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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	26.848	29.981	44.787	-	44.787	33.504	35.769	33.602	34.679	Continuing	Continuing
241: *NSTD COMBINED ARMS*	24.215	24.834	39.614	-	39.614	28.057	29.952	27.255	27.948	Continuing	Continuing
573: *Program Executive Office Simulation, Training SPT*	2.633	5.147	5.173	-	5.173	5.447	5.817	6.347	6.731	Continuing	Continuing

Note

None required

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 2013 Project 241 funds significant development efforts on the Combat Training Center Instrumentation Systems (CTC-IS), Homestation Instrumentation Training System (HITS), Live, Virtual, Constructive Integrating Architecture (LVC-IA), Integration and Interoperability (I2), Engagement Skills Trainer 2000 (EST 2000), Medical Simulation Training Center (MSTC), Target Modernization, One Tactical Engagement Simulation System (OneTESS), formerly Live Tactical Engagement Simulation System (L-TESS), and further implementation of Live Training Transformation (LT2) through development of the Common Training Instrumentation Architecture (CTIA).

FY 2013 Project 573 will provide for minimum 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).

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B. Program Change Summary ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**
Previous President's Budget	27.756	30.021	44.483	-	44.483
Current President's Budget	26.848	29.981	44.787	-	44.787
Total Adjustments	-0.908	-0.040	0.304	-	0.304
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.665	-			
• Adjustments to Budget Years	-0.243	-0.040	0.304	-	0.304

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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
241: *NSTD COMBINED ARMS*	24.215	24.834	39.614	-	39.614	28.057	29.952	27.255	27.948	Continuing	Continuing
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 Range Communication System at the National Training Center (NTC), 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 Homestation Instrumentation Training System (HITS) provides a high-fidelity deployable instrumented training capability to support platoon thru battalion level Live Force-on-Force Training. HITS tracks locations of soldiers, vehicles, and simulates weapons effects and engagements, allowing units to Train as they Fight against live opponents. HITS provides accurate feedback to training units. HITS consists of light deployable components that can be rapidly assembled/disassembled and transported to support deployed training. HITS integrates with future and legacy I-MILES. HITS is a member of the LT2 family of training systems and shares several hardware and software components with the CTC-IS. HITS is required for the Live function of Live-Virtual-Constructive Integrated Training Environment.

The Medical Simulation Training Center (MSTC) program provides a standardized combat medical training capability to sustain and validate Combat Medic's skills and to support Combat Lifesaver training for Active, Reserve and National Guard components, while being capable of training Joint, Interdepartmental, and Coalition partner organizations to better prepare personnel for medical interventions under combat conditions. Each MSTC system is made of sub-systems, to include the Virtual Patient System (VPS) and the Medical Training Evaluation System (MTES). The VPS contains multiple training devices, delivering increasing degrees of fidelity and trauma patient responses. MTES provides networked training and training management, with instruction and performance tracking/reporting capability. The MSTC system combines training devices, standardized programs of instruction, skilled instructors, adaptive scenarios, and tactical lane training into a cohesive, standardized, training platform for combat medicine.

The Engagement Skills Trainer (EST 2000) is an indoor, small arms, marksmanship training simulator for individuals and groups with a standard mix of light, heavy and crew-served weapons used in Overseas Contingency Operations (OCO) and support of Decisive Operations (DO). The EST 2000 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

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scenarios. As the only validated and accredited virtual small arms training system, the EST 2000 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 both Joint and Army Mission Command Systems. The LVC-IA defines the "how" information is exchanged among the 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.

Target Modernization provides for the development of advanced training target related technologies focused on enhancing threat realism and engagement feedback, development of a non-contact hit sensor to support counter defilade and area effects training, and development/integration of alternate energy (Green) solutions. Target Modernization provides for the support of changes in doctrine/weapons and alignment to the CTIA Product-Line framework and LVC-ITE.

One Tactical Engagement Simulation System (OneTESS), formerly Live Tactical Engagement Simulation System (L-TESS) will provide 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. It will be interoperable with current and future Instrumentable-Multiple Integrated Laser Engagement System (I-MILES) Line of Sight (LOS) laser based systems. 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.

