Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0604715A: Non-System Training Devices - Eng Dev

BA 5: System Development & Demonstration (SDD)

		'										
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	29.206	44.787	18.980	-	18.980	32.481	28.392	23.631	21.898	Continuing	Continuing
241: Nstd Combined Arms	-	24.144	39.614	15.940	-	15.940	29.422	25.492	19.729	18.688	Continuing	Continuing
573: Program Executive Office Simulation, Training Spt	-	5.062	5.173	3.040	-	3.040	3.059	2.900	3.902	3.210	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

Funds were realigned to higher priority requirements.

### A. Mission Description and Budget Item Justification

Program Element funds development of Non-System Training Devices to support force-on-force training at the Combat Training Centers (CTC), general military training, and training on more than one item/system, as compared with system devices which are developed in support of a specific item/weapon system. Training devices and training simulations contribute to the modernization of the forces by enabling and strengthening combat effectiveness through realistic training solutions for the Warfighter. Training devices maximize the transfer of knowledge, skills, and experience from the training situation to a combat situation. Force-on-force training at the National Training Center (NTC), Ft. Irwin, CA; Joint Readiness Training Center (JRTC), Ft. Polk, LA, and Joint Multinational Readiness Center (JMRC), formerly the Combat Maneuver Training Center (CMTC), Hohenfels, Germany; and battle staff training in Battle Command Training Program (BCTP) provide increased combat readiness through realistic collective training in low, mid, and high intensity scenarios. Project 241, Non-System Training Devices-Combined Arms, develops simulation training devices for Army-wide use, including the CTCs. Project 573 funds key organizational support to Army/DoD Transformation via innovative simulation and training device efforts. Program Executive Office (PEO) Simulation, Training and Instrumentation (STRI's) unique geographic co-location with other services facilitates joint training solutions in a common environment.

FY 2014 Project 241 funds significant development efforts on the Combat Training Center Instrumentation Systems (CTC-IS), Live, Virtual, Constructive Integrating Architecture (LVC-IA), Engagement Skills Trainer 2000 (EST 2000), Medical Simulation Training Center (MSTC), One Tactical Engagement Simulation System (OneTESS), and further implementation of Live Training Transformation (LT2) through development of the Common Training Instrumentation Architecture (CTIA).

FY 2014 Project 573 will provide for minimum PEO STRI core operations supporting development of training devices and simulations by PEO STRI's four Project Management Offices.

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

PE 0604715A: Non-System Training Devices - Eng Dev

BA 5: System Development & Demonstration (SDD)
B. Program Change Summary (\$ in Millions)

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	29.981	44.787	33.504	-	33.504
Current President's Budget	29.206	44.787	18.980	-	18.980
Total Adjustments	-0.775	0.000	-14.524	-	-14.524
<ul> <li>Congressional General Reductions</li> </ul>	-0.007	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.768	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	-	_	-14.524	-	-14.524

Exhibit R-2A, RDT&E Project Just	stification:	: PB 2014 <i>F</i>	Army							DATE: Api	rii 2013	
APPROPRIATION/BUDGET ACT	IVITY				R-1 ITEM I	NOMENCL	ATURE		<b>PROJECT</b>			
2040: Research, Development, Te	st & Evalua	ation, Army			PE 060471	ISA: Non-Sy	ystem Traini	ing	241: Nstd (	Combined A	Arms	
BA 5: System Development & Den	nonstration	(SDD)			Devices - E	Eng Dev		-				
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost

<sup>18.688</sup> Continuing Continuing 241: Nstd Combined Arms 24.144 39.614 15.940 15.940 29.422 25.492 19.729 Quantity of RDT&E Articles

### A. Mission Description and Budget Item Justification

This project supports development of prototype training devices to support Combined Arms (Infantry, Armor, Aviation, Air Defense, Artillery, Engineer, Chemical, and Support troops) training and multi-system training within the Army, to include the Reserve Components.

Common Training Instrumentation Architecture (CTIA) provides the common product-line architecture, product line software, standards, services, and architecture framework for developing the Live Training Transformation (LT2) Product Line of live training systems supporting Army-wide live instrumented Force-On-Force (FOF) and Force-On-Target (FOT) training requirements and is the core live architecture for the Live, Virtual, Constructive Integrated Training Environment (LVC-ITE).

Combat Training Center Instrumentation System (CTC-IS) funds the continued development of the existing Instrumentation Systems (IS) at the National Training Center (NTC), Joint Readiness Training Center (JRTC) and Joint Multinational Readiness Center (JMRC). Also, CTC-IS funds the continued development of the Range Communication System at the NTC and JRTC, to provide high-fidelity live, virtual, and constructive brigade training rotations which prepare Brigade Combat Teams, Joint partners, and supporting units to deploy in support of Army Force Generation (ARFORGEN). CTC-IS develops new data communications systems increasing tracking accuracy and coverage at the CTCs to provide greater training fidelity to training units.

