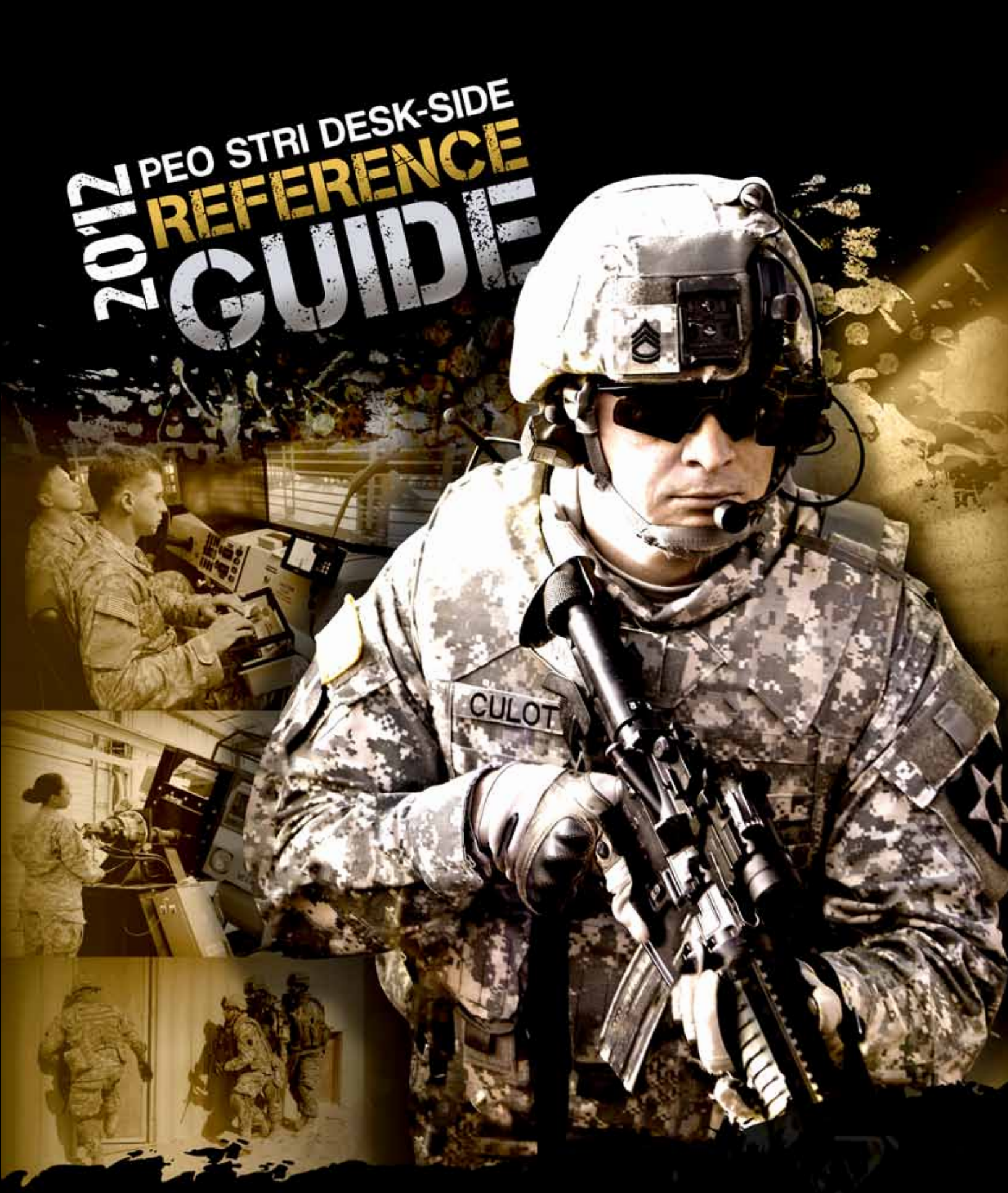
2012 PEO STRI DESK-SIDE REFERENCE GUIDE



U.S. ARMY PROGRAM EXECUTIVE OFFICE
FOR SIMULATION, TRAINING AND INSTRUMENTATION

PEO STRI

A Message from the PEO

James T. Blake, Ph.D. (SES)

General of the Army Omar Bradley once said, "In war there is no second prize for the runner–up." Throughout the Army, and especially at PEO STRI, we are laser-focused on providing our Soldiers with the most up-to-date training devices available to ensure they are second to none.

Training benefits are not constrained by the uniform worn by the individual. Training is a team sport. The tremendous technological advances we are making in simulation, training and testing reach far beyond just benefiting our nation's Warfighters. Through the affiliations that we form in the military, government services, industry and academia, we are able to have a significant impact on the training of not only our own military forces but also those of our coalition partners.

Time and again, our simulation, training, instrumentation and testing products have proven to excel at meeting the training objectives in the field, as well as saving time and money for the units using them.

Let me cite two recent examples of the types of simulation systems being fielded to put our Soldiers in realistic, stressful, mission-oriented training postures that will give them the fighting edge when faced with the realities of combat.

Upon assuming command of the 2nd Infantry Division in South Korea, Maj. Gen. Michael Tucker realized the non-digitized Rodriguez Live Fire Complex (RLFC) did not meet the training standards of the digitized live-fire ranges his previous units had trained on. He turned to PEO STRI to modernize the live-fire complex. Within eight months after the contract was awarded, the RLFC was transformed from a legacy gunnery range to a new world-class facility complete with two digitally enhanced ranges.

Following the Acceptance Testing and achieving Initial Operating Capability, units of the division were conducting live-fire tank gunnery training the next day. As well, a combined live-fire exercise with infantry and armor was successfully completed the next week. Maj. Gen. Tucker was extremely pleased with the quick transformation. "This technology allows us to achieve high-performing killer crews in half the time required when using non-digital ranges," he said. "The unique combination of range technology and terrain allows units to train as they will fight and where they will fight if called upon to defend the Republic of Korea from aggression."

We are also excited about a new training system that will be fielded in 2012. Called the Dismounted Soldier Training System (DSTS), it supports Chairman of the Joint Chiefs of Staff Gen. Martin E. Dempsey's stated goal of focusing on squad-level training.

Soldiers will be able to enter a nondescript training room, each taking their place on an assigned 10 X 10 foot pad, and within minutes be virtually transported together to a geo-specific combat zone that's alive with the 3-D sights and 360-degree sounds of the battlefield. They can then carry out their assigned mission in a totally immersive environment. To add to the realism of battle, the system will be able to gauge the effects of the injuries sustained in the virtual environment either from impact munitions such as bullets and grenades or explosive effects from Improvised Explosive Devices (IEDs).

The DSTS will also accurately simulate the movement of ground vehicles, aircraft, dismounted infantry and guided weapons, as well as conforming visually with the environment by identifying such elements as footprints, disturbed soil, rolling terrain and dense vegetation. Now Soldiers can train in any virtual environment including nighttime, daylight, and snow, rain or other weather elements that "Mother Nature" or, in this case, the trainer can throw at them.

When people hear about new Army training devices, their thoughts are often isolated to simulators, such as these, that prepare frontline Soldiers for combat. At PEO STRI, however, we are proud of the full range of training products and services we provide our Soldiers regardless of their mission. As you look through this Desk-Side Reference Guide, you will learn about high-tech simulators that train Soldiers on everything from operating the Army's fleet of watercraft to familiarizing them on heavy construction equipment.

It's an impressive line-up of the best training devices available to the best Soldiers in the world. Day in and day out, they give us their very best. They deserve nothing less from us. I am confident that we, along with other Army organizations, our sister services, industry, academia, and Congress, are doing just that.

Mission first, people always! Army Strong!

Dr. James T. Blake
Program Executive Officer
U.S. Army Program Executive Office for Simulation, Training and Instrumentation

Mission

Provide Simulation, Training and Testing Capabilities for the Nation's Security.

Vision

The Acquisition and Contracting Center of Excellence providing Simulation, Training and Testing Capabilities for the Nation's Security.

Motto

Putting the power of simulation into the hands of the Warfighter.

Strategic Goals

Reference PEO STRI Goals, Objectives and Resources. The PEO STRI strategic goals are shown below:

Goal 1.0 Provide STRI Capabilities to support Full Spectrum Operations.

Goal 2.0 Ensure capabilities meet the needs of the Integrated Training and T&E Environments.

Goal 3.0 Develop a workforce with expert level acquisition, technical and leadership skills.

Goal 4.0 Promote and sustain excellence in the execution of contracting activities.

PEO STRI Contact Information

Public Affairs Office • 407-384-5224

Industry Customer Contact • 407-384-3773

General Information • 407-384-3500

www.peostri.army.mil

History

In 1974, the U.S. Army recognized the need for new training technologies in the face of the advancing Soviet threat in Europe and established the Project Manager for Training Devices (PM TRADE). In 1976, the Army consolidated PM TRADE with the Army Training Device Agency. During the late 1980s, PM TRADE moved from the Naval Training Center Orlando to Central Florida's Research Park. The Army proved the importance of simulation and training in 1991 with a swift victory in Operation Desert Storm. The U.S. Army's Simulation, Training and Instrumentation Command was activated on August 1, 1992, in Orlando, FL. Then in 2003, Brigadier General Stephen Seay became the first Program Executive Officer for PEO STRI. On June 2, 2005, Dr. James T. Blake was named the organization's first civilian leader. The partnerships that have been established and nurtured over the years have produced a thriving and responsive simulation industry that is proudly referred to as the center of excellence for simulation and training.

Organization

PEO STRI is the U.S. Army's acquisition and contracting center of excellence for simulation, training and testing capabilities. PEO STRI annually executes programs valued at more than $2.7 billion with a workforce of 1,300 military, civilian and contractor personnel. Acquisition programs cover 1650 contracts valued at more than $20.4 billion and support 5,500 training systems at 415 sites in 18 countries worldwide. In addition, PEO STRI's Foreign Military Sales program supports 51 countries. Headquartered in Central Florida's Research Park, the organization also has geographically separated offices in Redstone Arsenal, AL, Fort Bliss, TX, and Fort Huachuca, AZ.

Accomplishments

Among many recent achievements, PEO STRI proudly fielded the first Soldier Tracking System to Fort Bragg, NC, to assist in the tracking and safety of Special Operations Soldiers during the land navigation qualification course. PM TRADE's Homestation Instrumentation Training System was reconfigured in less than a month to become an interim solution for tracking Soldiers during the qualification course. The Soldier Tracking System proved to be highly successful its first time in use, so useful that three injured Soldiers used the panic button to call for help. In addition to Special Operation Soldiers at Fort Benning, GA, Soldiers all across the Army are benefitting from the work PEO STRI is doing. The Common Driver Trainer program is one example. The trainer, originally designed to teach tank and HMMWV driving, has been modified to teach Soldiers to drive MRAPs, the highest-sought mode of transportation in the combat zone. The program is also an example of PEO STRI's longtime effort to increase acquisition efficiencies. Another example of efficiency is the retention rate of interns in PEO STRI's Acquisition Academy. More than 96% of the 73 interns from all five classes are still with the organization. Additionally, 18 of those graduates have been promoted to Journeymen.

Year in Review

- **More than $2.7 billion in contracting and business operations**
- **Workforce of 1,300 military, civilian and industry personnel**
- **Approximately 5,500 training systems fielded to 415 sites worldwide**
- **Acquisition Center manages 1650 contracts valued at $20.4 billion**
- **Foreign Military Sales supports 51 countries worldwide**

PEO STRI Supports Warfighters in Combat Operations

Nearly all Soldiers deployed to the Overseas Contingency Operations have trained on a PEO STRI-derived device. Some of these training aids and simulations include the Counter Improvised Explosive Device, Engagement Skills Trainer 2000, Mobile Military Operations on Urban Terrain, Aviation Combined Arms Tactical Trainer, Synthetic Environment Core and Medical Simulation Training Centers.

//Contents

MISSION FIRST, PEOPLE ALWAYS!

6 PM CATT

32 PM ConSim

46 PM Field OPS

59 PM ITTS

81 PM TRADE

104 Principal Assistant Responsible for Contracting

106 Business Operations Office

108 Customer Support Group

111 Project Support Group

114 Corporate Information Office

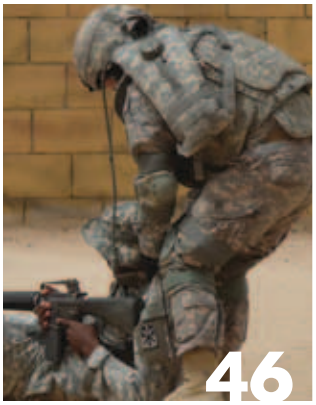
118 Office of Small Business Programs

119 Team Orlando

121 Contact

122 Glossary

126 Index



PUBLISHER'S NOTE

Halldale Media Group, publisher of MS&T, Military Simulation and Training, produced the 2012 PEO STRI Desk-Side Reference Guide.

The Orlando based company has offices in Canada and Europe and is entirely focused on modeling, simulation and training. It also publishes Civil Aviation Training (CAT) magazine, and MEdSim, The Journal of Healthcare Education Simulation and Training (from December 2011). In addition Halldale produces a range of events and a comprehensive M, S and T website. All products support their global communities in improving efficiency and safety via improved training. Content of this guide was compiled by PEO STRI. It was designed by the PEO STRI Graphics Department.

The appearance of advertisements in the Desk-Side Reference Guide does not constitute endorsement by the Program Executive Office for Simulation, Training & Instrumentation. PEO STRI does not exercise any editorial content over the advertisements in the Desk-Side Reference Guide.

HALLDALE MEDIA GROUP

Halldale Media Group
115 Timberlachen Circle,
Suite 2009
Lake Mary, FL 32746-3337
T. (407) 322 5605
F. (407) 322 5604
W. www.halldale.com

★ PM CATT SIMULATORS

- HMMWV Egress Trainer (HEAT)
- Engagement Skills Trainer (EST) 2000

PUTTING THE POWER OF SIMULATION INTO THE HANDS OF THE WARFIGHTER

INTRODUCTION

The Project Manager, Combined Arms Tactical Trainers (PM CATT) manages the development, acquisition, fielding and life-cycle support of the virtual synthetic environment and associated Training Aids, Devices, Simulators and Simulations (TADSS) to support individual, institutional and collective training. PM CATT refers to a group of high-fidelity, interactive, manned simulators; command, control and communications workstations; exercise control stations; After-Action Review (AAR) systems; and the virtual combined arms synthetic environment used to support virtual training up to battalion/task force level. PM CATT's virtual synthetic environment includes large-scale virtual terrain representations with synthetic natural environment effects and accredited Computer Generated Forces (CGF) that replicate adjacent, supporting and opposing forces.

Product Manager Air and Command Tactical Trainers (PM ACTT)

Introduction

The ACTT Program Management Office is responsible for the Aviation Combined Arms Tactical Trainer (AVCATT), all synthetic flight training system simulators, as well as system and non-system training aids, devices, simulators and simulations for Aviation, Air Traffic Control, Army Watercraft, Air Defense, Intelligence and Electronic Warfare, and Command and Control. Projects include various high-fidelity flight, weapons, combat mission simulators, part task trainers and maintenance trainers.

Additional Blackhawk Flight Simulator (ABHFS)

MISSION

To provide Army aviators with state-of-the-art flight simulators allowing them to train for basic, advanced, emergency and instrument flight maneuvers.

DESCRIPTION

The ABHFS program includes UH-60 A/L flight simulators to train individual and crew tasks to standard. Devices were fielded to Fort Drum, NY, Eastern Army National Guard Aviation Training Site and Western Army National Guard Aviation Training Site. The simulators include a full-motion system, a 200 x 45 field-of-view cross-cockpit panorama display, five high-resolution projectors, collimated chin windows, high-performance image generators, night vision goggle compatibility, high-fidelity blade element flight models, fully replicated flight controls, complete Lift Simulation Modernization Program (LSMP) database compatibility for Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) databases, enhanced Instructor Operator Station, and aircraft avionics concurrency. Additional capabilities include portable flight-planning software integration, Semi-Automated Forces threat environment, new IFR databases, training debrief capability and simulation training exercise planning software.

AH-64A Combat Mission Simulator (CMS)

MISSION

To enable Apache crews to develop tactical decision-making skills during realistic mission scenarios in a high-threat environment against interactive targets.

DESCRIPTION

The AH-64A CMS is a two-cockpit system with separate cockpits for the pilot, the copilot/gunner and on-board instructor operator stations. It provides transition and refresher training for experienced aviators in nap-of-the-earth flight, engagement techniques, weapons systems operation and aircraft survivability equipment.

Aviation Combined Arms Tactical Trainer (AVCATT)

MISSION

To provide a collective training system to meet aviation training requirements and to support institutional, organizational and sustainment training for Active and Reserve Army aviation units worldwide for combined arms collective training and mission rehearsal.

DESCRIPTION

AVCATT is a mobile, transportable, multi-station virtual simulation device designed to support unit collective and combined arms training. AVCATT provides six manned modules re-configurable to any combination of attack, reconnaissance, lift and/or cargo helicopters. There are four role-player stations for battalion/squadron staff, combined arms elements, integrated threat or friendly Semi-Automated Forces (SAF). Exercise record/playback with simultaneous After Action Review capability is provided. The Non-Rated Crew Member Manned Module (NCM3), a sub-system of AVCATT, will be a mobile, transportable, multi-station virtual simulation device designed to support training of non-rated crew members in crew coordination, flight, aerial gunnery, hoist and slingload-related tasks.

ABHFS

AH-64A Helicopter

Basic Electronics Maintenance Trainer (BEMT)

MISSION

To support critical electronics training for 43 Maintenance Military Occupational Specialties (MOS) trained at 16 Army/Reserve/National Guard locations.

DESCRIPTION

BEMT is a commercial product used to teach electronics theory. The core of the system is a console with an associated circuit card set to provide instruction in a multitude of specialties including basic electric motors, industrial controls, fiber optics, power supplies, network architectures, automotive electronics, avionics, radio communications and advanced programmable logic control. The systems include representations of digital Test Measurement and Diagnostic Equipment (TMDE). In addition, when used with the appropriate software, the system can be set up to permit self-paced instruction in the classroom.

AVCATT BMC

BEMT

Boom Operator Simulator System (BOSS)

MISSION

To produce, field and maintain 17 BOSS devices for the Air National Guard (ANG) and establish and man a Training Systems Support Center (TSSC). It will also provide configuration

Boom Operator Simulator System (BOSS) (Continued)

management of BOSS software, thus ensuring that all BOSS and MicroBOSS systems have the current version.

DESCRIPTION

The BOSS is a high-fidelity, immersive, continuation trainer for the ANG that replicates the KC-135R, Block 40 boom pod. The program will procure 17 units baselined on an existing prototype BOSS built by the United States Air Force (USAF). The BOSS units will be fielded to ANG sites in both CONUS and OCONUS (Hawaii and Alaska) locations.

C-27J Cockpit Procedures Trainer (CPT)

MISSION

To provide aircraft and cockpit system management training, general and procedural training, instrument flying training, and reinforcement flying training for USAF flight deck crews. The CPT provides many of the same training capabilities as the WST but is geared predominantly towards hands-on, procedural training to practice and demonstrate proficiency in the various training tasks.

DESCRIPTION

The CPT will be designed, fabricated and assembled based on the requirements for a Level 6 Flight Training Device (FTD) as outlined in 14 CFR Part 60, Appendix B and as modified by the C-27J specification. This device will have no motion or a visual system. The cockpit will be an accurate representation of all panels, instruments, controls and furnishings of the aircraft. The CPT will be FAA certified and will require initial and annual certification by the appropriate Simulation Certification (SIMCERT) authority.

C-27J Fuselage Trainer (FuT)

MISSION

To provide practical experience for U.S. Air Force C-27J Loadmaster (LM) personnel in the use of checklists (interior items only), palletized loading, winching, loading of vehicles and rolling stock, loading and rigging for aerial delivery, aeromedical evacuation, and principles of cargo restraint. The FuT will support LM training in a stand-alone mode.

DESCRIPTION

The FuT requirements called for an actual C-27/G-222 fuselage to be used and for specific areas to be simulated in order to accomplish the associated C-27J LM training tasks. The FuT will be designed to provide training in normal and emergency LM procedures.

C-27J Loadmaster Crew Resource Management Trainer (LMCRMT)

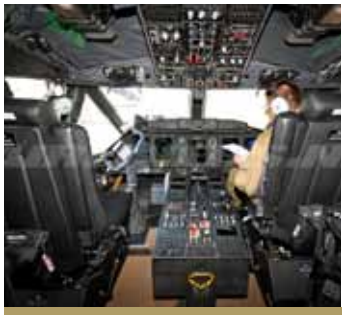
MISSION

To provide classroom training for the C-27J Loadmaster Station to include a Left Hand Simul-Handle, Lock Ratchet Handle, Lock Indicating Wheel, Bomb Rack Manual Release Handle, a Visual Awareness Recognition Screen (VARS), an operational Right Hand Master Control Handle, Static Line Retriever Control Pendant, Intercommunication Control System (ICS) Panel and an Instructor Operator Station (IOS). The LMCRMT will be a stand-alone device linked to the Weapon System Trainer (WST) for communications only. The purpose of the LMCRMT components is to provide basic visual recognition and operational training for the C-27J Loadmaster station.

DESCRIPTION

The LMCRMT will be designed to simulate the Loadmaster Station of a C-27J aircraft. An instructor-operator stations will allow the instructor to observe and control the simulation or allow the student to perform training scenarios without instructor intervention. The LMCRMT will be built as a representational loadmaster crew station (mock-up), i.e., not an exact replica. The aircraft equipment will be mounted on the floor or on a table accessible by the LM student in a manner to resemble the exact relative position as would be found in the aircraft. The LMCRMT will be a stand-alone device linked to the C-27J WST for voice communications only.

BOSS



C-27J Cockpit

C-27J Virtual Cockpit Trainer (VCT)

MISSION

To build a lower level training aid that will incorporate ground-based and flight-based virtual training exercises into the overall training program. The training aid will support instructor-led or self-directed exercises in order to maximize student self-study.

DESCRIPTION

The VCT will be a stand-alone, 14 CFR Part 60, Level 4 aircrew training device that will incorporate ground-based and flight-based virtual training exercises into the C-27J Aircrew Training System (ATS) program. The training device will support instructor-led or self-directed exercises in order to maximize student self-study. The availability of the VCT will increase student capability/proficiency prior to using higher level training devices thus reducing the amount of time these devices are dedicated towards teaching basic aircrew familiarization training.

C-27J Fuselage Trainer

C-27J Virtual Cockpit Trainer

C-27J Weapon System Trainer (WST)

MISSION

To provide full mission simulation complete with a high-resolution vision system and motion platform. The WST will replicate the operation and performance of the aircraft on the ground

C-27J Weapon System Trainer (WST) (Continued)

and in the air throughout the flight envelope in normal, abnormal and emergency conditions.

DESCRIPTION

The WST will be a dynamic vehicle for training U.S. Air Force C-27J pilots, loadmasters and maintenance engine run technicians. The WST will provide for the initial qualification replacement, transition and readiness training of the flight deck crewmembers. The WST will also support refresher training and instrument qualification for flight crewmembers. The WST will be designed to meet the simulation standards of a 14 CFR PART 60, Level D Simulator. The WST will be a stand-alone device until such time as it is connected to the Mobility Air Forces (MAF) Distributed Training Center Network (DTCN). The WST will be connected to the Loadmaster Crew Resource Management Trainer (LMCRMT) for voice communications only.

Engine Room Simulator (ERS)

MISSION

To provide engine room training to crews and officers from entry level to chief engineer. The ERS solution for marine engine room simulators has been designed to meet different platforms for full-scope general marine engineering, maintenance, operation, troubleshooting, casualty control and engineering resource management procedures at a single facility.

DESCRIPTION

The ERS, which consists of a fully integrated system of commercial off-the-shelf hardware and software, provides Army watercraft engineers with real-time, man-in-the-loop simulation training to Army doctrinal standards. The ERS integrates computer-based simulation with vessel-specific, three-dimensional, physically-interactive simulation/stimulation components. The ERS meets the needs of the U.S. Army Transportation School for initial and sustainment training on the marine engineering systems and components of the Theater Support Vessel, Logistic Support Vessel, Landing Craft Utility 2000 and Large Tug.

Global Hawk Sensor Operator Part Task Trainers (GH SOPTT)

MISSION

To provide Global Hawk Block 20/30 RQ-4 Sensor Operator training.

DESCRIPTION

The GH SOPTT system performs simulated operations across the Global Hawk high-altitude, long-endurance intelligence, surveillance and reconnaissance mission spectrum. The trainer

simulates all flight, navigation, air traffic, sensor system, and all other relevant displays and sensor operator crew interfaces. The trainer provides support for the execution and validation of the Global Hawk check list procedures and Training Task List (TTLs). The GH SOPTT system consists of two stations: Sensor Operator (SO) station and Instructor Operator Station (IOS). The GH SOPTT SO stations include the capability to train SOs in the functions they perform in the GH ground station. The GH SOPTT SO station configuration matches the look and feel, scale, physical orientation, and equipment positioning of the actual GH ground station. The GH SOPTT SO station simulates and presents data analysis functionality.

C-27J Weapon System Trainer

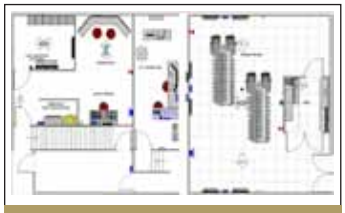
Joint High Speed Vessel (JHSV)

MISSION

To provide the Army with an upgraded, high-speed ship simulator replacing the Theater Support Vessel (TSV) with the JHSV. The JHSV will be added to the Maritime Integrated Training System (MITS) family of maritime training simulators to provide a total training solution for the primary navigation, seamanship and ship handling, and the Engine Room Simulator (ERS).

DESCRIPTION

The JHSV trainer will be fully integrated and compatible with the existing MITS for integrated exercises. The JHSV Program will update key elements of the MITS such as the Full Mission Bridge (FMB) and the ERS. The JHSV FMB simulator will replicate the key features and functions necessary to train essential operating tasks carried out to doctrinal standards. This includes the training of Army mariners to published competency requirements. These objectives are consistent with the required simulation objectives for a Class A bridge simulator. The JHSV ERS system is provided as an upgrade to the existing MITS ERS. The JHSV ERS system upgrades the TSV ERS elements of the existing multi-ship ERS system to the JHSV machinery system. All of the other existing capabilities of the ERS, such as the instructor station, evaluation system and CCTV monitoring system, remain in place and fully functional. Existing ERS elements will be upgraded with the newest JHSV software version in order to ensure native compatibility across all ERS student stations and the Instructor/Operator Station (IOS).



Engine Room Simulator

Joint High Speed Vessel

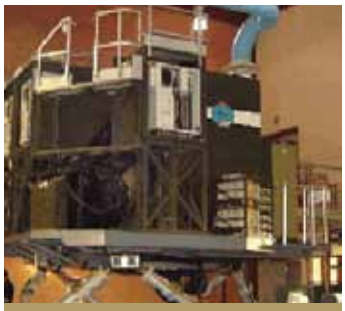
Lift Simulator Modernization Program (LSMP)

MISSION

To provide Army aviators with concurrent, state-of-the-art flight simulators, allowing them to train for basic, advanced, emergency and instrument flight maneuvers.

DESCRIPTION

The LSMP is a concurrency and technology refresh program for all UH-60A/L and CH-47D Flight Simulators (FS) modernizing visual and computer equipment and incorporating aircraft



LSMP

Lift Simulator Modernization Program (LSMP) (Continued)

concurrency upgrades. Capabilities that were implemented at all FS locations during the LSMP program included visual terrain databases with geo-specific local instrument gaming areas, fully operational capability for the ARC-220 radio, an Uninterruptible Power Supply (UPS) and power conditioning capability. The CH-47D FS received a new host computer, additional visual channels to support continuous chin windows, additional visual animations and full authority digital engine control malfunctions. The UH-60 FS received new cockpit out-the-window monitors and chin windows.

RC-12X Cockpit Procedural Trainer (CPT)

MISSION

To provide rated crew members of RC-12X aircraft a means to familiarize themselves with the cockpit switch/controls layout and manipulation of the flight management system displays. The RC-12X CPT will train and sustain specified individual and crew skills proficiency.

DESCRIPTION

The RC-12X CPT is a procedural trainer for the RC-12X aircraft. The RC-12X CPT will have a modular design of hardware and software components to support training in the RC-12X configuration, a subsystem component design to allow assembly/disassembly for relocation in government-furnished facilities, and the hardware and software necessary to serve as the medium for the training of RC-12X aircrews.

Shadow Crew Trainer (SCT)

MISSION

To provide sustainment, proficiency and mission training in a classroom/desktop environment for members of a Shadow platoon.

DESCRIPTION

The SCT is a mission simulator that provides platoon-level sustainment training for the lightweight, rapidly deployable, short-range airborne reconnaissance system that gives the tactical commander a day/night, multi-sensor, intelligence collection system. The SCT provides training positions for two air vehicle operators, two payload operators, launch and recovery crew via interactive multimedia instruction, staff/leader station, and an instructor operator station.

Vessel Defense System (VDS)

MISSION

To provide the Army the joint training needs for crews operating and defending a vessel from armed threat at close range. The VDS has been specifically designed to provide a highly-effective training and learning environment for defensive tactics, techniques and procedures employing weapons in defense of vessels. The intended training purpose of the VDS is to enable total team training for vessel crews to include the command and leadership roles of officers and crew.

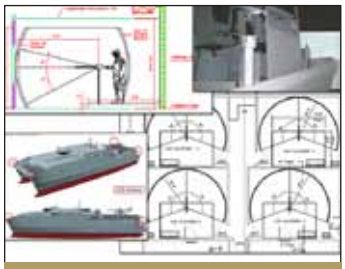
DESCRIPTION

The VDS is designed to train crews defending maritime vessels from an armed threat at close range, generally between 50 and 500 yards.

The VDS has four, physical gun positions that represent the actual gun mount positions on an Army JHSV, LSV, LCU-2000, and LCM-8 allowing for an effective training and learning environment for defensive tactics, techniques and procedures. The VDS trainer is capable of facilitating training scenarios for threat activity while in port or while underway. The VDS contains training weapons with simulated representation of ballistics. The premise of the VDS is that it is not sufficient to simply have qualified gunners; it is essential that the entire team is trained in the skills and knowledge for legal and effective management of weapons, personnel, ammunition, communications within the context of governing law and regulatory authority.

RC-12X

Shadow Crew Trainer



Vessel Defense System

BiLAT

U.S. Army Games For Training Program

Bilateral Negotiation Trainer (BiLAT)

BiLAT is a 3-D software simulation designed with a specific training objective—to provide an immersive and compelling training environment to practice skills in conducting meetings and negotiations in a specific cultural context. Students virtually assume the role of a U.S. Army officer to conduct a series of bi-lateral meetings with local leaders to achieve mission objectives. ELECT BiLAT is a part of the Learning with Adaptive Simulation and Training (LAST) Army Technology Objective (ATO), a collaboration between the University of California's Institute for Creative Technologies (ICT), U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), U.S. Army Research Laboratory Human Research and Engineering Directorate (ARL-HRED) and U.S. Army Research, Development and Engineering Command's Simulation and Training Technology Center (RDECOM STTC).

Operational Language and Culture Training System (Iraqi, Dari, Pashto)

The Operational Language and Culture Training System is a suite of game-based courses and simulations. The courses are self-paced, interactive "serious games" with numerous research-based pedagogic and technologic innovations that enable rapid and sustained learning of foreign languages and cultures. The goal of the software is to allow everyone from beginners to advanced students, regardless of their self-perceived learning aptitude or prior language knowledge, to learn and retain functional spoken communication skills after just a few hours of study.

UrbanSim

UrbanSim is a PC-based virtual training application for practicing the art of battle command in complex counterinsurgency and stability operations. UrbanSim consists of a game-based practice environment, a web-based multimedia primer on doctrinal concepts of counterinsurgency and a suite of scenario authoring tools. The practice environment allows Soldiers to take on the role of an Army battalion commander and to plan and execute operations in the context of a difficult, fictional training scenario. After developing their commander's intent, identifying their lines of effort and information requirements, and selecting their measures of effectiveness, Soldiers direct the actions of a battalion as they attempt to maintain stability, fight insurgency, reconstruct the civil infrastructure and prepare for transition. UrbanSim targets Soldiers' abilities to maintain situational awareness, anticipate second and third-order effects of actions and adapt their strategies in the face of difficult situations. UrbanSim is driven by an underlying socio-cultural behavior model coupled with a novel story engine that interjects events and situations based on the real-world experience of former commanders.

Virtual Battlespace 2 (VBS2) Fires

VBS2 Fires is an advanced, call-for-fire module for VBS2 that simulates artillery, mortars, MLRS and naval gunfire support to a high level of detail. It allows offensive support specialists to construct a call-for-fire mission, which is then processed and actioned accordingly within VBS2. Simulating exterior and terminal ballistics, VBS2 Fires enables gun-to-target visualization of artillery orders in VBS2. The wide array of munitions, fuse types and firing platforms allows instructions to range from basic skills to decision making from individual to battalion level. Seamless integration of VBS2 Fires with the existing VBS2 training programs enables Call-For-Fire training to be conducted simultaneously with other Soldier skills in the same virtual environment.

Virtual Battlespace 2 (VBS2) U.S. Army

MISSION

To field and support an Army-wide, game-based training system that provides our Soldiers with a platform to train small unit tactics, techniques and procedures in Full Spectrum Operations.

DESCRIPTION

VBS2 U.S. Army is a 3-D, first-person, games-for-training platform that provides realistic semi-immersive environments, dynamic terrain areas, hundreds of simulated military and civilian entities, and a range of geo-typical (generic) as well as actual geo-specific terrains. U.S. Army, U.S. Marine Corps and multinational equipment is modeled. Over 100 users can join the same exercise on a network. A 3-D scenario editor is included as well as a robust After Action Review capability. VBS2 is compatible with DIS and HLA in order to provide integration with Live, Virtual and Constructive architectures.

Operational Language and Culture Training System

VBS2 Fires

VBS2

Assistant Project Manager Close Combat Tactical Trainer (APM CCTT)

MISSION

To provide armor, mechanized infantry, cavalry and recon crews, units and staffs with a virtual, collective training capability.

DESCRIPTION

CCTT is a collective training program composed of three subsystems: (CCTT, Reconfigurable Vehicle Tactical Trainer (RVTT) and Dismounted Soldier (DS)). CCTT supports training of Infantry, Armor, Mechanized Infantry, Cavalry and Armored Reconnaissance units from squad through battalion/squadron level, to include their staffs. The primary training audience operates from full-crew simulators, mock-up command posts and live battalion command posts to accomplish their combined arms training tasks.