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 2013 Project 241 funds significant development efforts on the Combat Training Center Instrumentation Systems (CTC-IS), Homestation Instrumentation Training System (HITS), Live, Virtual, Constructive Integrating Architecture (LVC-IA), Integration and Interoperability (I2), Engagement Skills Trainer 2000 (EST 2000), Medical Simulation Training Center (MSTC), Target Modernization, 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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Common Training Instremention Architecture (CTIA) program.	2.054 0	1.935 0	1.681	-	1.681

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Articles:					
Description: Continue EMD phase contract activities for the CTIA program to provide the common architecture capabilities. *FY 2011 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 2012 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 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 Base 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 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.					
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Combat Training Center Instrumentation System (CTC-IS). *Articles:* *Description:* Continue EMD phase contract activities for the CTC-IS. *FY 2011 Accomplishments:*	4.3480	4.8090	14.023	-	14.023

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Combat Training Center Instrumentation System (CTC-IS) funded 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). Funding was also being used to develop a common Range Communications System (RCS) that can be implemented at all three Combat Training Centers for increased entity tracking coverage and accuracy in order to increase After Action Review fidelity for Brigade Combat Team rotations to better prepare units for deployment. *FY 2012 Plans:* 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). Funding is also being used to develop a common Range Communications System (RCS) that can be implemented at all three Combat Training Centers for increased entity tracking coverage and accuracy in order to increase After Action Review fidelity for Brigade Combat Team rotations to better prepare units for deployment. *FY 2013 Base Plans:* 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). Funding is also being used to develop a common Range Communications System (RCS) that can be implemented at all three Combat Training Centers for increased entity tracking coverage and accuracy in order to increase After Action Review fidelity for Brigade Combat Team rotations to better prepare units for deployment.					
Title: Government Program Management for the Combat Training Center Instrumentation System (CTC-IS) program. *Articles:* **Description:** Government Program Management for the CTC IS program. *FY 2011 Accomplishments:* Program Management for the Combat Training Center Instrumentation System (CTC-IS) program. *FY 2012 Plans:* Program Management for the Combat Training Center Instrumentation System (CTC-IS) program. *FY 2013 Base Plans:*	0.4490	0.5440	1.230	-	1.230

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Program Management for the Combat Training Center Instrumentation System (CTC-IS) program.					
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Homestation Instrumentation Training System (HITS) program. *Articles:*	-	0.7080	0.963	-	0.963
Description: EMD phase contract activities for the HITS program. *FY 2012 Plans:* Develop, integrate, and test new and upgraded software capabilities for the Home Station Instrumentation Training System (HITS). These capabilities are upgrading the operating system to Windows 7 and Microsoft Server 2008 and the associated applications into a new HITS baseline version 3.0. This software upgrade is critical to sustaining a training system based on COTS software, and for maintaining Information Assurance accreditation. *FY 2013 Base Plans:* Integrate, and test Synthetic Environment Core (SE Core) into the Home Station Instrumentation Training System (HITS) Exercise Control (EXCON) to establish a common terrain database among all components within the Live, Virtual, and Constructive Integrated Training Environment. The HITS Capabilities Production Document (CPD) requires the integration of SECore. Develop, integrate, and test the OneTESS Mortar interface with the HITS EXCON to expand the scope of provided instrumentated training to mortar teams and platoons.					
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Medical Simulation Training Center (MSTC). *Articles:*	-	1.3380	0.815	-	0.815
Description: EMD phase contract activities for the MSTC program. *FY 2012 Plans:* Development within the Virtual Patient System (VPS) of an effective Tetherless Mannequin (TLM). Develop Virtual Patient training capability and a Medical Training Evaluation System (MTES). MTES will have capability to use Army Knowledge Online to access the training and interoperate with the Virtual Patient System. Develop mobile training capability to support remote site training. *FY 2013 Base Plans:* Development of the Instructor Support System (ISS - TADSS Application) to incorporate new injuries and part task trainers and to improve existing part task trainers. Development of ISS (Trauma Immersion) for the use					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
of immersive, virtual, medical environments. Development of Medical Simulation Training Center (Mobile) for the capability to stand up a mobile training center in remote locations. Enhancement of Virtual Patient System (VPS) Tetherless Mannequin to implement autonomous casualty system technology. Develop multi-lingual, voice recognition, haptic enabled, artificial intelligence (AI) capabilities, and open architecture for other systems and applications to interface with MSTC systems.					
Title: Government Program Management for the Medical Simulation Training Center (MSTC) program. **Articles:** **Description:** Government Program Management for the MSTC program. **FY 2012 Plans:** Program management costs associated with the FY12 Medical Training Evaluation System (MTES) system. **FY 2013 Base Plans:** Program management costs associated with the FY13 Medical Simulation Training Center (MSTC) development efforts.	-	0.1910	0.220	-	0.220
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Engagement Skills Trainer 2000 (EST 2000) program. **Articles:** **Description:** EMD phase contract activities for the Engagement Skills Trainer 2000 (EST) program. **FY 2012 Plans:** EST 3D modeling to accurately portray all battlefield effects, in accordance with the Contemporary Operating Environment (COE), across the full range of military operations including: friendly and enemy forces and their doctrine, tactics, techniques and procedures; all military recognized terrain; atmospheric and weather conditions; specific enemy and friendly vehicles and equipment; dynamic, correlated terrain; the effects of munitions on personnel, vehicles and structures. **FY 2013 Base Plans:** EST 2000 prototyping of the AN/PEQ 15-A Laser Aiming Device. The AN/PEQ 15-A offers exceptional functionality in the field for maximum visibility. Operators can easily switch between the visible laser, IR laser, IR illuminator or a combination of both laser and illuminator. Ideal for special operations or covert missions, the DBAL-A2 ensures performance in the toughest conditions and situations. Fielded in Iraq, Afghanistan and by multiple law enforcement agencies, the DBAL-A2 is setting a higher standard for aiming lasers. EST 2000	-	0.3580	0.993	-	0.993