The Medical Simulation Training Center (MSTC) program provides a standardized, combat medical training capability to sustain and validate Combat Medic skills and to support Combat Lifesaver training for Active, Reserve and the Army National Guard components, using both classroom and simulated battlefield conditions to better prepare Soldiers for the application of medical interventions under combat conditions. Each MSTC system is made up of sub-systems that include the Virtual Patient System (VPS), Instruction Support System (ISS) and facility, Medical Training-Command and Control (MT-C2), and the Medical Training Evaluation System (MTES).

The Engagement Skills Trainer (EST) is a virtual, small arms, marksmanship training simulator for teams and squads with a standard mix of light, heavy and crew-served weapons used in Overseas Contingency Operations (OCO) and support of Unified Land Operations (ULO). The EST provides training for individual marksmanship, small unit collective gunnery skills and tactical training. It incorporates judgmental use of force, including escalation of force and graduated response scenarios. As the only validated and accredited virtual small arms training system, the EST is a critical element of the U.S. Army's gated marksmanship training strategy.

The Live, Virtual, Constructive Integrating Architecture (LVC-IA) provides a net-centric linkage that collects, retrieves and exchanges data among existing Training Aids, Devices, Simulations, and Simulators (TADSS) and Mission Command Systems (Joint and Army). The LVC-IA defines the "how" information is exchanged among the

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<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
2040: Research, Development, Test & Evaluation, Army	PE 0604715A: Non-System Training	241: Nstd (	Combined Arms
BA 5: System Development & Demonstration (SDD)	Devices - Eng Dev		

different LVC domains and the Mission Command Systems. The LVC-IA provides enterprise level tools for exercise control, after action review, and system information assurance. It also provides hardware and software to interface the different Live, Virtual and Constructive communication protocols and provides a correlated common operating picture for the training audience on their organic Mission Command equipment. The integration of the Live, Virtual, and Constructive TADSS with the Mission Command equipment will enable larger, more robust training events better preparing U.S. Soldiers for their missions at an overall reduced cost. The end-state goal is an LVC Integrated Training Environment that can approximate Operational Environments in a cost effective manner to provide a high level of value-added training and mission rehearsal opportunities to Army Commanders and their Soldiers.

One Tactical Engagement Simulation System (OneTESS) develops a live, precision, combined arms Force-on-Force Indirect Fire training capability for Brigade and below exercises at Homestation, Maneuver Combat Training Centers and deployed sites. OneTESS will provide realistic, real-time casualty effects for Force-on-Force tactical engagement training scenarios and the capability to integrate into training instrumentation systems to provide for high fidelity combined arms combat exercises. It is interoperable with current and future Instrumentable-Multiple Integrated Laser Engagement System (I-MILES) Line of Sight (LOS) laser based systems.

Integration and Interoperability (I2) integrates activities and products of current programs of record across the entire PEO STRI portfolio. I2 baselines persistent interoperability in PEO fielded systems, addresses current issues to facilitate interoperability, institutionalizes a common products/product line management approach and standards/policies across training/test, non-system/system and modeling and simulation domains.