The CCTT system consists of computer-driven, manned module simulators replicating the vehicles found in close combat units such as the M1 Abrams Tank, the M2 Bradley Fighting Vehicle (BFV), the M3 Cavalry Fighting Vehicle (CFV), the Bradley Fire Support Team Vehicle (BFIST), the M113 Armored Personnel Carrier, the Heavy Expanded Mobility Tactical Truck (HEMTT) and the High Mobility, Multipurpose, Wheeled Vehicle (HMMWV). Semi-Automated Forces (SAF) populate the battlefield and function through emulators to work interactively with the manned modules. These simulators and SAFs are connected via a local area network to provide real-time, fully-interactive, collective task training on computer-generated terrain. The CCTT system provides a collective training environment where units conduct multiple platoon-level training events or company and team collective training up to battalion task force level. CCTT allows for up to 32 simultaneous, independent exercises.

The CCTT system provides several realistic virtual environments, based on the Synthetic Environment Core (SE Core) database products; units train and perform tasks on these products

Assistant Project Manager Close Combat Tactical Trainer (APM CCTT) (Continued)

in order to successfully accomplish their collective missions. The CCTT system was originally developed to support virtual collective training requirements for armored, mechanized infantry battalions and armored cavalry squadrons.

Dismounted Soldier (DS) System

Dismounted Soldier (DS) is a virtual trainer focused on the individual Soldier and squad-level training that will combine gaming technology in a virtual, 360-degree training environment using untethered weapons. The initial DS systems will be stand-alone virtual systems and consist of nine untethered, manned modules, one exercise control/After Action Review workstation and one SAF workstation. These networked systems will provide an immersive training environment for individual Soldiers and squad member. The production delivered systems will incorporate the functionality of the development assets, but they will also be interoperable with other training systems and capable of operating in a classified environment. The DS system will also support Improvised Explosive Device-Detect/Defeat (IED-D) training.

Reconfigurable Vehicle Tactical Trainer (RVTT) System

RVTT is a system within CCTT that comprises the Reconfigurable Vehicle Simulator (RVS), which was originally designed to train the Armored Reconnaissance Platoons and Combat Service Support units supporting the Heavy Brigade Combat Team (HBCT). The RVS has evolved to support the Infantry Brigade Combat Team, Airborne, Rangers and Special Forces units as well as Improvised Explosive Device-Defeat (IED-D) training. The RVS simulator provides training for selected combat and tactical wheeled vehicles. The RVS complements the CCTT family with the representation of a wide variety of wheeled vehicles, including multiple variants of the HMMWV and HEMTT.

Assistant Project Manager (APM) MedSim

MISSION

Medical Simulation Training Center (MSTC) systems are an Army training asset with a regional training requirement. They are located at 18 installations in both the contiguous United States (CONUS) and outside contiguous United States (OCONUS) locations. They deliver effective medical training with a standardized training platform for both classroom and

simulated battlefield conditions. The MSTC program supports training for medical and non-medical personnel including Active Duty, Reserves, and National Guard, with priority given to deploying units. The MSTC's goal is to better prepare Soldiers, Sailors, Airmen and Marines for the application of medical interventions under combat conditions.

DESCRIPTION

MSTC is a standardized family of supporting component systems that provides a framework fitted with reconfigurable, enabling technology and supporting training devices. Some of the training devices are the Virtual Patient Simulator (VPS), Instruction Support System (ISS), Medical Training Command and Control (MT-C2) System, and the Medical Training Evaluation System (MTES).

The MSTC training components include a computerized bleed-breathe mannequin that is weighted and airway equipped, partial task trainers and associated equipment. Enabling technology includes audiovisual enhancements, camera surveillance capability, computer labs, and control rooms with a remotely managed training platform. The Army has a requirement for 34 MSTCs.

CCTT

RVTT

APM MedSim

Abrams MTS

Product Manager Ground Combat Tactical Trainers (PM GCTT)

MISSION

To develop, field and sustain high-quality ground combat virtual training devices that meet or exceed our Soldiers' requirements. Specific responsibilities include the acquisition, production, initial support, and product improvements for virtual training devices for Armor, Infantry, Field Artillery and Combat Engineer systems. This includes, but is not limited to, conduct of fire trainers, driver trainers, and maintenance trainers. PM GCTT also administers the Foreign Military Sales program for all supported training systems.

Abrams Maintenance Training System (MTS)

MISSION

To provide skill-level development for system operation, fault diagnosis, troubleshooting, adjustments, removal/replacement and repair tasks for armament and vehicle maintenance specialty Soldiers who support the Abrams family of combat vehicles.

DESCRIPTION

The Abrams MTS is a suite of devices that provides maintenance training capabilities to the institution. It is composed of Diagnostic and Troubleshooting Trainers (DTT) in addition to hands-on and part-task trainers. DTT lessons are completed on a desktop computer station and provide a virtual view of each maintenance task. These lessons can be repeated with hands-on and part-task devices.

Advanced Gunnery Training System (AGTS)

MISSION

To develop and sustain individual, crew and platoon precision gunnery skills to a level of proficiency that permits transition to live-fire training or combat gunnery.

DESCRIPTION

The AGTS is a family of gunnery training simulators for vehicle commander/gunner teams for M1A2 System Enhanced Package (SEP), M1A2, M1A1, M1A1 SA, M1A1 FEP and LAV-25 vehicles. It is rapidly transportable and deployable and features a high-fidelity crew compartment replicating the vehicle's turret and fire control system in both physical and functional aspects. The AGTS presents the vehicle commander and gunner with a full range of simulated engagement situations. The system trains both fully-operational and degraded-mode gunnery techniques under a wide variety of conditions. The pre-programmed, computer-controlled exercises vary in target type and number, range, vehicle and target motion, and visibility. The AGTS-based systems are capable of networking to provide section, platoon and company collective gunnery training. An After Action Review capability is provided for exercise management.

Avenger Table-Top Trainer (TTT)

MISSION

To train Avenger gunners to detect, acquire, identify and engage enemy aircraft and ground targets on a simulated battlefield.

DESCRIPTION

The TTT is a deployable gunnery trainer that can be used for initial and sustainment gunnery training. It simulates firing the Avenger Stinger anti-aircraft missiles and the Bradley 25mm cannon.

Bradley Advanced Training System (BATS)

MISSION

To simulate the functionality of the M2A3 Bradley Fighting Vehicle system and to train and sustain the crew's ability to perform critical gunnery skills required for direct-fire engagements.

DESCRIPTION

BATS is a precision gunnery system for the M2A3 Bradley Fighting Vehicle. It is comprised of a crew station, an instructor/operator station and a remote monitoring station. BATS includes a high-fidelity crew station that accurately replicates the commander and gunner positions within the vehicle. The system provides precision and degraded-mode gunnery simulation training.

BATS enables digital communications with Force XXI Battle Command Brigade-and-Below functionality in the crew station. The latest updates include urban operations exercises.

AGTS

Bradley Maintenance Training System (MTS)

MISSION

To provide skill-level development for system operation, fault diagnosis, troubleshooting, adjustments, removal/replacement and repair tasks for armament and vehicle maintenance specialty Soldiers who support the Bradley family of combat vehicles.

DESCRIPTION

The Bradley MTS is a suite of devices that provides a maintenance training capability to the institution. It is composed of Diagnostic and Troubleshooting Trainers (DTT) in addition to hands-on and part-task trainers. DTT lessons are completed on a desktop computer station and provide a virtual view of each maintenance task. These same lessons can be repeated with hands-on and part-task devices.

BATS

Common Driver Trainer (CDT)

MISSION

To provide initial and sustainment driver training at operational units and training installations for the Stryker, Abrams and MRAP family of vehicles.

DESCRIPTION

The CDT consists of a simulated vehicle cab, instructor/operator station, After Action Review station, visual system, six-degrees-of-freedom motion system and a computational system. Via the instructor/operator station, the instructor is capable of selecting a visual scene, introducing malfunctions and emergency control situations, monitoring each Soldier's performance and providing recorded AAR feedback. The reconfigurable common platform provides driver training for U.S. Army tactical vehicles including the M1A2 Abrams, Stryker, Mine Resistant, Ambush Protected (MRAP) vehicle, MRAP All Terrain Vehicle (MATV) and the Abrams Tank Engineering Variant (TEV). The CDT has been fielded in both fixed-site and mobile configurations.

Bradley MTS

CDT

Construction Equipment Virtual Trainers (CEVT)

MISSION

To provide training to Soldiers on the tasks used to operate construction equipment. These tasks include locations and functions of controls, instruments, and tactics prior to operating the actual construction equipment. The simulator replicates the form, fit, and function of tactical construction equipment.

DESCRIPTION

The CEVT Type I simulators represent the U.S. Army's initial use of simulation to support the training of construction equipment operators. The CEVT provides cost-effective training in a virtual environment. This allows personnel with little or no experience in operating construction equipment to have an opportunity for familiarization training. The simulator models the form, fit, and function of the actual construction equipment controls and provides instructions for basic machine operation and skills through a training curriculum that progresses from controls familiarization through complex application tasks. The CEVT Type I simulators incorporate interactive training lessons for basic operating techniques associated with the equipment. This includes tasks associated with maneuvering and earthmoving techniques or procedures. It also includes a fully narrated interactive operator training on daily service checks, startup and operation, safety, and emergency response drills. Currently, the CEVT program has fielded two variants. The CEVT Hydraulic Excavator (HYEX) Type I simulator is based on the John Deere Excavator (Model 230LCR). The CEVT Wheel Loader (WL) Type I simulator is based on the Caterpillar Small Wheel Loader (Model 924H). The CEVT- HYEX and CEVT - WL simulators are based on the available, commercial off the shelf (COTS) products that have been modified for the U.S. Army. Thirty CEVT - HYEX and thirty CEVT - WL are installed in fixed facility classrooms at Fort Leonard Wood, MO to support the U.S. Army Engineer School. The CEVT Type I simulators are expected to expand and include the Motor Grader and Dozer after the requirements are defined and approved.

Egress Assistance Trainers

MISSION

To expose Soldiers to the effects of vehicle rollover and to develop the skills necessary to react properly during a rollover and/or egress situation from both the HMMWV and Mine Resistant Ambush Protected (MRAP) families of tactical vehicles.

DESCRIPTION

The HMMWV Egress Assistance Trainer (HEAT) and the MRAP Egress Trainer (MET) increase the situational awareness of vehicle rollover by permitting the instructor to observe crew performance and reaction to emergency conditions without requiring the use of an actual vehicle. The device reinforces the importance of seat positioning, wearing seatbelts, demonstrating the feeling of being disoriented, and the actual effort required to execute egress procedures. The trainer allows individuals and crews to rehearse and physically execute the necessary steps required to survive a vehicle rollover.

Engagement Skills Trainer (EST) 2000

MISSION

To simulate weapon-training events that lead to live-fire individual/crew weapon qualification and other weapon-training events/activities.

DESCRIPTION

The EST 2000 provides initial and sustainment marksmanship training, static unit collective gunnery and tactical training, and shoot/don't shoot training. It supports the following three modes of training: marksmanship, squad/fire team collective and judgmental use of force. The system models multiple small arms weapons and is deployable with its own system shelter. All EST 2000 training scenarios are U.S. Army Training and Doctrine Command (TRADOC) validated.

High Mobility Artillery Rocket System (HIMARS) Maintenance Training System (MTS)

MISSION

To provide skill-level development for system operation, fault diagnosis, troubleshooting, adjustments, removal/replacement and repair tasks for armament specialty Soldiers who support the HIMARS tactical system.

DESCRIPTION

HIMARS MTS is a suite of devices that provides maintenance training capability to the institution. It is composed of Diagnostic and Troubleshooting Trainers (DTT) in addition to hands-on and part-task trainers. DTT lessons are completed on a desktop computer station and provide a virtual view of each maintenance task. These same lessons can be repeated with hands-on and part-task devices.

Laser Marksmanship Training System (LMTS)

MISSION

To simulate weapons-training events that lead to live-fire qualification for individual and crew weapons.

DESCRIPTION

The LMTS is a commercial, off-the-shelf, laser marksmanship training system that supports the Army's marksmanship training strategy. Since it is light, transportable, uses either self-sustained power or power from a vehicle, and requires no fixed facility support, it is ideal for training scenarios in the field during the day or at night. LMTS accommodates numerous weapons and calibers to include the M9 pistol, the M16 and M4 rifles, and the M249, M240 and M2 machine guns. It uses the individual Soldier's personal weapon, optics and accessories. LMTS allows units to conduct both initial and sustainment marksmanship training.

CEVT-HYEX

HEAT

EST 2000

HIMARS MTS

Route Clearance Training Services (RCTS)

MISSION

To instruct route clearance operations, improve Soldier route clearance skills, teach the latest tactics, techniques, and procedures (TTPs) for route clearance, and practice how to employ route clearance vehicles including the Mine Protected Clearance Vehicle (MPCV) ("Buffalo"), Vehicular Mounted Mine Detector (VMMD) ("Husky") with the Mine Detonation Trailer (MDT), Medium Mine Protected Vehicle (MMPV) (RG31), Joint Explosive Ordnance Disposal Rapid Response Vehicle (JERRV), and the Man Transportable Robotic Systems (MTRS) ("Talon"). RCTS will remain a stopgap-training tool until the U.S. Army completes the planned acquisition and fielding of the Virtual Clearance Training Suite (VCTS) program of record.

DESCRIPTION

The RCTS uses four, self-contained, mobile trailers containing four MPCV (Buffalo) virtual simulators (driver and co-driver positions), two VMMD (Husky) virtual simulators (Husky with/without MDT), four MMPV (RG-31) virtual simulators (driver, commander, gunner positions), one JERRV virtual simulator, one MTRS (Talon- IIIB) virtual simulator, five Instructor Operator Stations (IOS) with three shared After Action Review areas. The RCTS provides classroom instruction and a mobile virtual simulator environment owned, operated and maintained by the contractor. The vehicle simulators can be networked for collective route clearance mission training or provide individual skill training. The MPCV (Buffalo) simulator incorporates the actual MPCV Arm Control Box, MPCV Arm Camera Control Box, and Camera View Select Box. The MMPV (JERRV/RG31) simulator also incorporates the M2 crew served weapon. Metal detection and marking system capabilities are incorporated for the Husky. The instructor can modify scenario conditions and events such as Improvised Explosive Devices (IED) explosions in real time, allowing flexibility in training. The RCTS can be relocated to support Active, Reserve, and National Guard units as a requested by United State Army Forces Command (FORSCOM) and/or the Maneuver Support Center of Excellence (MSCoE).

Stryker Maintenance Training System (MTS)

MISSION

To provide skill-level development for system operation, fault diagnosis, troubleshooting, adjustments, removal/replacement and repair tasks for armament and vehicle maintenance specialty Soldiers for the Stryker tactical vehicles.

DESCRIPTION

Stryker MTS is a suite of devices that provides a maintenance training capability to the institution. It is composed of Diagnostic and Troubleshooting Trainers (DTT) in addition to hands-on and part-task trainers. DTT lessons are completed on a desktop computer station and provide a virtual view of each maintenance task. These same lessons can be repeated with hands-on and part task devices. The system uses the actual vehicle Interactive Electronic Technical Manual (IETM) to support training tasks.

Stryker Mobile Gun System (MGS) Advanced Gunnery Training System (AGTS)

MISSION

To develop and sustain individual, crew and platoon precision gunnery skills to a level of proficiency that permits transition to live-fire training or combat gunnery.

DESCRIPTION

The MGS AGTS is a gunnery training simulator for vehicle commander/gunner teams for the Stryker MGS vehicle. It is rapidly transportable and deployable and features a high-fidelity crew compartment replicating the vehicle's turret and fire control system in both physical and functional aspects. The MGS AGTS presents the vehicle commander and gunner with a full range of simulated engagement situations. The system trains both fully-operational and degraded-mode gunnery techniques under a wide variety of conditions. The pre-programmed, computer-controlled exercises vary in target type and number, range, vehicle and target motion, and visibility. The MGS AGTS-based system is capable of networking to provide section, platoon and company collective gunnery training. An After Action Review capability is provided for exercise management.

Virtual Combat Convoy Trainer (VCCT)

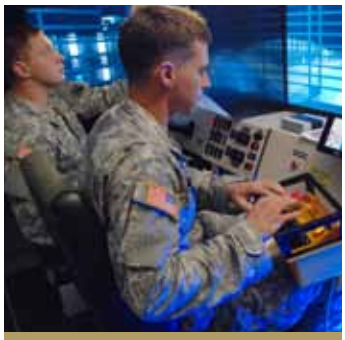
MISSION

To rapidly provide combat convoy operations training using the VCCT Services as an interim training solution until the Reconfigurable Vehicle Tactical Trainer (RVTT) program of record is fully fielded. The VCCT Services train HMMWV crews to properly execute convoy operations including identifying improvised explosive devices, avoiding an ambush, returning fire, maneuvering and reacting appropriately in the contemporary operating environment.

DESCRIPTION

VCCT Services addressed an immediate training need for deploying units. VCCT Services support training to enhance development of basic to advanced combat skills on situations that patrols and convoys frequently encounter in combat including Improvised Explosive Devices (IED), small arms fire and ambushes. VCCT Services use a self-contained, mobile system with four HMMWV vehicle simulators with head-mounted displays that allow a 360-degree field of regard, geo-specific terrain databases, small arms and crew-served weapons, simulated FBCB2 capability, and an After Action Review capability. The VCCT Services incorporate training with individual and crew-served weapons and multiple convoy scenarios including IED training. VCCT Services have provided critical convoy training to Soldiers supporting Operation Iraqi Freedom and Operation Enduring Freedom at Camp Buehring, Kuwait, U.S. Army Pacific, U.S. Army Europe and numerous U.S. locations.

RCTS-Husky



RCTS-Buffalo

Stryker MTS

Stryker MGS AGTS

Product Manager Special Operations Forces Training Systems (PM STS)

MISSION

To develop, field, sustain and improve high-quality mission, training, and preparation systems for Special Operations and Joint Conventional Forces that meet or exceed Warfighters' requirements.

Call For Fire Trainer (CFFT) Increment II

MISSION

To provide realistic observed fire training in support of all fire support mission tasks.

DESCRIPTION

The CFFT is a lightweight, rapidly deployable, observed fire-training system that provides multiple simulated battlefield environments for instructing Fire Support Specialists, Joint Fires Observers and Soldiers at the institutional and operational unit level. The CFFT is capable of training all Artillery, Type II and III close air support, naval gunfire and mortar missions. The system is fielded in multiple CONUS and OCONUS locations in three configurations: the 1:30 (one instructor to 30 students), 1:12 and 1:4. The 1:12 and 1:4 system configurations are deployable. Increment II systems are certified for networked operations with other simulators in both unclassified and classified environments, and fully interoperable with the Advanced Field Artillery Targeting and Direction System (AFATDS). Near term enhancements fully integrate Synthetic Environment Core (SE Core) and One Semi-Automated Forces (OneSAF), and leverage capabilities developed for the Joint Fires and Effects Trainer System through use of the Joint Fires Product Line architecture. These include high-fidelity, immersive visual displays for the institution and helmet-mounted displays, voice communications, C4ISR capabilities and improved After Action Review capability for the operational force.

Call For Fire Trainer (CFFT) II Plus

MISSION

To improve the existing capability for observed fire training in support of all fire support mission tasks and provide an immersive environment to train advanced call for fire techniques.

DESCRIPTION

The CFFT II PLUS is a follow-on to the existing CFFT II system. In addition to the current capability, the program improves the functionality by incorporating the Joint Fires Product Line (JFPL) architecture, which will provide ballistic trajectory calculations, commonality with the

Joint Terminal Attack Controller (JTAC) and future fires training devices. It will allow easy insertion of additional/future capabilities as required. The CFFT II Plus also incorporates the functionality and immersiveness of the technology demonstration/prototype Joint Fires and Effects Trainer System (JFETS) developed by the Fires Battle Lab. It adds the following five modules to the available CFFT configurations:

1. Open Terrain Module (OTM) for outdoor, rural scenarios.
2. Urban Terrain Module (UTM) for a generic, urban terrain scenario.
3. Close Air Support Module (CASM) for close air support techniques.
4. Fires and Effects Command Module for fires chain of command coordination.
5. After Action Review (AAR) Module for enhanced learning/training.

CFFT Increment II

CFFT II Plus

Joint Fires Product Line (JFPL)

MISSION

To promote widespread adoption of well-documented software architecture and reusable core assets that promote a synergized and collaborated common virtual fires training solution throughout the Special Operations Forces (SOF) and Joint communities.

DESCRIPTION

The JFPL is a family of virtual training systems that support portable classroom and immersive configurations. JFPL systems include the CFFT and the United States Special Operations Command (USSOCOM) and Joint Forces Command (JFCOM) Joint Terminal Attack Control (JTAC) trainers. The JFPL family leverages existing and emerging technologies into common and interoperable devices for indirect fire, close air support and terminal attack control training.

JFPL

Light Assault/Attack Reconfigurable (LASAR) Combat Mission Simulator (CMS)

MISSION

To provide the 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) with aircrew training and mission-rehearsal capabilities that are interoperable with other United States Special Operations Command (USSOCOM) systems. LASAR provides aircrews with a real-world capability to practice, validate and verify tactics, techniques and procedures to support training and mission rehearsal.

DESCRIPTION

The A/MH-6 LASAR CMS is a high-fidelity, motion-based, reconfigurable cockpit replication of the MH-6 Mission Enhanced Little Bird (MELB). All systems and controls required for aircrew training and mission execution are functional, including the capability for all system operations (including weapons) and the ability to simulate all systems emergencies, malfunctions, and degraded system operations. The LASAR

LASAR CMS

Light Assault/Attack Reconfigurable (LASAR) Combat Mission Simulator (CMS) (Continued)

CMS provides the commander with a system to plan and rehearse a special operations mission that incorporates tactics, situational awareness (real-world combat environment), decision making, and crew coordination. Identical to the actual aircraft capability, the simulator accepts automated transfer of all applicable mission data from Special Operations Forces (SOF) mission planning systems.

MH-47G and MH-60L Combat Mission Simulators (CMS)

MISSION

To provide the 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) with aircrew training and mission-rehearsal capabilities that are interoperable with other United States Special Operations Command (USSOCOM) systems. CMS provides aircrews with a real-world capability to practice, validate and verify tactics, techniques and procedures to support training and mission rehearsal.

DESCRIPTION

The MH-47G and MH-60L CMS are high-fidelity, full-motion simulators that operate with the latest Special Operations Aviation (SOA) Common Avionics Architecture System (CAAS). They provide correlated sensor simulation, full-flight and aircraft performance replication, and threat and environmental models. These simulators have improved out-the-window and FLIR scenes to support the field-of-view of the aircraft and will be used as mission-rehearsal platforms using the USSOCOM Common Database (CDB). The systems are Distributed Interactive Simulation/ High Level Architecture (DIS/HLA) compliant for interoperability.

Special Operations Aviation Combat Mission Simulator (SOA CMS) Simulation Block Updates (SBUDs)

MISSION

To provide the 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) with high-fidelity training systems for the MH-47E, MH-60K, MH-47G, MH-60L, and A/MH-6M aircraft that support United States Special Operations Command (USSOCOM) requirements. Provide aircrews a real-world capability to practice, validate and verify tactics, techniques and procedures to support training and mission rehearsal.

DESCRIPTION

The SBUDs program provides the capability to incorporate concurrency, obsolescence and technology upgrades into the aviation simulation systems in a timely and cost-effective manner with minimal impact on training and mission-rehearsal operations. SBUDs ensure that SOF aircrews are provided training systems that are reliable, technically advanced and concurrent with the operational aircraft on the flight line.

Special Operations Forces Air Ground Simulation (SAGIS)

MISSION

To provide Special Operations Forces (SOF) with realistic air traffic control, terminal attack control, fire support coordination training and mission rehearsal capability.

DESCRIPTION

SAGIS is a modular and scalable system designed to provide training for both U.S. Army and USAF Special Operations personnel in multiple fire support and air traffic control roles. SAGIS operates in a stand-alone or networked configuration using Distributed Interactive Simulation (DIS) or High Level Architecture (HLA).

MH-47G CMS

MH-60L CMS

SAGIS

Special Operations Forces Mixed-Reality Digitized Ranges (SOFDR)

MISSION

To augment existing Special Operations 360-degree, live-fire facility shoot-houses with virtual targetry and mixed reality scenarios that allow SOF to conduct multi-room, multi-team close quarters combat training.

DESCRIPTION

This capability combines the realism of live-fire training with state-of-the-art virtual technology to create a mixed-reality training capability for SOF. The system is comprised of video projectors, computers and self-healing screens to provide training versatility against a variety of scenarios. Virtual enemy combatants move freely throughout the facility and allow assault forces to react to animated combatants instead of the standard one corner movement that currently exists in non-virtual shoot-houses.

Special Operations Forces Planning, Rehearsal, and Execution Preparation - Support Contract (SOFPREP-SC)

MISSION

To provide contractor support to the production of Geospatial Intelligence (GEOINT) data and 3D scene visualization databases in support of SOF mission training and rehearsal.

DESCRIPTION

SOFPREP-SC uses highly sophisticated GEOINT database production centers to provide USSOCOM support in scene visualization generation, distribution, archiving and maintenance. SOFPREP-SC provides training and mission rehearsal support for Vital, Medallion-S, TOPSCENE, FLIR, radar and SAF databases, as well as databases developed in USSOCOM common database 2.1 and 3.0 formats.

Special Operations Forces Training, Engineering and Maintenance Support (SOF TEAMS)

MISSION

To provide contractor support for Training Aids, Devices, Simulators and Simulation (TADSS) to the 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)).

DESCRIPTION

SOF TEAMS maintains, troubleshoots, repairs, upgrades and modifies TADSS in response to aviation mission rehearsal requirements, accident investigation, aircrew and staff training, TADSS upgrades/ updates and other identified requirements. Additionally, SOF TEAMS provides the addition, deletion and relocation of equipment, performance of technical services in support of hardware, software and network infrastructure modifications and performance of other on-site support as required.

United States Special Operations Command (USSOCOM) Common Database (CDB)

MISSION

To improve the realism, performance and interoperability of simulation in support of SOF training and mission rehearsal.

DESCRIPTION

The USSOCOM CDB will increase correlation and ensure fair fight engagements between SOF simulators. The database layers are derived from the latest CDB 3.0 standard consisting of single, static synthetic representations of the world for use in full-mission air/ground/maritime simulators. These layers include enough relevant information for all simulator subsystems to perform their respective simulation tasks in order to meet training and mission rehearsal requirements.

United States Special Operations Command (USSOCOM) Joint Terminal Attack Control (JTAC) Trainer

MISSION

To provide Terminal Attack Control (TAC), Fire Support coordination training, Joint Close Air Support Executive Steering Committee certification and mission rehearsal capability to Special Operations Forces (SOF).

DESCRIPTION

The USSOCOM JTAC Trainer is an interim solution to provide realistic fire mission and TAC control training in portable classroom and immersive environments. It uses the same core asset software, and it is built from a modular

perspective, leveraging the same hardware for all configurations. Based on the Joint Fires Product Line (JFPL), which provides a common software architecture with other fires trainers, the JTAC Trainer is being developed and fielded using a three-phased approach:

Phase 1 (already fielded) provided the base laptop configuration with head-mounted displays and multi-station functionality.

Phase 2 (already fielded) integrated the Joint Semi-Automated Forces (JSAF) into the trainer, provided a direct view projection system, and provided dual-monitor Instructor and Student Stations.

Phase 3 will provide Simulated Military Equipment (SME), a six-degree-of-freedom (six-DOF) tracker, and a projection dome, visual, training environment.

SOFDR

JTAC TRAINER

United States Special Operations Command (USSOCOM) Special Operations Forces Virtual Mission Rehearsal (SOF VMR)

MISSION

To provide SOF a state-of-the-art virtual "sandtable" for mission planning, rehearsal and After Action Review.

DESCRIPTION

The SOF VMR project leverages commercial advancements and mature technologies to immerse SOF Warfighters in a virtual environment that closely replicates the actual environment they will experience in operational missions. The system uses a game engine for 3D rendering, incorporates geospatial data, and integrates existing SOF mission planning tools to provide superior mission planning, rehearsal, and AAR capabilities. Additionally, SOF-unique operational, language and cultural capabilities will be included. The goal of SOF VMR is to provide a superior capability before the mission to give the SOF Warfighter a sense of déjà vu when conducting the mission.

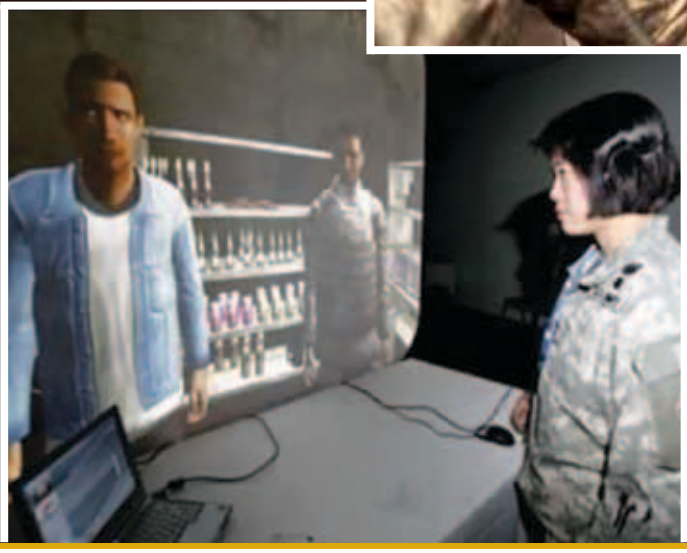
ACQUISITION ACADEMY PEO STRI

For PEO STRI Internship opportunities, please contact:

Mrs. Jean H. Burmester
Dean, Acquisition Academy
407.384.5555 • jean.burmester@us.army.mil

★ CONSTRUCTIVE AND INTEGRATED SIMULATION ENVIRONMENTS

Building integrated, interoperable live, virtual, constructive training environments providing full-spectrum individual collective training.



TRAINING OUR NATION'S WARFIGHTERS

INTRODUCTION

The Project Manager for Constructive Simulation (PM ConSim) acquires, fields, and sustains constructive simulations and integrated simulation environments to support Army Mission Command and Intelligence collective training requirements. Constructive simulations and integrated multi-domain environments are the most effective and efficient means to train commanders and staffs from company to theater level. PM ConSim supports training transformation, Army Force Generation (ARFORGEN) and the modular force while providing tailor-made integrated environments for collective training objectives across the full spectrum of military operations.

Program Manager Constructive Simulation (PM ConSim)

VISION

To be the recognized leader for providing constructive and integrated simulation environments.

MISSION

To provide operationally relevant constructive and integrated simulation environments for the Soldier and the Nation.

Joint Coalition Simulation Systems (JCSS)

MISSION

To develop, acquire, field and sustain interoperable simulation environments in support of multiservice, joint and coalition forces.

Interactive Multi-Media Instruction (IMI)

MISSION

To ensure rapid, cost-effective and streamlined contracting for delivery of high-quality training products to meet the immediate needs of the Soldier. The IMI contract provides access to an array of innovative and creative providers of interactive multimedia products that can be used by the Soldier at homestation or when deployed.

DESCRIPTION

The JCSS IMI contract provides for analyses and studies, training program structure development, course conduct information development and training conduct support specific to training systems and human performance to include job-task analyses. Additionally, it allows for cost-benefit analysis, various technology infusion studies, training system analyses, performance improvement analyses, gap analyses, effectiveness studies and other studies and analyses that lead to effective human performance solutions. The contract also provides specialists in design, development and implementation of multimedia products utilizing accepted Instructional System Design principles. The design, installation and implementation of Automated Electronic Classrooms, incorporating Advanced Learning Technologies designed to meet learning objective and performance requirements to maximize student engagement, may also be procured. Specific products include: interactive courseware, computer-aided instruction, electronic guides, interactive electronic technical manuals, learning management systems, electronic job aids (e.g., templates, macros, etc.) and Advanced Distributed Learning Products Online.

Assistant Project Manager Consim Joint Land Component Constructive Training Capability (APM JLCCTC)

Joint Land Component Constructive Training Capability (JLCCTC)

MISSION

To provide unit commanders and their battle staff the capability to train in a constructive environment from battalion to echelons above corps; to support Army and joint training requirements through a federation of legacy and developing objective systems including Warfighters' Simulation (WARSIM), One Semi-Automated Forces (OneSAF), Corps Battle Simulation (CBS), Tactical Simulation (TACSIM) and the Entity Resolution Federation (ERF).

DESCRIPTION

JLCCTC is a modeling and simulation software capability that contributes to the joint training functional concept and the Army training mission area by providing the appropriate levels of modeling and simulation resolution as well as the fidelity needed to support both Army and joint training requirements. JLCCTC is comprised of two separate federations, JLCCTC-Multi-Resolution Federation (MRF) and JLCCTC-Entity Resolution Federation (ERF). The MRF is a federated set of constructive simulation software that is supported by commercial software and commercial-off-the-shelf hardware that will support training of commanders and their staffs in maneuver, logistics, intelligence, air defense and artillery. The federate models are connected by a combination of the standard high-level architecture run-time infrastructure, distributed interactive simulation, custom interfaces, the master interface and point-to-point. The JLCCTC-MRF is a Command Post Exercise (CPX) driver designed to train Army commanders and their staffs at division through echelons above corps. JLCCTC provides the simulated operational environment in which computer-generated forces stimulate and respond to the Mission Command (MC) processes of the commanders and staffs. JLCCTC models will provide full training functionality for leader and battle staff for the Army and the joint, intergovernmental, interagency and multinational (JIIM) spectrum. JLCCTC provides an interface to MC Systems allowing commanders and their staffs to train with their organizational real-world MC equipment. JLCCTC-ERF is a federation of simulations, data collection and after-action review tools. It stimulates the Mission Command Networks and Systems to facilitate battle staff collective training by requiring staff reaction to incoming digital information while executing the commander's tactical plan. The targeted training audience is comprised of brigade and battalion battle staffs, functional Command Post (CP) training and full CP training. Battle staffs of higher echelons may also employ JLCCTC-ERF to achieve specific training objectives.

JLCCTC

JLCCTC

JLCCTC

Common Mission Command Simulation Equipment (CBCSE)

MISSION

To procure and field commercial-off-the-shelf hardware and software products in support of the Army's Joint Land Component Constructive Training Capability (JLCCTC) mission to provide unit commanders and their battle staff the capability to train in a constructive environment from battalion to echelons above corps.

