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

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0604746A I Automatic Test Equipment Development

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	Total Cost
Total Program Element	-	10.307	6.697	11.084	-	11.084		9.880	10.008		Continuing	
L59: Diagnost/Expert Sys	-	7.809	4.680	7.075	-	7.075	9.889	6.142	5.863	5.934	Continuing	Continuing
L65: Test Equipment Development	-	2.498	2.017	4.009	-	4.009	4.293	3.738	4.145	4.365	Continuing	Continuing

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

Note

FY 2015, \$3.294 million reduction to support higher priority projects

A. Mission Description and Budget Item Justification

This program element (PE) provides for development and testing of general-purpose test equipment, state-of-the-art diagnostics and prognostics technologies, and software and systems to support the increasingly complex electronic components of the Army's new and upgraded weapon systems. It focuses on implementation of commercial test and diagnostic technologies across multiple weapon platforms to minimize the cost of troubleshooting and maintenance of Army equipment in the field.

Modular, reconfigurable automatic and semi-automatic systems are being developed under this program to satisfy weapon system test and diagnostics requirements. The Next Generation Automatic Test System (NGATS), currently under development, provides state-of-the-art test and diagnostic capabilities to support current and future weapon systems. It is the platform for transitioning Agile Rapid Global Combat Support System (ARGCS) technologies into the Army weapon system support structure, and it will replace several aging automatic test systems (ATS) that are becoming prohibitively expensive to operate and maintain.

This PE also provides for continued development and improvement of general-purpose test equipment and calibration standards with emphasis on the incorporation of digital electronics and tailoring of configurations to improve deployability, mobility and survivability of the support equipment.

FY 2015 Base funding for this program continues development of the Army's standard NGATS which will improve deployability and mobility of test and diagnostic equipment. The NGATS provides state-of-the-art test and diagnostic capabilities and a means for reducing the Army's test equipment operating and support costs and the costs for supporting a number of the Army's vital warfighting systems. The FY 2015 funding will develop or significantly modify test equipment to satisfy modular force and homeland security support requirements that cannot be accommodated with test equipment currently available in the commercial marketplace such as radio frequency (RF) and electro-optic (EO) testing capability. It will also develop/redesign test program sets and hardware for support of legacy and emerging weapon systems and develop a network centric software framework for NGATS.

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

Development & Demonstration (SDD)

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

PE 0604746A I Automatic Test Equipment Development

Date: March 2014

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	10.815	6.701	15.008	-	15.008
Current President's Budget	10.307	6.697	11.084	-	11.084
Total Adjustments	-0.508	-0.004	-3.924	-	-3.924
 Congressional General Reductions 	-0.017	-0.004			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.302	-			
 Adjustments to Budget Years 	-	-	-3.924	=	-3.924
Other Adjustments 1	-0.189	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army Date: March 2014													
Appropriation/Budget Activity 2040 / 5		_	am Elemen 46A <i>I Autom</i> ent	•	•	ct (Number/Name) Diagnost/Expert Sys							
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	
L59: Diagnost/Expert Sys	-	7.809	4.680	7.075	-	7.075	9.889	6.142	5.863	5.934	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

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

A. Mission Description and Budget Item Justification

This project funds development of and system enhancements for the Next Generation Automatic Test System (NGATS). The NGATS is a general-purpose automatic test system (ATS) that provides test and diagnostic capabilities required to support current and future weapons and combat support systems and will facilitate retirement of aging and obsolete test equipment that is imposing increasing logistics and operations and support cost burdens. It is the platform for transitioning Agile Rapid Global Combat Support System (ARGCS) technologies into the Army weapon system support structure. The ARGCS initiative was sponsored by the Department of Defense, and all Services are expected to transition demonstrated technologies into their ATS programs. This project also provides for continuing efforts to upgrade and improve general-purpose automatic test equipment to satisfy test and diagnostic requirements of the Army's new and upgraded weapon systems; development and adaptation of automatic test equipment required to overcome existing deficiencies and voids in organic test and diagnostic capabilities; development and testing of common procedures utilizing existing test program sets and software applications; and market surveys of commercially available test equipment, methods and procedures to determine applicability to Army requirements. The test and diagnostic systems and procedures developed under this project are essential for ensuring the operational readiness, accuracy and effectiveness of the Army's warfighting systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: NGATS System Level Calibration/Verification Program	-	0.600	-
Articles Articles Articles Articles	-	-	-
Description: Develop and test the NGATS system level calibration/verification program			
FY 2014 Plans:			
Develop and test the NGATS system level calibration/verification program			
Title: NGATS Logistics Support Products	0.500	0.500	1.000
Articles Articles Articles Articles Articles	-	-	-
Description: Develop NGATS initial logistics support products (including provisioning, technical manuals and calibration)			
FY 2013 Accomplishments:			
Continue development of initial logistics support products			
FY 2014 Plans:			
	•	'	