FY 2014 Project 241 funds significant development efforts on the Combat Training Center Instrumentation Systems (CTC-IS), Live, Virtual, Constructive Integrating Architecture (LVC-IA), Engagement Skills Trainer (EST), Medical Simulation Training Center (MSTC), One Tactical Engagement Simulation System (OneTESS), and further implementation of Live Training Transformation (LT2) through development of the Common Training Instrumentation Architecture (CTIA).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Common Training Instrumention	1.882	1.681	0.873
Architecture (CTIA) program.	0	0	
Articles:			
<b>Description:</b> Continue EMD phase contract activities for the CTIA program to provide the common architecture capabilities.			
FY 2012 Accomplishments:  Continued development of CTIA to provide the common architecture capabilities that are essential for development, fielding, technology and capability insertion for Live Training Systems (LTS) to include: the Combat Training Centers-Instrumentation Systems (CTC-IS), Integrated Military Operations in Urbanized Terrain Training System (IMTS), Home Station Instrumentation Systems (HITS), Digital Ranges Training System (DRTS) training instrumentation programs and the Live, Virtual, Constructive-Integrated Training Environment (LVC-ITE) interoperability initiatives.			
FY 2013 Plans: Continue development of CTIA to provide the common architecture capabilities that are essential for development, fielding, technology and capability insertion for Live Training Systems (LTS) to include: the Combat Training Centers-Instrumentation			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJ			
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	PE 0604715A: Non-System Training Devices - Eng Dev	241: Λ	Istd Combine	d Arms	
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)		FY 2012	FY 2013	FY 2014
Systems (CTC-IS), Integrated Military Operations in Urbanized Ter Systems (HITS), Digital Ranges Training System (DRTS) training in Integrated Training Environment (LVC-ITE) interoperability initiative	nstrumentation programs and the Live, Virtual, Constru				
FY 2014 Plans:					
Continue development of CTIA to provide the common architecture technology and capability insertion for Live Training Systems (LTS) Systems (CTC-IS), Integrated Military Operations in Urbanized Ter Systems (HITS), Digital Ranges Training System (DRTS) training in Integrated Training Environment (LVC-ITE) interoperability initiative	to include: the Combat Training Centers-Instrumentation of Training System (IMTS), Home Station Instrumentstrumentation programs and the Live, Virtual, Constru	on tation			
<b>Title:</b> Engineering and Manufacturing Development (EMD) phase of System (CTC-IS).	,	entation  Articles:	4.660 0	14.023 0	2.54
<b>Description:</b> Continue EMD phase contract activities for the CTC-Is		Articles.			
FY 2012 Accomplishments: Combat Training Center Instrumentation System (CTC-IS) funded to Systems (IS) at the National Training Center (NTC), Joint Readines Center (JMRC). Funding was also used to begin to develop a commission may be a subject to the system of the sys	ss Training Center (JRTC) and Joint Multinational Read mon Range Communications System (RCS) that can b tity tracking coverage and accuracy in order to increas	liness e			
FY 2013 Plans: Combat Training Center Instrumentation System (CTC-IS) funds the Systems (IS) at the National Training Center (NTC), Joint Readines Center (JMRC). Funding is also being used to develop a common Implemented at all three Combat Training Centers for increased ent Action Review fidelity for Brigade Combat Team rotations to better process.	e continued development of the existing Instrumentations Training Center (JRTC) and Joint Multinational Read Range Communications System (RCS) that can be tity tracking coverage and accuracy in order to increas	liness			
FY 2014 Plans: Combat Training Center Instrumentation System (CTC-IS) will fund Systems (IS) at the National Training Center (NTC), Joint Readines Center (JMRC). Funding will be used to develop a common Range	the continued development of the existing Instruments Training Center (JRTC) and Joint Multinational Read	liness			

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PE 0604715A: Non-System Training Devices - Eng Dev Army Page 5 of 20 R-1 Line #95

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJ			
2040: Research, Development, Test & Evaluation, Army	PE 0604715A: Non-System Training	241: N	Istd Combine	d Arms	
BA 5: System Development & Demonstration (SDD)	Devices - Eng Dev				
B. Accomplishments/Planned Programs (\$ in Millions, Article Q			FY 2012	FY 2013	FY 2014
all both NTC and JRTC for increased entity tracking coverage and a Brigade Combat Team rotations to better prepare units for deploym	•	y for			
Title: Government Program Management for the Combat Training C	, , , ,	Articles:	0.542 0	1.230 0	1.358
<b>Description:</b> Government Program Management for the CTC IS pro	ogram.				
FY 2012 Accomplishments: Program Management for the Combat Training Center Instrumentat	tion System (CTC-IS) program.				
FY 2013 Plans: Program Management for the Combat Training Center Instrumentat	tion System (CTC-IS) program.				
FY 2014 Plans: Program Management for the Combat Training Center Instrumentat	tion System (CTC-IS) program.				
<i>Title:</i> Engineering and Manufacturing Development (EMD) phase of System (HITS) program.	•		0.688	0.963 0	0.00
<b>Description:</b> EMD phase contract activities for the HITS program.		Articles:			
FY 2012 Accomplishments:  Developed, integrated, and tested new and upgraded software capa System (HITS). These capabilities upgraded the operating system applications into a new HITS baseline version 3.0. This software up COTS software, and for maintaining Information Assurance accredit	to Windows 7 and Microsoft Server 2008 and the assograde was critical to sustaining a training system base				
FY 2013 Plans: Integrate, and test Synthetic Environment Core (SE Core) into the F Control (EXCON) to establish a common terrain database among all Integrated Training Environment. The HITS Capabilities Production integrate, and test the OneTESS Mortar interface with the HITS EXC to mortar teams and platoons.	Il components within the Live, Virtual, and Constructive Document (CPD) requires the integration of SECore. I	Develop,			
<b>Title:</b> Engineering and Manufacturing Development (EMD) phase of (MSTC).	,	ter Articles:	1.295 0	0.815 0	0.00