DESCRIPTION

The CBCSE program provides commercial-off-the-shelf hardware and software products capable of running Army constructive simulations and games for training products providing Army-wide equipment standardization, commonality and compatibility, as well as sufficient network and computer capacity to operate current and future versions of JLCCTC. Additionally, the CBCSE program provides new equipment training teams responsible for fielding each new JLCCTC version to Army Mission Command Training Centers and Battle Simulation Centers worldwide. Currently, JLCCTC Entity Resolution Federation Versions 5.1, 5.2, and 5.3, as well as the JLCCTC Multi-Resolution Federation Version 6, are fielded providing constructive simulations training capability.

Corps Battle Simulation (CBS)

MISSION

To geographically and functionally distribute an air and land warfare simulation that drives the U.S. Army Mission Command Training Program's Soldier exercises as well as corps and division command post training exercises for the active Army, National Guard and the Army Reserve.

DESCRIPTION

CBS is a constructive simulation system that portrays ground battle scenarios for theater, corps and division-level training events. CBS models Warfighting functions including psychological operations, rotary-wing and fixed-wing operations, logistics, and multi-sided play. In the JLCCTC-MRF, CBS is linked with other constructive simulations to provide a realistic presentation of joint battlefield operations. The system can also change its role in the game based on the training requirements and changing conditions on the battlefield.

Joint Deployment Logistics Model (JDLM)

MISSION

To integrate JDLM into both the Joint Land Component Constructive Training Capability (JLCCTC)–Multi-Resolution Federation (MRF) and Entity-Resolution Federation (ERF)

constructive simulation environments; to provide commanders and their staffs with the necessary tools to cost-effectively conduct the mission planning, rehearsals and training associated with the five phases of power projection operations: mobilization, deployment, employment, sustainment and redeployment.

DESCRIPTION

The Joint Deployment Logistics Model (JDLM) is the high-fidelity, logistics component, constructive simulation model of the JLCCTC federation. Whether operating in stand-alone mode or in a JLCCTC multi-resolution or entity-level federated environment, JDLM provides commanders and their staffs with the complete array of Warfighting function capabilities required to meet logistics training requirements.

WARSIM

Tactical Simulation (TACSIM)

MISSION

To provide simulated intelligence collection and reporting through organic user communications and processors; to provide training for intelligence analysts, operators and collection managers; to provide training for commanders and staffs through the use of aggregated products not requiring additional intelligence analysts.

DESCRIPTION

The TACSIM system is composed of a main simulator and several peripheral devices. These peripherals support computer-generated analysis, after-action reports, national collection systems and the Tactical Communications Support Processor. TACSIM is designed to operate at the Unclassified, Secret Releasable, Secret U.S. and Top Secret/Sensitive Compartmented Information security levels. TACSIM sensor models have been validated by the Army Material Systems Analysis Activity and are designed to simulate real-world sensor performance. The products produced by TACSIM emulate first-phase exploitation reports produced by real-world sensor pre-processors. TACSIM has two modes of operation, stand-alone and federated. In the stand-alone mode, TACSIM's primary use is for intelligence training only. This allows intelligence staffs, sections and units to use scripted opposing force movement and activity to train their personnel on specific objectives. The most common method for training with TACSIM is in the Entity Resolution Federation (ERF) or Multi-Resolution Federation (MRF) mode.

Warfighters' Simulation (WARSIM)

MISSION

To increase the effectiveness of commander and staff training, exercises and mission rehearsals by dramatically improving the realism and the scope of the available training environment; in

Warfighters' Simulation (WARSIM) (Continued)

conjunction with other simulations, to provide a complete operational environment with scenarios covering the full spectrum of military operations within the stages of force projection operations to support the global distributed Army as well as joint and coalition force task-based training.

DESCRIPTION

WARSIM trains and provides mission-rehearsal capabilities for Army and joint commanders and their staffs during stability operations and peacetime. Additionally, WARSIM portrays activities associated with post-employment operations such as war termination and post-conflict operations including restoring order, supplementing civilian government, providing humanitarian assistance, redeployment, reconstitution and demobilization. The simulation accounts for the time and space factors associated with large unit movements (Division and Corps) as well as the differences between heavy and light units. The simulation allows all units, including Warfighting function units, to be committed to combat operations in response to threats in a rear area. The WARSIM system uses a software computer-based simulation and associated hardware to support the planning, decision-making and operational execution of unit commanders and their staffs from battalion through theater level as well as the training events in educational institutions. Designed and built using modern computer technology, modern software engineering techniques and verified and validated algorithms and databases, WARSIM will allow units worldwide to train using their organizational real-world Mission Command equipment. WARSIM is the cornerstone of the Joint Land Component Constructive Training Capability (JLCCTC) Multi-Resolution Federation (MRF). In the JLCCTC-MRF, WARSIM is linked with other constructive simulations to provide a more realistic presentation of the Operational Environment. The system is compliant with the high-level architecture.

WARSIM capabilities include:

- Computer-based battle simulation models that portray the operational environment needed to support Army training events
- Software modules to support exercise preparation and scenario generation
- Software modules/databases to support after-action review
- Software modules for linking WARSIM to other simulations in order to expand the training environment for Joint force training exercises
- Workstations for use by personnel in an exercise support function
- Training Audience interfaces to the Simulation via Mission Command (MC) Systems (two-way communications)
- Synthetic Natural Environment (SNE) that provides 3D Battlespace with Terrain/Time of day impacts and Bio/Chemical/Weather effect
- Comprehensive Intelligence capability (HUMINT, IMINT, ELINT, COMINT, and MASINT systems); currently modeling over 160 Sensor Systems within three-enclave architecture
- Irregular Warfare (IW) Operations, explicit IED and associated Countermeasures Modeling
- Automated Unit/Reactive Behaviors and Workstation/Role-player efficiencies
- Data Driven Models will allow for changes in Parametric Data without changing source code (pre-ex and during run-time)
- Automated Internal Recovery and improved diagnostic tools

Product Manager One Semi-Automated Forces (PDM ONESAF)

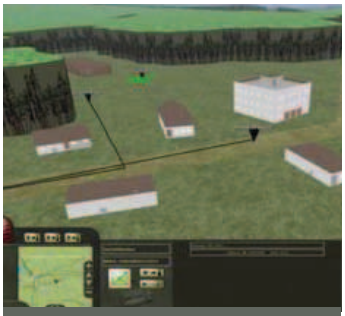
MISSION

To foster interoperability, standardization and reuse-based solutions in order to meet the modeling and simulation (M&S) needs of the future force. OneSAF will reduce duplication of investments by eliminating the Army's need for multiple simulation tools across the Research, Development and Acquisition; Advanced Concepts and Requirements; and Training, Exercises and Military Operations M&S domains to service Live, Virtual and Constructive (LVC) applications.

DESCRIPTION

OneSAF is a next-generation, entity-level simulation that supports both Computer Generated Forces and Semi-Automated Forces applications. This enables it to support a wide range of U.S. Army Brigade and below constructive simulations and virtual simulators. OneSAF is currently being integrated by the Synthetic Environment Core (SE Core) program as the replacement SAF for virtual trainers such as Aviation Combined Arms Tactical Trainer and Close Combat Tactical Trainer. It will serve as the basis for subsequent modernization activities for simulators across the U.S. Army. OneSAF was built to represent the modular and future force and provides entities, units and behaviors across the spectrum of military operations. OneSAF has been crafted to be uniquely capable of simulating aspects of the urban operating environment and its effects on simulated activities and behaviors. Special attention has been paid to detailed buildings for urban operations including interior rooms, furniture, tunnels and subterranean features, and associated automated behaviors to make use of these attributes. OneSAF is unique in its ability to model unit behaviors from fire team to company level for all units for both combat and non-combat operations. Intelligent, doctrinally correct behaviors and improved Graphical User Interfaces are provided to increase the span of control for workstation operators. The OneSAF Environmental Runtime Component provides a range of terrain database services and capabilities already supporting LVC applications across the world. In addition, interoperability support is present for industry standards such as Distributed Interactive Simulation, High-Level Architecture, Military Scenario Development Language, Joint Consultation Mission Command Information Exchange Data Model and Army Mission Command System devices. As a cross-domain simulation suitable for supporting training, analysis, research, experimentation, mission-planning and rehearsal activities, OneSAF provides the latest physics-based modeling and data, enhanced data collection and reporting capabilities. OneSAF provides a domestic release that is available to all U.S. Government users and an international version to support non-U.S. requirements. OneSAF also provides a full range of training, development and event support services.

OneSAF



OneSAF

SE Core-Dismount

SE Core-TDB

Assistant Project Manager Synthetic Environment Core (SE CORE)

MISSION

To focus on delivering software and limited hardware to enable an interoperable common virtual training environment for training Soldiers. The ultimate objective of SE Core is to facilitate a common virtual training environment to enhance the training and mission rehearsal capabilities for our Soldiers. The program ensures the Army's virtual simulation systems have an interoperable capability and are compatible with live and constructive training systems so that our Soldiers can truly train as they fight.

DESCRIPTION

The Department of Defense Training Transformation, Army Training Strategies, Army Modernization Programs, Joint/Army Training Doctrine, Joint/Army Mission Command Training Support, and Army Force Generation require an LVC Integrated Training Environment (ITE). The SE Core program is the Army's virtual component of the LVC ITE. SE Core develops and sustains the Army's CVE, which links current and future virtual simulation devices into an interoperable full-spectrum training capability. The CVE connects to gaming training enablers and the live and constructive environments for an integrated LVC ITE capability.

As the Army transitions to a campaign-quality Army with a joint and expeditionary mindset, our Soldiers require relevant, on-demand training available anywhere, anytime, and tailored to their operational training requirements. SE Core is comprised of complementary efforts for developing the common virtual training environment that facilitates fair-fight interoperability for virtual system and non-system Training Aids Devices Simulators and Simulations (TADSS). The program develops operational training terrain databases, models, and simulation architecture connectivity to meet Soldier operational training requirements. The terrain and model development efforts provide non-proprietary, open format and image generator independent common virtual training environment deliverables.

The simulation architecture provides an integrated training network. These common virtual training environment deliverables, linking current and future virtual training devices/simulations, enable the Army to execute combined arms and joint training as well as mission planning and rehearsals at homestation and deployed locations. The SE Core Product Line Architecture Framework defines the architecture for the Army's common virtual training environment. Common protocol and standards for virtual training devices are essential for fair-fight interoperability. SE Core's Virtual Distributed Interactive Simulation protocol provides the foundation for virtual systems interoperability and common communication to other components of the LVC ITE.

Through the involvement of SE Core's system development and demonstration phase, requirements for training and SE Core have grown. SE Core continues to produce terrain databases, common moving models, the virtual simulation architecture, changes to OneSAF, dynamic environment development, and common virtual components such as, but not limited to, after-action review, interoperability gateway, scenario generation tool, and C4I adapter. New requirements include, but are not limited to, common virtual training environment capability management for system and non-system TADSS, mission planning and rehearsal visualization capability, acquisition of terrain source data, SE Core to TADSS plug-in expansion, battlefield representation, semi-automated forces development and integration, exercise preparation and execution capabilities and definitions for the terms interoperability and fair fight. SE Core also facilitates integration and updates concerning the U.S. Army's OneSAF and SE Core version releases into system and non-system virtual TADSS.

Simulation To Command, Control, Communications, Computers And Intelligence (C4I) Interoperability (SIMCI) – SIMCI Executive Agent

MISSION

To provide common products, to support initiatives, to lead process improvement efforts and to make policy recommendations to Army leadership for improving and closing interoperability gaps between the Modeling and Simulations (M&S) domain and the Mission Command (MC) domain by employing the following chartered objectives: seamless interoperability between M&S and MC systems; alignment of M&S and MC standards, architectures and common MC components; identification of requirements for M&S and MC systems to support interoperability.

DESCRIPTION

The SIMCI program is focused on improving interoperability between the M&S domain and the MC domain. SIMCI uses an Overarching Integrated Product Team (OIPT) approach with more than 30 member organizations Army wide to include the Army Staff, capability developers and materiel developers. The OIPT addresses five key SIMCI components: architecture alignment, common data/object models, common standards, reusable component interfaces and programmatic-processes/certification/education. SIMCI executes part of its mission through an annual project call that focuses on unique applied research areas that support interoperability between M&S and Mission Command Systems. Past products from the annual project call include extensions to the Battle Management Language (BML), C2 adaptor improvements, and enhancements to the understanding across both communities. The SIMCI OIPT is co-chaired by PEO STRI and PEO Command, Control and Communications Tactical (PEO C3T).

Product Manager Warrior Training Integration (PdM WTI)

INTRODUCTION

The primary focus of the Warrior Training Integration Product Manager's Office is three fold:

- Develop the Live, Virtual, and Constructive architecture and training environment supporting the Army's Future Force
- Develop, manage and coordinate the Joint Exercise and Experiments TADSS training requirements
- Integrate the integration of Future Force, Unit of Action and Unit of Employment training requirements

VISION

To be the premier provider for the integrated training simulation environments, products, services and support.

MISSION

To provide operationally relevant integrated simulation environments for the Soldier and the Nation.

Battle Command Training Capability - Equipment Support (BCTC-ES)

MISSION

To provide network, equipment and technical tools that enable the integration of constructive simulations systems; to integrate Army Mission Command Systems white boxes into Tactical Operation Center (TOC) sets; to provide visualization of the Common Operating Picture (COP); and to ensure Simulation-Mission Command (MC) system thread functionality. It is the enabling link within a Mission Command Training Center (MCTC) that supports Joint Land Component Constructive Training Capability (JLCCTC) stimulation. It provides support to the Mission Command Training Center Design Board for New Military Construction, Army development.

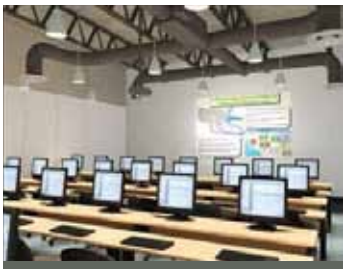
DESCRIPTION

MCTC-ES tools enable JLCCTC effectiveness by providing the MCTC with an improved ability to integrate constructive simulations with Mission Command training aligning the training environment to the operational environment. MCTC-ES provides significant mission command capability enablers including:

- Network - Internal MCTC Wide Area Network, Local Area Network additions and distribution to external Tactical Operations Center (TOC) pads, classrooms, Local Training Areas and remote sites
- Radio-Wire Integration System– Links constructive player work cells and live TOCs across combat radio nets
- Mission Command (MC) Servers - Link MC white boxes into unit and Higher Control (HICON)/Exercise Control (EXCON) TOC sets and interface with mobile operational TOC
- Battlefield Visualization System – Tool provides video, simulations and/or MC feeds to TOC, Executive Director, Simulation Control and After Action Review room
- Simulation/Command and Control End-to-End Integration – Integrate Simulation/Command and Control threads in conjunction with JLCCTC fieldings and update BCTC-ES components as required
- Architectural & Engineering Support – Subject matter experts planning support for new MCA projects prior to design directive issuance.
- Battery Refresh for computer back-up system – Eight MCTC sites – a five-year refresh cycle
- Combat Training Center (CTC) Mission Command Training Support Program Upgrades – One CTC per year

BCTC-ES

BCTC-ES



BCTC-ES

PEO STRI Digital Integration Laboratory (DIL)

MISSION

The PEO STRI DIL is operated by PEO STRI and is co-located with the Joint Development Integration Facility (JDIF) at 12000 Research Parkway, Suite 300, Orlando, FL. The Digital Integration Laboratory (DIL) provides resources and services in a centrally-controlled environment for the purpose of supporting the integration of PEO STRI systems and non-system Training Aids, Devices, Simulators and Simulations with existing and emerging mission command systems. The DIL reduces PEO STRI's integration and development cost and enables the timely delivery of level II-V training products in parallel with Army

DIL

PEO STRI Digital Integration Laboratory (DIL) (Continued)

Mission Command Systems while ensuring that PEO STRI products are relevant to emerging mission command baselines. The DIL supports PEO STRI system and software integration and development activities, conducts pre-Army interoperability certification testing and directly supports formal distributed Army interoperability certification in accordance with published software blocking schedules for designated PEO STRI programs.

DESCRIPTION

The DIL is formally recognized as an extension of the Central Technical Support Facility (CTSF) for the purpose of conducting formal distributed Army Interoperability Certification (AIC) and, as such, augments and supplements the published CTSF AIC test architecture. The DIL facilitates the adoption of common interoperability-related products and standards across the mission command and M&S communities. AIC testing conducted in the DIL does not duplicate or limit testing conducted by the Joint Interoperability Test Command, the U.S. Army Test and Evaluation Command or other test activities. Operating in full cooperation with the CTSF, the DIL has established representative mission command networks and provides a trained and certified cadre of mission command system operators and administrators as a dedicated risk reduction and digital integration facility in support of PEO STRI training system and simulation development. DIL processes, policies and procedures parallel those of the CTSF, and the DIL is fully certified as a Federated Net-Centric Site by HQDA CIO/G-6.

Integration & Interoperability (I2)

MISSION

According to the U.S. Army policy for the acquisition of training devices, PEO STRI has been designated the U.S. Army Acquisition Center of Excellence for training and testing enablers. PEO STRI is striving to achieve the Department of Defense Training Transformation goal stating that Training Aids, Devices, Simulators and Simulations are developed for interoperability across the live, virtual and constructive training environments and support operational and institutional, homestation, Combat Training Center and deployed training.

DESCRIPTION

PEO STRI recognizes this emerging need and is in the position to foster interoperability and integration of our current and future test and training systems to meet the LVC goal. By overseeing the planning, integration, cross-organization development, fielding and support of the PEO STRI portfolio, the organization can yield persistent simulation capabilities to meet LVC-derived requirements. The concept of operations for the I2 is documented and provides the overarching description and guidance for its operation as chartered by the PEO. The document defines three focus areas for the I2:

- Program Synchronization – Identification of key simulation activities and their interdependencies to identify issues and support decision making

- Interoperability – Implementation of processes to plan, develop, field and support persistent simulation capabilities for interoperability within PEO STRI programs to support user needs for training and testing
- Common Components – Implementation of processes to develop and manage common simulation capabilities for cross-program use to increase the efficiency and quality of program development and support

LVC-IA

IEWTPT-TCC

IEWTPT-HCC

IEWTPT-HCC

Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT)

MISSION

To provide Intelligence Military Occupational Specialty (MOS) training allowing Warfighting Commanders and their staff at all echelons the ability to train the Intelligence Warfighting Function (IWF) based on accurately portraying insurgency or Full Spectrum Operations; to train intelligence Soldiers by stimulating MI warfighting equipment where system operators and analysts are able to synchronize their Intelligence, Surveillance, and Reconnaissance (ISR) assets to exploit exercise intelligence data and provide the commander with opportunistic or requested, executable, exercise co-related, intelligence information.

DESCRIPTION

IEWTPT is a Non-System Training Device (NSTD) that provides proficiency training for analyst and system operators to acquire and exploit intelligence data during training, just as they would in real world operations. IEWTPT is composed of four components: a constructive simulation [CBS/TACSIM/JCATS/JLCCTC (OneSAF/ ERF, WARSIM/ MRF)] that feeds the Technical Control Cell (TCC) and Target Signature Arrays (TSA)/simulation interface, which are used to process the enhanced constructive information into native protocols of the organic ISR systems being stimulated, and the Human Intelligence (HUMINT) Control Cell (HCC). The TCC supports Combat Training Centers and Homestation intelligence sustainment training merging the Live, Virtual and Constructive training environments.

IEWTPT provides a realistic target environment for multi-intelligence disciplines including SIGINT, IMINT, HUMINT, CI, MASINT, GEOINT, and OSINT. IEWTPT must stimulate multiple systems TSAs (TUAS, TES, CGS, GRCS, CHARCS, DCGS-A, ACS, Prophet, etc.) as well as SIGINT Quick Reaction Capabilities (QRC's). In addition, IEWTPT provides a set of exercise support tools (i.e. SIGACT Generator, SIGINT ExCON, iLOD, etc.) specific to Intelligence training.

The HCC component provides sustainment training for HUMINT/Counter Intelligence (CI) collectors in an immersive, virtual training environment including the free-flowing interaction with avatars. This allows Soldiers to refine their skills in tactical questioning, source operations, interrogations, screenings, and use of an interpreter. Avatars speak in targeted foreign languages and behave culturally appropriately for the context of the scenario. The HCC allows the HUMINT/CI Collector to gather intelligence information from the virtual human while a HUMINT/CI instructor monitors the student's performance. At the end of the tactical questioning training event, the HUMINT/CI collector reviews after action review statistics as well as HUMINT/CI instructor commands. The HCC provides proficiency training of Tactical HUMINT Collectors, Company Intelligence Support Teams (CoIST), S2 Section, MC, and, in general, all Soldiers (every Soldier is a sensor/ collector) in a realistic environment.

Joint Exercise & Experimentation Integration (JEEI)

MISSION

To provide PEO STRI programmatic, technical and analytical support for planning, developing, integrating and executing Joint National Training Capability (JNTC) activities.

DESCRIPTION

JEEI is the tangible presence of PdM WTI and PEO STRI at JNTC and Joint Operating System Environment (JOSE) activities. JEEI resources compile the information provided at various JNTC and JOSE activities and outreaches to PEO STRI entities and receives and delivers feedback (requirements based). It maintains a strong, collaborative presence for the Army within the JFCOM/ DD J7 JCWC realm. JFCOM became the Deputy Director J7 Joint Coalition and Warfighting Center's (JCWC) 31 August 2011. Additionally, JEEI assets also monitor the development of the JLVC and its associated joint standards. Specifically, JEEI serves as the PEO STRI integrator for JCWC's JOSE. JOSE is a merging of the previously independent technical capabilities that support the training, experimentation, information operations, concept development and coalition activities under the JFCOM organizational structure.

Live, Virtual, Constructive-Integrating Architecture (LVC-IA)

MISSION

To provide the foundational structure and framework for integrating live, virtual, constructive systems into the integrated Soldier's training environment.

DESCRIPTION

The LVC-IA is a network-centric linkage that collects, retrieves and exchanges data among live instrumentation, virtual simulators and constructive simulations as well as between joint and Army Mission Command Systems. This architecture provides the common protocols, specifications, standards and interfaces that help standardize common LVC components and tools required for interoperability of LVC components for simulation/stimulation (SIM/STIM) of unit Mission Command Systems for mission rehearsals and training. The LVC-IA includes LVC simulation equipment and interoperability tools along with integration support personnel. It also includes common and reusable LVC components and tools such as enterprise after-action review, MC/ISR ADAPTER Adapters, correlated terrain databases, multi-level security and hardware/software requirements for LVC-IA. It involves data management, exercise management, exercise collaboration and updating training support system products.

★ PROGRAM MANAGER FIELD OPERATIONS

The Warfighter FOCUS (WFF) contract provides PEO STRI its flagship training support services. WFF operates, maintains and sustains 340,000 training systems and devices at more than 600 locations around the world to include Combat Training Centers, Homestations, Institutions and deployed locations. It delivers forward-deployed training to American and Coalition Forces in Operation New Dawn (Iraq) and Operation Enduring Freedom (Afghanistan). Since 2004, WFF has trained more than one million U.S. and Coalition Soldiers in Southwest Asia alone.

SUPPORT TO THE WARFIGHTER

ON TIME, ANYTIME, ANYWHERE

INTRODUCTION

PM Field OPS provides worldwide operations, maintenance, sustainment and instructional support of training systems used by the U.S. Army, Air Force, Marines, Navy and Multi-national Coalition Forces. PM Field OPS uses four training services contracts to accomplish its mission of providing integrated live, virtual and constructive training worldwide. The four contracts are the Warfighter FOCUS contract, the STRICOM Omnibus contract, the Artillery, Chemical and Air Defense contract, and the Flight School XXI training services contract.

Introduction (Continued)

PM Field OPS' life-cycle acquisition management services can be tailored to meet customer-specific requirements. Our acquisition professionals are Defense Acquisition Improvement Act (DAWIA) certified in Program Management, Acquisition Logistics, Business and Finance, Testing, Engineering, and Contracting ensuring the broad range of critical skills are available to support all programs and projects.

WARFIGHTER Field Operations Customer Support Warfighter FOCUS (WFF)

The Warfighter FOCUS program provides worldwide integrated operations, maintenance, sustainment, instruction and other training support services for training devices, simulators, simulations, Combat Training Centers and Ranges. These services primarily support the U.S. Army but are also provided to other U.S. services and Coalition partners. WFF maximizes opportunities for training support flexibility within a site and among multiple sites. Training support is seamlessly provided where and when it is required. The primary areas supported under WFF are Mission Command Training Programs, Combat Training Centers, Sustainable Range Program, Soldier Non-Systems, Soldier Systems, Contingency Operations and the Support Mission arena. Additionally, WFF provides military instruction, new equipment and tactics training services to both the Iraq and Afghan national armies.

Combat Training Centers

MISSION

Under the Warfighter FOCUS (WFF) program, the Assistant Program Manager for Combat Training Centers provides for Life-Cycle Contractor Support (LCCS) for Operations and Maintenance training services at the U.S. Army's Maneuver Combat Training Centers (CTCs).

DESCRIPTION

Under the WFF contract, the types of training and training support services at the three Army Maneuver Combat Training Centers are:

Joint Multinational Readiness Center (JMRC), Hohenfels, Germany

The JMRC trains leaders, staffs, units up to Brigade Combat Teams and multinational partners to dominate in the conduct of Full Spectrum Operations anywhere in the world both now and in the future. The JMRC Commander intent is to (1) Support USAREUR training - Train USAREUR leaders, staffs and units to expertly execute Full Spectrum Operations; (2) Focus on operations in Afghanistan - Increase our in-country experience and train USAREUR and multinational leaders, staffs, and units to succeed in their designated mission upon deployment to Afghanistan; (3) Provide world-class specialty training - Enhance JMRC's Leader Training Program, media and engagement skills training, counter-improvised explosive device training, situational training exercises, and live-fire exercises to better prepare leaders,

staffs, and units; (4) Provide the world's premier Multinational Training Center - Train NATO and other multinational forces to support combined operations, especially those of ISAF, while continuing to build multinational partnerships and capacity and to develop the multinational O/C-T team; (5) Enhance "The Great Little Place" - Continue to improve our Hohenfels community and our host nation relations; (6) Prepare for the future - Maintain Hohenfels and JMRC as the premier readiness center for USAREUR, NATO and multinational forces, no matter the mission, operating environment or training location. The JMRC end state is trained USAREUR leaders, staffs, units and partnered nations that are versatile, expeditionary, agile, lethal, sustainable, interoperable and capable of successfully executing Full Spectrum Operations against an array of threats anywhere in the world. JMRC remains an enduring, adaptive, and dynamic installation that supports our world-class, state-of-the-art maneuver combat training center and our strong and resilient Soldiers, Civilians and Families. More than 60,000 Soldiers (U.S. and Allied) train at JMRC annually. The JMRC supports eight 32-day rotations (approximately 256 days) per year. Up to four of the eight rotations per year are exportable training capability events, which are BCT-level exercises that include elements of the five CTC program pillars (operations group, instrumentation/training aids and devices, observer/controllers/trainers, an opposing force, and facilities) conducted at home station or at a power generation platform. The WFF contract support at JMRC/JMTC currently includes operations and maintenance for the JMRC-Instrumentation System and Exportable Instrumentation System that provide the capability to produce AARs and THPs, voice and data communications, instrumentation for tracking personnel, vehicles and aircraft, urban environment conflict scenarios, simulation operations, and battlefield effects. Additionally, WFF provides training scenarios and operational training environments to meet training objectives, conduct leader training and development programs, and conduct live-fire exercises. In addition, WFF provides subject matter experts for the Joint Improvised Explosive Device Defeat Organization support services, Improvised Explosive Device (IED) expertise, IED homestation trainers, transportation specialists, information operations specialists, civilian intelligence planners and signal school coaches.

Joint Readiness Training Center (JRTC), Fort Polk, Louisiana

The JRTC provides advance level joint training for the Army (active and reserve component), Air Force and Navy contingency forces in deployment and tactical operations under realistic conditions of low- to mid-intensity combat and is resourced to train up to a task-organized brigade, selected division maneuver assets, special operations forces and selected multi-echeloned combat support and combat service support units. JRTC training scenarios are based on each participating organization's mission-essential tasks list, and many of the exercises are mission rehearsals for actual operations the organization is scheduled to conduct. The exercise scenarios replicate many of the unique situations and challenges a unit may face to include host nation officials and citizens, insurgents and terrorists, news media coverage, and non-governmental organizations and are constantly evolving based on input from current theaters of operations, including in Iraq and Afghanistan. The JRTC supports ten 24-day rotations per year with 4,000 to 5,000 Soldiers involved in each rotation. The WFF contract support at JTRC currently includes maintenance for the JRTC-Instrumentation System (IS). The JRTC-IS is an integrated system of computer software and hardware; workstations; databases; voice, video, and data recording, production, and presentation equipment; interface devices; and communication networks. It provides the tools for the Trainer/Mentor (T/M) and the Training Analysts to collect, analyze and present training performance feedback to the training unit in the AARs and THPs by means of voice and data communications, instrumentation for

Instrumented training recorded by PM Field OPS at the Combat Training Centers

Counter ambush training at the Joint Maneuver Training Center, Hohenfels, Germany

Light forces training at the JRTC

After-Action Review using film by PM Field OPS contractors at Fort Polk, LA

Combat Training Centers (Continued)

tracking personnel, vehicles and aircraft, urban environment conflict scenarios and simulation operations. WFF also provides subject matter experts for the Army Battle Command Systems (ABCS), Distributed Common Ground System-Army (DCGS-A) Integration Support, Army Center of Excellence Counter Improvised Explosive Device (C-IED) Technical, Company Intelligence Support Team support (CoIST), Human tErrain Communication replicaTIon Capability - Army (HECTIC-A), and replication of a Provincial Reconstruction Team (PRT).

National Training Center (NTC), Fort Irwin, California

The primary mission of the NTC is to provide joint and combined arms training focused on developing Soldiers, leaders and units of today's Army for success on the 21st century battlefield. The NTC trains the transformed Army by conducting force-on-force and live-fire training for ground and aviation brigades in joint scenarios across the spectrum of conflict, using a live-virtual-constructive training model, as portrayed by a highly lethal and capable Opposing Force and controlled by an expert and experienced Operations Group. A key component of the NTC experience is the training performance feedback and assessment provided to the unit during its training rotation in the form of multimedia After-Action Reviews (AAR) and a take-home package (THP). Fort Irwin supports ten 24-day rotations per year with each rotation having 4,000 to 5,000 Soldiers involved with unparalleled force-on-force and live-fire training opportunities. Recent additions to the training scenario include cave and urban complexes that mirror combat conditions that Soldiers would expect to encounter in theaters of engagement such as Iraq and Afghanistan. The training mission is also supported by active-duty military (~5000) and working civilian populations (~4000 personnel). At the NTC, WFF contract support currently provides the operations and maintenance for the NTC-Instrumentation System that provides the capability to produce AARs and THPs, voice and data communications, instrumentation for tracking personnel, vehicles and aircraft, urban environment conflict scenarios, simulation operations, and battlefield effects. Additionally, WFF provides subject matter experts for the leadership training program, human terrain system support, Joint Improvised Explosive Device Defeat Organization support services, information operations and human intelligence operations support, and Distributed Common Ground System-Army integration support.

Contingency Operations Support (COS)

Warfighter Focus (WFF) Contingency Operations Support provides live, virtual and constructive training support to U.S. Armed Forces, host nation and multinational coalition forces deployed in Iraq, Kuwait, Jordan, Afghanistan, Saudi Arabia, United Arab Emirates and Kyrgyzstan.

WFF provides contractor training for 17 separate efforts valued at $342M in the following areas:

Afghanistan
NATO Training Mission – Afghanistan/ Combined Security Training Command – Afghanistan efforts focus on the training and

development of capable and self-sustaining Afghan National Security forces (ANSF) and Coalition Forces to include institutional instruction to develop capabilities in CIED/EOD, Personal Security Detachment, Logistics from CORPS to Battalion, Commando, Special Infantry Training, Afghan Education Program, NATO Air Training Command, Route Clearance Company, Special Vehicle Training and other branch-specific training and leadership development for a force that will exceed 250,000 personnel.

Pilot training for the Afghan National Air Force is being conducted at the Horizon International Flight Academy in the United Arab Emirates until such time as the Afghan National Army (ANA) facilities are built and curriculum developed enabling the ANAAF to assume responsibility for future pilot selection and training.
WFF provides training to the United States Forces – Afghanistan (USFOR-A) in support of their Title-10 training responsibilities for all U.S. forces deployed to and operating in Afghanistan to ensure units and personnel are appropriately trained to conduct effective operations in support of Cdr, USFOR-A priorities. This training is supported with 23 devices located in 6 different locations throughout Afghanistan.

Iraq
WFF support to United States Forces – Iraq (USF-I), Iraq Training and Advisory Mission (ITAM) – Army is shifting the focus of its operations from establishing the Iraqi Army training base and developing Iraqi Army internal defense capability, to developing sustainment, external defense capability, fielding of modernized equipment, combined arms and collective training, and the integration of Kurdistan Regional Guard Brigades (RGBs). The ITAM-Army effort focuses on advising, assisting and training the Iraqi Army with the development of a sustainment capability to adequately maintain combat systems and develop an overall logistics system for the Iraqi Army. Developing this sustainment capability revolves around a core effort of Logistics advisors at Medium Workshops and Maintenance Assistance and Instruction Training (MAIT) Teams at key Iraqi Army locations designed to train Iraq Army soldiers and units on Level 2 equipment maintenance. Training Iraqi Army leaders in managing workflow and maintenance supply system procedures is another key training effort of the MAIT teams.

Kuwait
For Army Central Command (ARCENT), WFF contractors provide critical realistic Theater Specific Readiness Training (TSRT). This includes training to safely exit disabled vehicles using the Mine Resistant Ambush Protected vehicle (MRAP) and HMMWV Egress Training (HEAT), casualty treatment training (Medical Simulation Training Center (MSTC)), situational weapons engagement training using the Engagement Skills Trainer 2000 (EST 2000), Call For Fire Trainer (CFFT) and the Longbow Crew Trainer (LCT).

The Kuwait Observer Controller Team facilitates individual, collective, leader and staff training at the Kuwait Armed Forces Training Center. It provides a staff of approximately 254 personnel consisting of Observer Controllers, Mobile Training Teams in Afghanistan, the Kingdom of Saudi Arabia, Jordan and Manas, Kyrgyzstan, as well as subject matter expertise and staff augmentation in support of ARCENT G7 in order to facilitate current training requirements and to assist in planning for future training requirements within the CENTCOM AOR.

