Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Date: March 2014

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0604823A I FIREFINDER

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	18.303	20.210	37.492	-	37.492	-	-	-	3.726	-	79.731
L86: LIGHTWEIGHT COUNTER MORTAR RADAR (LCMR)	-	2.841	-	-	-	-	-	-	-	3.726	-	6.567
L88: Enhanced AN/TPQ 36	-	15.462	20.210	37.492	-	37.492	-	-	-	-	-	73.164

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This Program funds design, development and test of primary target acquisition and counterfire radars to automatically detect, locate and classify hostile indirect fire weapons (mortars, artillery, and rockets). This PE directly supports the prioritization, tracking, and locating of targets, and dissemination of that information for simultaneous attack of multiple threats. It provides the Warfighter with continuous and responsive counterfire target acquisition systems for all types and phases of military operations. Project L86, Lightweight Counter Mortar Radar, Version AN/TPQ-50 provides 360 degree coverage and is used to detect, locate and report hostile locations of enemy indirect firing systems. Project L88, AN/TPQ-53 (formerly known as Enhanced AN/TPQ-36), is a highly mobile radar system that will leverage the latest in technology design to accelerate technology infusion and increase range while improving False Alarm Rate, reducing obsolescence and increasing reliability. The AN/TPQ-53 will provide 90 degree coverage and extended range, with an incremental development to increase detection capability to 360 degrees.

The Fiscal Year (FY) 2015 funds of \$37.492 million will support follow-on testing and continue development and testing of Pre-Planned Product Improvement (P3I) for Low Quadrant Elevation efforts. These funds will also initiate development and testing for Increased Range and Accuracy, Electronic Protection and Worldwide Interoperability for Microwave Access (WIMAX), and Networking and Radar Interoperability to include performing technical assessments, concept studies, cost reduction, risk reduction and required documentation.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	20.517	47.221	42.204	-	42.204
Current President's Budget	18.303	20.210	37.492	-	37.492
Total Adjustments	-2.214	-27.011	-4.712	-	-4.712
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-0.027	-27.011			
 Congressional Rescissions 	-	_			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.583	_			
 Adjustments to Budget Years 	-	-	-4.712	-	-4.712

PE 0604823A: FIREFINDER

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER	
Other Adjustments -1.6		

PE 0604823A: FIREFINDER Army

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army Date: March 2014														
Appropriation/Budget Activity 2040 / 5	_	am Elemen 23A <i>I FIREF</i>	•		Number/Name) CHTWEIGHT COUNTER MORTAR (LCMR)									
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost		
L86: LIGHTWEIGHT COUNTER MORTAR RADAR (LCMR)	-	2.841	-	-	-	-	-	-	-	3.726	-	6.567		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The AN/TPQ-50 (formerly known as AN/TPQ-48(V)3) Lightweight Counter Mortar Radar (LCMR) is a digitally connected, day/night mortar, cannon, and rocket locating system. It is used to detect, locate, track, and report enemy indirect firing systems and provides the ability to observe friendly fire units. The AN/TPQ-50 is capable of being deployed in two configurations, standalone or vehicle mounted. It can be set up and operational in 20 minutes and disassembled in 10 minutes. The AN/TPQ-50 will be deployed as part of a System of Systems for the Counter-Rocket, Artillery, and Mortar (C-RAM) construct or Rocket Artillery Mortar (RAM) Warn. It provides data to the Forward Area Air Defense Command and Control (FAADC2) node for the sense and warn force protection capability at fixed and semi-fixed sites. It provides 360 degrees of azimuth coverage from ranges of 500 meters to 10 kilometers. The AN/TPQ-50 is a program of record with systems currently fielded and deployed to Operation Enduring Freedom as well as multiple CONUS and OCONUS locations.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Government Test Support	2.841	-	-
Articles:	-	-	-
Description: Funding is provided for the following effort			
FY 2013 Accomplishments: Government Verification/Validation test support and associated Program Management Office support costs.			
Accomplishments/Planned Programs Subtotals	2.841	-	-

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
• B05201: SSN: B05201	77.107	98.535	24.828	-	24.828	24.795	24.551	25.292	21.074	Continuing	Continuing

Lightweight Counter Mortar Radar

Remarks

Army

PE 0604823A: FIREFINDER

UNCLASSIFIED

Page 3 of 16 R-1 Line #111

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army	Date: March 2014		
Appropriation/Budget Activity 2040 / 5	,	- , (umber/Name) ITWEIGHT COUNTER MORTAR CMR)