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		<u> </u>	DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604715A: Non-System Training Devices - Eng Dev	<b>PROJ</b> 241: <i>N</i>	IECT Nstd Combine	d Arms	
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)		FY 2012	FY 2013	FY 2014
<b>Description:</b> EMD phase contract activities for the MSTC program					
FY 2012 Accomplishments: Development within the Virtual Patient System (VPS) of an effective training capability and a Medical Training Evaluation System (MTES to access the training and interoperate with the Virtual Patient System training.	S). MTES will have capability to use Army Knowledge	Online			
FY 2013 Plans: Development of the Instructor Support System (ISS - TADSS Applied and to improve existing part task trainers. Development of ISS (Trainers) Development. Development of Medical Simulation Training Center in remote locations. Enhancement of Virtual Patient System (VPS) system technology. Develop multi-lingual, voice recognition, haptic architecture for other systems and applications to interface with MS	auma Immersion) for the use of immersive, virtual, med r (Mobile) for the capability to stand up a mobile training r Tetherless Mannequin to implement autonomous cast c enabled, artificial intelligence (AI) capabilities, and op	lical g center ualty			
Title: Government Program Management for the Medical Simulation		Articles:	0.191 0	0.220 0	0.075
<b>Description:</b> Government Program Management for the MSTC pro	ogram.				
FY 2012 Accomplishments: Program management costs associated with the FY12 Medical Training	ining Evaluation System (MTES) system.				
FY 2013 Plans: Program management costs associated with the FY13 Medical Sim	nulation Training Center (MSTC) development efforts.				
FY 2014 Plans: Research management costs associated with Instructor Support Sy Simulation Training Center (MSTC) program.	ystem (ISS) development efforts for the FY14 Medical				
<b>Title:</b> Engineering and Manufacturing Development (EMD) phase oprogram.	, , , , , , , , , , , , , , , , , , ,	,	0.000	0.993 0	0.800
Pagarintian, EMD phase contract activities for the Engagement Cl		Articles:			
<b>Description:</b> EMD phase contract activities for the Engagement Sk	kilis Trairier (⊏51) program.				
FY 2013 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604715A: Non-System Training Devices - Eng Dev	<b>PROJ</b> 241: <i>N</i>	ECT Istd Combine	d Arms	
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	antities in Each)		FY 2012	FY 2013	FY 2014
Integrate an EST prototype of the AN/PEQ 15-A Laser Aiming Device field for maximum visibility. Operators can easily switch between the plaser and illuminator. Ideal for special operations or covert missions, that and situations. Fielded in Iraq, Afghanistan and by multiple law enforce for aiming lasers. EST prototyping of the M145 Machine Gun Optical optical scope, is a small arms scope manufactured by ELCAN Optical for the U.S. Army and is commonly mounted on M240 and M249 mach LED with varying intensity settings.	visible laser, IR laser, IR illuminator or a combination the DBAL-A2 ensures performance in the toughest concernent agencies, the DBAL-A2 is setting a higher state The M145 Machine Gun Optic (MGO), a variant of the ITechnologies with 3.4x28 magnification. It was developed to the set of the ITechnologies with 3.4x28 magnification.	of both onditions andard e C79 eloped			
FY 2014 Plans: Develop EST Dynamic Terrain to accurately portray all battlefield effective Environment (COE), across the full range of military operations include techniques and procedures; all military recognized terrain; atmospheric vehicles and equipment; dynamic, correlated terrain; the effects of muyears efforts (weapons, optics, etc). Develop enhanced capabilities in	ding: friendly and enemy forces and their doctrine, take ric and weather conditions; specific enemy and frienc unitions on personnel, vehicles, structures; and deve	ctics, lly lop prior			
<b>Title:</b> Engineering and Manufacturing Development (EMD) phase cor Architecture (LVC-IA) program.		ating  Articles:	5.897 0	6.264 0	6.21
<b>Description:</b> Continue EMD phase contract activities for the LVC-IA	program.				
FY 2012 Accomplishments: Completed system development, integration and demonstration of Liv Version 1 capability.	ve, Virtual, Constructive Integrated Archiectecture (L	/C-IA)			
FY 2013 Plans: Begin system development and perform design, development, integral Integrating Architecture (LVC-IA) Version 2 capability.	ation and demonstration of the Live, Virtual, Construc	tive			
FY 2014 Plans: Complete system development, integration and demonstration of Live Version 2 capability.	e, Virtual, Constructive Integrating Architecture (LVC-	IA)			
Title: Government Program Management for the Live, Virtual, Constr		Articles:	1.068 0	1.127 0	1.240
<b>Description:</b> Government Program Management for the LVC-IA prog	gram.				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
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B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)		FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: The Government Program Management Office for LVC-IA supported Funding supported manpower, facilities, training, operations and ma		se.			
<b>FY 2013 Plans:</b> The Government Program Management Office for LVC-IA supports Funding supports manpower, facilities, training, operations and mair		se.			
FY 2014 Plans: The Government Program Management Office for LVC-IA will support LVC-IA Version 2. Funding supports manpower, facilities, training, of the control of the co		nase of			
<i>Title:</i> Government System Test and Evaluation for the Live, Virtual,		m. <i>Articles:</i>	0.923 0	0.961 0	1.000
Description: Government System Test and Evaluation for the LVC-	-IA program.				
FY 2012 Accomplishments:  LVC-IA continued integration testing support on developed components Mission Command Systems. Conducted FIE, FV & system measure Completed Test Readiness Review (TRR) as well as Government A	ement of performance (SMP) events for LVC-IA Build				
FY 2013 Plans: LVC-IA continues test support on the engineering and manufacturing integration testing on developed components for LVC-IA with other I federation integration event (FIE) and functional verification (FV) even	Mission Command Systems and LVC Training Aids. (				
FY 2014 Plans: LVC-IA continues integration testing support on developed components Mission Command Systems. LVC-IA will conduct Federation Integrated performance (SMP) events, complete Test Readiness Review (TRR	ation, Functional Verification and system measuremer				
Title: Engineering and Manufacturing Development (EMD) phase co	ontract activity for the Target Modernization program.	Articles:	1.586 0	1.466	0.000
<b>Description:</b> EMD phase contract activities for the Target Moderniz	ation program.				
FY 2012 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604715A: Non-System Training Devices - Eng Dev	<b>PROJ</b> 241: <i>N</i>	ECT Vista Combine	d Arms	
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua Target Modernization continued development of target system techno	•	ehavior)	FY 2012	FY 2013	FY 2014
threat/friend identification, and training performance feedback mechan	• • • • • • • • • • • • • • • • • • • •	eriavior),			
FY 2013 Plans: Target Modernization continues development of target system techno threat/friend identification, and training performance feedback mechan	• • • • • • • • • • • • • • • • • • • •	havior),			
Title: Government Program Management for the Target Modernization	, •		0.178	0.262	0.000
<b>Description:</b> Government Program Management for Target Moderniz		Articles:	0	0	
FY 2012 Accomplishments: Program Management for the Target Modernization program.					
FY 2013 Plans: Program Management for the Target Modernization program.					
<i>Title:</i> Engineering and Manufacturing Development (EMD) phase con System (OneTESS) program.			3.820 0	8.158 0	1.494
<b>Description:</b> Continue EMD phase contract activities for the OneTES		Articles:			
FY 2012 Accomplishments: Continued development of OneTESS capability for Real Time Casualt efforts that supported the training and testing communities into system		est (DT)			
FY 2013 Plans: Begin development of the Increment 2 effort (Fire Control Platforms for Brigade Combat Teams (HBCT).	or Stryker Brigade Combat Teams (SBCT) and/or He	avy			
FY 2014 Plans: Perfrom Operational Test, complete procurement of Technical Data P	ackage (TDP) in support of a Milestone C Decision.				
Title: Government Program Management for the One Tactical Engage		Articles:	1.414 0	0.339 0	0.342
<b>Description:</b> Government Program Management for the One Tactical	I Engagement Simulation System (OneTESS) progra	am.			