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
prototyping of the M145 Machine Gun Optic. The M145 Machine Gun Optic (MGO), a variant of the C79 optical scope, is a small arms scope manufactured by ELCAN Optical Technologies with 3.4x28 magnification. It was developed for the U.S. Army and is commonly mounted on M240 and M249 machine guns. The reticle is illuminated by a battery-powered LED with varying intensity settings.					
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Live, Virtual, Constructive Integrating Architecture (LVC-IA) program. *Articles:*	5.7370	6.1210	6.264	-	6.264
Description: Continue EMD phase contract activities for the LVC-IA program. **FY 2011 Accomplishments:** Continued to develop system and performed design, development, integration and demonstration of the Live, Virtual, Constructive Integrating Architecture (LVC-IA) Version 1 capability. The LVC Integrating Architecture includes common LVC components. **FY 2012 Plans:** Complete system development, integration and demonstration of Live, Virtual, Constructive Integrated Archiectecture (LVC-IA) Version 1 capability. **FY 2013 Base Plans:** Begin system development and perform design, development, integration and demonstration of the Live, Virtual, Constructive Integrating Architecture (LVC-IA) Version 2 capability.					
Title: Government Program Management for the Live, Virtual, Constructive Integrating Architecture (LVC-IA) program. *Articles:*	1.0680	1.0680	1.127	-	1.127
Description: Government Program Management for the LVC-IA program. **FY 2011 Accomplishments:** The Government Program Management Office for LVC-IA supported the design, development and integration of Version 1 of LVC-IA. Funding supported manpower, facilities, training and operations and maintenance. **FY 2012 Plans:**					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**
The Government Program Management Office for LVC-IA supports the engineering and manfacuring development phase. Funding supports manpower, facilities, training, operations and maintenance and other infrastructure. ***FY 2013 Base Plans:*** The Government Program Management Office for LVC-IA supports the engineering and manufacturing development phase. Funding supports manpower, facilities, training, operations and maintenance and other infrastructure.					
Title: Government System Test and Evaluation for the Live, Virtual, Constructive Integrating Architecture (LVC-IA) program. ***Articles:*** ***Description:*** Government System Test and Evaluation for the LVC-IA program. ***FY 2011 Accomplishments:*** LVC-IA continued test support on system design and development for SDD Version 1. Supported integration testing on developed components for LVC-IA with other Mission Command Systems and LVC Training Aids. Conducted federation integration event (FIE), functional verification (FV) events for LVC-IA Builds 0 & 1. ***FY 2012 Plans:*** LVC-IA continue integration testing support on developed components for LVC-IA for inter-operability with TADSS and other Mission Command Systems. Conduct FIE, FV & system measurement of performance (SMP) events for LVC-IA Build 2. Complete Test Readiness Review (TRR) as well as Government Acceptance Testing (GAT). ***FY 2013 Base Plans:*** LVC-IA continues test support on the engineering and manufacturing development phase for Version 2. Will also support integration testing on developed components for LVC-IA with other Mission Command Systems and LVC Training Aids. Conduct federation integration event (FIE) and functional verification (FV) events for LVC-IA.	0.9230	0.9230	0.961	-	0.961
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Target Modernization program. ***Articles:*** ***Description:*** EMD phase contract activities for the Target Modernization program.	2.2180	1.6360	1.466	-	1.466