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: M	arch 2014				
Appropriation/Budget Activity 2040 / 5		ect (Number/Name) I Diagnost/Expert Sys						
B. Accomplishments/Planned Programs (\$ in Millions, Article (Quantities in Each)		FY 2013	FY 2014	FY 2015			
Continue development of initial logistics support products								
FY 2015 Plans: Complete development of initial logistics support products								
Title: Developmental and Operational Follow-on Testing			-	-	1.000			
Description: Complete Increment 1 developmental and operational	al follow-on testing activities							
FY 2015 Plans: Complete Increment 1 developmental and operational follow-on test	sting activities							
Title: NGATS Radio Frequency (RF) Test Capability		4:-1	-	0.500	1.500			
Description: Develop and integrate NGATS RF test capability	Ar	ticles:	-	-	-			
FY 2014 Plans: Initiate development and integration of NGATS RF test capability								
FY 2015 Plans: Continue development and integration of NGATS RF test capability	у							
Title: NGATS Increment 2	Ar	ticles:	1.500	1.500 -	2.000			
Description: Develop and test hardware and software for NGATS	Increment 2 system							
FY 2013 Accomplishments: Continue development and testing of hardware and software for su Rocket System, Tube-launched Optically-tracked Wire-guided (TO Weapons Station (CROWS) II)		ated						
FY 2014 Plans: Continue development and testing of hardware and software for surrocket System, TOW Missile System, Paladin and CROWS II)	upport of Increment 2 systems (Avenger, Multiple Launch							
FY 2015 Plans:								

PE 0604746A: *Automatic Test Equipment Development* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: M	larch 2014					
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment Development		Project (Number/Name) 59						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	ntities in Each)		FY 2013	FY 2014	FY 2015				
Continue development and testing of hardware and software for suppor Rocket System, TOW Missile System, Paladin and CROWS II)	t of Increment 2 systems (Avenger, Multiple Launch								
Title: NGATS Electro-Optics Subsystem	Art	icles:	2.655	0.500	0.50				
Description: Develop and test hardware and software for NGATS elect support new ground and aerial sensors for unmanned air and ground versions.									
FY 2013 Accomplishments: Continue development and testing of hardware and software for NGATS (Apache, Kiowa Warrior, CROWS II and Stryker Remote Weapons Stat		ms							
FY 2014 Plans: Continue development and testing of hardware and software for NGATS (Apache, Kiowa Warrior, CROWS II and Stryker Remote Weapons Stat	• • • • • • • • • • • • • • • • • • • •	ms							
FY 2015 Plans: Continue development and testing of hardware and software for NGATS (Apache, Kiowa Warrior, CROWS II and Stryker Remote Weapons Stat		ms							
Title: General-Purpose Shop Replaceable Unit Diagnostic Capability	Art	icles:	0.500	0.250	-				
Description: Develop expanded general-purpose shop replaceable uni	it diagnostic capability								
FY 2013 Accomplishments: Continue development of expanded general-purpose shop replaceable	unit diagnostic capability								
FY 2014 Plans: Complete development of expanded general-purpose shop replaceable	unit diagnostic capability								
Title: Abrams/Bradley Test Program Set (TPS) Design	Art	icles:	0.500	0.250	0.500				
Description: Design, test and evaluate Abrams/Bradley TPSs									
FY 2013 Accomplishments:									
		,	'	•					