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Exhibit R-2A, RDT&E Project Just		2014 Army								pril 2013	
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test BA 5: System Development & Demo	& Evaluation,			PE 060	<b>EM NOMEN</b> 04715A: <i>No</i> es - Eng Dev	n-System Tra	aining	<b>PROJE</b> 241: <i>N</i>	ECT std Combine	d Arms	
B. Accomplishments/Planned Pro	grams (\$ in N	//illions, Art	icle Quantit	ties in Each)	<u> </u>				FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Government Program Management	for the One T	actical Enga	agement Sim	ulation Syste	em (OneTES	SS) program					
FY 2013 Plans: Government Program Management	for the One T	actical Enga	agement Sim	ulation Syste	em (OneTES	SS) program					
FY 2014 Plans: Government Program Management	for the OneTa	actical Enga	gement Simi	ulation Syste	m (OneTES	S) program.					
Title: Development Activity for the In	ntegration and	I Interoperat	oility (I2) Pro	gram.				Articles:	0.000	0.978 0	0.000
<b>Description:</b> Development of the I2	Program.										
Document capabilities (intra and interior identify limitations/interoperability is and cost estimated interoperability experiments institutionalize a set of common common components. Identify target re-use of common components.	sues needing execution plan aponents, inte	resolution, a and ensure grate comm	assess oppor proposals fo on capabilition	rtunities for c or enhancem es, and deve	apability expended apability expended are in syllent are in syllent apactions.	pansion, dev nc with the manageme	elop time-ph plan. Identif nt processes	nased fy/ s for the			
Title: Government Program Manage	ement for the	Integration a	and Interope	rability (I2) P	rogram.		A	Articles:	0.000	0.134 0	0.000
<b>Description:</b> Government Program	Management	for the I2 Pi	rogram.								
FY 2013 Plans:		-> / 4 0 10 . #									
Program management costs associa	ated with the I	-Y13 I2 effo	rts.	Accon	nlishment	s/Planned P	rograms Su	ıhtotals	24.144	39.614	15.940
0. Other Borrows Frontier O.	- · · · · · · · · · · · · · · · · · · ·			Accon	- Pilotilitotta		rogramo oc	ibiotais	27.177	00.014	10.040
C. Other Program Funding Summ	ary (\$ IN MIIII	ons)	FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	000	Total	FY 2015	FY 2016	FY 201	7 FY 2018	Complete	9
• Training Devices, Non-System: Training Devices, Non-System	180.892	152.501	225.200		225.200	186.955	197.014	164.86	7 121.829	) Continuing	Continuing
CTC Support: CTC Support	46.117	111.649	121.710		121.710	124.480	82.690	84.52	3 133.368	3 Continuing	Continuing

