforts include development, continual refinement during system developmental test, and maintenance.									761	1315	500	
Build, integration and contractor test of System #1. Efforts include design, materials, labor, and contractor acceptance test.									23944	2864	0	
Build, integration and contractor test of System #2. Efforts include design, materials, labor, and contractor acceptance test.									2920	12455	0	
Prime contractor activities to support Developmental Test and Limited User Test. Efforts include contractor conduct of Live Ammunition Tests at Yuma Proving Ground (YPG) and required fixes to hardware/software.									0	4774	11425	
Government Test Costs. Efforts include cost of range times at YPG, gun crews, ammunition and government manpower to support system test.									776	4657	6291	
Conduct Milestone C (MS C). Efforts include preparation of program documentation necessary to support a successful MS C decision.									0	0	300	
Small Business Innovative Research/Small Business Technology Transfer Programs									0	760	0	

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<b><u>Accomplishments/Planned Program B(continued)</u></b>						FY 2003	FY 2004	FY 2005																																									
Totals						28401	26825	18516																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%; padding: 5px;"><b><u>B. Program Change Summary</u></b></th> <th style="width: 10%; padding: 5px;">FY 2003</th> <th style="width: 10%; padding: 5px;">FY 2004</th> <th style="width: 10%; padding: 5px;">FY 2005</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Previous President's Budget (FY 2004)</td> <td style="padding: 5px;">24913</td> <td style="padding: 5px;">27107</td> <td style="padding: 5px;">28515</td> </tr> <tr> <td style="padding: 5px;">Current Budget (FY 2005 PB)</td> <td style="padding: 5px;">28401</td> <td style="padding: 5px;">26825</td> <td style="padding: 5px;">18516</td> </tr> <tr> <td style="padding: 5px;">Total Adjustments</td> <td style="padding: 5px;">3488</td> <td style="padding: 5px;">-282</td> <td style="padding: 5px;">-9999</td> </tr> <tr> <td style="padding: 5px;">  Congressional program reductions</td> <td></td> <td style="padding: 5px;">-255</td> <td></td> </tr> <tr> <td style="padding: 5px;">  Congressional rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">  Congressional increases</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">  Reprogrammings</td> <td style="padding: 5px;">3488</td> <td style="padding: 5px;">-27</td> <td></td> </tr> <tr> <td style="padding: 5px;">  SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">  Adjustments to Budget Years</td> <td></td> <td></td> <td style="padding: 5px;">-9999</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Change Summary Explanation: FY05 funds realigned to higher priority requirements.</p>										<b><u>B. Program Change Summary</u></b>	FY 2003	FY 2004	FY 2005	Previous President's Budget (FY 2004)	24913	27107	28515	Current Budget (FY 2005 PB)	28401	26825	18516	Total Adjustments	3488	-282	-9999	Congressional program reductions		-255		Congressional rescissions				Congressional increases				Reprogrammings	3488	-27		SBIR/STTR Transfer				Adjustments to Budget Years			-9999
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<b><u>C. Other Program Funding Summary</u></b>				FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost																																					
SSN: BA5100 Firefinder AN/TPQ-47				0	0	0	46701	82342	112084	174221	Continue	Continue																																					

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<p><b><u>D. Acquisition Strategy:</u></b> Two (2) Systems Development and Demonstration (SDD) systems were competitively awarded to Thales-Raytheon Systems (TRS). 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(R3)									February 2004			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604823A - FIREFINDER</b>					PROJECT <b>L85</b>		
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 OTA	Thales-Raytheon Sys, El Segundo CA, Scotland, Forrest MI	116809	25510	1-4Q	19816	1-4Q	10880	1-4Q	0	173015	0
b . Ancillary Hardware Dev	SS/T&M	Various	4945	437	1-2Q	1065	1-4Q	1506	1-2Q	14603	22556	0
c . Sys Engrg (Contractor)	SS/FP	Various	2286	256	2-3Q	200	1-3Q	300	1-3Q	100	3142	0
d . Sys Engrg (Government)	MIPR	CECOM, Fort Monmouth, NJ	3196	440	1-2Q	428	1-2Q	425	1-2Q	400	4889	0
e . Software Engineering	C/CPAF	Telos, Lawton, OK	1522	270	1-2Q	565	1-3Q	525	1-2Q	200	3082	0
f . SSEB/MS C	MIPR	Various	227	0		0		300	2Q	0	527	0
Subtotal:			128985	26913		22074		13936		15303	207211	0

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604823A - FIREFINDER</b>					PROJECT <b>L85</b>		
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	233	1-2Q	199	1-2Q	274	1-2Q	301	1937	0
b . Integrated Logistics Spt (ILS) - Contractor	TBD	Various	589	0		0		100	1-2Q	0	689	0
c . ILS Support-Government	MIPR	CECOM, Fort Monmouth, NJ	425	0		120	2Q	210	1-2Q	35	790	0
d . Configuration Mgmt Spt-Government	MIPR	CECOM, Fort Monmouth, NJ	600	119	1Q	155	1Q	150	1Q	35	1059	0
Subtotal:			2544	352		474		734		371	4475	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		0		1000	1Q	0	1000	0
b . Verification Testing	MIPR	Various	202	190	1-2Q	2533	1-2Q	200	1Q	0	3125	0
c . Test Support	MIPR	Various	1356	100	1-2Q	224	1Q	300	1-2Q	0	1980	0
d . Limited User Test	MIPR	Various	0	0		0		531	3-4Q	0	531	0
e . Logistics/Training	MIPR	Various	0	0		0		250	2Q	0	250	0
Subtotal:			1558	290		2757		2281		0	6886	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	245	1-2Q	618	1-3Q	460	1Q	203	3159	0
b . Program Management - Government Matrix Spt	MIPR	CECOM, Fort Monmouth, NJ	439	103	1Q	110	1-2Q	210	1Q	150	1012	0
c . Program Management	In House	PM NV/RSTA, Fort Monmouth NJ	2426	498	1-4Q	792	1-4Q	895	1-4Q	447	5058	0

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BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604823A - FIREFINDER</b>					PROJECT <b>L85</b>			
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	
			4498	846		1520		1565		800	9229	0	
Subtotal:													
Project Total Cost:				137585	28401		26825		18516		16474	227801	0

Schedule Profile (R4 Exhibit)																				February 2004																
BUDGET ACTIVITY 5 - System Development and Demonstration										PE NUMBER AND TITLE 0604823A - FIREFINDER																		PROJECT L85								
Event Name	FY 02				FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
SDD (Qty 2)																																				
LUT																																				
(1) MS C																																				
LRIP																																				
IOT&E																																				
(2) FUE																																				
(3) IPR																																				
Full Production																																				
FCS Block I UA FUE																																				



Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604823A - FIREFINDER</b>			PROJECT <b>L85</b>	
<u><b>Schedule Detail</b></u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MS B for FCS	3Q						
Conduct Developmental Testing (DT)		1-4Q	1-2Q				
Conduct Limited User Test (LUT)			3-4Q				
Milestone C for LRIP			4Q				
Operation Control Selter - FCS				4Q			
Develop Training Devices				1-4Q	1-4Q		
Conduct IOT&E						3Q	
FUE						3Q	
FRP IPR						3Q	