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
FY 2011 Accomplishments: Target Modernization initiated development of target system technologies which provide enhanced realism (look and behavior), threat/friend identification, and training performance feedback mechanisms. Target Modernization initiated integration with Live Training Transformation (LT2) and Live, Virtual, and Constructive (LVC) simulation interoperability. **FY 2012 Plans:** Target Modernization continues development of target system technologies which provide enhanced realism (look and behavior), threat/friend identification, and training performance feedback mechanisms. **FY 2013 Base Plans:** Target Modernization continues development of target system technologies which provide enhanced realism (look and behavior), threat/friend identification, and training performance feedback mechanisms.					
Title: Government Program Management for the Target Modernization program. **Articles:** *Description:* Government Program Management for Target Modernization. **FY 2011 Accomplishments:** Program Management for the Target Modernization program. **FY 2012 Plans:** Program Management for the Target Modernization program. **FY 2013 Base Plans:** Program Management for the Target Modernization program.	0.273 0	0.179 0	0.262	-	0.262
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the One Tactical Engagement Simulation System (OneTESS) program [formerly NLOS and L-TESS]. **Articles:** *Description:* Continue EMD phase contract activities for the OneTESS program [formerly NLOS and L-TESS]. **FY 2012 Plans:**	-	3.730 0	8.158	-	8.158

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continues development of OneTESS (formerly Non Line of Sight (NLOS)/L-TESS) capability for Real Time Casualty Assessment (RTCA). Perform Developmental Test/Operational Test (DT/OT) efforts that support the training and testing communities into systems under development. Support Milestone C documentation. *FY 2013 Base Plans:* Begin development of the Increment 2 effort (Fire Control Platforms for Stryker Brigade Combat Teams (SBCT) and/or Heavy Brigade Combat Teams (HBCT).					
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the One Tactical Engagement Simulation System (OneTESS) program. **Articles:** *Description:* Continue EMD phase contract activities for OneTESS. *FY 2011 Accomplishments:* Continued development of One Tactical Engagement Simulation System (One TESS).	7.0350	-	-	-	-
Title: Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS). **Articles:** *Description:* Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS). *FY 2011 Accomplishments:* Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS).	0.1100	-	-	-	-
Title: Government Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS). **Articles:** *Description:* Government Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS). *FY 2012 Plans:*	-	1.2940	0.339	-	0.339

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Government Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS). *FY 2013 Base Plans:* Government Program Management for the One Tactical Engagement Simulation System (OneTESS) program (formerly NLOS and L-TESS).					
Title: Development Activity for the Integration and Interoperability (I2) Program. *Description:* Development of the I2 Program. *FY 2013 Base Plans:* Document capabilities (intra and inter domain) and user capability events. Formalize the interoperability documentation and identify limitations/interoperability issues needing resolution, assess opportunities for capability expansion, develop time-phased and cost estimated interoperability execution plan and ensure proposals for enhancement are in sync with the plan. Identify/institutionalize a set of common components, integrate common capabilities, and develop baseline management processes for the common components. Identify target/programs (non-system, system, other) than can benefit from and share the cost of systematic re-use of common components.	-	-	0.978	-	0.978
Title: Government Program Management for the Integration and Interoperability (I2) Program. *Description:* Government Program Management for the I2 Program. *FY 2013 Base Plans:* Program management costs associated with the FY13 I2 efforts.	-	-	0.134	-	0.134
Accomplishments/Planned Programs Subtotals	**24.215**	**24.834**	**39.614**	**-**	**39.614**