PE 0604746A: *Automatic Test Equipment Development* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: N	larch 2014						
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment Development		roject (Number/Name) 9 / Diagnost/Expert Sys						
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)	Γ	FY 2013	FY 2014	FY 2015				
Continue design, test and evaluation of TPSs									
FY 2014 Plans: Continue design, test and evaluation of TPSs									
FY 2015 Plans: Complete design, test and evaluation of Abrams/Bradley TPSs									
Title: Additional Software Capabilities	A	rticles:	0.500	0.250 -	0.250				
Description: Develop software capabilities to incorporate common embedded diagnostics data collection and analysis for closed loop of maintenance									
FY 2013 Accomplishments: Continue development of expanded software capabilities									
FY 2014 Plans: Continue development of expanded software capabilities									
FY 2015 Plans: Continue development of a network centric software framework to faccounting, and data exchange with other components of the globa									
Title: Smart TPSs/Enhanced Self Test	A	rticles:	0.500	0.100	0.300				
Description: Develop enhanced smart TPS hardware and software									
FY 2013 Accomplishments: Continue development of enhanced smart TPSs									
FY 2014 Plans: Initiate development of enhanced self test strategy for NGATS									
FY 2015 Plans: Continue development and integration of enhanced self test strateg	y for NGATS.								
Title: Power and Weight Enhancements			0.354	0.030	0.02				
	A	rticles:	-	-	-				

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									Number/N gnost/Exp	-				
B. Accomplishments/Planned Pro	ograms (\$ in N	Millions, Art	ticle Quantit	ies in Each)			F	Y 2013	FY 2014	FY 2015			
Description: Develop power and v	veight enhance	ements for N	GATS											
FY 2013 Accomplishments: Continue development of power an	d weight enha	ncements												
FY 2014 Plans: Continue development of power an	d weight enha	ncements												
FY 2015 Plans: Continue development of power an	d weight enha	ncements												
Title: Abrams/Bradley EO TPS De	velopment						Article	os:	0.800	0.200	-			
Description: Develop Abrams/Bra	dley TPSs for ເ	use with NG	ATS EO ass	et			Artich	es.	-	-	-			
FY 2013 Accomplishments: Continue development of TPSs														
FY 2014 Plans: Continue development of TPSs														
				Accon	nplishment	s/Planned Progr	ams Subtot	als	7.809	4.680	7.075			
C. Other Program Funding Sumn Line Item	nary (\$ in Milli FY 2013	ons) FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016 FY	/ 2017 FY	′ 201 8	FY 201	Cost To	Total Cost			

Remarks

Army

D. Acquisition Strategy

· .: OPA3, SSN MB4000, Integrated

Family of Test Equipment (IFTE)

This developmental project consists of organic and contractual actions. When the necessary expertise and capability are available within the Department of Defense, services required for the individual development projects are ordered from the government source; otherwise, commercial contracts are used. Equipment required for developmental projects is obtained by contract from the commercial supplier. Developmental efforts for the Next Generation Automatic Test System (NGATS) are being completed under a number of contracts awarded to the prime contractor for the Integrated Family of Test Equipment off-platform testers and other contractors with automatic test equipment (ATE) and test program set development capabilities. Full-rate production of the system will be a competitive award. NGATS is following

37.482

39.626

PE 0604746A: Automatic Test Equipment Development

45.447

42.460

37.482

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army

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39.661

49.618

61.952 Continuing Continuing

Date: March 2014

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army Date: March 2014											
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment Development	Project (Number/Name) L59 / Diagnost/Expert Sys									
an evolutionary acquisition strategy using incremental development to satisfy A existing legacy Army ATE (i.e., Base Shop Test Facility (BSTF)(V)3, BSTF(V)5 ATE.											
E. Performance Metrics N/A											
N/A											

PE 0604746A: Automatic Test Equipment Development Army

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army Date: March 2014 Project (Number/Name) Appropriation/Budget Activity R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment L59 I Diagnost/Expert Sys 2040 / 5 Development FY 2015 FY 2015 FY 2015 **Product Development (\$ in Millions)** FY 2013 FY 2014 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type **Activity & Location Years** Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Software Development/ Various, : Various 28.051 4.309 1.343 1.700 1.700 Continuing Continuing Continuing Various Verification/Validation Hardware/Support Items Various.: Various 2.500 3.325 Continuing Continuing Continuing Various 57.446 1.438 3.325 Development Northrop Grumman, SS/CPFF Rolling Meadows. 15.724 Continuing Continuing Prototype Development 1.062 101.221 Subtotal 6.809 3.843 5.025 5.025 FY 2015 FY 2015 FY 2015 Support (\$ in Millions) FY 2013 FY 2014 oco Total Base Contract Target Method Performing Award Award Award **Award** Cost To Value of Prior Total **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Project Management/ Various Various.: Various 47.291 0.600 0.637 0.850 0.850 Continuing Continuing Continuing **Technical Support** Other Direct Various, : Various 3.190 0.400 0.200 0.200 0.200 Continuing Continuing Continuing Various 50.481 1.000 0.837 1.050 1.050 Subtotal FY 2015 FY 2015 FY 2015 Test and Evaluation (\$ in Millions) FY 2013 FY 2014 oco Base Total Contract Target Method **Cost To** Performing Prior Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract 0.750 0.750 Continuing Continuing Continuing Operational Testing Various Various.: Various 4.014 Various, : Various 1.046 Continuing Continuing Continuing **Developmental Testing** Various 0.250 0.250 1 000 Subtotal 5 060 1 000