D. Acquisition Strategy

The AN/TPQ-50 Lightweight Counter Mortar Radar is post Milestone C and was developed to meet Training and Doctrine Command (TRADOC) Capabilities Production Document (CPD) requirements. Seventy eight (78) Quick Reaction Capability (QRC) and forty five (45) Low Rate Initial Production (LRIP) systems have been procured towards an Army Acquisition Objective (AAO) of 400. Initial Operational Test and Evaluation (IOT&E) was conducted in third quarter of fiscal year 2012 (3QFY12). A favorable Full Rate Production (FRP) decision was achieved on 30 May 2013. A three year sole source contract was awarded on 17 July 2013. One hundred thirty two (132) AN/TPQ-50 radars and vehicle mounts have been procured to date. The approved acquisition strategy does include upgrading the 78 QRC and 45 LRIP systems to the full rate production specification beginning in FY15. A second three year production contract is scheduled for 2QFY16. Follow on production contracts will be awarded as needed to fulfill the AAO.

E. Performance Metrics

Ν	//	١

PE 0604823A: FIREFINDER

				U	ICLAS	SIFIED								
Project C	ost Analysis: PB 2	2015 Army	/								Date:	March 20	14	
et Activity	1			R-1 Program Element (Number/Name) PE 0604823A I FIREFINDER PE 0604823A I FIREFINDER RADAR (LCMR)										
es (\$ in M	illions)		FY 2	2013	FY	2014					FY 2015 Total			
Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Various	Various : Activities	3.348	0.632		-		-		-		-	-	3.980	-
Various	PM Radars : Fort Monmouth NJ/ APG MD	0.911	-		-		-		-		-	-	0.911	-
Various	Various : Activities	1.155	-		-		-		-		-	-	1.155	-
	Subtotal	5.414	0.632		-		-		-		-	-	6.046	-
nt (\$ in Mi	illions)		FY 2	2013	FY	2014			1		FY 2015 Total			
Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Various	SRCTec, North : Syracuse, NY	0.000	-		-		-		-		-	-	-	-
SS/CPFF	SRCTec, North : Syracuse, NY	45.088	-		-		-		-		-	-	45.088	-
Various	CERDEC : Fort Monmouth, NJ	2.964	-		-		-		-		-	-	2.964	-
Various	Various : Activities	4.613	-		-		-		-		-	-	4.613	-
Various	Oakridge National Labs : Oakridge, TN	0.250	-		-		-		-		-	-	0.250	-
	Subtotal	52.915	-		-		-		-		-	-	52.915	-
s)			FY 2	2013	FY	2014			1		FY 2015 Total			
Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Various	Various : Activities	0.774	-		-		-		-		-	-	0.774	-
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	es (\$ in M Contract Method & Type Various Various Various Various Various Various Various Contract Method & Type Various Various SS/CPFF Various Various Various Various Various Various	es (\$ in Millions) Contract Method & Type Activity & Location Various Various : Activities Various Various : Activities Various Various : Activities Various Various : Activities Subtotal At (\$ in Millions) Contract Method & Type Activity & Location Various SRCTec, North : Syracuse, NY SS/CPFF SRCTec, North : Syracuse, NY Various CERDEC : Fort Monmouth, NJ Various Various : Activities Various Cerous : Activities Various Performing Activity & Location Subtotal	Pes (\$ in Millions) Contract Method & Type Activity & Location Various Various : Activities 3.348 Various PM Radars : Fort Monmouth NJ/ APG MD Various Various : Activities 1.155 Subtotal 5.414 At (\$ in Millions) Contract Method & Type Activity & Location Years Various SRCTec, North : Syracuse, NY SS/CPFF SRCTec, North : Syracuse, NY Various CERDEC : Fort Monmouth, NJ Various Various : Activities 4.613 Various Oakridge National Labs : Oakridge, TN Subtotal 52.915 Contract Monmouth NJ Various Performing Activities 4.613 Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Contract Normouth, NJ Various Performing Normouth, NJ Various Performing Normouth, NJ Various Performing Normouth, NJ Various Performing Normouth, NJ Various Prior Years	Contract Method & Type Activity & Location Years Cost Various Various: Activities 3.348 0.632 Various PM Radars: Fort Monmouth NJ/ APG MD Various Various: Activities 1.155 - Subtotal 5.414 0.632 Activity & Location Prior Subtotal 5.414 0.632 Activity & Location Prior Years Cost Method & Performing Activity & Location Prior Syracuse, NY SS/CPFF SRCTec, North: Syracuse, NY Various CERDEC: Fort Monmouth, NJ Various Various: Activities 4.613 - Various Various: Activities 4.613 - Various Cakridge National Labs: Oakridge, TN Subtotal 52.915 - SS) Contract Method & Performing Activity & Location Prior Years Cost Contract Method Activity & Location Prior Years Cost Contract Method Activity & Location Prior Years Cost Contract Method Activity & Location Prior Years Cost	Project Cost Analysis: PB 2015 Army Et Activity PS (\$ in Millions) Contract Method & Performing Activity & Location Various Various: Activities Various Various: Activities Various Various: Activities Subtotal Contract Method MD Various Various: Activities 1.155 Subtotal Contract Method Performing Activity & Location Various SRCTec, North: Syracuse, NY Various SRCTec, North: Syracuse, NY Various Various Various: Activities Various SRCTec, North: Syracuse, NY Various CERDEC: Fort Monmouth, NJ Various Various: Activities Various CERDEC: Fort Monmouth, NJ Various Various: Activities Various Various Various: Activities Activity & Location Various Various Various CERDEC: Fort Monmouth, NJ Various Various: Activities Activities Activity & Location Various Cernor Cernor	Project Cost Analysis: PB 2015 Army Proper	R-1 Program Ele	Project Cost Analysis: PB 2015 Army Project Cost Analysis: PB 2015 Army	Project Cost Analysis: PB 2015 Army R-1 Program Element (Number/N PE 0604823A / FIREFINDER	Project Cost Analysis: PB 2015 Army R-1 Program Element (Number/Name)	Project Cost Analysis: PB 2015 Army Project Activity PE 0604823A / FIREFINDER Project L86 / LB / RADAR	Project Cost Analysis: PB 2015 Army Project (Number Ractivity PE 0604823A I FIREFINDER Project (Number Ractivity PE 0604823A I FIREFINDER Project (Number Ractivity	Project Cost Analysis: PB 2015 Army Pate: March 20	Project Cost Analysis: PB 2015 Army Pate: March 2014