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• Training Devices, Non-System: *Training Devices, Non-System*	349.014	180.892	125.251	27.250	152.501		243.698	230.845	190.203	Continuing	Continuing
• CTC Support: *CTC Support*	36.668	46.117	104.649	7.000	111.649		152.951	97.999	99.192	Continuing	Continuing

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Army		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices - Eng Dev*	**PROJECT** 241: *NSTD COMBINED ARMS*

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 2013 Army										DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*					**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices -* *Eng Dev*					**PROJECT** 241: *NSTD COMBINED ARMS*		

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OneTESS Program Management (formerly NLOS and L-TESS)	Various	PEO STRI:Orlando, FL	8.046	-		-		-		-	0.000	8.046	8.046
OneTESS Program Management (formerly NLOS and L-TESS)	Various	PEO STRI,:Orlando, FL	-	1.294		0.339		-		0.339	Continuing	Continuing	Continuing
CTC-IS Program Management	Various	PEO STRI:Orlando, FL	0.879	0.544		1.230		-		1.230	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		0.220		-		0.220	Continuing	Continuing	Continuing
EST 2000 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		1.127		-		1.127	Continuing	Continuing	Continuing
Integration and Interoperability	Various	PEO STRI:Orlando, FL	-	-		0.134		-		0.134	Continuing	Continuing	Continuing
Target Modernization	Various	PEO STRI:Orlando, FL	0.273	0.179		0.262		-		0.262	Continuing	Continuing	Continuing
ETC-IS Program Management	Various	PEO STRI:Orlando, FL	0.164	-		-		-		-	0.000	0.164	0.000
Subtotal			12.265	3.276		3.312		-		3.312			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OneTESS (formerly NLOS and L-TESS)	SS/CPFF	General Dynamics:Fairfax, VA	124.769	-		-		-		-	0.000	124.769	125.023
OneTESS (formerly NLOS and L-TESS)	SS/CPFF	General Dynamics C4 Systems:Orlando, FL 32826	-	3.291		8.158		-		8.158	Continuing	Continuing	Continuing
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:Orlando, FL	1.661	1.569		1.288		-		1.288	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army			DATE: February 2012								
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*			**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices - Eng Dev*					**PROJECT** 241: *NSTD COMBINED ARMS*			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
CTC-IS	C/FFP	TBS:TBS	8.806	4.809		14.023		-		14.023	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	-	0.708		0.963		-		0.963	Continuing	Continuing	Continuing
MSTC Development	C/FP	Multiple:Various	0.732	1.338		0.815		-		0.815	Continuing	Continuing	Continuing
EST 2000 Development	SS/FP	Cubic Simulation Systems Division:Various	1.528	0.358		-		-		-	Continuing	Continuing	Continuing
EST 3D Modeling	TBD	TBS:TBD	-	-		0.993		-		0.993	0.000	0.993	0.000
LVC-IA Development	C/CPAF	Cole Engineering Services, Inc:Various	11.309	6.121		6.264		-		6.264	Continuing	Continuing	Continuing
Integration and Interoperability	TBD	PEO STRI:Orlando, FL	-	-		0.978		-		0.978	Continuing	Continuing	Continuing
Target Modernization	C/CPFF	General Dynamics:Orlando, FL	2.136	1.582		1.410		-		1.410	Continuing	Continuing	Continuing
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
Subtotal			218.828	19.776		34.892		-		34.892			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
OneTESS (former NLOS and L-TESS)	Various	Various:Orlando, FL	6.596	-		-		-		-	0.000	6.596	6.596
OneTESS (former NLOS and L-TESS)	Various	Various:Various	-	0.262		-		-		-	0.000	0.262	0.262

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army		DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604715A: Non-System Training Devices - Eng Dev	PROJECT 241: NSTD COMBINED ARMS