Remarks

Test program set (TPS) and contractor developmental test and evalutation are included in the product development cost.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2015 Army						Date:	March 20	14	
Appropriation/Budget Activity 2040 / 5				lement (Number/N Automatic Test Equ	Project L59 / E	Project (Number/Name) L59 / Diagnost/Expert Sys				
	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2	2015 FY 2015 CO Total		Cost To Complete	Total Cost	Target Value o Contrac
Project Cost Totals	156.762	7.809	4.680	7.075	-		7.075	-	-	-

xhibit R-4, RDT&E Schedule Profile: PB 2015	Army																					Date	e: Ma	arch	201	4		
ppropriation/Budget Activity 040 / 5							R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment Development								Project (Number/Name) L59 / Diagnost/Expert Sys													
		FY 2	2013	3		FY 2	2014	14 FY 2			FY 2015		FY 2016			FY		2017	17		FY 2018			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	,
Full Rate Production Decision Review											·																	
Full Materiel Release																												
First Unit Equipped																												
NGATS Testing (Increment 1 Follow-On DT/OT)																												
NGATS Production for Down-Selection																												
NGATS Full-Rate Production (Increment 1)																												
NGATS System Development and Demonstration (SDD) (Increment 2)																												
NGATS Testing (Increment 2)																												
NGATS SDD (EO Subsystem)																												
NGATS Testing (EO Subsystem)																												
NGATS Product Improvements - Netcentric																												
New Systems Test Capability																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army	Date: March 2014		
,	1 3 1 1 1 1 1 1 1 1 1 1 1	- 3 (umber/Name) nost/Expert Sys

Schedule Details

	Sta	art	En	ıd
Events	Quarter	Year	Quarter	Year
Full Rate Production Decision Review	2	2016	2	2016
Full Materiel Release	2	2016	2	2016
First Unit Equipped	4	2017	4	2017
NGATS Testing (Increment 1 Follow-On DT/OT)	3	2015	3	2016
NGATS Production for Down-Selection	3	2014	1	2015
NGATS Full-Rate Production (Increment 1)	2	2016	4	2019
NGATS System Development and Demonstration (SDD) (Increment 2)	4	2009	3	2016
NGATS Testing (Increment 2)	4	2010	4	2017
NGATS SDD (EO Subsystem)	4	2010	2	2015
NGATS Testing (EO Subsystem)	4	2012	2	2015
NGATS Product Improvements - Netcentric	4	2011	4	2019
New Systems Test Capability	2	2011	4	2019

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	rmy							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 5					_	am Elemen 16A / Autom ent	•	•	Project (N L65 / Test		n e) Developmei	nt
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
L65: Test Equipment Development	-	2.498	2.017	4.009	-	4.009	4.293	3.738	4.145	4.365	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