PE 0604823A: *FIREFINDER*

Army

UNCLASSIFIED

Page 5 of 16

Exhibit R-3, RDT&E I			U 15 Allily			1					1		March 20	14	
Appropriation/Budge 2040 / 5			ogram Ele 14823A <i>I F</i>		Number/Name) HTWEIGHT COUNTER MORTAR (LCMR)										
Support (\$ in Million	s)			FY 2	2013	FY:	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.774	-		-		-		-		-	-	0.774	_
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY:	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support (Contractor)	SS/CPFF	SRCTec : Syracuse, NY	0.309	-		-		-		-		-	-	0.309	-
Limited User Test	Various	YUMA/WSMR : Arizona/ New Mexico	1.246	-		-		-		-		-	-	1.246	-
Follow-On Test Event (FOTE)	Various	YUMA/WSMR : Arizona/New Mexico	0.690	-		-		-		-		-	-	0.690	-
Developmental Test Operational Test (DT/OT)	Various	YUMA/ATEC : Arizona/APG	4.228	-		-		-		-		-	-	4.228	-
Initial Operational Test & Evaluation	Various	YUMA/FT SILL : Arizona/Oklahoma	2.077	-		-		-		-		-	-	2.077	-
Test Support (Government)	Various	Various : Activities	2.542	2.209		-		-		-		-	-	4.751	-
		Subtotal	11.092	2.209		-		-		-		-	-	13.301	-
			Prior Years	FY 2	2013	FY:	2014		2015 ase		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	70.195	2.841		_		_		-		_	_	73.036	_

PE 0604823A: FIREFINDER Army

Page 6 of 16

E	xhibit R-4, RDT&E Schedule Profile: PB 20	15 Arm	/																				C	ate	: M	arch	20	14		
	ppropriation/Budget Activity 040 / 5										_			•	Num DER		Nar	me))	L8	6 <i>1</i>	LIĞ		WE	IGH	ame IT C	,	NTE	R M	ORTAR
			FY	2013	3		FY	201	4		FY	2015	5		FY 2	016			FY	201 [°]	7		F	Y 2	2018	3		FY:	2019	
		1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	4	1	2	3	4	1	2	3	4
	Development and Test efforts																													
	Development and Test enons																													