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CTIA	Various	Various:Various	11.392	0.366		0.393		-		0.393	Continuing	Continuing	Continuing
Target Modernization	Various	Various:Various	0.082	0.054		0.056		-		0.056	Continuing	Continuing	Continuing
Subtotal			18.070	0.682		0.449		-		0.449			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OneTESS Development & Test (formerly NLOS and L-TESS)	Various	Multiple:Orlando, FL	4.162	-		-		-		-	0.000	4.162	4.162
OneTESS Test Support (formerly NLOS and L-TESS)	Various	Multiple:Orlando, FL	-	0.177		-		-		-	0.000	0.177	0.177
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		0.961		-		0.961	Continuing	Continuing	Continuing
IEDES	Various	Multiple:Orlando, FL	0.519	-		-		-		-	0.000	0.519	0.000
Subtotal			6.706	1.100		0.961		-		0.961			

			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
	Project Cost Totals		255.869	24.834		39.614		-		39.614			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices - Eng Dev*	**PROJECT** 241: *NSTD COMBINED ARMS*

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OneTESS (formerly NLOS and L-TESS) MS C								■																				
HITS Development								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
MSTC MTES Development								■	■	■	■	■	■															
MSTC System Developments										■	■	■	■	■	■	■	■	■	■	■							
EST 2000 System Enhancement Development								■	■	■	■	■	■	■	■	■												
EST 2000 Weapon Optic Enhancement Development										■	■	■	■	■														
LVC-IA - Version 2									■	■	■	■	■	■	■													
LVC-IA - Version 3																	■	■	■	■	■	■	■					
I2 Development								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Army		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices - Eng Dev*	**PROJECT** 241: *NSTD COMBINED ARMS*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
OneTESS (formerly NLOS and L-TESS) MS C	4	2012	4	2012
HITS Development	3	2012	4	2017
MSTC MTES Development	3	2012	1	2014
MSTC System Developments	2	2013	4	2015
EST 2000 System Enhancement Development	3	2012	3	2014
EST 2000 Weapon Optic Enhancement Development	2	2013	2	2014
LVC-IA - Version 2	1	2013	4	2014
LVC-IA - Version 3	1	2015	4	2016
I2 Development	1	2013	4	2017

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army									DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604715A: *Non-System Training Devices -* *Eng Dev*					PROJECT 573: *Program Executive Office Simulation,* *Training SPT*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
573: *Program Executive Office Simulation, Training SPT*	2.633	5.147	5.173	-	5.173	5.447	5.817	6.347	6.731	Continuing	Continuing
Quantity of RDT&E Articles											

Note

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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 2013 funds labor in support of PEO operations.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Government Program Management to support PEO STRI. *Articles:*	2.633 0	5.147 0	5.173	-	5.173
Description: Government Program Management to support PEO STRI. *FY 2011 Accomplishments:* Government Program Management to support PEO STRI labor for project managers in PM TRADE, PM ITTS, PM CATT, and PM Constructive Simulation. *FY 2012 Plans:* Government Program Management to support PEO STRI labor for project managers in PM TRADE, PM ITTS, PM CATT, and PM Constructive Simulation. *FY 2013 Base Plans:* Government Program Management to support PEO STRI labor for project managers in PM TRADE, PM ITTS, PM CATT, and PM Constructive Simulation.					
Accomplishments/Planned Programs Subtotals	2.633	5.147	5.173	-	5.173

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Army		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604715A: *Non-System Training Devices - Eng Dev*	**PROJECT** 573: *Program Executive Office Simulation, Training SPT*

D. Acquisition Strategy

  N/A

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 2013 Army | **DATE:** February 2012

| APPROPRIATION/BUDGET ACTIVITY
2040: *Research, Development, Test & Evaluation, Army*
BA 5: *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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Program Management- PEO STRI	Various	PEO STRI:Orlando, FL	4.275	5.147		5.173		-		5.173	Continuing	Continuing	Continuing
Government Program Management - BCT-M	Various	PEO STRI:Orlando, FL	0.394	-		-		-		-	0.000	0.394	0.394
Subtotal			4.669	5.147		5.173		-		5.173			

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.669	5.147	5.173	-	5.173			

Remarks