A. Mission Description and Budget Item Justification

This project supports development and demonstration of state-of-the-art calibration standards and techniques, and upgrades/improvements to existing Army calibration systems. It provides for feasibility studies, market research, inventory analyses, bid sample testing, and prototyping to support calibration systems and general-purpose test and diagnostic equipment acquisitions. Primary efforts under this project include development of calibration software, development of calibration capability for chemical and biological agent detection systems, support of AN/GSM-705 and AN/GSM-421 capability upgrade requirements, improvement of test and measurement equipment performance envelopes via product improvements, and development/evaluation of advance technology and higher reliability calibration systems and general-purpose test, measurement, and diagnostic equipment (TMDE). Product improvements are underway to current test and measurement systems to overcome deficiencies and voids in existing organic capabilities and ensure the operational readiness, accuracy, effectiveness, and safety of Army weapons and combat support systems. These improvements will employ reconfigurable open electronics architecture and computer-based instrumentation wherever feasible and will be focused on reducing the test equipment footprints to improve deployability and mobility in areas of operation.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Calibration Sets (CALSETS) Software Environment and Calibration	1.046	0.450	0.960
Articles:	-	-	-
Description: Develop and test an Army automated calibration environment and develop calibration procedures. Test efforts in support of DoD Information Assurance Certification and Accreditation Process (DIACAP).			
FY 2013 Accomplishments: Continue development and evaluation of calibration procedures. Perform testing efforts for DIACAP issues. Complete testing for initial release of a calibration software environment.			
FY 2014 Plans: Continue development and evaluation of calibration procedures. Perform testing and evaluation to support calibration software environment. Develop and test DIACAP for calibration instrument controllers.			
FY 2015 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: M	arch 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604746A I Automatic Test Equipment Development		t (Number/N est Equipme	ame) nt Developme	ent
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2013	FY 2014	FY 2015
Continue development and evaluation of calibration procedures. I environment. Develop and test DIACAP for calibration instrument	• •				
Title: Physical Instruments	Art	ticles:	0.427	0.702	1.35 -
Description: Research, develop and test physical parameter calib biological agent detection systems, night vision testers, small arms FY 2013 Accomplishments: Continue development and test of liquid hydrocarbon flow calibrations.	s gauges, pneumatic pressure systems, temperature, etc. on and test standards. Continue development of traceable	.			
calibration standards for biological and chemical agent detectors a pneumatic and hydraulic transport standards.	and gas mask testers. Continue development and test of				
FY 2014 Plans: Continue development and test of hydrocarbon flow calibration and for small arms gage calibration standards. Continue development testers and calibrators.					
FY 2015 Plans: Complete development and test of hydrocarbon flow calibration ar prototype small arms gage calibration standards. Complete development testers and calibrators. Initiate development of pneumators.	opment and test of chemical agent detectors and protective				
Title: Electrical Instruments	Art	ticles:	0.975 -	0.704	1.32 -
Description: Research, develop, and test electrical parameter cal recertification set, intrinsic electrical standards, electrical transport		ole			
FY 2013 Accomplishments: Perform market research and evaluate commercial equipment and calibration standards package. Develop requirements and specific development and initiate testing of a deployable recertification set voltage standard.	cations for small, practical intrinsic voltage standards. Com	plete			
FY 2014 Plans:					

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PE 0604746A: Automatic Test Equipment Development Page 14 of 20 R-1 Line #98 Army

				UNCLAS							
Exhibit R-2A, RDT&E Project Jus	tification: PB	2015 Army							Date: M	arch 2014	
Appropriation/Budget Activity 2040 / 5				PE 06		nent (Numb Itomatic Test	er/Name) t Equipment		t (Number/N est Equipme		ent
B. Accomplishments/Planned Pr	ograms (\$ in N	lillions, Art	icle Quantit	ties in Each))				FY 2013	FY 2014	FY 2015
Perform market research and evaludevelopment and testing of direct of transport standards.											
FY 2015 Plans: Perform market research and evalutesting of DC intrinsic voltage systems.											
Title: Test Equipment Modernization	on							Articles:	0.050	0.161	0.37
Description: Perform market resegeneral-purpose test equipment ac		ation of com	mercial equi	pment and d	develop perf	ormance spe					
FY 2013 Accomplishments: Perform market research and evalue purpose test equipment acquisition		ercial equip	ment and de	velop perfor	mance spec	ifications for	future gener	ral-			
FY 2014 Plans: Perform market research and evalue purpose test equipment acquisition		ercial equip	ment and de	velop perfor	mance spec	ifications for	future gene	ral-			
FY 2015 Plans: Perform market research and evalue purpose test equipment acquisition		ercial equip	ment and de	velop perfor	mance spec	ifications for	future gener	ral-			
				Accon	nplishment	s/Planned P	Programs Su	ıbtotals	2.498	2.017	4.00
C. Other Program Funding Sumn	nary (\$ in Millio	ons)	FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	Base	000	Total	FY 2016	FY 2017	FY 201	8 FY 2019	Complete	
SSN N10000: Calibration Sets Equipment	10.481	4.370	5.726	-	5.726	5.724	5.096	5.12	1 8.610	Continuing	Continuin
• SSN N11000: <i>Test</i>	37.285	18.755	16.061	-	16.061	16.252	15.268	12.88	1 11.903	Continuing	Continuin
Equipment Modernization Remarks											

PE 0604746A: Automatic Test Equipment Development Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
1	,	- , \	umber/Name) Equipment Development

D. Acquisition Strategy

Projects are focused on use of commercial and nondevelopmental item technologies. When programmatic and engineering expertise and capability are available within the Department of Defense, services required for the individual development projects are acquired from the government source; otherwise, commercial service contracts are used to provide these capabilities. Equipment required for development projects is obtained from the commercial supplier. Candidate commercial equipment and nondevelopmental items are identified and evaluated through market research and government testing and evaluation.