PE 0604823A: FIREFINDER Army

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
11	PE 0604823A I FIREFINDER	- 3 (umber/Name) ITWEIGHT COUNTER MORTAR CMR)

Schedule Details

	St	End			
Events	Quarter	Year	Quarter	Year	
Development and Test efforts	4	2006	4	2013	
Full Rate Production (FRP) Decision	3	2013	3	2013	

PE 0604823A: FIREFINDER

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2015 A	rmy							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 5					R-1 Progra PE 060482	ame) /TPQ 36						
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
L88: Enhanced AN/TPQ 36	-	15.462	20.210	37.492	-	37.492	-	-	-	-	-	73.164
Quantity of RDT&E Articles	-	-	-	-	-	_	-	-	-	-		

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The AN/TPQ-53 (formerly known as the Enhanced AN/TPQ-36) Counterfire Target Acquisition Radar System Capability Production Document (CPD) was approved on 29 September 2010. The AN/TPQ-53 System is a highly mobile radar set that automatically detects, classifies, tracks, and locates the point of origin of projectiles fired from mortar, artillery, and rocket systems with sufficient accuracy for first round fire for effect. It mitigates close combat radar coverage gaps and will ultimately replace the current AN/TPQ-36 and AN/TPQ-37 Firefinder Radars; fully supporting Brigade Combat Teams (BCTs) and Fires Brigades operations. The AN/TPQ-53 System interoperates with Battle Command Systems (BCSs) to provide the maneuver commander increased counterfire radar flexibility. The AN/TPQ-53 System is capable of being deployed as part of the Indirect Fire Protection Capability (IFPC) System of Systems (SoS) to provide a sense and warn capability for fixed and semi-fixed sites. The AN/TPQ-53 provides a system with increased range and accuracy throughout a 90 degree search sector (stare mode) as well as 360 degree coverage (rotating) for locating mortar, artillery and rocket firing positions.

The Fiscal Year (FY) 2015 funds of \$37.492 million will support follow-on testing and continue development and testing of Pre-Planned Product Improvement (P3I) for Low Quadrant Elevation efforts. These funds will also initiate development and testing for Increased Range and Accuracy, Electronic Protection and Worldwide Interoperability for Microwave Access (WIMAX), and Networking and Radar Interoperability to include performing technical assessments, concept studies, cost reduction, risk reduction and required documentation.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Test Support	8.654	8.378	7.300
Articles:	-	-	-
Description: Funding is provided for the following effort			
FY 2013 Accomplishments: Initiated Logistics/Maintenance Demonstration, Cold Regions Test Center (CRTC) testing, Developmental Testing (DT), Initial Operational Test and Evaluation (IOT&E), operational Capabilities and Limitations (C&Ls) tests, software and hardware Independent Verification and Validation (IV&V), ammunition, Program Management Office (PMO) and test support costs.			
FY 2014 Plans: Test activities to include DT, IOT&E, operational C&Ls, software and hardware IV&V, ammunition, PMO and test support costs.			
FY 2015 Plans:			

PE 0604823A: FIREFINDER

Army

UNCLASSIFIED

Page 9 of 16 R-1 Line #111

UNCLASSIFIED				
		Date: M	larch 2014	
R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER				
uantities in Each)		FY 2013	FY 2014	FY 2015
and Limitations (C&Ls) testing, ammunition, Program				
ve Access (WiMAX)		-	-	17.307
etile EMI, and the WiMAX commercial spectrum; this inc	udes			
		-	-	7.105
ng range threats and improve accuracy; this includes				
		5.408	6.923	-
Α	rticles:	-	-	-
er environment; this includes associated PMO support o	osts.			
ter environment; this includes associated PMO support	costs.	1 400	4.000	1.690
A	rticles:	1.400	4.909	1.090
ncludes associated PMO support costs.				
includes associated PMO support costs.				
	R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER uantities in Each) and Limitations (C&Ls) testing, ammunition, Program ve Access (WiMAX) stille EMI, and the WiMAX commercial spectrum; this includes and are environment; this includes associated PMO support of the environment; this includes associated PMO support And ancludes associated PMO support costs.	R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER L88 / L uantities in Each) and Limitations (C&Ls) testing, ammunition, Program re Access (WiMAX) stile EMI, and the WiMAX commercial spectrum; this includes re are environment; this includes associated PMO support costs. ter environment; this includes associated PMO support costs. Articles: articles:	R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER Rand Limitations (C&Ls) testing, ammunition, Program The Access (WiMAX) The Access (R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER Rand Limitations (C&Ls) testing, ammunition, Program The Access (WiMAX) The Access (