Counter-IED training triggered by a PM Field OPS contractor at the National Training Center, Fort Irwin, CA

Force-on-force maneuver training

COS strategic mobility – Apache Longbow Crew Trainer

Flight School XXI (FSXXI)

The FS XXI simulation capability is a long-term, contractor-provided simulation service consisting of Training Helicopter (TH-67) virtual simulators, advanced aircraft virtual simulators (UH-60A/L, UH-60M, AH-64A/D, OH-58D, CH-47D and CH-47F), reconfigurable collective training devices and a training support/management oversight capability.

Systems are owned, operated and maintained by the contractor with government oversight and approval. The number, type, functionality, fidelity and availability of the flight simulators meet the needs of student loads, training schedules, individual/crew and collective training requirements prescribed by the U.S. Army Aviation Center of Excellence at Fort Rucker, AL.

Mission Command Training Program (MCTP)

MISSION

Under the Warfighter FOCUS (WFF) contract, the Mission Command Training Program (MCTP) provides training and training support in the live, virtual and constructive training spectrums to U.S. and Coalition Warfighters. This includes both fixed and mobile simulations and simulator/trainers, intelligence training and training for unmanned aerial systems.

DESCRIPTION

WFF MCTP currently provides training and/or training support for 18 distinct programs in the United States, Germany and Korea:

- Virtual Combat Convoy Trainer (VCCT) – (R) 2 trailers/1 site and 3 manned modules
- Mobile Close Combat Tactical Trainer (MCCTT) – 71 trailers/6 sites
- Close Combat Tactical Trainer (CCTT) – 303 Manned Modules /8 sites
- Reconfigurable Vehicle System (RVS) – 5 Fixed Sites/20 Manned Modules and 3 Mobile sites/10 Manned Modules
- Reconfigurable Vehicle Tactical Trainer (RVTT) – 5 Fixed Sites/20 Manned Modules and 11 Mobile sites/44 Manned Modules
- Fixed Tactical Internet (FTI) – 14 military installations utilize this network
- Common Battle Command Simulation Equipment (CBCSE) – 24 maintainers are responsible for repair of the common hardware platforms world wide
- Very Small Aperture Terminals (VSATs) – there are 3 contractor positions located at Ft. Jackson SSI
- U.S. Army Training and Doctrine Command (TRADOC) – 63 simulations (computer) operators
- Battle Command Arts & Science Program (BCASP) – 52 instructors for various Army schools: Fort Bliss United States Army Sergeants Major Academy, Fort Sill Air Defense Artillery School, Fort Rucker Aviation Center and Warrant Officer Course, Fort Benning Infantry School, Fort Knox Armor Center, Fort

Leonard Wood, Fort Lee

- Intelligence and Electronic Warfare Tactical Proficiency Trainer (IEWTPT) – 9 sites
- Virtual Battle Space 2 Gaming – 46 positions located at 16 sites
- MILSTAR Extremely High-Frequency Satellite Simulator – 1 tower
- Secure Mobile Anti-Jam Reliable Tactical Terminal Training System (SMART-T) – classroom equipment
- Mission Command Training Centers (BCTC) – 8 sites
- United States Army Intelligence Center (USAIC) – see below
- Unmanned Aircraft Systems (UAS) – see below
- One Semi-Automated Forces (OneSAF) – software installation and training support
- U.S. Army Medical Department (AMEDD) – computer operator support for exercise Global Medic

WFF currently supports intelligence training and training support primarily at Fort Huachuca, as well as Fort Devens, Goodfellow Air Force Base and Pensacola Naval Station. At Fort Huachuca, WFF supports the United States Army Intelligence Center's mission of leading, training and equipping the world's premier Corps of Military Intelligence professionals by providing professional instructors, training developers, training systems, infrastructure support, training material and system purchases. From FY09 to date, WFF has assisted the Intelligence Center with training of 29,819 students in resident courses, conducted 89,197 Mobile Training Team (MTT) and New Equipment Training (NET) visits, and trained more than 119,016 Soldiers. WFF is a key component of the Intelligence School's transformation from an instructor-centric to a learning-centric environment in compliance with the Army Learning Concept (ALC) 2015. WFF also provides training instruction for in-flight operations and maintenance on four unmanned aerial systems: Shadow, Hunter, Warrior A and ER/MP—along with training and training support in FAA ground certification in visual and instrument flight rules (VFR and IFR) and flight safety and standardization.

UH-60 Flight Simulators, Aviation Center of Excellence (AVCoE)

Apache Longbow pilots review simulator training results, AVCoE

Computer-based Mission Command training

Soldier Non-Systems (SNS)

MISSION

Soldier Non-Systems (SNS) supports (worldwide) Soldier training through sustainment and operations of entrusted "non system" Training Aid Devices, Simulations and Simulators (TADSS) and programs. SNS performs life-cycle management for fielding Program Managers (PMs), Army Training Support Center (ATSC), and other strategic partners.

VISION

SNS is acknowledged as trusted teammates and service providers that support our strategic partners' common goals and exceed mission expectations.

DESCRIPTION

PM Field OPS, SNS supports over 225,000 training devices worldwide using two on-going contracts:

1. Warfighter FOCUS (WFF)

2. Artillery and Chemical Trainers (ACT), which is a five-year 8(a) (small business set aside) contract.

Soldier Non-Systems (SNS) (Continued)

WFF provides sustainment, support, and, in some cases, operation of legacy and newly fielded TES equipment. For EST 2000, training support includes scenario development and operation, recording of units' performance and preparation of training results. For Medical Simulation Training Centers (MSTC), training support includes sound effects, battlefield effects, smells of war, realistic threat environments, and reaction recording. WFF also supports training data collection using internal and external field camera systems – the information from which is used in the preparation and presentation of the AARs for the units' evaluation. Sustainment efforts also include installation of Tactical Engagement Simulation Systems (TESS), hardware maintenance, interaction/training of unit personnel, instrumented operations and preparation of AARs.

SNS TADSS supported via WFF:

- Air-to-Ground Engagement System II (AGES II)
- AN/PSS-14 Training Set Comprised of the Sweep Monitoring System (SMS)and Training Target Set(TTS)
- Anti-Tank Guided Missile Tactical Engagement System (ATGM TES)
- Basic Electronics Maintenance Trainer (BEMT)
- Basic Multiple Integrated Laser Engagement Systems (MILES)
- Close Combat Mission Capability Kit (CCMCK)
- Engagement Skills Trainer 2000 (EST 2000)
- Fire-Arms Training Systems (FATS)
- Improved Target Acquisition System TESS (ITAS TESS)
- Improvised Explosive Device Effects Simulator (IEDES)
- Instrumentable MILES (IMILES), consisting of the Individual Weapons Systems (IWS), Shoulder Launched Munitions (SLM), Wireless Independent Target System (WITS), Universal Controller Device (UCD), and Combat Vehicle Tactical Engagement Simulation System (CVTESS)
- Laser Marksmanship Training System (LMTS)
- Longbow Tactical Engagement Simulation System (TESS)
- M2A3 Bradley adapter kits
- Man-portable Aircraft Survival Trainer (MAST)
- Medical Simulation Training Centers (MSTC)
- MILES 2000
- MILES XXI
- Mine Resistant Ambush Protected (MRAP) suite (unique WITS and Mk-19)
- Mk-19
- Mobile Gun System TESS (MGS TESS)
- Multi-Cultural Mobile Counter-IED Interactive Trainer (MCIT)
- Non-Standard Training Devices (NSTD)
- Opposing Forces (OPFOR) – OPFOR Surrogate Vehicles (OSV) and Main Battle Tank (MBT) TESS
- SBCT Vehicle Instrumentation Interface Package (VIIP)
- Simulated Area Weapons Effects/MILES II (SAWE MILES II)
- TOW Improved Target Acquisition System (TOW ITAS)

The Artillery, Chemical and Air Defense Training contract (ACT)

ACT is an 8(a) set-aside for providing worldwide Life-Cycle Contractor Support (LCCS) for the U.S. Army's Air Defense, Field Artillery and Chemical Training devices. It supports more than 1,300 training devices located worldwide. These include the Call For Fire Trainer, Fire

Support Combined Arms Tactical Trainer and the Chemical Agent Monitoring Simulator.

ACT devices supported include:

- Automated Chemical Agent Detector Alarm Simulation (ACADA SIM)
- Avenger Institutional Conduct of Fire Trainer (ICOFT)
- M270A1 Multiple Launched Rocket Systems (MLRS) Maintenance Trainers
- M93 Nuclear, Biological, Chemical Reconnaissance System (NBCRS FOX) Simulator
- Air Defense/Field Artillery/Chemical (ADFAC) Base
- Anti-Tank Guided Missile (ATGM) Basic Skills Trainer (BST)
- Biological Detection System (BIDS) Trainer
- Chemical Agent Monitoring Simulation (CAMSIM)
- Fire Support Combined Arms Tactical Trainer (FSCATT)
- High-Mobility Artillery Rocket System (HIMARS)
- Stryker NBC Reconnaissance Vehicle (NBCRV)

Mine Resistant Ambush Protected (MRAP) Egress Trainer operated by PM Field OPS contractor

Cockpit of the CH-47 Tactical Flight Proficiency Trainer (TFPT)

CH-47 in flight

PM Field OPS Instructor demonstrates life saving skills to SOCOM Soldiers

Soldier Systems

MISSION

Soldier Systems provides high-quality and economical sustainment services for the families of aviation, gunnery maintenance and driver trainer virtual training devices at more than 150 training sites worldwide. Sustainment services consist of device maintenance, supply support, engineering and upgrade support, device relocations, and minor post-production software support. Additionally, training services, to include instructors, operators and facilitators for the family of devices, are also provided as necessary.

DESCRIPTION

Soldier Systems currently focuses on the following platforms: Legacy Gunnery and Maintenance Trainers, Abrams Advanced Gunnery System (AGTS), Bradley Advanced Training System (BATS), Common Driver Trainer (CDT) (Mine Resistant Ambush Protected (MRAP), Stryker, Tank, Tank Engineering Variants), High-Mobility Multi-Wheeled Vehicle (HMMWV) Egress Assistance Trainer (HEAT), Legacy Aviation and Transportation Devices, CH-47F Transportable Flight Proficiency Simulator (TFPS), UH-60M Transportable Blackhawk Operations Simulator (TBOS), AH-64D Longbow Crew Trainer (LCT), LUH-72A Lakota Cockpit Procedures Trainers, Aviation Maintenance Trainers, and Aviation Combined Arms Tactical Trainer (AVCATT).

Soldier Systems System Availability

Device availability is critical to ensure Soldiers have necessary resources available to learn and sustain required skills.

The required 90% contractor performance factor has been exceeded with an average from 2009 to present of +98%.

Gunnery Maintenance and Driver Trainers (GMDT) operational excellence includes:

- Attaining over 90% operational readiness
- Meeting 100% of all scheduled training events
- Training over 100,000 Soldiers at GMDT sites in 2010
- Attaining work order to completed status over 95%

Soldier Systems (Continued)

Aviation and Transportation operational excellence includes:

- Achieving Contractor Performance Factor (CPF) of over 98% CPF since contract inception (and previous to December 2003)
- Meeting many obsolescence challenges for 25 to 30 year old devices
- Successfully supporting interfacing newer technology with old technology that is still in use
- Successfully installing field kits sent to device sites
- Actively participating with OEM modification teams
- Supporting fielding of new devices and relocation of existing devices
- Reacting quickly to short-notice requirements

Support Mission

MISSION

Under the WFF program, APM Support Mission (SM) provides live, virtual and constructive training products and services for the U.S. Army, Navy, Air Force, Marine Corps and Other Government Agencies (OGA). SM provides particular emphasis on the training of special operations units in both CONUS and OCONUS locations. Additionally, SM provides Foreign Military Sales (FMS) support throughout Asia, Africa, Europe and Southwest Asia.

DESCRIPTION

Through use of the WFF contract, APM SM currently provides its customers with opposing forces, role players and distinctive courses and exercises to support the specific requirements and needs of U.S. Army, Navy, Air Force and Marines Corps units. These courses, which are extremely varied and diverse in nature, can range from specialized training topics, such as combat first aid and tactical combat casualty care, to host-nation interactions, advanced weapons handling, enhanced force protection, improvised explosive device (IED) awareness, counter - IED (C-IED) training, high threat driving, cultural awareness training and other critically needed combat skills. The WFF contract vehicle also provides APM SM the expertise necessary to support the Joint Collective Training environment, including providing a rapid reaction capability to conduct training exercises for special operations forces worldwide, as well as provide SOF expertise supporting special forces/ conventional forces integration events. Through WFF, APM SM also provides critical support to the planning and implementation of pre-and post-mobilization training, as well as rebalancing and transformation of major commands and their subordinate commands into modular forces operating within the Army Force Generation process. Additionally, the WFF contract vehicle provides subject matter experts for U.S. Army North's Homeland Defense mission and Defense Support to Civil Authorities, including disaster-preparedness exercise support. The WFF contract provides FMS customers with worldwide virtual, live and constructive contractor support. The WFF contract vehicle also provides customized levels of life-cycle support for unique training systems, technical analysis, evaluation and integration of modeling and simulation, as

well as tailored technical support to information technology (IT) platform architectures, including requirements analysis, software maintenance, configuration management and large-scale Army training database integration.

WFF currently provides training services supporting the SM customer base at more than 350 sites throughout the U.S., Asia, the Mid-East, Africa and Europe. Examples of the more than 50 active customers include:

- U.S. Special Operations Command (USSOCOM)
  - U.S. Army Special Operations Command (USASOC)
  - 95th Civil Affairs Brigade
  - U.S. Army Special Forces Command (USASFC)
  - JFK Special Warfare Center and School (JFKSWCS)
  - Marine Corps Special OPS Command (MARSOC)
- U.S. Marine Corps
  - Marine Air Ground Task Force Training Command (MAGTFTC)
  - First Marine Expeditionary Force (IMEF)
- U.S. Joint Forces Command (JFCOM)
- U.S. Navy
  - Center for Security Forces (CENSECFOR)
  - Navy Expeditionary Combat Command (NECC)
  - Naval Special Warfare Command (NSW)
- National Ground Intelligence Center (INSCOM)
- U.S. Army Forces Command (FORSCOM)
- 10th Mountain Division
- 21st Calvary Brigade
- Department of Energy (DOE)
- Department of Transportation (DOT)
- Installation Management Command (IMCOM)
- U.S. Army Training Support Center (ATSC), Ft Eustis VA
- Central Technical Support Facility (CTSF), PEO C3T, Ft Hood TX
- U.S. Air Force Expeditionary Center
- U.S. Air Force Special Investigation Academy
- U.S. Army Reserve Command (USARC)
  - 75th Division (MCTD)
- First U.S. Army
  - Division East
  - Division West
  - Training Support Brigades (TSB)
- Third U.S. Army (ARCENT)
- Fifth U.S. Army North (ARNORTH)
- USAREUR, Joint Maneuver Training Center (JMTC)
- United States Coast Guard (USCG).
- 82nd ABN Div
- FMS
  - Saudi Arabia
  - Kuwait
  - Oman
  - Jordan
  - Lebanon
  - Egypt
  - Botswana
  - Ukraine
  - Georgia
  - Serbia
  - Slovenia
  - Uzbekistan
  - Poland
  - Netherlands

PM Field OPS operates a Marine Corps MRAP Egress Trainer

APM SRP operates Combined Arms Collective Training Facility (CACTF) Ranges

Digital Multi-Purpose Range Complex (DMPRC)

Sustainable Range Program (SRP)

MISSION

Under the WFF program, the SRP provides worldwide operations, maintenance and sustainment support of digital live training range systems used by the U.S. Army, Air Force, Marines, Navy and multinational Coalition Forces.

DESCRIPTION

These range systems consist of the following platforms, for which WFF currently provides sustainment and operations:

- Aerial Weapon Scoring System (AWSS)
- Initial Homestation Instrumentation Training System (IHITS)
- Integrated Military Operations on Urban Terrain (MOUT) Training System (IMTS) consisting of:
  - Combined Arms Collective Training Facility (CACTF)
  - Shoot House (SH)
  - Location of Miss and Hit (LOMAH)
  - Range Support
  - Mobile Urban Training System (MUTS)
- Digital Range Training System (DRTS) consisting of:
  - Digital Multi-Purpose Range Complex (DMPRC)
  - Digital Multi-Purpose Training Range (DMPTR)
  - Digital Multi-Purpose Battle Area Complex (DMPBAC)
  - Multi-Purpose Training Range (MPTR)
  - Battle Area Complex (BAX)

Using advanced targetry, sound effects, battlefield effects and smells of war, WFF supports systems that represent realistic threat environments that produce realistic reactions. WFF also supports enhanced training data collection using onboard instrumentation systems, as well as vehicle-mounted, internal and external field camera systems. This information is used in the preparation and presentation of the AAR for the unit's evaluation. WFF sustainment efforts currently include instrumentation hardware maintenance, interaction/training support of unit personnel, instrumented operations and preparation of AAR and THPs for trained units. Under WFF, the SRP can also interoperate within a live-virtual-constructive integrated architecture to support Army and joint exercises.

Cross Utilization

Through SRP, WFF has developed a strategy for providing detailed support to the Soldier. Depending on the training requirement for deploying units and the need for training, WFF affords the ability to surge support across the program. This has equated into cost avoidance to the government and has saved the program valuable dollars. It also provides Soldiers training opportunities to sharpen Ground Combat Crew Gunnery skills, provides realistic individual and collective training scenarios in an urban environment and challenges Aviation Crew Gunnery skills executing target acquisition and engagement in preparation for Full Spectrum Combat Operations.

★ THREAT VEHICLES UTILIZED BY DOD WEAPON SYSTEM MATERIEL DEVELOPERS

The SMERCH Multiple Launch Rocket System (MLRS) (above) has 12 launching pipes, rotating base, turning, lifting, and aiming devices, and electronic and auxiliary equipment. The Networked Electronic Support Threat Sensors (NESTS) (bottom right) provides a three-tiered approach to providing a threat SIGINT and Direction Finding capability during test and evaluation.

ITTS FOR SOLDIERS

INTRODUCTION

Project Manager for Instrumentation, Targets and Threat Simulators (PM ITTS) was established in 1990 at Aberdeen Proving Ground, MD, to provide centralized acquisition of the research, development, production and fielding of test assets and investments in support of full spectrum, developmental and operational testing for the U.S. Army. PM ITTS is the life cycle manager of major test instrumentation, aerial and ground targets, and threat simulators/systems, as well as manager of the operation and maintenance of targets and threats for developmental and operational test and evaluation (T&E). Additionally, PM ITTS is the executor for programs/funding of Army-led Office of Secretary of Defense (OSD) Central T&E Investment Program (CTEIP).

Instrumentation Management Office (IMO)

Advanced Distributed Modular Acquisition System Product Improvement Program (ADMAS PIP)

MISSION

To enhance the instrumentation data collection capabilities of the ADMAS suite of devices in several major areas to meet emerging test and evaluation needs.

DESCRIPTION

ADMAS PIP, comprised of the macro and micro ADMAS, will expand the current ADMAS Instrumentation Suite. The expansion will include updates to the existing hardware and software of the current suite plus the development of two new devices (nano ADMAS and pico ADMAS). At the completion of the ADMAS PIP, the complete suite will be comprised of four ADMAS devices (macro, micro, nano and pico ADMAS). The ADMAS instrumentation suite emphasizes modularity, low recurring costs, small size, weight, power performance, commonality and non-intrusive data collection capability.

Advanced Range Tracking And Imaging System (ARTIS)

MISSION

To provide a capability that replaces the existing Kineto Tracking Mount based optical tracking systems at White Sands Missile Range with modern optical tracking systems.

DESCRIPTION

ARTIS will develop and build three smaller systems and two medium sized systems. The multiple units will provide a fully developed and integrated system capability including time-space-position information solutions, sensor fusion, automated flight regime handoff, and staged and segmented camera triggering. ARTIS will result in greatly reduced operation and maintenance costs, support for weapon platform test programs and scenarios that are not adequately supported with existing systems. ARTIS will also provide a much improved turn around time while simultaneously producing superior data products.

Command, Control And Communications (C3) Driver

MISSION

To provide end-to-end integration of planning, simulation and stimulation, monitoring, data collection and analysis services for the test and training communities. Those features are packaged as an easy-to-use, single box solution that integrates existing tools into a cohesive and concise package.

CRIIS RPI

DESCRIPTION

C3 Driver is a Federate of the U.S. Army Test and Evaluation Command (ATEC) Common Tools in a single box that provides end-to-end system-of-systems event/exercise planning and execution. C3 Driver includes not only data collection and aggregation tools, but also tools for reduction, analysis, display and storage. It is an integrated family of systems consisting of the following: Starship/StarGen, which provides user interface and command/control; Remotely Reconfigurable Intelligent Instrumentation to Control, Collect, Stimulate and Simulate (RICS2), which provides data collection, stimulation, data reduction and analysis; Role Player Work Station (RPWS), which allows for role-playing capability; and Variable Message Format (VMF)/United States Message Text Format (USMTF) Test Tools, which serve as the Army-approved message validation tools. With C3 Driver, the effort and knowledge to configure and use a collection of advanced test instrumentation tools are reduced substantially. C3 Driver is widely used in the following environments: to test and evaluate Army tactical systems' mission command networks and systems interoperability; to perform daily system-of-systems integration testing at the Central Test Support Facility (CTSF) at Fort Hood, TX; to develop Army Battle Command System (ABCS) thread; and to support the DoD Joint Mission Environment Test Capability (JMETC) as part of its Interoperability Test and Evaluation Capability (InterTEC) tools.

Common Range Integrated Instrumentation System Rapid Prototyping Initiative (CRIIS RPI)

MISSION

To develop a "man-portable" radio unit to provide Time-Space Position Information (TSPI) for Dismounted Soldiers (DS) and Low Dynamic Vehicles (LDV) supporting test and training activities.

DESCRIPTION

CRIIS RPI is an accelerated effort to develop a "prototype" capability to provide precision TSPI for DS and LDV (e.g., ground or aircraft that are subjected to accelerations of 4Gs or less) engaged in test and evaluation events. The initial users of this capability are White Sands Missile Range (WSMR) and Yuma Proving Ground (YPG). To date, the CRIIS RPI project has delivered 300 radio units to WSMR and 80 to YPG.

Digital Network Migration (DNM)

MISSION

To integrate all range instrumentation and sensor systems at White Sands Missile Range (WSMR) into a Global Information Grid (GIG) compatible data transport network for effective distribution of classified and unclassified positional information data, voice and video.

Digital Network Migration (DNM) (Continued)

DESCRIPTION

The Digital Network Migration (DNM) project is a multi-year, Army major instrumentation modernization effort to upgrade the existing Test Support Network (TSN) infrastructure to achieve secure, interoperable, net-centric, robust bandwidth capacity of 10 gigabits per second (Gbps) at WSMR. The enterprise network capability is known as the TSN-Internet Protocol network (TSN-IP). In addition, all range instrumentation (radar, optics, telemetry and processing centers) and sensors (meteorological, etc.) have been integrated with the TSN-IP for effective, secure, real-time distribution of data, voice and video to support current and future (DoD) GIG requirements. The end-state capabilities delivered by DNM have significantly improved data delivery and network availability to three U.S. Armed Services (Army, Air Force and Navy), industry and foreign military customers to support test and evaluation and training at WSMR. The DNM project has delivered a 10 Gbps IP Core Network with 255 1 Gbps access points, a robust 40-channel core transport Dense Wave Division Multiplexing capability with associated Network Management Systems. In addition, 87 fixed and mobile instrumentation systems (radar, telemetry, GPS, optical trackers, processing centers and meteorological sensors) have been successfully transitioned to the TSN-IP Enterprise network. All systems comply with DoD Information Assurance policies and received authority to operate by the designated approving authority.

Directed Energy Test And Evaluation Capability (DETEC)

MISSION

To address critical Joint Service Directed Energy (DE) Test and Evaluation (T&E) infrastructure needs (identified in an August 2004 tri-Service study and revalidated in a 2007 update) by acquiring and fielding selected high priority T&E capabilities to the Major Range and Test Facility Base (MRTFB).

DESCRIPTION

DETEC addresses the 12 highest priority, multi-Service DE T&E infrastructure shortfalls. The Government uses a systems integration contractor to develop functional specifications for these high priority DE T&E infrastructure capabilities and then acquires these capabilities via competitive procurements. Sixteen separate capabilities are being fielded to support open-air range testing of current and future High Energy Laser and High Power Microwave weapon systems. Delivered portable/transportable hardware systems are maintained by an MRTFB host site, which in turn provides scheduling flexibility by offering these DE T&E systems to other MRTFB sites for major weapons testing. Other procedural or software-based systems are available to Government and qualified contractors via the DETEC website.

Directed Energy Test Science And Technology (DET S&T)

MISSION

To mature and transition high-risk, high-payoff directed energy test technologies (Technology Readiness Level (TRL) 3) from the laboratory environment into DoD test ranges in support of future directed energy weapon systems, full-spectrum test and evaluation shortfalls in the High-Energy Laser (HEL) and High-Power Microwave (HPM) domains.

DESCRIPTION

DET S&T is a multi-year effort sponsored by the DoD Test Resource Management Center (TRMC). DET S&T provides timely investments to mature technologies that fill both critical current and future test gaps identified by the Directed Energy Test and Evaluation Capability (DETEC) tri-Service study updates from emerging needs from DoD test ranges/facilities. Annually, DET S&T releases Broad Agency Announcements soliciting offers or projects that address Directed Energy (DE) test gaps to mature Technology Readiness Levels (TRL) from a TRL3 up to a goal of TRL6. Upon verification in a DoD test range environment, S&T prototypes are transitioned to DoD test facilities to support upcoming DE tests or future follow-on test infrastructure engineering developments (i.e., DETEC). As of Fiscal Year 2011, the DET S&T team has a portfolio of over 18 projects ranging from HEL onboard sensors, multi-waveband imagers, HPM non-intrusive miniaturized sensors and target boards to various modeling and simulation tools – each with intended transition to DoD DE test facilities. With common IMO management and synergy with DET S&T and DETEC programs, S&T investments have also supported maturation of DETEC acquisition requirements as risk reductions, analysis of alternative candidates and Pre-planned Product Improvements.

Fiber Optic Network (FON II)

MISSION

To provide instrumented test areas within Aberdeen Test Center (ATC) with high-speed communication links.

DESCRIPTION

FON II is intended to modernize instrumented test areas at ATC with high-speed communication links by modernization/replacement of microwave, copper cable, and slower Ethernet links. The project provides the ability for added bandwidth, faster routing, user prioritization and quality of service with the addition of high-speed, complex IPV6, and multi-media links. Additional security equipment will also improve gateway access, bandwidth and increase the number of locations with encryption capability. ATC's Versatile Information System Integrated ON-line (VISION) enterprise is dependent on FON II to move data within the ATC intranet and through gateways to other locations.

Joint Urban Test Capability (JUTC)

MISSION

To develop technical solutions to augment live urban test ranges with advanced data collection systems and effects generators. This effort will also link and integrate live ranges with virtual and constructive urban simulations to create distributed, capability-based joint urban test environments for brigade and below joint operations. The JUTC program was established under the Central Test and Evaluation Investment Program (CTEIP) as administered by the Test Resource Management Center (TRMC).

DESCRIPTION

The U.S. military has an immediate need for a robust Joint Urban Operations (JUO) testing capability. The 2006 Quadrennial Defense Report identified the ability to operate in urban terrain as a critical capability requirement. A major requirement for JUO testing is a set of realistic environments ranging from small rural towns to urban metropolis cityscapes that support air, ground, and maritime systems and system-of-systems operating as a joint task force. While limited representations of small rural town environments exist, current urban test facilities have deficiencies of size, complexity, realism and control that prevent them from fulfilling this requirement. The goal of the JUTC program is to strengthen this testing shortfall and address future testing JUO requirements.

Mobile Multi-Sensor Time-Space-Position Information (TSPI) System (MMTS)

MISSION

To provide an accurate, mobile, multi-sensor TSPI system to support live testing of high-speed, low-altitude guided munitions.

DESCRIPTION

The MMTS is a state-of-the-art tracking system that will enhance the Army's ability to provide accurate live missile and projectile performance data. Currently in the integration and test phase, the MMTS is a mobile system that will track existing and future tactical missiles, rockets and projectiles in order to provide high-fidelity TSPI data. The system will be able to track high-speed (up to 2000m/s) guided munitions, as well as weapons with low/flat trajectories (as low as 2 meters) and low radar cross sections. The project will employ both visible and infrared cameras along with a ranging radar, all integrated on a high-performance tracking pedestal. MMTS will capture and produce highly accurate positional information from launch to impact. Data will be further combined within the system post test to produce an accurate time-correlated flight path. The objective accuracy of the system is to resolve the position of the target missile within 1 meter at a range of 10 kilometers.

Multi-Spectral Sea And Land Target Simulator (MSALTS)

MISSION

To provide the Office of the Director, Operational Test and Evaluation (DOT&E) Center for Countermeasures (CCM), and its customers with a portable Infrared/Ultraviolet (IR/UV) open-air missile simulator to support multiple tests of Directed IR Countermeasures (DIRCM) and/or Missile Warning Systems (MWS).

DESCRIPTION

The CCM has project management authority to execute the MSALTS for the Central Test and Evaluation Investment Program (CTEIP) Resource Enhancement Project (REP). The CCM requested support to execute the contingency contracting for this project. The MSALTS project will develop several mobile IR/UV open-air missile simulators to support multiple simultaneous missile engagement tests and evaluation of a DIRCM and/or MWS at a single location or concurrent single-missile tests at any suitable Government or urban location. Each MSALTS will consist of radiometry and controls on suitable support vehicles to enable both easy portability to DoD range/urban locations and activation of the sources while the support vehicle is in motion.

JUTC

MMTS

MSALTS

OHISS

Objective Helicopter Icing Spray System (OHISS)

MISSION

To improve and replace the current Helicopter Icing Spray System (HISS) equipment that generates an artificial cloud with controlled and quantifiable characteristics which a System Under Test (SUT) flies into for the purposes of testing the SUT's de-icing capabilities. OHISS is a DoD Test Resource Management Center (TRMC) Central Test and Evaluation Investment Program (CTEIP), which will continue to be a unique national asset supporting multi-Service aviation development and icing certification.

DESCRIPTION

The OHISS project is developing a replacement airborne icing capability that will provide low-speed icing test mission support at low altitudes, produce a large cloud capable of full immersion of a test aircraft and be able to accurately simulate natural rain and Federal Aviation Administration icing conditions (used as a standard for icing qualification by both Government and industry). OHISS is fielding two capabilities: the UH-60-based Cloud Characterization System, which will replace the current C-12 Airborne Cloud Measurement System; and the Cloud Generation System, which will replace the current 35-year-old U.S. Army HISS. Artificial icing clouds provide a safer, more reliable and more controlled flight-test environment for evaluating de-icing technologies. Small-scale rain conditions can be created to provide a safer, more controlled flight-test environment for evaluating rain effects on critical aircraft surfaces, sensors and engine inlets.

Operational Test Command Analytic Simulation And Instrumentation Suite-Enterprise Integration Systems (OASIS-EIS)

MISSION

To develop common technology tools, processes, procedures, practices and standards required to support U.S. Army Operational Test Command (USAOTC) test missions. Specifically, OASIS-EIS integrates test technologies and weaves them into the live, virtual and constructive test environment by providing a family of integrated systems to support operational tests.

DESCRIPTION

OASIS-EIS is an acquisition program that will acquire the tools and define the processes necessary to develop, enhance, integrate and operate the Army's Operational Test Command test technology capabilities as an enterprise solution. These solutions will support four test technology areas: data collection, reduction and analysis; LVC simulation systems; tactical systems and networks and test control systems. OASIS-EIS will deliver improved test support capabilities through a combination of process improvements, requirements tracking, focused acquisitions of systems and software, and new development efforts as needed.

Range Radar Replacement Program (RRRP)

MISSION

To replace obsolete tracking radars at Aberdeen Test Center, Redstone Test Center, White Sands Missile Range and Yuma Proving Ground with modern digital instrumentation radars.

DESCRIPTION

The Developmental Test Command operates and maintains a fleet of large tracking and surveillance radars. After four decades of service, these radars are experiencing decreased reliability and require a large, highly-skilled work force to operate and maintain them. To keep pace with test requirements and overcome obsolescence, the ranges used limited funds to make sporadic modifications and upgrades over the years. In spite of these modifications, the technical capability, maintenance, operational costs and failure rates have reached unacceptable levels. The inability of these radars to keep pace with current and emerging test customer requirements have resulted in increased flight safety risk and reduced customer satisfaction. RRRP will develop and deploy modern radar designs that provide improved radar resolution, sensitivity, accuracy, clutter suppression and reliability. These radars will also require smaller crew sizes and reduce operational costs through remote control operations. Significantly improved radar mobility will also increase the operational tempo of the radar fleet, allowing increased mission throughout. Rapid relocation of radars will optimize radar placement and improve technical performance for the wide variety of test scenarios each test center supports.

Starship II

MISSION

To provide software-based tools to facilitate effective distributed test and training by providing planning, scheduling, verification, initialization, execution, monitoring, control and post-event review capabilities. These tools support the live, virtual and constructive distributed test and training environments.

DESCRIPTION

Starship II is a suite of software applications, services, frameworks, interfaces and documentation designed to facilitate and automate test and training events. Starship II provides an environment for the user to plan and generate planning documents, to verify configuration and to initialize, execute, synchronize, monitor, control and report the status of any sequence of activities. Starship II is adaptable to different communications media (radio, secured radio, local area network, wide area network and internet). Starship II is fully customizable to any domain and has templates for the testing and training communities. Starship II can be used to control, monitor and display the status of live, virtual or constructive instrumentation, models and simulations. Starship II can be employed either by itself or integrated with other tool kits (e.g., Command, Control and Communications (C3) Driver, Interoperability Test and Evaluation Capability (InterTEC), Operational Test Command Analytical Simulation and Instrumentation Suite (OASIS), and Battle Command Network Integration and Simulation (BCNIS)).

RRRP

STARSHIP II

System Test And Integration Laboratory (STIL)

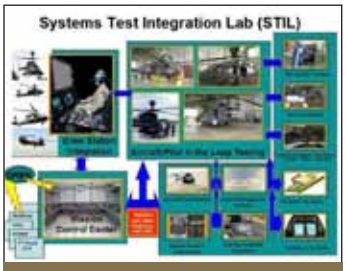
MISSION

To develop a set of laboratories for the testing and evaluation of systems and electronic components installed on aircraft prior to flight test. This capability will enhance the Army's ability to rapidly, accurately and efficiently perform developmental testing on new and modernized aircraft and their integrated systems.