E. Performance Metrics

PE 0604746A: Automatic Test Equipment Development Army

Exhibit R-3, RDT&E	Project C	ost Analysis : PB 2	015 Army	/								Date:	March 20)14	
Appropriation/Budg 2040 / 5	et Activity	1					4746A <i>I A</i>	ement (Na Automatic				(Number est Equipn		elopment	
Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	014	FY 2 Ba		FY 2	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 o Contrac
In-house Engineering	SS/LH	Civ Labor : various	3.016	0.700		0.715		0.744		-		0.744	Continuing	Continuing	-
		Subtotal	3.016	0.700		0.715		0.744		-		0.744	-	-	
Product Developme	ent (\$ in Mi	illions)		FY 2	2013	FY 2	014	FY 2 Ba		FY 2		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 o Contrac
AN/GSM-421(V2)	Various	Various : Various	2.346	-		-		-		-		-	Continuing	Continuing	-
CALSETS Software Environment and Calibration	Various	Various : Various	5.107	0.500		0.211		0.400		-		0.400	Continuing	Continuing	-
Physical Instruments	Various	Various : Various	5.905	0.250		0.292		0.580		-		0.580	Continuing	Continuing	-
Electrical Instruments	Various	Various : Various	8.138	0.598		0.293		0.552		-		0.552	Continuing	Continuing	-
Test Equipment Modernization	Various	Various : Various	0.230	0.050		0.090		0.160		-		0.160	Continuing	Continuing	-
		Subtotal	21.726	1.398		0.886		1.692		-		1.692	-	-	
Support (\$ in Million	าร)			FY 2	2013	FY 2	014	FY 2 Ba		FY 2		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 o Contrac
Contract Engineering	SS/FFP	University of Alabama, Huntsville : Huntsville, AL	1.837	-		0.140		0.245		-		0.245	Continuing	Continuing	-
	-	Subtotal	1.837	-		0.140		0.245		_		0.245	_	_	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 5	PE 0604746A I Automatic Test Equipment	L65 / Test Equipment Development
	Development	

Test and Evaluation	ı (\$ in Milli	ons)		FY 2	2013	FY 2	014	FY 2 Ba		FY 2		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
AN/GSM-421(V2)	Various	Various : Various	0.620	-		-		-		-		-	Continuing	Continuing	-
CALSETS Software Environment and Calibration	Various	Various : Various	0.300	0.200		0.070		0.360		-		0.360	Continuing	Continuing	-
Physical Instruments	Various	Various : Various	1.300	0.075		0.088		0.407		-		0.407	Continuing	Continuing	-
Electrical Instruments	Various	Various : Various	1.393	0.075		0.047		0.351		-		0.351	Continuing	Continuing	-
Test Equipment Modernization	Various	Various : Various	0.200	0.050		0.071		0.210		-		0.210	Continuing	Continuing	-
	<u>'</u>	Subtotal	3.813	0.400		0.276		1.328		-		1.328	-	-	-
			Prior					FY 2	2015	FY 2	015	FY 2015	Cost To	Total	Target Value of

	Prior Years	FY 2	2013	FY 2	014	FY 2	 FY 2	 FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	30.392	2.498		2.017		4.009	-	4.009	-	-	-

Remarks

PE 0604746A: *Automatic Test Equipment Development* Army

xhibit R-4, RDT&E Schedule Profile: PB 20	15 Army	/)ate	e: Ma	arch	20	14		
ppropriation/Budget Activity 040 / 5						Р	E 06	rogra 60474 opme	6A / /									t (Nu est E					lopm	ent	
		FY 2	013		FY	2014		FY	2015	5		FY 2	16		F	′ 201	17	ı	FY 2	2018			FY 2	2019)
	1	2	3 4	1 ′	l 2	3	4	1 2	3	4	1	2	3	4	1 2	2 3	4	1	2	3	4	1	2	3	4
Physical Instruments																									
CALSETS Software Environment and Calibration																									
Electrical Instruments																									
Test Equipment Modernization																									

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
2040 / 5	,	, ,	umber/Name) Equipment Development

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Physical Instruments	2	2007	4	2019
CALSETS Software Environment and Calibration	2	2007	4	2019
Electrical Instruments	2	2007	4	2019
Test Equipment Modernization	1	2011	4	2019