PE 0604823A: *FIREFINDER*

Army

UNCLASSIFIED

Page 10 of 16

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: I	March 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604823A / FIREFINDER	Project (Number/ L88 / Enhanced A	•	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	ities in Each)	FY 2013	FY 2014	FY 2015
Continue efforts to develop algorithms to detect Low Quadrant Elevation Management Office (PMO) support costs.	(QE) shots; this includes associated Program			
Title: Networking / Radar Interoperability		-	-	4.090
Description: Funding is provided for the following effort				
FY 2015 Plans: Initiate development of increased capabilities through the use of Advance Integrated Air and Missile Defense (IAMD) Battle Command System (IBC the Warfighter to employ counterfire with increased accuracy. Develop a Counterfire Target Acquisition (CTA) radars. Perform technical assessment analysis, and required documentation; this includes associated PM	CS), and other Army Battle Command Systems to en a new user interface that supports commonality amo ments, concept studies, cost reduction, risk reduction	ng		
	Accomplishments/Planned Programs Sub	ototals 15.462	20.210	37.492

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 SSN B05310 AN/TPQ-53: 	297.082	348.557	209.050	-	209.050	274.117	243.943	202.934	159.087	-	1,734.770
SSN B05310 AN/TPQ-53											

Remarks

D. Acquisition Strategy

The AN/TPQ-53 leverages technology developed in the Multi-Mission Radar Advanced Technology Objective (ATO) program incorporating the latest antenna technology into the AN/TPQ-53. In 2006, the Government awarded a contract following full and open competition for the design of the AN/TPQ-53 radar and the purchase of four Non-Recurring Engineering (NRE) radars. Twelve additional radars were purchased under the same contract in response to an urgent directed procurement in July 2008. The Army Acquisition Executive approved the acquisition of up to 20 radars. Twenty systems were procured through two separate contract actions in 2010 and 2011. A competitive production contract for Low Rate Initial Production (LRIP) systems was awarded in 2012 with an option for additional systems in 2013. Production and delivery of all IP systems are complete, and production of LRIP systems is ongoing. A Full Rate Production (FRP) contract to fill the remainder of the Army Acquisition Objective (AAO) is expected to be awarded following completion of the Initial Operating Test and Evaluation (IOT&E). Additionally, all initial production systems will be retrofitted to FRP configuration between FY2014 and FY 2016. The FRP system deliveries will continue through FY 2021. The system will eventually replace all of the AN/TPQ-36 and AN/TPQ-37 systems in the fleet.

The Fiscal Year (FY) 2015 funds will support follow-on testing and continue development and testing of Pre-Planned Product Improvement (P3I) for Low Quadrant Elevation efforts. These funds will also initiate development and testing for Increased Range and Accuracy, Electronic Protection and Worldwide Interoperability for

PE 0604823A: FIREFINDER

UNCLASSIFIED

Page 11 of 16 R-1 Line #111

Army

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	PE 0604823A I FIREFINDER	L88 <i>I Enha</i>	umber/Name) nced AN/TPQ 36
Microwave Access (WIMAX), and Networking and Radar Interoperability to include required documentation.	ude performing technical assessments, conce	pt studies,	cost reduction, risk reduction and
E. Performance Metrics			
N/A			