DESCRIPTION

The STIL project develops two major test capabilities composed of test suites and test control center infrastructure, each with its own specific operational requirements:

- The Aviation STIL will include a reconfigurable cockpit and will be used for aviation systems platform testing at the Redstone Test Center Aircraft Flight Test Directorate in Huntsville, AL. The Aviation STIL focuses on test capabilities for navigation, sensors, aircraft survivability equipment, electrical power, communications and weapons systems. It will have a Crew Station Interface and a Test Control Center (TCC). The Aviation STIL will be transportable and rapidly re-configurable to enable testing of different aircraft and associated aircraft systems while minimizing cost for instrumentation and modification.
- A smaller Weapons STIL is used for aviation weapons/aircraft testing at Yuma Proving Ground, Yuma, AZ. The Weapons STIL consists of test laboratories, a TCC, weapons station interface and test infrastructure. The test suites provide the capabilities to test



STIL

System Test And Integration Laboratory (STIL) (Continued)

navigation, sensors, weapons and armaments. The weapons station interface consists of a series of workstations utilizing commercial software to be used for mission rehearsal and crew-member, mission-specific preparation. The weapons station interface does not include a reconfigurable cockpit. The Weapons STIL reached full operating capability in FY10.

Test Resource Management Center (TRMC) Test And Evaluation, Science And Technology (T&E/S&T) Consolidated Contracting Activity (CCA)

MISSION

To improve overall DoD Test Resource Management Center (TRMC) Test and Evaluation Science and Technology (T&E/S&T) program execution by providing responsive, single-source acquisition and life cycle contract management services for test technology areas across the country.

DESCRIPTION

The TRMC S&T CCA is a multi-year, acquisition customer support effort for all the military Services. The Instrumentation Management Office (IMO) releases annual updated technical topics in Broad Agency Announcements (BAA) where offerors compete for available S&T funding. IMO awards and executes contracts for projects upon completion of the annual BAA source selection efforts. Test technology area teams manage their S&T projects with similar objectives, as described earlier under the Directed Energy Test Science and Technology program description. The OSD TRMC T&E/S&T Program Management Office funds nine separate and specific test technology areas in support of future full-spectrum DoD weapons tests.

Target Management Office (TMO)

Aerial Targets

MISSION

To provide aerial targets for Army, DoD and other nations' weapons system developmental and operational testing.

DESCRIPTION

The aerial targets mission is accomplished by two major target categories: High and Medium Speed Aerial Targets (HSAT and MSAT). The current HSAT targets are the MQM-107 and the BQM-34. Both of these targets are launched from zero length launchers using Rocket Assisted Take Off (RATO) rocket motors that fall away after boosting the aircraft to flight speed. Both aircraft are controlled through the Target Tracking Control System and are capable of high subsonic flight speeds at altitudes up to 40,000 feet. The current MSAT targets are the MQM-175A (DT-

35) and the MQM-175B (DT-45) target aircraft. These targets are less powerful/capable than the HSAT, but also less expensive to procure and operate. These targets are launched from a hybrid hydraulic/pneumatic launcher that accelerates the aircraft up a short ramp, have a stand-alone control system and are capable of flying at several hundred miles per hour at altitudes up to 20,000 feet. Both the HSAT and MSAT systems are transportable, and TMO supports test missions at locations around the world. TMO is examining alternative systems to replace or supplement the HSAT and MSAT fleets in an effort to continue to provide affordable aerial target performance in the future.

AERIAL TARGETS

Aerial Target Flight Services (ATFS)

MISSION

To provide an affordable, quick-reaction, turn-key flight services capability to the U.S. Army and DoD community, as well as to support Foreign Military Sales commitments for live air defense training and weapon system test and evaluation around the world.

DESCRIPTION

The Aerial Target Flight Services (ATFS) program provides a complete operations and maintenance capability to support U.S. Army Air Defense Artillery training and tri-Service research, development, and test and evaluation requirements for a variety of weapon systems. A myriad of sub-scale, fixed-wing target drones (MQM-107, BQM-34 and MSAT) are flown at various speeds, altitudes and profiles to support tracking missions and live-fire engagements for live training and testing environments. Full-scale, rotary-wing target aircraft (QUH-1) and Ballistic Aerial Targets (BATS) are also used to meet DoD training and testing needs. Unique augmentation devices are used to meet specific weapon system requirements, including scoring devices for missile miss-distance and bullet counting, cruise missile profile replication, radar cross section enhancement devices, flare and electronic countermeasure pods and various towed targets to offset drone kill costs. Single or multiple target drones can be launched and flown, either in formation or simultaneously with other target systems.

Aerial Weapons Scoring System (AWSS)

MISSION

To provide objective scoring for aviation gunnery crew qualification and training.

DESCRIPTION

AWSS is an objective scoring system that supports live Army aviation gunnery training. AWSS provides scoring for 2.75-inch training rockets, both point detonation and multipurpose submunitions. AWSS provides area scoring and hit location for a variety of machine gun weapons and laser scoring of the Hellfire training missile. Four systems are provided for U.S. training exercises and are deployed as needed to

Aerial Weapons Scoring System (AWSS) (Continued)

support home station training events. The fifth system is stationed in Grafenwoehr, Germany, and supports training both in Germany and in other European countries. The sixth system is stationed in Korea and supports Pacific theater training events. A seventh tailored system is in Camp Buehring, Kuwait. An annual scheduling conference, held in conjunction with the Aviation Master Gunner's Conference, prepares a baseline schedule for the deployment of the U.S. systems for the following fiscal year.

Air Defense Artillery (ADA) Targets

MISSION

To provide live targets and scoring systems in support of Air Defense Artillery (ADA) Standards in Training Commission (STRAC) Department of Army Pamphlet 350-38. The program includes the MQM-170 Remotely Piloted Vehicle Target (Outlaw), MTR-15 Ballistic Aerial Target System (BATS) and Air Defense Scoring system and services. These systems are available for use on DoD test or training ranges within CONUS and overseas, as well as in support of Foreign Military Sales clients.

DESCRIPTION

Crew-gunnery and live-fire training are conducted using various unmanned aerial targets. The targets are threat representative of cruise missiles, unmanned aerial vehicles and low-flying, fixed-wing aircraft. These targets must be capable of simulating threat target characteristics and require the ADA weapon system crew to utilize and understand its maximum capability. Numerous types of aerial targets, operated by troop units or furnished to and operated by contract personnel, are available for ADA service practice. Training programs must result in demonstrated tactical and technical competence, as well as weapon system confidence and abilities of our Soldiers. The ADA Targets program includes multiple systems. The most commonly used targets and support devices used for this training are the MQM-170 Remotely Piloted Vehicle Target (Outlaw), MTR-15 BATS and the Scoring Miss Distance Indicator (MDI).

Air Defense Scoring Systems And Services

MISSION

To increase training efficiency by providing real time feedback of scoring data.

DESCRIPTION

Scoring augmentation is available for installation on a variety of both aerial and ground live targets. Real time feedback of scoring data is available by detecting and counting bullets' miss-distance indications that penetrate a pre-determined radio frequency field around the target. After Action Review (AAR) reports are generated by the support contractor and provided to the unit immediately after

completion of the mission. Scoring is contractor operated. Training support is scheduled with the PM ITTS Targets Management Office.

Ballistic Aerial Target System (BATS)

MISSION

To enable gunners to achieve quick reaction skills while engaging aerial threats.

DESCRIPTION

The MTR-15 BATS provides a low-cost, realistic live target for the U.S. Army's Air Defense Artillery (ADA) battalions in support of the Stinger Man-Portable Air Defense System and Avenger missile systems. BATS may be flown at low and medium altitudes and at speeds from 295 to 510 knots. Its "pop up" characteristics simulate the trajectory of a high-performance threat, such as a cruise missile, flying low to minimize radar detection then suddenly "popping up" before diving on its target to deliver its ordnance. The BATS system enables gunners to achieve quick reaction habits needed to mitigate this type of threat. It was originally designed for operation by military personnel, and the hardware can be requisitioned through the wholesale supply system. The contract support teams can also provide this training as a "turn-key" target service.

Deployable Range Package (DRP)

MISSION

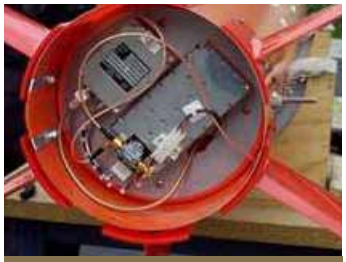
To provide a live-fire training range in the operational theater for deployed units.

DESCRIPTION

Deployable Range Packages (DRPs) include all of the equipment, tools and instructions to establish and operate a training range in support of various combat units and their individual and crew-served weapons. Lifters for infantry and armor targets (both moving and stationary), along with generators, batteries, hammers, nails, tape and other small items needed to set up a training facility, are included in the containers shipped to the units. Target lifters are operated using hand-held controllers that communicate via radio frequency signals. The hand-held controllers allow training scenarios to be designed and run by range operators according to special unit needs. Master gunners responsible for conducting unit live-fire training are able to devise scenarios that use the available range space to its best advantage. If appropriate, the targetry can be divided among up to three separate ranges, allowing individual units to conduct their own mission-focused training.

AWSS

AIR DEFENSE ARTILLERY (ADA) TARGETS



AIR DEFENSE SCORING SYSTEM SERVICES MDI

BATS

Mobile Ground Targets (MGT)

MISSION

To provide the test and evaluation community with mobile ground target vehicles for use as threat targets for destructive and non-destructive testing scenarios.

DESCRIPTION

The new generation of ground-to-ground and air-to-ground weapon systems that employ intelligent seekers require ground targets with visual, infrared, acoustic and radar signatures that accurately emulate the threat. The MGT program is responsible for managing the acquisition and certification of actual threats, as well as the development, prototype fabrication and validation of ground target surrogates to meet these requirements. TMO provides centralized management, sustainment and control of three components: Mobile Ground Target Hardware (MGTH), Mobile Ground Target Operations (MGTO) and the Operational Threat Vehicle Company (OTVC).

Mobile Ground Target Hardware (MGTH) provides actual and surrogate targets for specific test scenarios. These targets are the highest priority based upon the U.S. Army Test and Evaluation Command's (ATEC) test-specific requirements.

Mobile Ground Target Operations (MGTO) provides the methods and procedures for the management, utilization, operation, control and support of foreign mobile ground targets, surrogate assets and equipment. MGTO consists of a fleet of operational foreign vehicles and equipment used as targets for test and evaluation. The vehicles are located at five primary operating centers (POCs) that have the capability to perform operations and maintenance of the foreign assets. The POC locations are Aberdeen Test Center, MD; Eglin Air Force Base, FL; Redstone Test Center, AL; White Sands Missile Range, NM; and Yuma Test Center, AZ. TMO has established a training course that provides instruction on safe operations and preventive maintenance checks and services procedures for foreign ground assets. A "train-the-trainer" program provides annual refresher training for operators. The objective of the MGTO is to support the testing and training community's target needs as fully, efficiently and effectively as possible. Only properly trained personnel (civil service and support contractors) operate and maintain these assets. Vehicles can be transported to various locations for tests. Customers are responsible for transportation costs. Currently the MGTO inventory has more than 350 assets available for testing or training events.

The Operational Threat Vehicle Company (OTVC) acquires and fields fully mission-capable targets (such as T-72 Main Battle Tanks, BMP-2 Infantry Fighting Vehicles and BTR-80 Armored Personnel Carriers) to meet emerging requirements for threat representative missions. This program provides realistic threat-capable targets for use in force-on-force exercises allowing blue forces to think and adapt to unfolding, changing battle dynamics.

Precision Target Signatures (PTS)

MISSION

To provide low-cost three-dimensional (3-D) targets and decoys.

DESCRIPTION

The PTS project implements state-of-the-art Visual and Infrared (EO/IR) signature

technologies to produce full-scale, validated 3-D decoys that can be stationary or used on existing mover equipment. These decoys emulate the visual and infrared signatures of "actual" threat vehicles (T-72 Main Battle Tanks, BMP-2 Infantry Fighting Vehicles and BTR-80 Armored Personnel Carriers). PTS targets are:

- Low Cost
- Deployable Worldwide
- Multi-Purpose: Low-Cost Decoy/ Surrogate Target
- Durable / Reusable
- Mobile
- Augmented with Thermal Signature Kit
- Validated
- Threat Representative
- Recyclable

MGT

MGTH

PTS BMP3

PTS BTR80

Remotely Piloted Vehicle Target (RPVT)

MISSION

The MQM-170 Outlaw RPVT is currently the backbone of the Air Defense Artillery (ADA) Targets project. Competitively procured, the Outlaw series of aerial targets have been used for training and qualification of ADA missile and gun crews for over 30 years. It is a low-cost, highly-maneuverable, portable system.

DESCRIPTION

The Outlaw RPVT is a flight-proven unmanned aircraft that has flown more than 92,000 sorties to date. The system is managed by the Targets Management Office (TMO) to support the air defense training requirements for the U.S. Army, other U.S. DoD agencies and allied foreign military customers. Capable of numerous types of missions, the Outlaw's fixed-wing aerial platform and support equipment provide targeting solutions for tracking and live-fire for gun and missile crews. The Outlaw's low cost, tactical size, superior maneuverability and multi-mission capability make it the preferred aerial target for the air defense community. The Outlaw's beyond-visual-range control capability makes it ideal as a representative small unmanned aircraft system for technology demonstrations, test events, and Force Development Test and Experimentation activities. Other mission payload kits are available to provide radar and infrared signature enhancement, scoring, Multiple Integrated Laser Engagement System (MILES) engagements, smoke operations, and carrying of small avionic packages such as range transponders and customer emitters. Outlaw is controlled manually, beyond-visual-range with autopilot and waypoint navigation or satellite communications data link.

Rotary Wing

MISSION

To provide Rotary Wing aerial targets for all Services of the U.S. military and allied foreign countries to support air defense weapon systems development and operational testing.

Rotary Wing (Continued)

DESCRIPTION

The QUH-1 Rotary Wing Target provides a low-cost, realistic helicopter target system to be used in live-fire tracking and engagement testing by air defense missile systems and is approved for use on DoD test and training ranges. The QUH-1 is controlled by the Army's Target Control System. This target can be modified with infrared (IR) and radio frequency (RF) signature augmentation to provide a more realistic threat representation to meet customer needs. An effort to identify and acquire a low-cost replacement to the existing rotary wing target is underway.

Target Control System (TCS)

MISSION

To provide cost-effective, reusable and reconfigurable control subsystems for live sub-scale aerial targets, live full-scale rotary-wing targets, and live unmanned mobile ground targets used in test and evaluation events and training exercises.

DESCRIPTION

TCS is comprised of two components: the Target Tracking Control System (TTCS) and the Army Common Control System (ACCS). The TTCS is a mobile control system that provides on-site control of a large variety of targets. Through its Ultra High-Frequency data link (380-400MHz band), the system is capable of controlling up to four targets out to distances of 200 miles from the control console with a single data link unit. The system can control targets out to 400 miles with a remote relay. Additional radio frequency units can be added to the control system network for additional target control. There are two configurations of the TTCS. The first is installed in a climate-controlled S280 transportable shelter or building, and the second is installed in man-portable hard-shell "suitcases." With the addition of extra control consoles, both systems can be expanded to control as many targets as needed. The ACCS includes ground control equipment for aerial and ground targets, vehicle avionics, test sets and upgrades for the Unmanned Aircraft System-Target (UAS-T). ACCS incorporates the technology of the Target Tracking and Control System-Ultra High-Frequency (TTCS-U) and augments it with a ground target control capability.

Towed Target Program

MISSION

To provide live towed-target prototypes and production hardware that closely emulates the signature level (radar or infrared) and performance of typical threat aircraft or cruise missiles.

DESCRIPTION

The Towed Target Program has a variety of economical, off-the-shelf, towed targets that can be towed by either droned or manned aircraft systems. Towed targets can be used for both testing and for training by various air-defense weapon systems. A broad range of large and small Radar Cross Section (RCS) towed systems are available with little lead time for use. All towed systems can be fitted with both miss-distance and bullet-counting types of scoring systems and RCS measurements of all towed targets can be provided to customers. Customer-specified signature towed targets can be designed and built, if specific signature requirements cannot be met with in-stock inventory tow targets.

ROTARY WING

TOWED TARGET PROGRAM POTA

TOWED TARGET PROGRAM RRTT

UNMANNED AIRCRAFT SYSTEM - TARGET UAS -T

Unmanned Aircraft System – Target (UAS -T)

MISSION

To provide a target system that offers a generic representation of the tactical class of unmanned aircraft systems being deployed by potential adversaries worldwide. The target system is available to support developmental and operational testing of weapon systems, Force Development Test and Experimentation, and training operations.

DESCRIPTION

The Broadsword UAS-T, designated MQM-171, provides a realistic representation of the class of unmanned aircraft systems likely to be employed against U.S. and Allied Forces in the Operational Environment. It can be manually controlled within line-of-sight by the operator or programmed for flight beyond-visual-range using either the CloudCap Piccolo ground control station or the Target Tracking and Control System-UHF. The UAS-T incorporates a programmable autopilot on the aircraft to support a wide variety of repeatable flight profiles to represent UAS operations in a variety of mission profiles. UAS-T systems are currently available to support target requirements on ranges worldwide.

Virtual Targets

MISSION

To develop simulation inputs from virtual target models to support visual, predictive radar frequency and predictive infrared spectrum simulations; to conduct verification and validation of virtual targets; to support development of high-fidelity Computer Aided Design (CAD) models for specific customer funded requirements; to maintain and distribute virtual targets through the Army Model Exchange (AME).

DESCRIPTION

The Virtual Target Center provides a wide array of support to the modeling and simulation community for test and evaluation and for

Virtual Targets (Continued)

training. The Virtual Targets project provides four supporting modeling and simulation components:

1. The Targets Generation Laboratory develops simulation inputs to support visualization, radar frequency and infrared simulations. The Target Generation Laboratory also addresses emerging simulation technologies to maintain model products suitable for simulation input both today and in the future.
2. The model verification and validation process was developed by the Virtual Targets Center staff and approved by the Army Threat Validation Committee. Models are reviewed by this process to ensure that the model is properly constructed in accordance with (IAW) AR 5-11 and properly validated as threat representative IAW AR 73-1.
3. The Virtual Targets project develops high-fidelity CAD models of field equipment for use throughout the Army and Department of Defense.
4. The Army Model Exchange provides a distribution point for simulation target models and Synthetic Environment (SE) Core Common Moving Models to support T&E and training, modeling and simulation requirements. It is located at https://modelexchange.army.mil/.

Threat Systems Management Office (TSMO)

Camouflage, Concealment, Deception, and Obscurants (CCD&O)

MISSION

To support the test and evaluation of ground and aerial sensors.

DESCRIPTION

The CCD&O program includes high-fidelity decoys, low observable materials, and advanced camouflage for utilization on, and in conjunction with, various weapon systems or high-value targets expected to be encountered in a real-world environment.

Integrated Threat Force (ITF)

MISSION

To provide a scalable and reconfigurable threat force capable of establishing a reactive, "thinking" threat representation for use in test and training events.

DESCRIPTION

The ITF is being developed using mission control, visualization and collaboration tools to provide a scalable and reconfigurable

representation of opposing force structure and capabilities. The ITF accomplishes this through the integration of multiple threat assets across all functional areas that are interoperable via a robust mission control backbone. Coupled with scalable visualization and collaboration tools, the ITF enables reconfigurable data fusion functionality for the purposes of managing threat fidelity and establishing complete test control of live, virtual and constructive threat assets.

VIRTUAL TARGETS

Mobile Commercial Network Infrastructure Test Range (MCNITR)

MISSION

To create a telecommunications network that replicates the radio frequency emissions and density expected to be encountered in an operational environment.

DESCRIPTION

MCNITR is a closed–loop commercial telecommunications network that produces representative radio frequency signals and infrastructure. MCNITR provides a commercially available, wireless telecommunications network implementing Second through Third Generation via Global System for Mobile communications and Universal Mobile Telecommunications Standard/ Wideband-Code Division Multiple Access and Wi-Fi network utilizing IEEE 802.11a/b/g/n standards.

CCD&O

NESTS 2

Networked Electronic Support Threat Sensors (NESTS)

MISSION

To provide Signal Intelligence and Direction Finding (SIGINT/DF) capabilities for use in test and evaluation events.

DESCRIPTION

The NESTS program consists of a suite of SIGINT/DF systems utilized to monitor radio frequency emissions for the purposes of determining direction and position of signals of interest.

NETT

Network Exploitation Test Tool (NETT)

MISSION

To provide a live Computer Network Operations (CNO) tool that can depict full-spectrum cyber capabilities.

DESCRIPTION

NETT is a comprehensive test system utilized for delivering an integrated suite of open-source exploitation tools in support of CNO missions.

Network Exploitation Test Tool (NETT) (Continued)

NETT is designed to be used by information/cyber warfare professionals to conduct full-spectrum, live, distributed cyber tests for threat and vulnerability analysis and system evaluation. More information is available at https://www.us.army.mil/suite/page/624623.

Threat Computer Network Operations (CNO) Team

MISSION

To conduct live Threat Computer Network Operations missions involving the use of full-spectrum information/cyber operations in support of tests, exercises and training events.

DESCRIPTION

Threat CNO teams consist of highly-qualified Government and contractor personnel possessing highly-specialized authority, certifications and training necessary to conduct live, full-spectrum cyber operations in support of vulnerability analysis and system evaluation.

Threat Intelligence Electronic Warfare Environment (TIEW ENV)

MISSION

To provide a seamless, real-time, simulated, wrap-around, threat-representative constructive Electronic Warfare (EW) environment in support of Test and Evaluation (T&E) events.

DESCRIPTION

To create this constructive EW environment, the TIEW ENV develops and integrates EW (Electronic Attack, Support and Protect) models into the One Semi-Automated Forces (OneSAF) baseline. The TIEW ENV (constructive environment) has the ability to interact with the live and virtual environments via the Integrated Threat Force (ITF). This program provides high-fidelity model representation of radio-frequency propagation and entity interaction and is intended to be integrated with existing mission command and electronic warfare assets for varying degrees of force-level portrayal. The ability to support such events with a live, virtual and constructive environment will allow for a greater diversity of assets as well as anticipated cost savings.

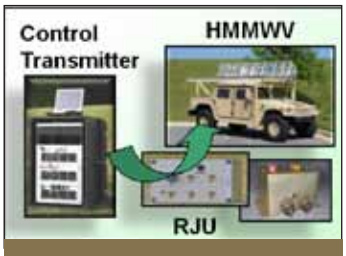
Threat Signal Injection Jammer (TSIJ)

MISSION

To establish a real-world electronic warfare environment that re-creates the effects of broadband jamming technology against tactical and strategic assets.

DESCRIPTION

TSIJ is a validated jamming device designed to mitigate the restrictions of open area emissions routinely enforced by the Federal Communication Commission. These devices are intended to replicate the effects of real-world jamming environments for the purpose of supporting test and training events. Signal injection technology utilizes a remote "control tone" to stimulate an on-board (victim) jamming device; this jamming device is coupled between the antenna and radio receiver for the purpose of injecting jamming waveforms. The current program consists of signal injection devices capable of replicating the effects of communications and GPS jamming.



TSIJ

WCCJ

Wideband Configurable Controlled Jammer System (WCCJ)

MISSION

To establish a real-world electronic warfare environment that re-creates the effects of broadband jamming technology against tactical and strategic assets.

DESCRIPTION

The WCCJ system is a reprogrammable, open-air jamming asset that can be utilized to operate in the 30 MHz to 18 GHz band against various forms of communications devices and networks.

PEO STRI'S CUSTOMER SUPPORT GROUP
INTERNATIONAL PROGRAMS

//MISSION

The mission of PEO STRI's Customer Support Group International Programs Office is to build allied and coalition partner capabilities in support of combatant commander (COCOM) operational plans and theater engagement strategies.

//INTERNATIONAL PROGRAMS OFFICE RESPONSIBILITIES

- Develop and implement the PEO's international affairs strategy to support COCOM objectives
- Direct the PEO's international activities
- Serve as the single point of entry for U.S. Embassies and foreign militaries on PEO capabilities
- Develop, implement and manage Foreign Military Sales (FMS) cases
- Provide oversight and assistance to PMs during FMS case execution

PEO STRI

For More Information Please Visit www.peostri.army.mil or Email fmspeostri@peostri.army.mil.

★ PM TRADE VISION

Providing our Soldiers realistic training solutions to ensure they are the best trained force in the World.

LT2Portal.org

PM TRADE TRAINS THE WARFIGHTER

INTRODUCTION

Project Manager for Training Devices (PM TRADE) is the Army's solution provider for collective instrumented live training systems. PM TRADE's mission is to develop, acquire, field and sustain a family of interoperable live training solutions for use at homestation, Combat Training Centers (CTCs) and deployed sites to improve Warfighter readiness in peacetime and in wartime. Leading the life-cycle management of these capabilities requires close coordination with the combat developer, TRADOC Capability Manager for Live (TCM-L), and industry to translate the Warfighter's needs to industry. The goal is to deliver the systems on schedule and within cost leveraging a product-line architecture that will ensure the best value products for our Warfighters.

Live Training Transformation (LT2)

Live Training Transformation (LT2) Product Line

MISSION

To provide Project Manager Training Devices (PM TRADE) a product-line strategy to efficiently and effectively address future live collective training systems acquisitions by focusing on the shared requirements of all live domain training systems with the strategic objectives to maximize commonality and systematic component reuse and to ensure interoperability across the live, virtual and constructive domains. The LT2 Product Line reduces fielding time, minimizes acquisition costs, enables total ownership cost reductions across the live training domain, the Live, Virtual, Constructive-Integrated Training Environment (LVC-ITE), the live domain and enhances training benefits afforded to the Warfighter through software and component reuse.

DESCRIPTION

The LT2 Product Line focuses on live-training domain requirements, LVC and Joint interoperability to maximize component reuse, reduce fielding time, minimize programmatic costs and enhance training benefits afforded to the Soldier. The LT2 product line includes live training systems in support of homestation training, deployed training, Military Operations on Urban Terrain (MOUT) training, Maneuver Combat Training Center (MCTC) training and instrumented live-fire range training. The LT2 product line is comprised of programs that use the Common Training Instrumentation Architecture (CTIA), the Future Army System of Integrated Targets (FASIT) Architecture and the LT2-CTIA components to implement the various product instantiations, such as the Objective Instrumentation Systems (OISs) for the MCTCs, Homestation Instrumented Training System (HITS), Army live-fire Digital Range Training Systems (DRTS), Integrated-Military Operations on Urban Terrain Training System (I-MTS), Exportable Training Capability-Instrumentation System (ETC-IS), One Tactical Engagement Simulation System (OneTESS), the Targetry Range Automated Control and Recording (TRACR) system and the Future Army System of Integrated Targets (FASIT) ground target programs.

Through successful execution of the product line strategy, LT2 will deliver a set of assets that provide integrated and interoperable training solutions for live collective training across the homestation, MCTC and deployed and joint training domains. The LT2 product line vision is captured in the figure at the right and in the following program objectives:

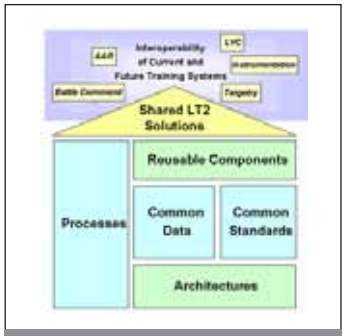
- Produce a product-line architecture that completely supports live instrumentation, Tactical Engagement Simulation System (TESS), targetry, domain-specific services and associated equipment for live training within the Army's doctrine-based training process
- Engineer a product-line process and associated standards, tools, rules and guidelines that foster development of both components and products that are compliant with the product-line architecture
- Produce a set of common applications that plug-and-play in the product-line architecture and are applicable across a wide range of programs within the LT2 domain
- Encourage development of common applications and products and capture

convincing evidence of the benefits of a product-line approach

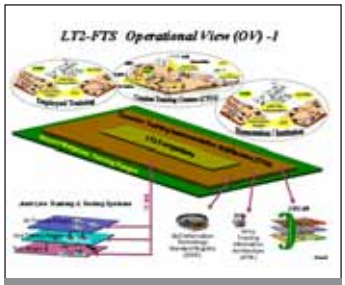
- Provide a flexible architectural environment that will support evolution of the architecture to support all Army live-training simulation systems, as well as integration with emerging Army and joint architectures such as the Test and Training Enabling Architecture (TENA) and the Live, Virtual, Constructive Integrating Architecture (LVC-IA)

PM TRADE awarded the Consolidated Product-Line Management (CPM) Indefinite delivery/indefinite quantity (ID/IQ) contract in fiscal year 2010. The CPM contract provides the management, maintenance and evolution for the LT2 Product Line core assets and provides total product-line life-cycle support to product managers within the LT2 Product Line. The CPM contract will meet the requirement for a consolidated streamlined approach that provides the project managers and product managers an efficient, effective and agile method to accomplish the following:

- Management, maintenance and evolution of the LT2 Product Line core assets
- Total life-cycle system management product-line support of systems/products within the LT2 Product Line family of training systems
- Product Line support of systems/products that leverage LT2 product-line assets
- Support of external interoperability initiatives such as LVC-IA, joint and Foreign Military Sales
- Synchronization with Warfighter FOCUS (WFF)



LT2



CTIA

Common Training Instrumentation Architecture (CTIA)

MISSION

To provide a flexible product-line architecture environment that will support the development and evolution of a common architecture to support Army live-training instrumentation systems. The product line provides integration and interoperability with legacy and emerging Army and joint architectures such as the Live, Virtual and Constructive Integrating Architecture (LVC-IA) and the Test and Training Enabling Architecture (TENA). The CTIA provides cost reduction across the total life-cycle of Army live-training instrumentation systems.

DESCRIPTION

The CTIA is the foundation architecture of the Live Training Transformation Family of Training Systems (LT2-FTS) strategy. The CTIA is the product-line architecture that provides commonality across training instrumentation systems and interoperability across LVC and joint training systems. It consists of the architecture services, software components, standards and protocols to be used by systems developers and is the core software component of the Army live-training instrumentation systems. With significant emphasis on commonality, the CTIA improves the quality of training while significantly reducing development, training, logistics and sustainment costs. The CTIA and its family of product-line components are Army-owned and are managed by the PM TRADE Assistant Project Manager. The CTIA-based systems are fielded and fully

Common Training Instrumentation Architecture (CTIA) (Continued)

operational at the Army's Combat Training Centers (CTCs) and at numerous homestation training ranges. Additionally, CTIA systems are being fielded by the Marine Corps and Air Force. The CTIA systems are Information Assurance certified to operate at the secret classification level.

Future Army System Of Integrated Targets (FASIT)

MISSION

To provide and maintain a set of common standards, specifications and interface protocols for the Army associated with live-fire range target systems, devices and interoperabilities.

DESCRIPTION

The FASIT effort provides a single target system architecture and standard solution set (specifications and interface standards) for live-fire training range devices. The FASIT standards allow for the replacement of the aging family of range devices first fielded in the late 1970s/early 1980s while allowing for standardization and future technology insertion. Its capabilities include reduced life-cycle costs, improved threat representations, a reduction in components' size, weight and power requirements, and a data interface port for instrumentation capabilities. The FASIT is part of the overarching LT2 product-line initiative within PM TRADE that is driving the live-training standardization strategy.

Live Training Transformation (LT2) Video Service Oriented Architecture (SOA)

MISSION

To provide the SOA framework and contract specification to create a non-proprietary, interoperable standard to allow various service consumers (TOC2, TAFF workstations, etc.) to communicate with any video control system regardless of the vendor.

DESCRIPTION

The goal of the Video SOA is to create a framework to organize and utilize the distributed video capabilities located on a live training range and provide compatibility with various consumers on the training data network. The SOA allows for a vendor-neutral approach to linking video sources and controls with any range operations software system. The SOA approach is the ideal solution for addressing the Live Training Transformation Family of Training Systems (LT2-FTS) need for agnostic video services. Because there are many different ranges and training sites around the world, it is necessary to "plug-in" the various LT2 products into any range and have interoperability with the local video services

infrastructure. The Video SOA will prevent the creation of additional stovepipe systems, where the consumers of video control services interface to a vendor-specific video system. Such a stovepipe would require costly rework if the video system were to change. It also requires a vendor-specific consumer implementation at each site where the video system is different. The video SOA will provide industry a clear standard for interfacing their video technology with LT2 based systems, while providing the government improved means to provide tech insertion, address obsolescence and reduce life cycle costs across ranges.

MOUT

Military Operations On Urbanized Terrain And Cultural Training (MOUT-CT) Center Of Excellence (CoE)

MISSION

To provide support and/or conduct research, development, testing, and evaluation of MOUT and cultural training technologies and to assist the services in the integration of these technologies into new and existing training programs of record.

DESCRIPTION

The MOUT-CT CoE will help the services in rapid fielding of advanced MOUT training capabilities, provide the ability to leverage and coordinate services' Research, Development, Test and Evaluation (RDT&E) efforts, reduce acquisition costs, program schedules and program risks, provide a mechanism to investigate solutions for training shortfalls, and promote interoperability of live, virtual, and constructive assets. The MOUT-CT CoE will provide a means to demonstrate, assess, evaluate and validate new capabilities at the Florida National Guard MOUT facility in a holistic, immersive simulation environment through a disciplined experimental design and evaluation process. The MOUT-CT CoE will provide a facility to conduct technology and training experiments focused on cultural/environment realism enhancements, communications enhancements, situational awareness, target system elements and other specified and to-be-determined areas based on input from operational units, technologists, researchers, user requirements and available resources. The MOUT-CT CoE is envisioned to enhance the Warfighters' ability to successfully accomplish their missions as a result of exceptional training experiences.

MOUT

MOUT

Target Modernization

MISSION

To provide and maintain a set of standard requirements and capabilities for range device capabilities and communication protocols that is synchronized with the Live Training Transformation (LT2), allows "plug and play" for differing hardware solutions across live training ranges, and to provide a mechanism for developing and implementing capabilities

Target Modernization (Continued)

in support of emerging technologies and requirements.