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Army

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 

PE 0604715A: Non-System Training 2040: Research, Development, Test & Evaluation, Army 241: Nstd Combined Arms BA 5: System Development & Demonstration (SDD)

Devices - Eng Dev

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

FY 2014 **Cost To** FY 2014 FY 2014

FY 2018 Complete Total Cost Line Item FY 2012 FY 2013 Base OCO FY 2015 FY 2016 FY 2017 Total

Remarks

### D. Acquisition Strategy

Competitive development efforts based on performance specifications.

### **E. Performance Metrics**

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604715A: Non-System Training

Devices - Eng Dev

PROJECT

241: Nstd Combined Arms

DATE: April 2013

Management Servic	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
OneTESS Program Management	Various	PEO STRI:Orlando, FL	8.046	-		-		-		-		-	0.000	8.046	8.046
OneTESS Program Management	Various	PEO STRI,:Orlando, FL	0.000	1.414	Dec 2011	0.339	Dec 2012	0.342	Dec 2013	-		0.342	Continuing	Continuing	Continuing
CTC-IS Program Management	Various	PEO STRI:Orlando, FL	0.879	0.542	Dec 2011	1.230	Dec 2012	1.358	Dec 2013	-		1.358	Continuing	Continuing	Continuing
HITS Program Management	Various	PEO STRI:Orlando, FL	0.400	-		-		-		-		-	0.000	0.400	0.400
MSTC Program Management	Various	PEO STRI:Orlando, FL	0.191	0.191	Dec 2011	0.220	Dec 2012	0.075	Dec 2013	-		0.075	Continuing	Continuing	Continuing
EST Program Management	Various	PEO STRI:Orlando, FL	0.214	-		-		-		-		-	0.000	0.214	0.000
LVC-IA Program Management	Various	PEO STRI:Orlando, FL	2.098	1.068	Dec 2011	1.127	Dec 2012	1.240	Dec 2013	-		1.240	Continuing	Continuing	Continuing
Integration and Interoperability	Various	PEO STRI:Orlando, FL	0.000	-		0.134	Oct 2012	-		-		-	Continuing	Continuing	Continuing
Target Modernization	Various	PEO STRI:Orlando, FL	0.273	0.178	Dec 2011	0.262	Dec 2012	-		-		-	0.000	0.713	0.714
ETC-IS Program Management	Various	PEO STRI:Orlando, FL	0.164	-		-		-		-		-	0.000	0.164	0.164
		Subtotal	12.265	3.393		3.312		3.015		0.000		3.015			

Product Developmen	Product Development (\$ in Millions)				2012	FY 2	2013	FY 2 Ba	2014 Ise	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
OneTESS	SS/CPFF	General Dynamics:Fairfax, VA	124.769	-		-		-		-		-	0.000	124.769	124.769
OneTESS	SS/CPFF	General Dynamics C4 Systems:Orlando, FL 32826	0.000	3.278	Dec 2011	8.158	Dec 2012	0.494	Dec 2013	-		0.494	Continuing	Continuing	Continuing

PE 0604715A: *Non-System Training Devices - Eng Dev* Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604715A: Non-System Training