PE 0604823A: FIREFINDER Army

					UN	ICLASS	SIFIED								
Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	2015 Army	y								Date:	March 20	14	
Appropriation/Budge 2040 / 5	et Activity	1					ogram Ele 4823A <i>I F</i>			ame)		(Number	6		
Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Management (Contractor)	Various	Various : Activities	3.482	0.136	Jan 2013	0.138	Dec 2013	0.629	Mar 2015	-		0.629	-	4.385	-
Program Management (Government)	Various	Various : Activities	0.974	0.033	Oct 2013	0.050	Jan 2014	0.515	Mar 2015	-		0.515	-	1.572	-
		Subtotal	4.456	0.169		0.188		1.144		-		1.144	-	5.957	-
Product Developmen	nt (\$ in M	illions)		FY 2	2013	FY:	2014		2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Electronic Protection/ Worldwide Interoperability for Microwave Access (WiMAX)	SS/CPFF	Lockheed Martin : Syracuse, NY	0.000	-		-		17.096	Mar 2015	-		17.096	-	17.096	-
Increased Range and Accuracy	SS/CPFF	Lockheed Martin : Syracuse, NY	0.000	-		-		6.886	Mar 2015	-		6.886	-	6.886	-
High Clutter Environment	SS/CPFF	Lockheed Martin : Syracuse, NY	0.000	5.340	Aug 2013	6.854	Apr 2014	-		-		-	-	12.194	-
Low Quadrant Elevation (QE) Shots	SS/CPFF	Lockheed Martin : Syracuse, NY	0.000	1.332	Aug 2013	4.840	Apr 2014	1.501	Mar 2015	-		1.501	-	7.673	-
Networking/Radar Interoperability	SS/CPFF	Lockheed Martin : Syracuse, NY	0.000	-		-		3.755	Mar 2015	-		3.755	-	3.755	-
		Subtotal	0.000	6.672		11.694		29.238		-		29.238	-	47.604	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY :	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Test Support	Various	Various : Activities	22.236	8.621	Mar 2013	8.328	Sep 2014	7.110	Mar 2015	-		7.110	-	46.295	-
		Subtotal	22.236	8.621		8.328		7.110		-		7.110	-	46.295	-

PE 0604823A: FIREFINDER

Army

UNCLASSIFIED

Page 13 of 16

Exhibit R-3, RDT&E Project Cost Analysis: PB 2	015 Army	1								Date:	March 20	14	
Appropriation/Budget Activity 2040 / 5					•	lement (N		Name)	•	(Number	6		
	Prior Years	FY 2	013	FY:	2014	1	2015 ase	FY 2		FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	26.692	15.462		20.210		37.492		-		37.492	-	99.856	-

Remarks

PE 0604823A: FIREFINDER Army

Page 14 of 16

UNCLASSIFIED

ppropriation/Budget Activity 040 / 5								R-1 Program Element (Number/Name PE 0604823A / FIREFINDER										ame) Project (Number/Name) L88 / Enhanced AN/TPQ 36										
1073	PE U0U4823A I FIREFINDER													Loo I Ellianceu AW/TPQ 30														
FY 2				FY 2013 FY 2014					014 FY 2015 FY 2							F	FY 2	2017	'	l	FY 2	FY 2019				 }		
	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		
Developmental Test (DT)														,							,							
Limited User Test (LUT)																												
Low Rate Initial Production (LRIP) Lot 3 Production Contract Award																												
Full Rate Production (FRP) Decision																												
FRP Contract Award																												
Initial Operational Test and Evaluation (IOT&E)																												
Follow-On Test and Evaluation (FOT&E)																											_	
Electronic Protection/Worldwide Interoperability for Microwave Access (WiMAX)																												
Increased Range and Accuracy																												
High Clutter Environment																											_	
Low Quadrant Elevation (QE) Shots																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity	, ,	, ,	umber/Name)
2040 / 5	PE 0604823A I FIREFINDER	L88 I Enha	anced AN/TPQ 36

Schedule Details

	St	art	E	ind
Events	Quarter	Year	Quarter	Year
Developmental Test (DT)	2	2012	4	2014
Limited User Test (LUT)	4	2012	1	2013
Low Rate Initial Production (LRIP) Lot 3 Production Contract Award	3	2013	3	2013
Full Rate Production (FRP) Decision	2	2015	2	2015
FRP Contract Award	3	2015	3	2015
Initial Operational Test and Evaluation (IOT&E)	2	2014	3	2014
Follow-On Test and Evaluation (FOT&E)	1	2015	2	2016
Electronic Protection/Worldwide Interoperability for Microwave Access (WiMAX)	1	2015	4	2015
Increased Range and Accuracy	1	2015	4	2015
High Clutter Environment	1	2013	4	2014
Low Quadrant Elevation (QE) Shots	1	2013	4	2015
Networking / Radar Interoperability	1	2015	4	2015

PE 0604823A: *FIREFINDER*

UNCLASSIFIED Page 16 of 16