DESCRIPTION

The Target Modernization effort is the overarching means to generate and provide a standard solution set for range devices. This includes a single government owned common target controller for all Army targets identified in Training Circular 25-8 Ranges with a common look and feel and an integrated graphical user interface in accordance with the LT2 style guide and in compliance with the Common Training Instrumentation Architecture. The single target controller controls legacy targets (RETS/ERETS) and Future Army System of Integrated Targets (FASIT) and allows for commercial-off-the-shelf system integration (via standard interface documentation to allow industry to create their own interfaces and/or adapters). It also includes a standard performance specification (FASIT), a standard set of interfaces (FASIT Interface Control Documents), and target technology development and technology insertion. The Target Modernization effort is also developing the protocols and technology for the next generation of non-contact hit sensors, overseeing the definition and development of the next generation of common target silhouettes in support of Recognition of Combat Vehicles (ROC-V) and Combat Identification (CID), and developing and integrating solutions to modernize existing legacy ranges via new technology to align to the FASIT and Corps of Engineering Range Design Guide requirements.

Targetry Range Automated Control And Recording (TRACR)

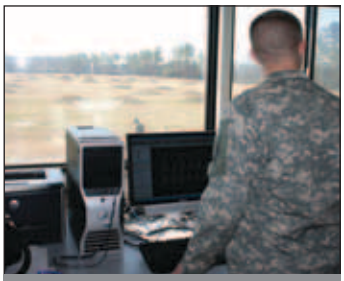
MISSION

To provide a single, government-owned, common target controller for all Army targets and ranges identified in Training Circular 25-8 Ranges with a common look and feel and an integrated Graphical User Interface in accordance with the LT2 style guide and in compliance with the Common Training Instrumentation Architecture. The single target controller controls legacy targets (RETS/ERETS) and FASIT targets and allows for commercial-off-the-shelf system integration (via standard interface documentation to allow industry to create their own interfaces and/or adapters).

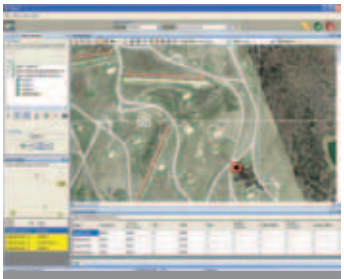
DESCRIPTION

The TRACR system is a software application that supports the planning, execution and review of scenario-based training at non-instrumented Army training ranges. TRACR allows users to develop and prepare automated target control scenarios that support time and event-based target control as well as triggering via manual control. TRACR permits the user to control the training scenarios via scenario or manual overrides and control. TRACR also collects target engagement statistics and assists the user with the generation and presentation of After Action Review (AAR) material. Currently, the TRACR system can be utilized on all live-fire training ranges, from the small arms, lane-based versions up to large maneuver ranges such as Multipurpose Range Complex (MPRC). TRACR is a proven replacement for the existing Enhanced Remote Equipment Target System (ERETS) control system and is also compatible with FASIT-compliant targets. The TRACR Suite provides modular software components to extend capabilities of

TRACR to include Advanced Crew/Collective Evaluation (ACE) and AAR functions (HTML and PowerPoint-based), Common Player Unit Gateway support, Situational Awareness and embedded functions to support the LT2 Video SOA. TRACR and TRACR Suite have been updated to provide legacy COTS target integration and support for both Meggitt and Saab-based range target systems.



TRACR Ft. Eustis



TRACR Maneuver Base

Product Manager Live Training System (PM LTS)

Aerial Weapons Scoring System Integration With Longbow Apache Tactical Engagement Simulation System (AWSS-LBA TESS)

MISSION

To provide force-on-target gunnery training for Longbow Apache aircrews.

DESCRIPTION

AWSS LBA TESS provides the LBA pilots the ability to conduct force-on-target engagements using live ammunition for 30mm and rocket engagements and simulated Hellfire missile engagements. The SMart Onboard Data Interface Module (SMODIM) transmits aviation data from the Apache to the AWSS ground station to support gunnery scoring. Trainers and commanders use AWSS to score the pilot's live-fire gunnery performance and provide constructive AAR feedback.

AWSS-LBA TESS

Counter Radio Electronic Warfare 2 (CREW2)

MISSION

To provide the Warfighter a training simulator that looks, feels and operates like the equipment fielded to operational units. To train users to employ Current Electronic Countermeasure (ECM) equipment in response to an adaptive threat and to understand the potential impacts of using radio frequency emitters on enemy and friendly-force equipment located in the same battle space. CREW2 will be fielded at homestations and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

CREW2 significantly enhances and advances the operational readiness and tactical proficiency of Soldiers in tactics, techniques and procedures during employment of the tactical CREW devices and subsequent Counter-Improvised Explosive Device (C-IED) measures. The system maintains full functionality of all switches, lights, indicators and procedures with the ultimate goal of providing a training simulator that replicates the equipment fielded to operational units. The CREW2 Training System is compatible and interoperable and interfaces with the currently fielded families of CREW and IED training devices. The CREW 2 training device operates on assigned frequencies, effectively disabling the detonation components of the training improvised detonation devices. CREW2 captures operationally

ASV MILES

Counter Radio Electronic Warfare 2 (CREW2) (Continued)

significant Electronic Warfare-related events, configurations and settings to support an AAR.

Improved Target Acquisition System-Tactical Engagement Simulation System Field Training System (ITAS-TESS)

MISSION

To provide the capability for the Warfighter to train with the Tube-launched, Optically-tracked, Wire-guided (TOW) anti-tank weapon system in an instrumented environment at Combat Training Centers, homestations and deployed locations.

DESCRIPTION

The ITAS-TESS is an operationally transparent integrated training system that provides crew and combined arms training as either a stand-alone system or as an integrated component at U.S. Army Combat Training Centers (CTC) and Homestations. The ITAS-TESS is a fully-deployable mobile MILES-based training capability and does not infringe upon crew, dismount soldier or ground observer safety. The wireless ITAS-TESS consists of equipment used to instrument and configure the TOW ITAS (mounted or dismounted configuration) as a shooter and as a MILES target. It also includes the equipment to support Homestation training exercises, remote relays to bridge long distances between the ITAS-TESS in an exercise box, and the Mobile Command and Control (C2) at Homestations.

Improvised Explosive Device Effects Simulator (IEDES)

MISSION

To provide better training fidelity by including more realistic training capabilities, reduced life-cycle costs and more realistic simulation for the current improvised explosive device threats in a live training environment. IEDES will assist the Army in training the joint and individual services on the key tasks of explosive hazards defeat required to support DoD IED defeat objectives. IEDES is fielded according to the Army-wide distribution plan.

DESCRIPTION

Under current force structure, IEDES is programmed to be fielded and employed in a full spectrum of operations and conflicts by offering realistic detection and reaction training against IED threats. IEDES consists of wireless and manual tripwires and control devices to simulate the IED threat. IEDES includes a Module Control Unit, an Electronic Common Interface Device, a trip wire IED, booby traps and a suicide bomber's vest. The IED Effects Simulator (IEDES) kit is a TADSS that will assist the Army in training

the joint and individual service on operational support tasks, conditions, and standards needed to achieve U.S. Military IED objectives. The IEDES is configured to simulate a Small, Medium, Large, and Extra Large explosive signature. The IEDES is designed to train key tasks of Explosive Hazards (EHs) defeat, to predict, prevent, detect, classify, neutralize, mark, report and record EH; and to protect personnel, equipment and facilities from EH effects. The Counter Radio Electronic Warfare 2 (CREW2) is compatible with IEDES to counter the threat of simulated IEDs. NOTE: The CREW 2 Training System is not included in the IEDES kit.

CREW Remote

CREW Primary

ITAS-TESS

IEDES

Instrumentable Multiple Integrated Laser Engagement System Combat Vehicle Tactical Engagement Simulation System (IMILES CVTESS)

MISSION

To simulate both the firing capabilities and the vulnerability of the vehicle as well as to serve as a means to objectively assess weapon effects during training; to provide unit commanders an integrated training system for use at homestation local training area and instrumented training areas. To replace Basic MILES, M2000 and MXXI target systems and field in accordance with the Army-wide distribution plan.

DESCRIPTION

IMILES CVTESS is a laser-based training device to be used on Abrams, Bradley, and Opposing Forces (OPFOR) tanks and fighting vehicles to provide real-time casualty effects. It is an evolutionary approach for replacing older IMILES CVTESS equipment currently used in force-on-force training exercises with devices that provide better training fidelity for combat vehicle systems. It will reinforce crew duties, reward proper engagement techniques and develop tactical maneuver skills of armor and mechanized infantry combined arms teams up to brigade level. It provides unit commanders an integrated training system in force-on-force and force-on-target training events at homestation training area through instrumented training. The system interfaces with instrumentation systems at Maneuver Combat Training Centers (MCTC). The IMILES CVTESS modular design will accommodate new weapons, ammunition and vehicle types. The U.S. Army will use and field IMILES CVTESS worldwide in all geographical areas.

Instrumentable Multiple Integrated Laser Engagement System Independent Target System/ Wireless Independent Target System (IMILES ITS/WITS)

MISSION

To replace basic MILES target systems at homestations and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

IMILES ITS/WITS provides real-time casualty effects necessary for tactical engagement training in direct-fire, force-on-force training scenarios

Instrumentable Multiple Integrated Laser Engagement System Independent Target System/ Wireless Independent Target System (IMILES ITS/WITS) (Continued)

and instrumented training scenarios. It replaces the previously fielded Mobile Independent Target System (MITS) and Independent Target System (ITS) used on non-turret military vehicles (e.g. tactical wheeled vehicles, M113s, MRAPs, etc.). It can also be used independently on fixed structures, i.e. bridges. Instrumentation interface is provided for CTC use and includes GPS and battery eliminator functionality. IMILES ITS/ WITS is fielded Army-wide in accordance with the MILES Basis of Issue Plan (BOIP).

Instrumentable Multiple Integrated Laser Engagement System Individual Weapon System (IMILES IWS)

MISSION

To replace basic IMILES IWS at homestations and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

The IMILES Individual Weapons System (IWS) is a manworn, dismounted system, providing real-time casualty effects necessary for tactical engagement training in direct fire force-on-force and instrumented training scenarios. Event data can be downloaded for use in an AAR and training assessment. The IWS replaces "Basic" MILES manworn systems at homestations (Homestation Instrumentation Training System - HITS) and Maneuver Combat Training Centers (MCTCs) Army-wide in accordance with the MILES Basis of Issue Plan (BOIP).

Instrumentable Multiple Integrated Laser Engagement System Shoulder Launched Munitions (IMILES SLM)

MISSION

To replace basic MILES simulators for the AT4 anti-tank weapon and RPG-7 opposing forces equivalent systems at homestations and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

The IMILES SLM provides real-time casualty effects necessary for tactical engagement training in direct-fire, force-on-force training scenarios and instrumented training scenarios. IMILES SLM replaces basic MILES currently fielded, improves simulation of opposing forces and links to MILES 2000 and MILES Individual Weapon System (IWS) torsos. It provides better training fidelity for blue forces weapons and a more realistic simulation of threat weapons using opposing forces visual modifications vehicles (VISMOD). The SLM replaces older systems at homestations and Maneuver Combat Training Centers (MCTCs) Army-wide in accordance with the MILES Basis of Issue Plan (BOIP).

Instrumentable Multiple Integrated Laser Engagement System Tactical Vehicle System (IMILES TVS)

MISSION

To replace basic MILES target systems at homestations and maneuver CTCs Army wide in accordance with the distribution plan as next generation to WITS.

DESCRIPTION

IMILES TVS provides real-time casualty effects necessary for tactical engagement training in direct-fire, force-on-force training scenarios and instrumented training scenarios. It replaces all basic MILES Systems currently fielded on non-turreted military vehicles, from commercial vehicles through MRAP and Stryker families of vehicles, and can be used independently on fixed structures, i.e. bridges. The TVS improves on the wireless function of WITS, permitting a "weapons link" between the system's target detectors and the Small Arms Transmitter (SAT) used by personnel on board the tactical vehicle; adding the capability of killing both the vehicle and the on-board small arms weapon system. Instrumentation interface is provided for CTC use and includes GPS, crew-served weapons interface and battery eliminator functionality. IMILES TVS is fielded Army-wide in accordance with the MILES Basis of Issue Plan (BOIP).

IMILES ITS/WITS

IMILES TVS

Instrumentable Multiple Integrated Laser Engagement System Universal Control Device/ Micro-Controller Devices (IMILES UCD/MCD)

MISSION

To replace legacy MILES controller devices at homestations and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

The IMILES controller devices are low-cost, lightweight devices used by observer controllers and maintenance personnel to initialize, set up, troubleshoot, reload, reset and manage participants during live force-on-force training exercises. These self-contained devices interact and provide administrative control of all other MILES devices.

IMILES IWS

IMILES UCD/MCD

Kiowa Warrior Cockpit And Sensor Upgrade Program Tactical Engagement Simulation System (KW CASUP TESS)

MISSION

To provide a live training system to support KW CASUP Limited User Testing (LUT) planned for FY 13 and Operational Testing (OT) planned for FY 15.

DESCRIPTION

KW CASUP TESS is planned to be used as a data collection tool to support KW CASUP LUT evaluation in FY 13 and OT evaluation in FY 15. The system will provide aircraft location,

Kiowa Warrior Cockpit And Sensor Upgrade Program Tactical Engagement Simulation System (KW CASUP TESS) (Continued)

heading, status (alive or killed), lethality (weapons engagements) and vulnerability information in near real time. The system will leverage and be interoperable with the existing Apache Tactical Engagement Simulation System (TESS) homestation system infrastructure. KW CASUP TESS will simulate missile, gun, and rocket engagements and provide for an AAR capability.

One Tactical Engagement Simulation System (OneTESS)

MISSION

To provide the indirect fire capability and fill the weapon systems training gap in Live Fire Force-on-Force training across the Army to include the development of the initial Architecture and Standards for indirect fire to ensure commonality and interoperability between components.

DESCRIPTION

OneTESS is currently guided by a new requirements document called Live Tactical Engagement Simulation System (LTESS) Directed Requirements Document (DRD). OneTESS will provide a live, precision, combined arms Indirect Fire (IF) Force-on-Force training capability for Brigade-and-below exercises, at Homestation, Combat Maneuver Training Centers and deployed sites and will be interoperable with I-MILES laser-based systems. It will provide realistic, real-time casualty effects for indirect-fire tactical engagements. Current development includes Indirect Fire capability for the IBCT 60mm/81mm/120mm mortars, Forward Observer (FO), and development of the Architecture. Future development includes Artillery, Automated Medical Casualty Assessment, Medical Casualty Treatment Tracking, Maintenance Assessment, NBC, Aviation/Air Defense, EW/IOW, Mk-19, M203/320, Mine/Countermine, and Precision Gunnery. OneTESS will be compliant with the Common Training Instrumentation Architecture (CTIA) in support of Army and Joint Exercises.

Longbow Apache Tactical Engagement Simulation System (LBA TESS)

MISSION

To provide a collective training capability at the Combat Training Centers (CTCs), aviation homestations, ranges and deployed locations.

DESCRIPTION

The LBA TESS is an advanced training system developed for the LBA to support force-on-force and force-on-target live training at the CTCs, aviation homestations and ranges. The system is comprised of aircraft and target hardware, a

telemetry network, repeaters, and ground station. LBA TESS displays live training events in real time and enables trainers to control live-training exercises. LBA TESS simulates Apache weapons engagements to include SAL and RF Hellfire, rocket, and gun and provides an AAR capability.

LBA TESS

Man-Portable Aircraft Survivability Trainer (MAST)

MISSION

To field MAST at homestation and maneuver CTCs according to the Army-wide distribution plan.

DESCRIPTION

The MAST is a MANPADS live-training device used to train aircrews to react to SAM threats during live-training exercises. The MAST will interoperate with the AN/AAR-47 MWS and AN/AAR-57 CMWS. A WESS simulates the visual launch signature of a MANPADS to signify that the MAST has been fired. Additionally, the MAST has a capability to record SAM engagements during live-training exercises. The recorded engagements are used for debriefing aircrews and support the preparation of AARs. The system also has the capability to interoperate with aircraft MILES/ LBA TESS aircraft instrumentation during force-on-force and force-on-target training at the MCTCs and at Aviation unit homestations.

MAST

MK-19 Simulation Player Unit (SPU)

MISSION

To provide accurate training devices with line-of-sight laser engagements that measure unit performance and provide a positive training experience, giving Warfighters and staffs confidence in their equipment.

DESCRIPTION

The MK-19 SPU incorporates a modular design resulting in an interoperable solution simulating the firing effects of a MK-19 in a direct-fire Multiple Integrated Laser Engagement Simulation (MILES) system environment. It provides a common approach for the Stryker remote weapon station, M113 pintle mount, Amphibious Assault Vehicle (AAV), High-Mobility Multipurpose Wheeled Vehicle (HMMWV), Mine Resistant Ambush Protected (MRAP), and ground mount. It includes independent casualty assessment, built-in optical alignment, four types of selectable ammunition, rechargeable battery for power source and controller gun for programmable lethality.

SPU

Mobile Gun System Tactical Engagement Simulation System (MGS TESS)

MISSION

To simulate both the firing capabilities and the vulnerability of the vehicle and provide a means to objectively assess weapons' effects during training; to provide unit commanders an integrated training system for use at homestation local training areas and at the Combat Training Centers.

DESCRIPTION

MGS TESS provides laser-based precision gunnery capabilities and force-on-force training. It provides a full-fire control interface that allows the crew to train reinforcing tactical, crew and engagement skills. The main and secondary weapons are simulated and integrated through the Fire Control System (FCS). TESS interfaces with the vehicle with brackets and connectors and to the crew with audio and visual signals through Sight Video captures tracer effects, vehicle position and firing events. It also records video from Gunner's Day, Gunner's Thermal, Commander's Panoramic Viewer and from the crew camera mounted in the turret to be used during AAR. The sub-caliber In-bore Device System is appended as a cost-saving alternative to main gun live fire for comprehensive force-on-target training.

Multiple Integrated Laser Engagement System (MILES) XXI

MISSION

To simulate both the firing capabilities and the vulnerability of the vehicle as well as to serve as a means to objectively assess weapon effects during training. To replace Basic MILES, M2000 target systems and field in accordance with the Army-wide distribution plan.

DESCRIPTION

The MILES XXI CVS is a Tactical Engagement Simulation System (TESS) currently used to instrument M1 Abrams, M2/M3 Bradley, and Stryker vehicles at the Army's Maneuver Combat Training Centers (MCTC) and homestations providing a direct-fire training capability. It provides the real-time casualty effects necessary for tactical engagement training in direct-fire force-on-force combined arms training scenarios.

Opposing Forces Surrogate Wheeled Vehicle (OSWV)

MISSION

To provide an OPFOR wheeled threat capability that units are able to train against and develop Tactics Techniques and Procedures (TTP) to counter and defeat the emerging worldwide threat capability. The OSWV will provide Combat Training Centers' Opposing Forces (OPFORs) the ability to replicate a hybrid threat vehicle that is needed to train a Rotational Training Unit (RTU) using their Full Spectrum Operations Mission Essential Task Lists. The OSWV provides the

key component of the OPFOR that is the tactical, technical and commercial vehicles that are needed during the Force on Force (FOF) training events for live training.

DESCRIPTION

OSWV is a family of wheeled vehicles, VISMODs, and instrumentation components intended to portray an enemy threat and Civilians on the Battle Field (COB) vehicles at the three CTCs. These vehicles include Enemy Tactical (Indirect Fire, Armored Personnel Carrier (APC), Anti-Tank Guided Missile (ATGM), Reconnaissance, Surveillance and Target Acquisition (RSTA), Technical, and COB Vehicles.

MGS TESS

STRYKER MILES XXI

Opposing Forces Weapons (OPFOR WEAPONS)

MISSION

To provide Opposing Forces Weapons Tactical Engagement Simulation Systems (OPFOR Weapons TESS) to support OPFOR Main Battle Tanks (OPFOR MBT), Opposing Forces Surrogate Vehicle BMPs (OSV) and Shoulder Launched Munitions (SLM) OPFOR weapon variants. The OPFOR Weapons will provide Combat Training Centers' Opposing Forces (OPFORs) the ability to replicate hybrid threat vehicles and weapons that are needed to train a Rotational Training Unit (RTU) using their Full Spectrum Operations Mission Essential Task Lists. The OPFOR Weapons TESS provides real-time casualty effects necessary for tactical engagement training in direct fire, force-on-force training scenarios and instrumented scenarios.

DESCRIPTION

The IMILES OPFOR Weapons TESS is compatible and interoperable and interfaces with the fielded MILES family of training devices. The OPFOR MBT and OSV is a modular, wireless design that significantly reduces system installation times. Its Direct/Indirect Fire Cue (DIFCUE) interfaces provide better visual cues, flash, and smoke to simulate a weapon firing and enhance battlefield effects. The OPFOR MBT TESS replicates a T72/80 threat weapons, and the BMP TESS replicates the BMP 2 threat weapons. The SLM reports and communicates with the manworn MILES via an inductive loop, providing engagement and casualty assessment data. The IMILES SLM allows visual modification to the "base" system, replicating the physical appearance of the simulated weapon (RPG 27and other OPFOR Weapon Variants). It includes a Weapons Effects Signature Simulation (WESS) assembly that provides visual cues, flash and smoke to simulate a rocket firing.

Stryker Anti Tank Guided Missile (ATGM) Stryker Tow Simulator (STS) MILES XXI

MISSION

To provide a MILES capability for the (ATGM) vehicle. It replaces the obsolete Field Tactical Trainer (FTT) with a system that is compatible with both Fire Control Systems (FCS).

Stryker Anti Tank Guided Missile (ATGM) Stryker Tow Simulator (STS) MILES XXI (Continued)

DESCRIPTION

STS works in conjunction with the vehicle Modified Improved Target Acquisition System (MITAS) and the MILES XXI training system. STS has two major components; TOW Laser Device (TLD) stimulates the actual TOW missile round, and TOW ATWESS Device (TAD) provides the visual and **audible** cues associated with the TOW missile when engaging targets. It is currently the only force-on-force trainer that accommodates the Common Processor.

Stryker Multiple Integrated Laser Engagement System (MILES XXI)

MISSION

To provide nine of ten Stryker variants with MILES training capability to include crew served weapons, MK-19 and below.

DESCRIPTION

Stryker MILES XXI provides a laser-based training device to realistically replicate casualty effects necessary for tactical engagement training during a direct-fire, force-on-force training scenario. It enables collective training from platoon to brigade to train as a combined arms team at homestation and CTCs. Force-on-force maneuver training affords the brigade the means to train Soldiers on combat engagement skills using go-to-war weapon platforms in a safe environment. It provides realistic training without the expense and environmental impact of firing live ammunition. Stryker MILES XXI provides training capability to the following variants: Infantry Carrier Vehicle, Commander's Vehicle, Fire Support Vehicle, NBC Reconnaissance Vehicle, 120mm Mounted Mortar Carrier, Anti-Tank Guided Missile, Engineer Squad Vehicle, Medical Evacuation Vehicle and Reconnaissance Vehicle.

Product Manager Combat Training Instrumentation Systems (PM CTIS)

Combat Training Center Instrumentation System (CTC-IS MOD)

MISSION

To enhance the ability of the CTCs to conduct force-on-force, live-fire and full-spectrum operations training in a contemporary operating environment, as well as combined arms training by allowing the collection of engagement data for analysis and after-action review production.

DESCRIPTION

CTC-IS MOD modernizes the Instrumentation System (IS) at the National Training Center (NTC), Fort Irwin, CA and Joint Readiness Training Center (JRTC), Fort Polk, LA, by meeting the Army's advanced collective training objectives. It upgrades ranges and MOUT

sites, core IS software and hardware thereby facilitating training at the maneuver CTCs. It provides an integrated system of workstations, databases, voice and video recording, production and presentation equipment, interface devices, and communications systems. CTC-IS MOD is scalable to collect, report, store, manage, process and display event data for 10,000 instrumented players and 100,000 constructive entities. CTC-IS MOD is a key part of the Live Training Transformation – Family of Training Systems (LT2-FTS) and is based on the Common Training Instrumentation Architecture (CTIA). It leverages advanced technology in a modular and component-based manner and provides the foundation for common components across the live training product line. Common components such as exercise planning, exercise preparation, exercise control, after-action review preparation and presentation, in concert with CTIA services, processes, rules and standards, support the full spectrum of training. CTC-IS MOD is interoperable with other external systems through DIS, HLA or TENA protocols.

CTC-IS MOD

ETC-IS

Combat Training Center Live Fire Modernization (CTC LIVE FIRE MOD)

MISSION

To provide tools to support the live-fire training missions requirements of the CTCs to assistance in the transition from Mission Rehearsal Exercise/Situational Training Exercise (MRE/STX) rotations to Full Spectrum Operations (FSO) against a hybrid threat.

DESCRIPTION

CTC Live Fire Modernization is a program for required upgrades to provide live-fire training in an FSO environment against a near peer threat. Critical components for Live Fire Mod include Battlefield Effects, Range Control System, and Targetry. The Battle Effects Simulator (BES) provides real-time feedback and realistic battlefield effects to units conducting Force-On-Target (FOT) tactical training. The system is used in day or night range exercises for visual and acoustic target recognition at stationary range positions with a target mechanism or mounted on a moving target platform. BES is designed to produce a flash/bang and a smoke signature, which simulates/replicates a large caliber weapon fire of a hostile threat and/or an impact round on an armor target. The Range Control System will allow for the integration of new Future Army Systems of Integrated Targets (FASIT) targetry systems with legacy targetry systems. The FASIT targetry systems will be a combination of Stationary Armor Targets (SATs), Stationary Infantry Targets (SITs), and Moving Infantry Targets (MITs) to emulate the hybrid threat to support the training of Full Spectrum Operations.

Exportable Training Capability Instrumentation System (ETC-IS)

MISSION

To provide a mobile, deployable, training system capable of augmenting CTC rotations with live, instrumented and brigade combat team size exercises at homestations.

Exportable Training Capability Instrumentation System (ETC-IS) (Continued)

DESCRIPTION

ETC-IS is an Army Battle Command System centric "system of systems" that includes integrated computer software and hardware, workstations, databases, voice and video recording, production and presentation equipment, and interfaces capable of providing CTC-like training. The ETC-IS supports exercise planning, exercise management, training performance feedback and collection of Tactical Engagement Simulation data and includes an observer controller communication system. ETC-IS is a key part of the Live Training Transformation – Family of Training Systems (LT2-FTS) leveraging advanced technology in a modular and component-based manner.

Homestation Instrumentation Training System (HITS)

MISSION

To provide consistent homestation-instrumented training systems throughout the Army; to interoperate with existing and future capabilities.

DESCRIPTION

HITS supports collective maneuver training for platoon through battalion units. By integrating future and legacy Tactical Engagement Simulation, HITS provides position location and weapons effects data for real-time exercise monitoring and AAR. HITS supports force-on-force and force-on-target training across the full spectrum of operations at a security level up to Secret System High. HITS is part of the Live Training Transformation–Family of Training Systems (LT2-FTS) and is based on the Common Training Instrumentation Architecture (CTIA). Common components such as exercise planning, exercise preparation, exercise control, AAR preparation and presentation in concert with CTIA services, processes, rules and standards support the full spectrum of training. HITS is interoperable with other external systems through DIS, HLA or TENA protocols. HITS provides the Live domain for Live-Virtual-Constructive Integrated Training Environment (ITE).

Product Manager Digitized Training (PM DT)

Battlefield Effects Simulator (BES)

MISSION

To simulate the flash/bang of a weapon's discharge and impact in Force-On-Target live training.

DESCRIPTION

The Battle Effects Simulator (BES) provides real-time feedback to units conducting Force-

On-Target (FOT) tactical training and realistic battlefield effects. The system is used in a day and night range exercise for visual and acoustic target recognition at stationary range positions with a target mechanism or mounted on a moving target platform.

BES is designed to produce flash/bang and smoke signatures using the M34 (Hostile Fire) cartridge and/or M35 (Target Hit) cartridge, which simulates/replicates a large caliber weapon fire of a hostile threat and/or an impact round on an armor target. The system is a core feature in support of live-fire ranges throughout the Army as identified within Training Circular (TC) 25-8.

Multiple PEO STRI programs such as the Remote Target System/Enhanced Remote Target System RETS/ERETS, New Generation Army Targetry System (NGATS), Future Army Systems of Integrated Targets (FASIT), Non-Instrumented (Small Arms), and Instrumented Ranges Digital Range Training System (DRTS) rely on the BES system in order to support the training missions requirements.

HITS

BES

Combat Training Center Military Operations On Urban Terrain Instrumentation System (CTC MOUT-IS)

MISSION

To provide MOUT video, audio, battlefield effects, instrumentation and supporting infrastructure in the CTCs to support urban operations training events. CTC MOUT-IS provides both the ability to support training for full spectrum operations for individual Soldiers through Brigade-level urban operations training and timely and effective AAR capabilities for the units.

DESCRIPTION

This system provides state-of-the-art urban training facilities capable of training today's Soldiers in a realistic urban environment to ensure Soldiers are prepared to conduct full-spectrum operations in any urban environment. This system monitors and controls the training exercise, processes, and displays and analyzes collected exercise data, prepares and presents standardized training performance feedback, and archives training performance information for external use.

CTC MOUT

Digital Range Training System (DRTS)

MISSION

To provide new and modern ranges capable of training, evaluating and stressing today's Soldiers and their modern equipment in a realistic train-as-you-fight environment.

DESCRIPTION

The Instrumented Ranges/Digital Range Training System (IR/DRTS) Program is the enabler of range modernization for heavy tactical vehicle training. IR/DRTS provides the infrastructure and instrumentation for Abrams, Bradley and Stryker live-fire gunnery training and qualifications and

DRTS

Digital Range Training Systems (DRTS) (Continued)

Combined Live Fire Exercises (CALFEX). IR/DRTS facilitates individual, collective live-fire training and qualification per Training Circular 25-8 with enhanced training data collection and AAR capabilities. IR/DRTS addresses emerging doctrinal requirements and enables new training techniques. They address the need to replace aging live-fire training infrastructures with a modern suite of digital capabilities. These training systems replace obsolete, inadequate training methods and equipment in order to stimulate new weapon systems, stress Soldiers, incorporate the Digitized Force, and provide enhanced training data collection and AAR capabilities. The system employs these capabilities on four standard digital ranges: Digital Multi-Purpose Range Complex (DMPRC), Digital Multi-Purpose Training Range (DMPTR), Battle Area Complex (BAX), and Digital Air Ground Integration Range (DAGIR). The system is scalable among these ranges and capabilities. The instrumented ranges utilize all available combat system's capabilities and digitally integrate them to manage forces undergoing individual and collective live-fire training and qualification exercises.

Integrated Military Operations On Urban Terrain (MOUT) Training System (I-MTS)

MISSION

To help Warfighters hone their skills in urban terrain environments and enhance their ability to complete their wartime mission.

DESCRIPTION

I-MTS consists of four training facilities/systems. The Urban Assault Course (UAC), Shoot House (SH), Combined Arms Collective Training Facility (CACTF), and Collective Training Facility (CTF) are designed to provide individual Soldier-through-Battalion-level homestation, and urban-operations training. These training facilities allow units to train Warfighters on building-entry and room-clearing techniques under live and blank-fire conditions. These systems monitor and control the training exercise. They also analyze collected exercise data, prepare and present standardized training performance feedback, and archive training performance information for external use.

These I-MTS urban training facilities are located across Army, Army Reserve, and National Guard installations to ensure Soldiers are prepared to conduct full-spectrum operations in any urban environment. The CTF system is fielded exclusively to National Guard and Army Reserve Installations which are Pre-Mobilization sites.

By providing state-of-the-art urban training facilities capable of training today's Soldiers in a realistic urban environment, the Army ensures the highest level of urban training short of combat. Lessons are learned on the training ground and not in battle.

Mobile Military Operations On Urban Terrain (MOBILE MOUT) Training System

MISSION

To provide a rapidly fielded, deployable urban operations training system that allows Warfighters to improve their tactics, techniques, and procedures and to conduct mission rehearsals

practicing force on-force or force-on-target while utilizing Multiple Integrated Laser Engagement System (MILES), blanks, man-marker rounds or Short-Range Training Ammunition.

DESCRIPTION

Mobile MOUT is a transportable, urban combat training system consisting of reconfigurable shipping containers assembled into urban structures. Urban structures are fitted with audio/video instrumentation systems, exercise control and monitoring and AAR presentation capability. Urban structures can be multi-story with interior/ exterior stairwells and may include balconies and trap doors leading to subterranean storage areas or tunnel complexes. In its fully instrumented configuration, the system allows realistic battlefield effects (smoke, sounds, smells, pyrotechnics, etc.) and provides video and audio of Warfighters being trained to allow for rapid AAR.

CACTF

APM Foreign Military Sales (FMS)

Egyptian Combat Training Center (AFCTC-3)

MISSION

To provide I-MILES player units, detectors and other equipment to facilitate force-on-force live training and instrumented Combat Training Centers (CTC) training capability to the Egyptian foreign military sales (FMS) customer.

DESCRIPTION

Production MILES hardware has been and is being provided under FMS cases. These FMS MILES deliveries from several different MILES manufacturers include foreign-made combat vehicles as well as different types of small arms weapons. They will provide man-worn MILES instrumentation for small arms weapons, medium crew-sized weapons, vehicles, artillery, tanks, and air defense systems. The MILES-based tactical engagement simulation system (TESS) is also offered, along with a communications infrastructure and an exercise control/AAR center. Vehicles to be outfitted with MILES player units include five trucks and jeeps, six artillery and mortar pieces, and seven air defense artillery guns and missiles. Both fixed and mobile EXCON/AAR centers are included in the effort. In addition, a semi-automatic, computer-generated forces simulation piece (OneSAF) will be included in the project. This will provide realistic computer-generated forces to fill out the battlefield, enabling commanders and staff sections to be fully trained during exercises.

SH

AFCTC-3

Jordanian Armed Forces (JAF) Interim House Station Instrumentation Training Systems (I-HITS)/MILES Training System

MISSION

To provide I-MILES player units, detectors and other equipment to facilitate a force-on-force live training and instrumented homestation version of a Combat Training Center (CTC) training capability to the Jordanian FMS customer.

JAF I-HITS/MILES

Jordanian Armed Forces (JAF) Interim House Station Instrumentation Training Systems (I-HITS)/ MILES Training System (Continued)

DESCRIPTION

Production MILES hardware has been, and is being provided under FMS cases. These FMS MILES deliveries from several different MILES manufacturers include foreign-made combat vehicles, as well as different types of small arms weapons. They will provide man-worn MILES instrumentation for small-arms weapons and some tactical vehicles, including the M60 tank and M113 Armored Personnel Carrier, to provide a homestation CTC-like environment. The MILES-based tactical engagement simulation system (TESS) is also offered along with a communications infrastructure and an exercise control/AAR center.