Devices - Eng Dev

PROJECT

241: Nstd Combined Arms

DATE: April 2013

Product Developme	nt (\$ in M	illions)		FY	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
CTIA	C/CPFF	Lockheed Martin Inc.:Orlando, FL	57.091	-		-		-		-		-	0.000	57.091	57.091
CTIA	SS/CPFF	TBS:TBS	1.585	-		-		-		-		-	0.000	1.585	4.886
CTIA	C/CPFF	General Dynamics C4 Systems:Orlando, FL	1.661	1.516	Dec 2011	1.288	Dec 2012	0.455	Dec 2013	-		0.455	Continuing	Continuing	Continuing
CTC-IS	C/FFP	Northrop Grumman Technical Services:Herndon, VA	8.806	4.660	May 2012	14.023	May 2013	2.547	May 2014	-		2.547	Continuing	Continuing	Continuing
HITS	C/FFP	Riptide:Orlando, FL	1.379	-		-		-		-		-	0.000	1.379	1.379
HITS	C/IDIQ	General Dynamics C4 Systems:Orlando, FL 32826	0.000	0.688	May 2012	0.963	May 2013	-		-		-	0.000	1.651	1.651
MSTC Development	C/FP	Multiple:Various	0.732	1.295	May 2012	0.815	Jan 2013	-		-		-	Continuing	Continuing	Continuing
EST Development	SS/FP	TBD:Various	1.528	-		-		-		-		-	Continuing	Continuing	Continuing
EST PEQ-15A	C/FP	TBS:TBD	0.000	-		0.993	Jan 2013	-		-		-	0.000	0.993	0.000
EST Enhanced Capabilities	C/FFP	TBS:TBD	0.000	-		-		0.800	Jan 2014	-		0.800	0.000	0.800	0.000
LVC-IA Development	C/CPAF	Cole Engineering Services, Inc:Various	11.309	5.897	Dec 2011	6.264	Jun 2013	6.211	Jun 2014	-		6.211	Continuing	Continuing	Continuing
Integration and Interoperability	TBD	PEO STRI:Orlando, FL	0.000	-		0.978	Jun 2013	-		-		-	0.000	0.978	0.978
Target Modernization	C/CPFF	General Dynamics C4 Systems:Orlando, FL	2.136	1.532	Dec 2011	1.410	Dec 2012	-		-		-	0.000	5.078	5.078
Congressional Add Center of Excellence for Military Operations in Urban Terrain and Cultural Trn	C/FP	Multiple:Various	2.996	-		-		-		-		-	0.000	2.996	2.996
ETC-IS	SS/CPFF	General Dynamics C4 Systems:Orlando, FL 32826	4.836	-		-		-		-		-	0.000	4.836	0.000

PE 0604715A: *Non-System Training Devices - Eng Dev* Army

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DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0604715A: Non-System Training 241: Nstd Combined Arms BA 5: System Development & Demonstration (SDD) Devices - Eng Dev FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type **Activity & Location** Years Cost Cost Complete Contract Cost Date Cost Date Date Date Cost Cost 218.828 18.866 34.892 10.507 0.000 10 507 Subtotal FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target All Prior Method Performing Award Award Award Award **Cost To** Total Value of Cost **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date **Date** Cost **Date** Cost Complete Cost Contract OneTESS Various:Orlando, FL 6.596 Various 6.596 0.000 6.596 OneTESS Various Various: Various 0.000 0.262 Dec 2011 0.000 0.262 0.262 **CTIA** Various Various:Various 11.392 0.366 Dec 2011 0.393 Dec 2012 0.418 Dec 2013 0.418 Continuing Continuing Continuing **Target Modernization** Various Various:Various 0.082 0.054 Dec 2011 0.056 Dec 2012 0.000 0.192 0.192 Subtotal 18.070 0.682 0.449 0.418 0.000 0.418 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method All Prior **Cost To** Performing Award Award Award Award **Total** Value of **Cost Category Item** Cost Cost Contract & Type Activity & Location Years Date Cost **Date Date** Cost **Date** Cost Complete Cost OneTESS Development & Multiple:Orlando, FL Various 4.162 0.000 4.162 4.162 Test OneTESS Test Support Various Multiple:Orlando, FL 0.000 0.280 Dec 2011 1.000 Dec 2013 1.000 Continuing Continuing Continuing HITS Various Various:Orlando, FL 0.740 0.000 0.740 0.740 LVC-IA Test Support Various Multiple:Orlando, FL 1.285 0.923 Dec 2011 0.961 Dec 2012 1.000 Dec 2013 1.000 Continuing Continuing Continuing Multiple:Orlando, FL **IFDFS** Various 0.519 0.000 0.519 0.519 Subtotal 6.706 1.203 0.961 2.000 0.000 2.000 Target All Prior FY 2014 FY 2014 FY 2014 Cost To Total Value of Years FY 2012 FY 2013 Base oco Total Complete Cost Contract 39.614 15.940 0.000 15.940 Project Cost Totals 255.869 24.144

Remarks

PE 0604715A: Non-System Training Devices - Eng Dev Army

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PROJECT

PE 0604715A: Non-System Training

Devices - Eng Dev

241: Nstd Combined Arms

		FY 2	2012 FY 2013				F١	<sup>201</sup>	4		FY	<b>2</b> 0	15			FΥ	201	6		F١	<b>/</b> 20	17			FY:	2018	3			
	1	2	3	4	1	2	3	4	1	2	2 3	4	1	2	2	3	4	1	2	3	4	1	2	2 ;	3	4	1	2	3	4
OneTESS MS C						,				,				·			·				,	'	·			·				
HITS Development																														
MSTC MTES Development																														
MSTC System Developments																														
EST PEQ-15A																														
EST Enhanced Capabilities																														
LVC-IA - Version 2																														
LVC-IA - Version 3																														
LVC-1A - Version 4																														
I2 Development																														

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0604715A: Non-System Training 241: Nstd Combined Arms

BA 5: System Development & Demonstration (SDD)

Devices - Eng Dev

## Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
OneTESS MS C	3	2014	3	2014
HITS Development	3	2012	4	2018
MSTC MTES Development	3	2012	1	2014
MSTC System Developments	2	2013	4	2015
EST PEQ-15A	2	2013	1	2015
EST Enhanced Capabilities	2	2014	4	2018
LVC-IA - Version 2	1	2013	4	2014
LVC-IA - Version 3	1	2015	4	2016
LVC-1A - Version 4	1	2017	4	2018
I2 Development	1	2013	4	2013

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 A	rmy							DATE: Apr	il 2013	
APPROPRIATION/BUDGET AC 2040: Research, Development, T BA 5: System Development & De	est & Evalua					•	ATURE /stem Traini	ing	PROJECT 573: Progra Training Sp		ve Office Si	mulation,
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
573: Program Executive Office Simulation, Training Spt	-	5.062	5.173	3.040	-	3.040	3.059	2.900	3.902	3.210	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

### Note

## A. Mission Description and Budget Item Justification

In support of Non-System Training Devices (NSTD), this project funds the US Army Program Executive Officer Simulation, Training and Instrumentation (PEO STRI) core operations supporting development of training devices and simulations by PEO STRI project managers (PM TRADE, PM ITTS, PM CATT, and PM Constructive Simulation) FY 2014 funds labor in support of PEO operations.

FY 2012	FY 2013	FY 2014
5.062	5.173	3.040
0	0	
5.062	5.173	3.040
	5.062	5.062 5.173 0 0

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PE 0604715A: Non-System Training Devices - Eng Dev Army

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0604715A: Non-System Training	573: Program Executive Office Simulation,
BA 5: System Development & Demonstration (SDD)	Devices - Eng Dev	Training Spt
C. Other Program Funding Summary (\$ in Millions)		
N/A		
Remarks		
D. Acquisition Strategy		
N/A		
E. Performance Metrics	Land to Control to EV 0040 And De Control	Policy I office Post data May 2040
Performance metrics used in the preparation of this justification materia	il may be found in the FY 2010 Army Performand	e Budget Justification Book, dated May 2010.

PE 0604715A: *Non-System Training Devices - Eng Dev* Army

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604715A: Non-System Training

Devices - Eng Dev

**PROJECT** 

573: Program Executive Office Simulation,

Training Spt

Management Services (\$ in Millions)		lillions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Program Management- PEO STRI	Various	PEO STRI:Orlando, FL	4.275	5.062	Dec 2011	5.173	Dec 2012	3.040	Dec 2013	-		3.040	Continuing	Continuing	Continuing
Government Program Management - BCT-M	Various	PEO STRI:Orlando, FL	0.394	-		-		-		-		-	0.000	0.394	0.394
		Subtotal	4.669	5.062		5.173		3.040		0.000		3.040			
			All Brion					EV 1	2014	EV 2	1014	EV 2014	Cost To	Total	Target

													Target
	All Prior					FY 2	2014	FY 2	2014	FY 2014	Cost To	Total	Value of
	Years	FY 2	012	FY 2	013	Ва	se	00	co	Total	Complete	Cost	Contract
Project Cost Totals	4.669	5.062		5.173		3.040		0.000		3.040			

Remarks

PE 0604715A: *Non-System Training Devices - Eng Dev* Army

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