Saudi Arabian National Guard (SANG) Miles/Combat Training Center (CTC)

MISSION

To provide I-MILES player units, detectors and other equipment to facilitate force-on-force live training and instrumented Combat Training Centers (CTC) training capability to the Saudi Arabian National Guard (SANG) FMS customer.

DESCRIPTION

Production MILES hardware has been and is being provided under FMS cases. These FMS MILES deliveries from several different MILES manufacturers include foreign-made combat vehicles as well as different types of small arms weapons. They will provide man-worn MILES instrumentation for seven different small arms weapons for use by the individual soldier trainee. Six different MILES-based vehicle tactical engagement simulation systems (TESS) are also offered along with a communications infrastructure and an exercise control/AAR center. Vehicles to be outfitted with MILES include the LAV-25, -AT, -AG, -M, -CC/PC/AC and the Recon/Pinz. Both fixed and mobile EXCON/AAR centers are included in the effort.

Mission

To provide sound business advice and tailored contracting and acquisition solutions to acquire a variety of products and services managed by PEO STRI in support of the U.S. Army and the Nation's security.

Vision

To serve as an Acquisition and Contracting Center of Excellence that focuses on customer satisfaction; promotes innovative and flexible business practices, calculated risk-taking, empowerment and collaborating with industry; and emphasizes diversity in the workforce and professional development.

Simulation and Training Omnibus Contract (STOC II)

Awarded in January 2009, STOC II provides the Soldier with the next generation of simulation and training devices to meet the challenges of the joint operational environment. STOC II is not only a continuation, but an evolution of its predecessor, STOC I. The omnibus contracting vehicle awarded a total of 142 contracts spread over two lots: Lot I, Full and Open Lot (consisting of small and large businesses), and Lot II, Small Business Set-Aside. These awards resulted in multiple-award, indefinite delivery/indefinite quantity contracts that will provide troops with simulation, training and instrumentation products and services beginning with concept development and continuing through life-cycle support.

Warfighter Field Operations Customer Support Contract (Warfighter FOCUS)

Warfighter FOCUS is a contract that fully integrates the live, virtual and constructive training services at Army installations worldwide. As the Army continues to field an increasing number of interoperable training systems, the Warfighter FOCUS contract provides a fully-integrated contractor workforce to operate and maintain them. Furthermore, the contract will allow PEO STRI to provide a more rapid response to Department of the Army requests.

Systems Engineering and Technical Assistance Services (SETA) Contract

An indefinite delivery/indefinite quantity contract for SETA services was awarded in August 2009, with a period of performance of five years (basic and options). The SETA contract provides systems engineering and technical support services for PEO STRI and other federal agencies worldwide. The services include activities in support of all aspects of providing responsive integrated and interoperable infrastructure for simulation, training, testing, and instrumentation solutions and acquisition services for the Soldiers and the Nation.

PEO STRI

2012 EVENTS CALENDAR

Come see PEOSTRI at the following exhibitions and trade shows

Military Health Systems (MHS) Conference
30 January - 2 February
Gaylord National,
National Harbor, MD

Army Aviation Association of America (AAAA)
1 - 4 April
Gaylord Opryland Resort & Convention Center, Nashville, TN

Test Week
June
Von Braun Convention Center, Huntsville, AL

AUSA's ILW Winter Symposium & Exposition
22 - 24 February
Greater Fort Lauderdale Convention, Fort Lauderdale, FL

ITEC Defence, Training, Simulation and Education Conference
22 - 24 May
ExCeL London, UK

AUSA's Army Medical Exposition
June
Henry B. Gonzalez Convention Center, San Antonio, TX

Defense GameTech User's Conference
26 - 30 March
Caribe Royale Resort & Convention Center, Orlando,FL

Training & Simulation Industry Symposium (TSIS)
13 - 14 June
Renaissance Orlando at SeaWorld, Orlando, FL

134th General Conference
10 - 12 September
Hosted by the Nevada National Guard, Reno, NV

Introduction

The mission of the Business Operations Office (BOO) is focused on developing and implementing policies and procedures across the PEO that provide an efficient environment for the project managers to produce interoperable products and services for our Army. The BOO is responsible for PEO finances, personnel resources, acquisition management oversight, strategic planning and organic PEO staff support. The Assistant Program Executive Officer for Business Operations (APEO BO) leads the BOO through five individual groups identified below.

Acquisition Management Support

MISSION

The Acquisition Management Support group is responsible for responding to Department of the Army tasks and questions, maintaining PEO and Department of the Army databases, providing support to the PEO and PMs on acquisition requirements and current status, and preparing budget justifications to Department of the Army, Office of the Secretary of Defense and Congress.

The primary functional areas include:

- Program Reporting/Enterprise Business System Oversight
- Acquisition Management Oversight
- Assistant Secretary of the Army (Acquisition, Logistics and Technology) Liaison
- Budget Submission and Justification

Funds, Planning and Integration

MISSION

The Funds, Planning and Integration group continuously seeks to improve business processes and procedures by focusing on credible, streamlined, accountable and responsive support to the Warfighter.

The primary functional areas include:

- PEO Operating Fund Execution
- PEO Business Review
- Strategic Planning for Program Execution: Ends, Ways, Means
- Training Support System Integration
  - -Non-System/System Training Aids, Devices, Simulators and Simulations
  - -Weapons System Review

Personnel Resources

MISSION

The Personnel Resources Management group is responsible for providing proactive, user-focused, innovative and efficient human resources support to the PEO STRI leaders, managers and employees. Personnel Resources encompasses civilian and military personnel life-cycle management from recruiting, retention, employee relations, equal employment, position management and performance management.

The primary functional areas include:

- Civilian and Military Personnel Management
- Civilian and Military Performance Management
- Enterprise Business System – Human Resource Management Architecture
- Management Employee Relations
- Time and Attendance
- Awards

PEO Infrastructure Support

MISSION

The PEO Infrastructure Support group provides accurate, relevant and responsive support for PEO STRI operations. The group assists in areas throughout the entire organization to advance the PEO STRI mission and provide support to the workforce.

The primary functional areas include:

- Public Affairs
- Protocol
- Facilities, Mail, Property Book
- Travel, Credit Card
- Management Controls
- Audits and Freedom of Information Act Requests

PEO Manpower Management

The PEO Manpower Management group oversees the manpower requirements and authorizations for civilian, military and contractor manpower equivalents for the PEO. It is responsible for coordinating and staffing authorization documents with higher headquarters and aligns manpower resources with program resources.

The primary functional area includes Civilian and Military Manpower Management.

Mission

The mission of the Customer Support Group (CSG) is to provide customer advocacy that advances the global awareness of and access to PEO STRI's capabilities in support of the Warfighter and the Nation.

Introduction

The CSG provides an entry point for ease of navigation within the PEO STRI organization for Army, other services, joint agencies, other U.S. departments and agencies, allied nations, and our industry stakeholders. The CSG works with these agencies to better understand their training, simulation or testing requirements and how PEO STRI solutions can support their missions.

To accomplish these tasks, the CSG is organized into three business units: the Warfighter Outreach Office (WOO), the International Programs Office (IPO), and the Joint Training Integration and Evaluation Center (JTIEC). The Assistant Program Executive Officer for Customer Support (APEO CS) serves as the PEO STRI principal on the Team Orlando Board of Directors (BoD). The CSG provides staffing to the JTIEC.

The CSG also directs and manages the PEO STRI Events Managements Office (EMO), ensuring that PEO STRI's message is communicated and assistance is given to the PM offices in their outreach activities. The EMO plans and manages PEO STRI's participation in exhibits, conferences and events across the country and around the world. The EMO also promotes the awareness of PEO STRI's capabilities, products and services through an annual publication and distribution of the PEO STRI Desk-Side Reference Guide.

CSG Business Units:

- Warfighter Outreach Office (WOO)
- International Programs Office (IPO)
- Joint Training Integration and Evaluation Center (JTIEC) Deputy/Project Manager

Warfighter Outreach Office (WOO)

DESCRIPTION

The WOO is an externally-focused organization, reaching out across the Army, the Department of Defense, and other U.S. departments and agencies. As the mission of PEO STRI evolves, its focus has shifted to include the provision of modeling and simulation (M&S), training, and testing solution support to these aforementioned commands, organizations, and agencies. The WOO's primary goal is to educate these groups on PEO STRI's capabilities and provide them with a single point of contact (POC) for their access to PEO STRI. These POCs serve as coordinators to ensure requirements receive a solution optimized across the live, virtual and constructive M&S training and testing domains so as to best support the Warfighter and the Nation.

Warfighter Outreach Office (WOO) (Continued)

Within the WOO, there are four discrete functional areas that work in concert to achieve this goal: Senior Training Management Advisors (STMAs), Acquisition Support, the Field Service Representatives (FSRs) and the Technology and Industry Liaison Office (TILO).

The WOO assigns an STMA to each command, organization or agency with a potential training or testing need. The STMA educates each on the capabilities of PEO STRI, assists in the triage of their requirements, identifies potential solutions and support and connects them with the PEO STRI Project Manager (PM) best capable of satisfying their needs. The STMA remains a part of the customer/PEO STRI team until the PM achieves a satisfactory outcome solving the training or testing challenge.

Acquisition Support provides additional experienced acquisition and program management professionals that work with the STMAs, as requirements evolve, to explore and identify the optimum acquisition approach and available contractual vehicles that maximize responsiveness to the Soldier. These professionals also support the Acquisition Center in the evolution of PEO STRI's Omnibus Contract II (STOC II), the PEO's premier products acquisition contract. They are PEO STRI's principal partner with the Acquisition Center in developing the Contract Opportunity System, an innovative process and e-Business front-end tool that supports STOC II and other PEO STRI Multiple Award Contracts.

The FSR program extends the ability of the WOO to reach out to the Army and the Soldier. It is a PEO STRI-sponsored initiative, with a cadre of retired senior military officers positioned at key military installations to liaise on training-related issues affecting both PEO STRI and the host installation/organization. The FSRs are empowered to ensure PEO STRI is providing the service and support necessary to enhance the ability of their respective customers to accomplish their missions. Their primary function is to facilitate the early communication of emerging needs at the host installation/organization to PEO STRI, ensure the host installation/organization is kept abreast of the status of on-going acquisitions and provide feedback regarding the ability of fielded systems to provide the desired level of training support in both functionality and availability.

The TILO function provides the interface with PEO STRI's industry stakeholders. This critical activity expands PEO STRI's awareness of existing and emerging industry capabilities that the PMs may use to enhance their support in meeting Soldier requirements. It also assists our industry members in doing business with PEO STRI by outlining the PEO's mission, goals, structure and acquisition processes; it also provides insight for business opportunities.

International Programs Office (IPO)

DESCRIPTION

The function of the IPO is to enhance allied and coalition partners' capabilities in support of national security and foreign policy objectives. Towards these ends, highly-trained and experienced Army international affairs professionals execute a robust Foreign Military

Sales (FMS) program, developing and managing FMS cases that result in the delivery of PEO STRI products, services and capabilities around the globe. In addition, the IPO develops and oversees international armaments cooperation activities and collaborative research and development efforts with key allies that increase interoperability and reduce total development and life-cycle costs to both sides. Industry requests for export licenses of PEO STRI-related products and services are also reviewed within the IPO to ensure protection of critical technologies while allowing U.S. industry to export those technologies that support U.S. interests abroad.

Joint Training Integration and Evaluation Center (JTIEC)

DESCRIPTION

The JTIEC was created by the Team Orlando Board of Directors in 2006. The JTIEC is resourced and staffed by the Team Orlando commands with CSG providing the deputy director and the project manager. It has two primary missions: (1) to support, enhance and advocate for Team Orlando, and (2) to manage cross-cutting interservice or joint projects.

The JTIEC promotes Team Orlando capabilities to non-service customers. In this regard, it serves as a conduit into Team Orlando for government entities that do not have a habitual relationship with a Team Orlando member. The JTIEC staff consults with prospective customers to determine which Team Orlando organizations are best suited to meet the individual customer's requirements. As an action arm of the Team Orlando Board of Directors, the JTEIC coordinates Team Orlando participation in special events and conferences, coordinates and hosts Team Orlando visitors, and executes tasks in support of strategic objectives developed to improve Team Orlando capabilities.

The JTIEC currently manages three projects for the DoD Modeling and Simulation Steering Committee. These projects are: Live, Virtual, Constructive Architecture Roadmap Implementation (LVCAR-I), Rapid Data Generation (RDG), and Modeling and Simulation Core. All of these projects are resourced by the OSD Modeling and Simulation Coordination Office (M&SCO) program element and support the entire DoD M&S enterprise.

Summary

The CSG plays an essential role in successfully achieving PEO STRI's mission to support the Warfighter and the Nation. As an organization, the CSG provides a global awareness and easy access to PEO STRI's capabilities, products and services. The CSG demonstrates this commitment by ensuring customer satisfaction and providing the best PEO STRI has to offer. For more information, please contact us at 407-384-3773 or by e-mail for more information.

Introduction

The mission of the Project Support Group (PSG) is to be the force provider for PEO STRI and to ensure that the workforce has the proper skills, processes, procedures and tools to efficiently and successfully accomplish the mission of the organization. We recruit some of the best and brightest talent across the DoD, other agencies and industry. PEO STRI, and organizations all across the Army and DoD, are experiencing a very intense operational tempo. It is critical that every employee in federal service - from the newest developmental employee to the most senior journeyman - perform their duties with reduced oversight. The PSG sponsors the Acquisition Academy (A2), an 11-week on-site training program, to introduce developmental employees to the federal government. The A2 provides the basics of each career field's functions and high-level information about the Army and acquisition processes. We have a 98% retention rate of our developmental employees - each is an integral and valuable member of the workforce. PEO STRI has a very active employee development program and has won the OSD Workforce Development Award (Bronze). The Assistant Program Executive Officer for Project Support leads the PSG through three Directorates and the Workforce Development Office, each of which are identified below.

Engineering Directorate

MISSION

To provide an agile, highly-efficient technical workforce that ensures the technical relevance and superiority of training and testing solutions across the acquisition life cycle to support the needs of the Soldier.

GOALS

- Horizontal Technical Integration Interoperability and Integration
- Technology Investment and Transition Goal: Facilitate the insertion and transition of research and innovation that has the potential for high impact in meeting the Army's modeling and simulation needs
- Technical Management for Customers
  - * Organizational Excellence
    - - Effectively organize the directorate to provide agile, multi-disciplinary technical and leadership expertise to the PEO
    - - Front-end analysis
    - - Technical program execution
    - - Sound Systems Engineering foundations
  - * Processes, procedures
- Technical/Acquisition Education and Workforce Development: Provide opportunities for advanced technical and professional training and education

To support of the mission and goals of the PEO, the Engineering Directorate takes an active role in identifying the state-of-the-art for application to the PEO's development programs. We evaluate the future program requirements and identify technology gaps in achieving these requirements. Our Engineers monitor industry's and academia's research and development activities and work to influence their efforts to support PEO STRI's future technology needs. We continuously review these gaps with respect to the Army's technology needs to support training and testing and evolve our focus areas to ensure that PEO STRI is providing innovative solutions to the Soldier.

Finance Directorate

MISSION

To provide a workforce to PEO STRI Project Managers and customers to execute and manage financial processes to ensure coordination of financial matters. These include the planning, programming, budget and execution system functions across all years (prior, current and future), time/attendance/payroll system control, accounting functions, independent cost analyses, program support and resource-related automation tools and the development of standardized processes, procedures, guidance and training for budget, cost, program and systems analysts.

GOALS

In order to achieve this ultimate organizational success, our focus must be on creatively delivering and transitioning financial management solutions to ensure that:

- Our customers achieve a competitive advantage utilizing a mission-driven workforce to provide systems at the right time and at the least cost
- Our customers' expectations about the quality of the workforce provided are met or exceeded

- Our customers regard our employees as knowledgeable, helpful, competent and committed to their mission
- Our customers clearly understand the emerging mission strategy so that they can achieve improved mission performance, decision making and quality
- Our customers think of us first as their force provider when existing and future business requirements arise

ACQUISITION ACADEMY CLASS 2011

Acquisition Logistics Directorate

MISSION

To focus on reducing total life-cycle costs of systems by implementing cutting-edge techniques and performance-based logistics processes; to ensure that PEO STRI maintains a cadre of highly-trained acquisition logisticians to satisfy the common needs of the Project Managers and customers.

GOALS

- Influence system design, reduce total ownership costs and logistics footprint, identify life-cycle support requirements, procure and deliver suitable logistics documentation, support items and services for all PEO STRI acquisition programs
- Provide technical/acquisition education and workforce development
- Provide opportunities for technical and professional training and education

Workforce Development Office

MISSION

To oversee training and career development across PEO STRI.

GOALS

- Manage a comprehensive career leadership and development program for the PEO STRI workforce
- Execute the Acquisition Academy developmental employee program
- Execute the new employee on-boarding

Introduction

The Corporate Information Office's (CIO) mission is to provide responsive and trusted technology solutions that enable acquisition excellence for the Warfighter and the Nation. The CIO offers world-class support services for all of Information Technology (IT) Business Management needs to include Cyber Security (CS)/Information Assurance (IA) and Systems Engineering (SE).

The CIO provides IT business system products and services within its four core competencies: IT Business Management, SE, IA and Information Management. This includes project management, network engineering, asset acquisition and management, system maintenance, software development, customer support, sustainment and other services in support of the IT infrastructure. Customers include PEO STRI program offices, PEO STRI tenants and PEO STRI supported laboratories to include RDECOM and ADL Co-Lab. Most customers are located within the Central Florida Research Park campus in Orlando, FL; however, PEO STRI maintains two offices at Redstone Arsenal in Huntsville, AL and field offices at numerous other military installations. In addition, the CIO supports NAVAIR PMA-262, ARL, ARI, JFCOM, Air Force, and many other organizations throughout the DoD.

Whether managing large IT contracts or hosting enterprise systems on the Non-classified Internet Protocol Network (NIPRNET) and the Defense Research and Engineering Network (DREN), the CIO stands ready to support IT business and technical needs in support of the Warfighter.

Enterprise Business System (EBS) Development

The CIO oversees the development and deployment of PEO STRI's internal application, the Enterprise Business System (EBS), which is used to manage the complex business operations within PEO STRI. The system consists of seven modules: human resources, program management and tracking, financial management, legal/timekeeping, contracts, engineering and CIO services. EBS was designed to automate PEO STRI's business processes to assist management in making informed decisions regarding resource allocation. In addition, the system integrates with existing Army-level systems to provide PEO-level visibility and status of the business operations. The CIO will provide and implement a flexible and centralized business-based solution for the program managers' core business units, which will enable PEO-level rollup with reusable, maintainable and secure information. EBS was designed and developed in a service-oriented architecture, thus allowing EBS services, in whole or in part, to be shared across the Army and DoD.

Information Technology Business Management

MISSION

To provide efficient, world-class IT business services to the Army and DoD in support of the Warfighter.

DESCRIPTION

The CIO Business Office provides a full range of services to run an IT organization. These services include:

Information Technology Business Management (Continued)

- Procurement of IT Equipment, Software, Maintenance and Cellular Equipment
- Asset Management
- IT Support Contract Management and Documentation
- Software Licensing and Hardware Ordering Support
- Finance Management in support of IT purchases and services

The CIO Business Office provides the tools and services required to be successful in today's DoD environment.

Cybersecurity Services

MISSION

To provide the Cybersecurity products and services for managing, enforcing and maintaining a formal Cybersecurity program while providing technical support in carrying out the program for the PEO and Army in support of the Warfighter.

DESCRIPTION

The Cybersecurity Office (CSO) provides direct guidance and consulting services while acting as a liaison to external Army and DoD Cybersecurity/Information Assurance organizations. The office has developed tools, templates and products, such as the Basic Accreditation Manual, which consolidates many DoD and Army directives, instructions and regulations into one, easy-to-read document.

The many tools and templates developed and made available by the CSO, simplify the DoD Information Assurance Certification and Accreditation Process (DIACAP) for project managers who are developing the PEO STRI systems.

The office also provides direct support to PMs and their contractors in the form of classroom and hands-on training in the Information Assurance Integration and Training Lab (IAITL). The training can range from DIACAP artifact generation, to hardening of a system, to scanning for vulnerabilities and analyzing the reports. Finally, the CSO provides direct support in ensuring that PEO STRI-developed systems receive favorable accreditation decisions upon conclusion of the Certification & Accreditation (C&A) process. This is done by actively participating in the reviews that are conducted as a part of the system's development as well as by tracking various DIACAP milestones and program metrics throughout the process to ensure that the C&A plan remains executable. The CIO CSO also has close working relationships with Agents for the Certification Authority and the Certification Authority of the Army to assist in the completion of successful certification events and help resolve complex IA challenges that programs encounter over the course of their life cycle.

System Engineering Office (SEO)

MISSION

To provide Certificate of Networthiness (CoN), Spectrum Management (SM), Information Technology System Engineering (ITSE) and Host Based Security System (HBSS) products, tools, and services to assist in meeting fielding requirements while providing technical support for the PEO and Army in support of the Warfighter.

DESCRIPTION

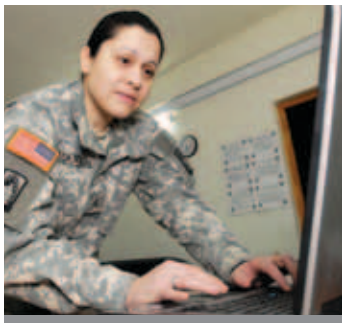
The System Engineering Office (SEO) provides subject matter expertise to the PMs in the development of the DoD and/or Army acquisition life-cycle requirements for Certificate of Networthiness (CoN), Equipment Spectrum Certification (ESC), Tactical Radio Purchase Program (TRPP), Information Technology System Engineering (ITSE) and Host Base Security System (HBSS) compliance. The office also provides a common point of contact and a systematic approach through guidance and consulting services for PMs, while acting as a liaison to external Army and DoD organizations. The SEO has developed tools, processes, templates and products to assist the PM in developing systems and meeting Army and DoD fielding requirements.

The SEO develops and manages the PEO STRI CoN process, ensuring all current PEO STRI applications receive a valid CoN and assists other PEO STRI program offices in obtaining any CoNs required for lab use/project/system/software development.

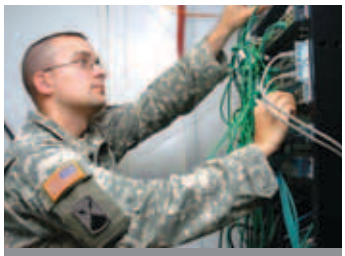
The SEO provides spectrum coordination and certification support to the PMs by developing the required certification documentation to include DD-1494, preliminary assessments, range coordination and host nation coordination requests. It functions as the PEO liaison for meetings and teleconferences with the Army Spectrum Management Office, the National Telecommunication and Information Administration, and Federal Communications Commission as required. The office also provides direct support to PMs and their contractors with classroom and hands-on spectrum certification training, conducts research and develops support material as required. It provides support with developing required documentation for the Army Tactical Radio purchase program.

The SEO provides HBSS subject matter expertise to support PMs in establishing an initial system baseline and HBSS installation. It provides assistance with both compatibility testing for all Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) systems and documenting system impacts and compliance guidance. The SEO performs annual HBSS review for CoN and provides validation documentation to ASA(ALT). The office also provides direct support to PMs and their contractors with classroom and hands-on HBSS training.

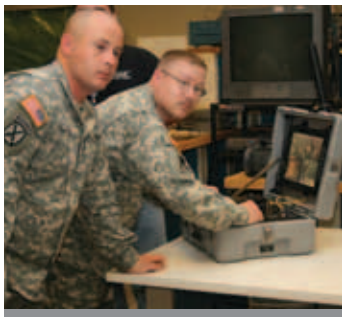
In addition, the SEO ITSE provides subject matter expertise in the form of telecommunications, as well as network and software expertise, to augment product development teams and assist with fielding and configuration management in order to ensure life-cycle requirements are successfully achieved.



COMPUTER SYSTEM CHECK, CAMP TAJI, IRAQ



COMPUTER SERVER MAINTENANCE, DIWANIYAH, IRAQ



COMPUTER-AIDED TECHNOLOGIES TO IMPROVE SMALL ROBOTS

Information Management

MISSION

To provide outstanding and secure network operations and customer service support to the PEO and its customers.

DESCRIPTION

Data Center Operations: The PEO STRI Data Center provides a secure, robust set of network, file-server and net-centric operations in support of PEO STRI and other CIO customers. Among the featured services are web-server, application and collaboration hosting to complement a feature-rich set of office automation services provided to the desktops of PEO STRI personnel. The state-of-the-art Data Center makes efficient use of blade servers, storage area networks, enterprise backup systems, backup power systems and the latest Microsoft products.

Network Infrastructure: PEO STRI provides a high-speed, all-optical network backbone to buildings and offices housing PEO STRI personnel in the Central Florida Research Park. As PEO STRI grows, new fiber strands with dark fiber growth capacity are installed in new locations. The backbone is powered by gigabit switches and 100Mb connections to the desktop. Wide-area connections include a 45Mbps NIPRNET connection and a 9Mbps backup NIPRNET connection. A high-speed connection to the DREN is also available.

Desktop Support: Support to PEO STRI personnel is provided by both the Client Services Group, which provides hands-on technical support, and also by Network Operations, which provides automated delivery of software packages and patches. Updating of anti-virus software and anti-virus signature files is fully automated, as is the response to detection of infected software. PEO STRI users usually experience all software upgrades on a transparent basis. In addition, Client Services will assist personnel in identifying and procuring hardware and software required for their mission on a reimbursable basis.

Help Desk: The PEO STRI Help Desk stands willing to assist personnel on all their IT issues and should be the first contact made when problems are encountered with PEO STRI systems. The PEO STRI Help Desk enjoys an Initial Call Close Rate of more than 90%, one of the highest in DoD and industry.

System Training: Numerous training courses have been developed for PEO STRI and other customers. Most of the training courses are available on PEO STRI's intranet as well as formal instructor-led sessions, both on and off-site. The training facility is available for IT training use by other PEO STRI organizations or outside organizations training PEO STRI personnel if scheduled sufficiently in advance.

Cellular Management Support: Wireless cellular and Blackberry services through several major carriers are available on a reimbursable basis. In addition, broadband wireless personal computer data cards are also available.

Small Business Office Mission

The mission of the Office of Small Business Programs (OSBP) is to support our Nation's Soldiers by serving as an advisor to the PEO, DPEO and staff members on issues impacting federal small business programs. The office advocates for small business enterprises, and it develops and implements strategies that provide maximum procurement opportunities to small businesses while supporting PEO STRI's contracting mission.

Program Areas

- Small Business
- Small Disadvantaged Business/Small Business Administration Section 8(a)
- Woman-Owned Small Business
- Veteran-Owned Small Business
- Service-Disabled Veteran-Owned Small Business
- Historically Underutilized Business Zone (HUBZone)
- Historically Black Colleges & Universities and Minority Serving Institutions (HBCU/MSI)
- Subcontracting

Steps To Doing Business With PEO STRI

Step 1: Review PEO STRI's public website, http://www.peostri.army.mil/, to become familiar with the mission, organizational structure, and products and services procured by PEO STRI.

Step 2: Perform an analysis of the products and services, to identify how your company supports PEO STRI's mission.

Step 3: Contact the Office of Small Business Programs to discuss your interest, experience and capabilities.

Step 4: Frequently review the Federal Business Opportunities (FedBizOpps) website, http://fedbizopps.gov, and PEO STRI's Business Opportunity Portal (STRI BOP), https://bop.peostri.army.mil/sites/bop/default. aspx, for contracting and possible subcontracting opportunities.

Step 5: Participate in industry briefings, business opportunity conferences, and trade fairs as this is an excellent opportunity to meet with technical and/or acquisition personnel who are searching for qualified firms that may serve to support their mission requirements.

Step 6: Actively respond to competitive requirements and seek opportunities to team, joint venture or subcontract.

Step 7: Follow-up routinely with the Office of Small Business Programs. Be sure your Central Contractor's Registration information is up-to-date and accurate.

Contact Information

To learn more about PEO STRI's small business programs and contract opportunities contact:

Office of Small Business Programs
One Resource Square
13501 Ingenuity Drive, Suite 248
Orlando, Florida 32826
(407) 384-3656/(407) 384-3517

Team Orlando

Improving Human Performance Through Simulation

- Team Orlando is established by a Department of Defense Inter-Service Charter
- All four Services, Coast Guard, Joint Staff, Defense Acquisition University (DAU), Advanced Distributed Learning Co-laboratory (ADL Co-lab) and Department of Homeland Security (DHS) locally represented at monthly Team Orlando Board of Directors meetings.
- Two Liaison Members:
  - University of Central Florida, Institute for Simulation and Training
  - National Center for Simulation
- Adjunct Member: Metro Orlando Economic Development Commission
- Two Advisor Members:
  - Joint & Coalition Warfighter Center
  - Office of the Secretary of Defense (Personnel and Readiness)
- Mission of Team Orlando Board of Directors:
  - Provide an inter-service military partnership in Central Florida which leverages collaboration of technologies and lessons learned related to training, simulation, and human performance issues.
  - Promote effective employment of new technologies, academia and industry to minimize costs and maximize products and services to Warfighters.

Team Orlando Federal Government Organizations

- US Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI)
- US Army Research Laboratory Simulation and Training Technology Center (ARL STTC)
- Army Research Institute (ARI), Orlando Training Technology Research Unit
- Naval Air Warfare Center Training Systems Division (NAWCTSD)
- Naval Support Activity Orlando
- Marine Corps Systems Command (MARCORSYSCOM), Program Manager Training Systems (PM TRASYS)
- Air Force Agency for Modeling & Simulation (AFAMS)
- Air Force Training Systems Product Group (TSPG) Liaison
- Joint & Coalition Warfighter Center Liaison
- United States Coast Guard Program Office
- Joint Training Integration and Evaluation Center (JTIEC)
- Advanced Distributed Learning Co-laboratory Initiative
- Defense Acquisition University, Teaching and Learning Laboratory Orlando
- Department of Homeland Security, Federal Law Enforcement Training Center (FLETC), Orlando Technology Integration & Simulation Team
- Department of Veterans Affairs SimLEARN National Simulation Center

Central Florida Research Park

- The largest single concentration of Service training systems developers and human performance experts are located in Orlando
- Team Orlando organizations obligaed approximately $4.5B in FY10 with employment of over 2,500 government and civilian employees and an industrial base of over 12,000 professionals
- The military partnership that today comprises Team Orlando builds upon a Memorandum of Agreement signed by the Army and the Navy

University of Central Florida

- 2nd largest university with over 56,000 students
- 1st school with Masters and PhD programs in Modeling and Simulation
- Conducts simulation and training research that benefits the DoD
- Provides highly educated workforce for government and industry
- New medical school with simulation incorporated in curriculum

Industry

- Over 170 industry partners located in Central Florida
- Largest modeling and simulation industry in the world
- National Center for Simulation, a non-profit organization, represents industry base

TEAM ORLANDO

www.teamorlando.org

Doing Business with PEO STRI

www.peostri.army.mil

The first option is to visit our website. Once there, you will find information about PEO STRI, its organization, Desk-Side Reference Guide, information about business opportunities and more.

(407) 384-3773 (DSN 970)

The second option is to call the PEO STRI Customer Service number. You will be prompted to leave your contact information. Once the information is received, a member of the Customer Support Group will review it and forward it to the appropriate project manager for action.

Technical Industrial Liaison Office (TILO)

The TILO is the point of contact between industry and PEO STRI, and provides guidance to streamline the exchange of information. We assist our partners in industry with doing business with the government. We can provide an overview of PEO STRI's mission, goals, structure and acquisition processes along with insight for short and long term business opportunities. It is advantageous for PEO STRI to provide this assistance so that our industry partners can effectively apply its resources in developing materiel necessary to support the national defense effort.

We depend on the industrial sector to provide material acquisition and services. By providing information to industry on our needs, we gain access to existing and emerging technologies and benefit from increased competition. In return, industry can effectively apply its resources in developing the material and weapons necessary to support the national defense effort. Following a review of a company's capabilities by the TILO, the company's information will be provided to the PEO STRI community for further consideration.

E-mail TILO at customerliason@peostri.army.mil

Glossary of Acronyms

21C TCS – 21st Century Target Control Program
3CE – Cross Command Collaborative Effort
3D – Three-Dimensional
A&I – Architecture and Integration
AAR – After Action Review
AAV – Amphibious Assault Vehicle
ABCS – Army Battle Command System
ABCTM – Army Brigade Combat Team Modernization
ABHFS – Additional Blackhawk Flight Simulator
ACR – Advanced Concepts and Requirements
ADA – Air Defense Artillery
ADL Co Lab – Advanced Distributed Learning
ADMAS – Advanced Distributed Modular Acquisition System
AEC – Automated Electronic Classrooms
AFATDS – Advanced Field Artillery Tactical Data System
AFRL – Air Force Research Lab
AGTS – Advanced Gunnery Training System
AKE – Army Knowledge Enterprise
ALT – Advanced Learning Technologies
ARFORGEN – Army Force Generation
ARI – Army Research Institute
ARL – Army Research Laboratory
ASV MILES – Armored Security Vehicle Multiple Integrated Laser Engagement System
ATC – Aberdeen Test Center
ATC – Air Traffic Control
ATEC – U.S. Army Test and Evaluation Command
ATFS – Aerial Target Flight Services
ATGM – Anti-tank Guided Missile
ATSC – Army Training Support Center
ATWESS – Anti-Tank Weapon Engagement Simulation System
AVCATT – Aviation Combined Arms Tactical Trainer
AWSS – Aerial Weapons Scoring System
AWSS-LBA TESS – AWSS with Longbow Apache TESS
B1D1 – Build 1 Drop 1
B1D2 – Build 1 Drop 2
BAA – Broad Agency Announcement
BAM – Basic Accreditation Manual
BATS – Ballistic Aerial Target–Systems
BATS – Bradley Advanced Training Systems
BAX – Battle Area Complex
BC – Battle Command
BCID – Battle Command Integration Directorate
BCT – Brigade Combat Team
BCTB – Battle Command Training Branch
BCTC – Battle Command Training Center
BCTC-ES – Battle Command Training Capability- Equipment Support
BCTM – Brigade Combat Team Modernization
BCTP – Battle Command Training Program
BEAMR – Baseline Evaluation and Augmentation of Multispectral Mobile Ground Target System Radar Cross Section
BEMT – Basic Electronics Maintenance Trainer
BES – Battlefield Effects Simulator
BOIP – Basic of Issue Plan
BOO – Business Operations Office
BOS – Battlefield Operating System
BSC – Battle Simulation Center
BST – Basic Skills Trainer
BVS – Battlefield Visualization System
C&A – Certification and Accreditation
C/B – Chemical/ Biological
C2 – Command and Control
C3 – Command, Control and Communications
C4I – Command, Control, Communications, Computer, Information
C4ISR – C4 Intelligence, Surveillance, and Reconnaissance
CAAS – Common Avionics Architecture System
CACTF – Combined Arms Collective Training Facility
CAD – Course Administrative Data
CAF – Combat Air Force
CALFEX – Combined Arms Live-Fire Exercises
CAP – Common Avionics Package
CAS – Close Air Support
CATS – Combined Arms Training Strategies
CATT – Combined Arms Tactical Trainers
CBCSE – Common Battle Command Simulation Equipment
CBS – Corps Battle Simulation
CCD&O – Camouflage, Concealment, Deception, and Obscurants
CCI – Consolidated Contracting Initiative
CCS – Cloud Characterization System
CCTT – Close Combat Tactical Trainer
CDA – Common Digital Architecture
CDB – Common Database
CDD – Capability Development Documents
CDT MRAP – Common Driver Trainer MRAP
CDT/SV – Common Driver Trainer/Stryker Variant
CEVT – Construction Equipment Virtual Trainers
CFFT – Call for Fire Trainer
CGA – Common Gunnery Architecture
CGF – Computer Generated Force
CGS – Cloud Generation System
C-IED – Counter-Improvised Explosive Device
CIO – Corporate Information Office
CIU – Counter measure Indicator Unit
CLS – Combat Life-Saver
CMAST – Combat Medical Advanced Skills Training
CMS – Combat Mission Simulator
CNA – Computer Network Attack

CND – Computer Network Defense
CNE – Computer Network Exploitation
CNO – Computer Network Operations
CoE – Center of Excellence
COE – Common Operational Environment
COE – Contemporary Operating Environment
COFT-E – Conduct of Fire Trainer-Enhanced
CONSIM – Constructive Simulation
COP – Common Operating Picture
COTS – Commercial-Off-The-Shelf
CP – Command Post
CPD – Capability Production Documents
CP-FCS – Common Processor Fire Control System
CPM – Consolidated Product-Line Management
CPV – Commander's Panoramic Viewer
CPX – Command Post Exercise
CQC – Close Quarters Combat
CREW2 – Counter Radio-controlled IED Electronic Warfare 2
CSG – Customer Support Group
CTC – Combat Training Center
CTC-OIS – CTC Objective Instrumentation System
CTEIP – Central Test and Evaluation Investment Program
CTIA – Common Training Instrumentation Architecture
CTL – Collective Training List
CTO – Chief Technology Officer
CTSF – Central Technical Support Facility
CV – Commander's Vehicle
CVC – Common Virtual Components
CVE – Common Virtual Environment
DAGIR – Digital Air Ground Integration Range
DCRA – Data Collection, Reduction and Analysis
DE – Directed Energy
DET S&T – Directed Energy Test Science & Technology
DETEC – Directed Energy Test & Evaluation Capability
DF – Direction Finding
DFCS – Drone Formation Control System
DIACAP – DoD Information Assurance Certification and Accreditation Process
DIL – Digital Integration Laboratory
DIS – Distributed Interactive Simulation
DITS – Deployable Instrumented Training System
DMN – Digital Migration Network
DMON – Distributed Mission Operations Network
DMPRC – Digital Multi-Purpose Range Complex
DMPTR – Digital Multi-Purpose Training Range
DMT – Distributed Mission Training
DNM – Digital Network Migration
DOD – Department of Defense
DOIM – Directorates of Information Management
DRA – Data Reduction and Analysis
DREN – Defense Research and Engineering Network
DRP – Deployable Range Packages
DRTS – Digital Range Training Systems
DSGL – Distributed Scenario Generation Lab
DSTAR – Deployable System for Training and Readiness
DTT – Desktop Trainer
DTT – Diagnostic and Troubleshooting Trainers
DVED – Database Virtual Environment Development
EA – Electronic Attack
EAATS – Eastern Army National Guard Aviation Training Site
EBS – Enterprise Business System
ECID – Electronic Common Interface Device
ECM – Electronic Countermeasure
EDACS – Enhanced Digital Access Communication System
EI – Engineering Iterations
ERC – Environmental Runtime Component
ERETS – Enhanced Remote Equipment Target System
ERF – Entity Resolution Federation
ERS – Engine Room Simulator
EST – Engagement Skills Trainer
ESV – Engineer Squad Vehicle
ET – Embedded Training
ETC-IS – Exportable Training Capability-Instrumentation System
EW – Electronic Warfare
FASIT – Future Army System of Integrated Targets
FBCB2 – Force XXI Battle Command Brigadeand-Below
FCS – Fire Control System
FCS – Future Combat Systems
FDC – Fire Direction Center
FFS – Future Force Simulation
FITE – Future Immersive Training Environment
FMS – Foreign Military Sales
FO – Forward Observers
FOCUS – Field Operations Customer Support
FON II – Fiber Optic Network
FOV – Field-of-View
FS – Fire Support
FS – Flight School
FS – Flight Simulators
FSCATT – Fire Support Combined Arms Tactical Trainer
FSV – Fire Support Vehicle
FTI – Fixed Tactical Internet
FTT – Field Tactical Trainer
GEOINT – Geospatial Intelligence
GIG – Global Information Grid
GIS – Geospatial Information System
GUI – Graphical User Interface
GWOT – Global War on Terrorism
HBCU/MI – Historically Black Colleges & Universities and Minority Institutions
HCA – Head of Contracting Authority
HCC – HUMINT Control Cell
HCT – Howitzer Crew Trainer
HEAT – HMMWV Egress Assistance Trainer
HEL – High Energy Laser
HIMARS – High Mobility Artillery Rocket System
HISS – Helicopter Icing Spray System
HITS – Homestation Instrumentation Training System
HLA – High-Level Architecture
HMMWV – High-Mobility Multi-purpose Wheeled Vehicle
HPC – High Performance Computer
HPM – High Power Microwave
HQDA – Headquarters Department of the Army
HSI – Human Systems Integration
HTI – Horizontal Technical Integration
HUBZone – Historically Underutilized Business Zone
I2 – Integration and Interoperability
IA – Information Assurance
IAITL – Information Assurance Integration and Training Lab
IAP – Integrated Avionics Program
ICV – Infantry Carrier Vehicle
ID – Interrupt Device
ID/IQ – Indefinite Delivery/Indefinite Quantity
IDAGTS – Interim Deployable Advanced Gunnery Training Systems
IDS – In-bore Device System
IED – Improvised Explosive Devices
IEDES – IED Effects Simulator
IETM – Interactive Electronic Technical Manual
IEWTPT – Intelligence Electronic Warfare Tactical Proficiency Trainer
IF – Indirect Fire
IFR – Instrument Flight Rules
IHITS – Initial Homestation Instrumentation Training System
IMI – Interactive Multi-media Instruction
IMO – Instrumentation Management Office
IMT – Integrated Management Team
I-MTS – Integrated-Military Operations on Urban Terrain Training System
IO – Information Operations
IOS – Instructor Operator Station
IPT – Integrated Product Team
IS – Instrumentation System
ISD – Instructional System Design
ISP – Information Support Plans
ISR – Intelligence, Surveillance and Reconnaissance
ISS – Instruction Support System
IT – Information Technology
ITAS – Improved Target Acquisition System
ITAS-TESS FTS – Improved Target Acquisition System – Tactical Engagement Simulation System Field Training System
ITF – Integrated Threat Force
ITTS – Instrumentation Targets and Threat

Simulators
IW – Information Warfare
IWF – Intelligence, Warfighting Function
IWS – Individual Weapon System
JAAR-RL – Joint After Action Review-Resource Library
JAAT – Joint Air Attack Team
JATS – Joint Architecture & Technical Standards
JC3IEDM – Joint Consultation Command and Control Information Exchange Data Model
JCAS – Joint Close Air Support
JCOM – Joint Composable Object Model
JCTD – Joint Capabilities Technology Demonstration
JDIF – Joint Development Integration Facility
JDLM – Joint Deployment Logistics Model
JEEI – Joint Exercise and Experimentation Integration
JFCOM – Joint Forces Command
JFETS – Joint Fires and Effects Trainer System
JFO – Joint Fires Observers
JFPL – Joint Fires Product Line
JHSV – Joint High Speed Vessel
JIIM – Joint, Intergovernmental and Multinational
JITC – Joint Interoperability Test Command
JLCCTC – Joint Land Component Constructive Training Capability
JLCCTC-ERF - JLCCTC Entity Resolution Federation
JLCCTS-MRF - JLCCTC Multi Resolution Federation
JLVC – Joint Live, Virtual, Constructive
JNTC – Joint National Training Center
JRSG – Joint Rapid Scenario Generation
JRTC – Joint Readiness Training Center
JTAC – Joint Terminal Attack Control
JTF – Joint Task Force
JTRG – Joint Training Review Group
LAN – Local Area Network
LASAR – Light Assault/Attack Reconfigurable
LBA TESS – Longbow Apache Tactical Engagement Simulation System
LC – Live and Constructive
LCCS – Life-Cycle Contractor Support
LCTM – Low Cost Target Mover
LFXs – Live-Fire Exercises
LIDAR – Light Detection and Ranging
LMS – Learning Management Systems
LMTS – Laser Markmanship Training System
LSI – Lead Systems Integration
LSMP – Lift Simulation Modernization Program
LSVTC – Land and Sea Vulnerability Test Capability
LT2-FTS – Live Training Transformation-Family of Training Systems
LTA – Local Training Areas
LT-TES – Live Training-Tactical Engagement Simulation
LVC – Live, Virtual, and Constructive
LVC SE – LVC Simulation Equipment
LVC-IA – LVC Integrating Architecture
M&S – Modeling and Simulation
MAIS – Mobile Automated Instrumentation Suite
MANPAD – Man-Portable Air Defense Simulator
MCA – Military Constructive, Army
MC-B – Mounted Mortar Carrier
MCNITR – Mobile Communications Network Infrastructure Test Range
MCTC – Maneuver Combat Training Centers
MCU – Module Control Unit
MDI – Miss Distance – Indicator
MDT – Mine Detonation Trailer
MET – MRAP Egress Trainer
MeTER – Medical Training Evaluation and Review System
METL – Mission Essential Task List
MEV – Medical Evacuation Vehicle
MGS – Mobile Gun System
MGS TESS – Mobile Gun System Tactical Engagement Simulation System
MGT – Mobile Ground Targets
MGTH – Mobile Ground Target Hardware
MGTO – Mobile Ground Target Operations
MI – Master Interface
MIDAS – Modified Independent Target Acquisition System
MILES – Multiple Integrated Laser Engagement Simulation
MILES CVS – MILES Combat Vehicle System
MILES ITS/WITS – MILES Independent Target System/Wireless Independent Target System
MILES IWS – MILES Individual Weapon System
MILES SLM – MILES Shoulder Launched Munitions
MITAS – Modified Improved Target Acquisition
MMPV – Medium Mine Protected Vehicle
MMTS – Mobile Multi-sensor Time-Space-Position Information System
MOA – Memorandum of Agreement
MOS – Military Occupational Specialty
MOSS – Microsoft Office Sharepoint Services
MOUT – Military Operations on Urbanized Terrain
MOUT-CT – Military Operations on Urbanized Terrain and Cultural Training
MPCV – Mine Protected Clearance Vehicle
MPRC – Multipurpose Range Complex
MRAP – Mine Resistant Ambush Protected
MRF – Multi-Resolution Federation
MRTFB – Major Range and Test Facility Base
MRTS – Mission Rehearsal and Training Support
MSALTS – Multi-spectral Sea and Land Target Simulator
MSC – Major Subordinate Commands
MSDL – Military Scenario Development Language
MSTC – Medical Simulation Training Centers
MT-C2 – Medical Training Command and Control
MTP – Management and Transition Plan
MTPS – Mission Training and Preparation Systems
MTRS – Man Transportable Robotic Systems
MTS – Maintenance Training System
MT-SAV – Metal Target Surrogate Analysis and Validation
NBCRV – NBC Reconnaissance Vehicle
NCOW-RM – Net-Centric Operational Warfare – Reference Models
NDI – Non-Developmental Item
NESTS – Networked Electronic Support Threat Sensors
NETT – Network Exploitation Test Tool
NGATS – New Generation Army Target Systems
NIPRNET – Non-Classified Internet Protocol Network
NOC – Network Operations Center
NR-KPP – Net-Centricity, Net-Ready-Key Performance Parameters
NSTD – Non System Training Device
NTC – National Training Center
NTC FON – NTC Fiber Optic Network
NTIA – National Telecommunications and Information Administration
O/C – Observer/Controller
OASIS-EIS – Operation Test Command Analytic Simulation and Instrumentation Suite – Enterprise Integration Systems
OCCS – Observer Controller Communications System
OCS – Office Communication Services
ODS – Operation Desert Storm
OFDM – Orthogonal Frequency Division Multiplexing
OHISS – Objective Helicopter Icing Spray System
OIPT – Overarching Integrated Team
OIS – Objective Instrumentation System
OneSAF – One Semi-Automated Forces
OneTESS – One Tactical Engagement Simulation System
OSBP – Office of Small Business Programs
OSD DOT & E – Office of the Secretary of Defense Director Operational Test and Evaluation
OSTS – OPFOR Surrogate Training System
OTC – Operational Test Command
P25 – Project 25
P3I – Preplanned Product Improvement
PAAR – Pre-brief After Action Review
PARC – Pacific Alaska Range Complex
PARC – Principal Assistant Responsible for Contracting
PC IGs – Personal Computer Image Generators
PEO C3T – Program Executive Office, Command, Control and Communications Tactical
PEO STRI – Program Executive Office for Simulation, Training and Instrumentation
PG – Precision Gunnery

PGS – Precision Gunnery System
PM – Program Manager
PM – Project Manager
PM Field OPS – Project Manager Field Operations
PM TRADE – Project Manager for Training Devices
PMCS – Periodic Maintenance Checks and Services
POC – Platoon Operation Center
POC – Primary Operating Centers
POI – Programs of Instruction
POR – Program of Record
PPBES – Programming, Budget and Execution System
PRU – Packet Radio Units
PSG – Project Support Group
PTP – Point-to-Point
PTS – Precision Target Signatures
PU – Player Unites
QV – Quantitative Visualization
R&D – Research and Development
RCS – Research Cross Section
RCTS – Route Clearance Training Services
RDA – Research, Development & Acquisition
RDECOM – Research and Development Engineering Command
RDT&E – Research, Development, Test and Evaluation
REP – Resource Enhancement Program
RF – Radio Frequency
RFA – Red Flag Alaska
RLCT – Realistic Low Cost Target
ROPS – Range Operations
RPVT – Remotely Piloted Vehicle Target
RRRP – Range Radar Replacement Program
RTCA – Real Time Casualty Assessment
RTI – Run-Time Infrastructure
RV – Reconnaissance Vehicle
RVS – Reconfigurable Vehicle Simulator
RVTT – Reconfigurable Vehicle Tactical Trainer
RWIS – Radio-Wire Integration System
SAF – Semi-Automated Forces
SAGIS – Special Operations Forces Air Ground Simulation
SBCT – Stryker Brigade Combat Team
SBUDs – Simulator Block Updates
SCoPIS – Self-Contained Portable IED Simulator
SCORM – Sharable Content Object Reference Model
SCT – Shadow Crew Trainer
SDZ – Surface Danger Zone
SE – Synthetic Environment
SE – Systems Engineering
SEO – Systems Engineering Office
SEP – System Enhanced Package
SETA – Systems Engineering and Technical Assistance Services
SH – Shoot House
SIB – Separate Infantry Brigade
SIM/STIM – Simulation/Stimulation
SIM-C2 – Simulation-Command and Control
SIMCI – Simulation to C41 Interoperability
SMCS – Simulated Mine Clearing System
SME – Subject Matter Experts
SMODIM – Smart Onboard Data Interface Module
SOA – Special Operations Aviation
SOAR(A) – Special Operations Aviation Regiment (Airborne)
SOATC – Special Operations Aviation Training Company
SOF – Special Operations Forces
SOF TEAMS – Special Operations Forces Training, Engineering and Maintenance Support
SOFPREP-SC – Special Operations Forces Planning, Rehearsal and Execution Preparation – Support Contractor
SoSCOE – System of Systems Common Operating Environment
SPU – Simulation Player Unit
SRTA – Short-Range Training Ammunition
STAR – Student Training Recruitment
STELIR – Special Operations Forces Technology for Eye Limiting Image Resolution
STIL – System Test and Integration Laboratory
STOC II – Simulation and Training Omnibus Contact
STRAC – Standards in Training Commission
STS – Stryker TOW Simulator
SUGV – Small Unmanned Ground Vehicle
T&E – Test and Evaluation
TAC – Terminal Attack Control
TACSIM – Tactical Simulation
TACSIM CDS – TACSIM Cross- Domain Solutions
TAD – TOW ATWESS Device
TADSS – Training Aids, Devices, Simulators & Simulations
TBCC – Threat Battle Command Center
TBV – Tactical Battlefield Visualization
TC – Training Circular
TCC – Technical Control Cell
TCC – Training Common Components
TCS – Target Control System
TE – Tracer Effects
TEMO – Training, Exercise and Military Operations
TENA – Training Enabling Architecture
TES – Tactical Engagement Simulation
TESS – Tactical Engagement Simulation System
TH-67 – Training Helicopter 67
TIED – Training Improvised Explosive Device
TIED2 – Training Improvised Explosive Device, Increment 2
TIEWE – Threat Information Electronic Warfare Environment
TILO – Technical and Industrial Liaison Office
TISP – Tailored Information Support Plans
TLD – TOW Laser Device
TMDE – Test Measurement and Diagnostic Equipment
TMI – Targets Management Initiatives
TMO – Targets Management Office
TOC – Tactical Operation Center
TOW – Tube-launched, Optically-tracked, Wire-guided
TRACR – Targetry Range Automated Control and Recording
TRADOC – U. S. Army Training and Doctrine Command
TRMC – Test Resource Management Center
TS IPT – Training Systems Integrated Product Team
TS/SCI – Top Secret Sensitive Compartmented Information
TSA – Target Signature Arrays
TSIJ – Threat Signal Injection Jammer
TSN – Test Support Network
TSP – Training Support Packages
TSPI – Time-Space-Position Information
TSV – Through Sight Video
TTCS – Target Tracking Control System
TTP – Techniques, Tactics and Procedures
TTT – Table-Top Trainer
TWGSS – Tank Weapon Gunnery Simulation System
UAC – Urban Assault Course
UAE – United Arab Emirates
UAS-T – Unmanned Aerial System - Target
UAV – Unmanned Aerial Vehicle
UHF – Ultra High Frequency
UO – Urban Operations
UPS – Uninterruptible Power Supply
USAF – United States Air Force
USAOTC – U.S. Army Operational Test Command
USSOCOM – United States Specials Operations Command
VBS2 – Virtual Battle Space 2
VCCT – Virtual Combat Convoy Trainer
VDS – Vessel Defense System
VFR – Visual Flight Rules
VIIP – Vehicle Instrument Interface Package
VISION – Versatile Information System Integrated On-line
VISMODS – Visual Modifications
VMMD – Vehicular Mounted Mine Detector
VPS – Virtual Patient System
VRCT – Virtual Route Clearance Trainer
VSA – Virtual Simulation Architecture
WAATS – Western Army National Guard Aviation Training Site
WAN – Wide Area Network
WARSIM – Warfighters' Simulation
WCCJ – Wideband Configurable Controlled Jammer System
WFF – Warfighter FOCUS
WITS – Wireless Integrated Target System
WSMR – White Sands Missile Range
WTI – Warrior Training Integration
XM – Transition Manager
YTA – Yukon Training Area

Index

A

Abrams Maintenance Training System (MTS) – CATT 23
Acquisition Logistics Directorate – PSG 129
Acquisition Management Support – BOO 121
Additional Blackhawk Flight Simulator (ABHFS) – CATT 10
Advanced Distributed Modular Acquisition System Product Improvement Program (ADMAS PIP) – ITTS 70
Advanced Gunnery Training System (AGTS) – CATT 24
Advanced Range Tracking And Imaging System (ARTIS) – ITTS 70
Aerial Target Flight Services (ATFS) – ITTS 81
Aerial Targets – ITTS 80
Aerial Weapons Scoring System (AWSS) – ITTS 81
Aerial Weapons Scoring System Integration with Longbow Apache Tactical Engagement Simulation System (AWSS-LBA TESS) – TRADE 99
AH-64A Combat Mission Simulator (CMS) – CATT 10
Air Defense Artillery (ADA) Targets – ITTS 82
Air Defense Scoring Systems and Services – ITTS 82
Artillery, Chemical and Air Defense – OPS 62
Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) - 133
Avenger Table-Top Trainer (TTT) – CATT 24
Aviation Combined Arms Tactical Trainer (AVCATT) – CATT 11

B

Ballistic Aerial Target Systems (BATS) – ITTS 83
Basic Electronics Maintenance Trainer (BEMT) – CATT 11
Battle Command Training Capability – Equipment Support (BCTC-ES) – ConSim 49
Battlefield Effects Simulator (BES) – TRADE 112
Bilateral Negotiation Trainer (BiLAT) – CATT 19
Boom Operator Simulator System (BOSS) – CATT 11
Bradley Advanced Training Systems (BATS) – CATT 24
Bradley Maintenance Training Systems (MTS) – CATT 25

C

Call for Fire Trainer (CFFT) Increment II – CATT 32
Call For Fire Trainer (CFFT) II Plus – CATT 32
Camouflage, Concealment, Deception, and Obscurants (CCD&O) – ITTS 88
Close Combat Tactical Trainer (CCTT) – CATT 21
Combat Training Centers – OPS 56
Combat Training Center Instrumentation System (CTC-IS MOD) – TRADE 110
Combat Training Center Military Operations on Urban Terrain Instrumentation System (CTC MOUT-IS) – TRADE 113
Combat Training Center Live Fire Modernization (CTC LIVE FIRE MOD) – TRADE 111
Command, Control and Communications (C3) Driver – ITTS 70
Command, Control, Communications, Computers And Intelligence (C4I) – ConSim 48
Common Battle Command Simulation Equipment (CBCSE) – Field Ops 60
Common Mission Command Simulation Equipment (CBCSE) – ConSim 42
Common Driver Trainer (CDT) – CATT 25
Common Range Integrated Instrumentation System rapid Prototyping Initiative (CRIIS RPI) – ITTS 71
Common Training Instrumentation Architecture (CTIA) – TRADE 95
Construction Equipment Virtual Trainers (CEVT) – CATT 26
Contingency Operations Support (COS) – OPS 58
Corps Battle Simulation (CBS) – ConSim 42
Counter Radio Electronic Warfare 2 (CREW 2) – TRADE 99
Cross Utilization – OPS 66
Customer Support Group – CSG 123
Cybersecurity Services (CS) – CIO 132
Cybersecurity Office (CSO) – CIO 132
C-27J Cockpit Procedures Trainer (CPT) – CATT 12
C-27J Fuselage Trainer (FuT) – CATT 12
C-27J Loadmaster Crew Resource Management Trainer (LMCRMT) – CATT 13
C-27J Virtual Cockpit Trainer (VCT) – CATT 13
C-27J Weapon System Trainer (WST) – CATT 13

D

Deployable Range Package (DRP) – ITTS 83
Digital Network Migration (DNM) – ITTS 71
Digital Range Training Systems (DRTS) – TRADE 113
Directed Energy Test & Evaluation Capability (DETEC) – ITTS 73
Directed Energy Test Science & Technology (DET S&T) – ITTS 73
Dismounted Soldier (DS) System – CATT 22

E

Egress Assistance Trainers – CATT 26
Egyptian Combat Training Center (AFCTC-3) – TRADE 115
Engagement Skills Trainer (EST) 2000 – CATT 27
Engine Room Simulator (ERS) – CATT 14
Engineering Directorate – PSG 127
Enterprise Business System (EBS) Development – CIO 131
Event Management Office EMO – CSG 123
Exportable Training Capability Instrumentation System (ETC-IS) – TRADE 111

F

Fiber Optic Network (FON II) – ITTS 73
Finance Directorate – PSG 128
Fire Support Combined Arms Tactical Trainer (FSCATT) –OPS 63
Fixed Tactical Internet (FTI) – OPS 60
Flight School (FS) XXI – OPS 60
Foreign Military Sales (FMS) – TRADE 115
Funds, Planning and Integration – BOO 121
Future Army System of Integrated Targets (FASIT) – TRADE 96

G

GameTech - 146
Global Hawk Sensor Operator Part Task Trainers (GH SOPTT) – CATT 14
Geospatial Intelligence (GEOINT) – CATT 35

H

High- Mobility Artillery Rocket System (HIMARS) Maintenance Training System (MTS) – CATT 27
Homestation Instrumentation Training Systems (HITS) – TRADE 112

I

Improved Target Acquisition System- Tactical Engagement Simulation System Field Training System (ITAS-TESS FTS) – TRADE 100
Improvised Explosive Device Effects Simulator (IEDES) – TRADE 100
Information Management – CIO 134
Information Technology Business Management – CIO 131
Initial Homestation Instrumentation Training Systems (I-HITS) – TRADE 115
Instrumentable Multiple Integrated Laser Engagement System Combat Vehicle Tactical Engagement Simulation System (IMILES CVTESS) – TRADE 101
- Foreign Military Sales (IMILES for FMS) - TRADE 115
- Independent Target System/Wireless Independent Target System (IMILES ITS/ WITS) 101
- Individual Weapon System (IMILES IWS) - TRADE 101
- System Shoulder Launched Munitions (IMILES SLM) - TRADE 102
- Tactical Vehicle System (IMILES TVS) – TRADE 105
- Universal Control Device/Micro-Controller Devices (IMILES UCD/ MCD) - TRADE 106

Integrated Military Operations On Urban Terrain (MOUT) Training System (I-MTS)– TRADE 114

Integration & Interoperability (I2) – ConSim 50
Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT) – ConSim 51
Interactive Multi-media Instruction (IMI) – ConSim 40
Integrated Threat Force (ITF) – ITTS 88
International Programs Office (IPO) – CSG 124

J

Joint Coalition Simulation Systems (JCSS) – ConSim 40
Joint Deployment Logistics Model (JDLM) – ConSim 42
Joint Exercise & Experimentation Integration (JEEI) – ConSim 52
Joint Fires Product Line (JFPL) – CATT 33
Joint High Speed Vessel (JHSV) – CATT 15
Joint Land Component Constructive Training Capability (JLCCTC) – ConSim 41
Joint Multinational Readiness Center (JMRC), Hohenfels, Germany – OPS 56
Joint Readiness Training Center (JRTC) – OPS 57
Joint Training Integration and Evaluation Center (JTIEC) – CSG 125
Joint Urban Test Capability (JUTC) – ITTS 74
Jordanian Armed Forces (JAF) Interim House Station Instrumentation Training Systems (I-HITS)/MILES Training System – TRADE 115

K

Kiowa Warrior Cockpit And Sensor Upgrade Program Tactical Engagement Simulation System (KW CASUP TESS) – TRADE 105

L

Laser Marksmanship Training System (LMTS) – CATT 27
Light Assault/Attack Reconfigurable (LASAR) Combat Mission Simulator (CMS) – CATT 33
Lift Simulator Modernization Program (LSMP) – CATT 15
Light Assault/Attack reconfigurable (LASAR) Combat Mission Simulator (CMS) – CATT 33
Live Training Transformation (LT2) Product Line – TRADE 94
Live Training Transformation (LT2) Video Service Oriented Architecture (SOA) – TRADE 96
Live, Virtual, Constructive-Integrating Architecture (LVC-IA) – ConSim 52
Longbow Apache Tactical Engagement Simulation System (LBA TESS) – TRADE 99
Loadmaster Crew Resource Management Trainer (LMCRMT) – CATT 14

M

Man-Portable Aircraft Survivability Trainer (MAST) – TRADE 107
(SOA CMS) Simulator Block Updates (SBUDS) – CATT 34
Medical Simulation Training Centers (MSTC) – CATT 33
MH-47G and MH-60L Combat Mission Simulator (CMS) – CATT 34
Military Operations on Urbanized Terrain and Cultural Training (MOUT-CT) Center of Excellence (CoE) – TRADE 97
Mission Command Training Program (MCTP) – OPS 60
MK-19 Simulation Player Unit (SPU) – TRADE 107
Mobile Commercial Network Infrastructure Test Range (MCNITR) – ITTS 89
Mobile Ground Target Hardware (MGTH) – ITTS 84
Mobile Ground Target Operations (MGTO) – ITTS 84
Mobile Ground Targets (MGT) – ITTS 84
Mobile Gun System Tactical Engagement Simulation System (MGS TESS) – TRADE 108
Mobile Military Operations on Urban Terrain (Mobile MOUT) Training System – TRADE 114
Mobile Multi-sensor Time-Space-Position Information (TSPI) System (MMTS) – ITTS 74
Multiple Integrated Laser Engagement System (MILES) XXI – TRADE 108
Multi-spectral Sea and Land Target Simulator (MSALTS) – ITTS 77

N

National Training Center (NTC) – OPS 58
Network Exploitation Test Tool (NETT) – ITTS 89
Networked Electronic Support threat Sensors (NESTS) – ITTS 89
Non-Rated Crew Member Manned Module (NCM3) – CATT 11

O

Objective Helicopter Icing Spray System (OHISS) – ITTS 77
Office of Small Business Programs (OSBP) 135
One Semi-Automated Forces (OneSAF) – ConSim 41
One Tactical Engagement System (OneTESS) – TRADE 108
Operational Test Command Analytic Simulation and Instrumentation Suite- Enterprise Integration Systems (OASIS-EIS) – ITTS 78
Operational Language and Culture Training System (Iraqi, Dari, Pashto) – CATT 20
Opposing Forces Weapons (OPFOR WEAPONS) – TRADE 109
Opposing Forces Surrogate Wheeled Vehicle (OSWV) – TRADE 108

P

PEO Infrastructure Support – BOO 122
PEO STRI ACQUISITION CENTER – PARC 119
PEO STRI Digital Integration Laboratory (DIL) – ConSim 49
PEO Manpower Management – BOO 122
Personnel Resources – BOO 122
Precision Targetry System (PTS) – ITTS 84

Q

R

Range Radar Replacement Program (RRRP) – ITTS 78
RC-12X Cockpit Procedural Trainer (CPT) – CATT 16
Remotely Piloted Vehicle Target (RPVT) – ITTS 85
Route Clearance Training Services (RCTS) – CATT 28
Reconfigurable Vehicle Tactical Trainer (RVTT) System – CATT 22

S

Saudi Arabian National Guard (SANG) Miles/ Combat Training Center (CTC) – TRADE 116
Shadow Crew Trainer (SCT) – CATT 16
Simulation and Training Omnibus Contract (STOC II) – PARC 119
Simulation to Command, Control, Communications, Computers and Intelligence (C4I) Interoperability (SIMCI) – ConSim 48
Special Operations Aviation Combat Mission Simulator (SOA CMS) Simulator Block Updates (SBUDs) – CATT 34
160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) – CATT 34
Special Operations Forces Air Ground Simulation (SAGIS) – CATT 35
Special Operations Forces Mixed-Reality Digitized Ranges – CATT 35
Special Operations Forces Planning, Rehearsal, and Execution Preparation – Support Contract (SOFPREP-SC) – CATT 35
Special Operations Forces Training, Engineering and Maintenance Support (SOF TEAMS) – CATT 36
Soldier Non-Systems (SNS) – OPS 61
Soldier Systems - OPS 63
Starship II – ITTS 79
Stryker – CATT
- Maintenance Training System (MTS) 28
- Mobile Gun System (MGS) Advanced Gunnery Training System (AGTS) 31
- Multiple Integrated Laser Engagement System (MILES XXI) - 110

Stryker Anti-Tank Guide Missile (ATGM)
Stryker Tow Simulator (STS) – TRADE 109
Stryker Multiple Integrated Laser Engagement System (MILES) XXI – TRADE 109
Support Mission (SM) OPS 64
Sustainable Range Program (SRP) – OPS 66
Synthetic Environment Core (SE Core) – ConSim 46
Systems Engineering and Technical Assistance Services (SETA) Contract – PARC 119
System Engineering Office (SEO)– CIO 133
System Test and Integration Laboratory (STIL) – ITTS 79

T

Tactical Simulation (TACSIM) – ConSim 43

Target Control System (TCS) – ITTS 86
Target Modernization - TRADE 97
Targetry Range Automated Control and Recording (TRACR) – TRADE 96
Team Orlando – 136
Technical Industrial Liaison Office (TILO) – PEO 139
Test Resource Management Center (TRMC) Test & Evaluation Science & Technology (T&E/ S&T)
Consolidated Contracting Activity (CCA) – ITTS 80
Threat Computer Network Operations (CNO) Team – ITTS 90
Threat Intelligence Electronic Warfare Environment (TIEW ENV) – ITTS 90
Threat Signal Injection Jammer (TSIJ) – ITTS 90

U

U.S. Army Research, Development and Engineering Command's Simulation and Training Technology Center (RDECOM STTC) (BiLAT)– CATT 19
United States Special Operations Command (USSOCOM) Common Database (CDB) – CATT 36
United States Special Operations Command (USSOCOM) Joint Terminal Attack Controller (JTAC) Trainer – CATT 36
United States Special Operations Command (USSOCOM) Special operations forces Virtual Mission rehearsal (SOF VMR) – CATT 37
Unmanned Aerial System Target (UAS-T) – ITTS 87

V

Vehicle Instrument Interface Package (VIIP) – OPS 62
Vessel Defense System (VDS) – CATT 19
Virtual Battlespace 2 (VBS2) Fires – CATT 20
Virtual Battlespace 2 (VBS2) U.S. Army – CATT 21
Virtual Combat Convoy Training (VCCT) Services – CATT 31
Virtual Targets – ITTS 87

W

Warfighter Field Operations Customer Support Contract (WFF FOCUS) – OPS 56/PARC 119
Warfighter Outreach Office (WOO) – CSG 123
Warfighters' Simulation (WARSIM) – ConSim 43
Warrior Training Integration (WTI) – ConSim 48
Wideband Configurable Controlled Jammer System (WCCJ) – ITTS 91
Workforce Development Office – PSG 129

X

Y

Z

Defense GAMETECH Users' Conference

March 28-30, 2012 | Caribe Royale • 8101 World Center Drive • Orlando, FL 32821

Learn about the latest trends in DoD Games, Virtual Worlds and Mobile Apps for Training

www.gametechconference.com

PEO STRI

12350 RESEARCH PARKWAY ORLANDO, FL 32826-3276

HTTP://WWW.PEOSTRI.ARMY.MIL