TRADOC Capability Manager for the Virtual Training Environment

Themes and Messages

Virtual simulations support the Army Training Concept for Unit and Institutional Training

- TCM Virtual serves as the user representative for:

- **Aviation Combined Arms Tactical Trainer (AVCATT)**

- **Non-Rated Crew Member Manned Module (NCM3)**

- **Close Combat Tactical Trainer (CCTT)**

- **Dismounted Soldier Training System (DSTS)**

- **Reconfigurable Vehicle Tactical Trainer (RVTT)**

- **Synthetic Environment Core (SE Core)**

- **Call for Fire Trainer II (CFFT II)**

- **Engagement Skills Trainer II (EST II)**

- **Basic Electronics Maintenance Trainer (BEMT)**

- **Virtual Clearance Training Suite (VCTS)**

- **Common Driver Trainer (CDT)**

- The virtual components of the Integrated Training Environment (ITE) are AVCATT, CCTT, RVTT and SE Core which support the requirements to build and sustain unit collective training, while simultaneously developing flexible, adaptive, and innovative leaders.

- Air and ground simulations are available for training at home stations throughout the Army.

- Use of virtual simulations is amplified as specific events in many Combined Arms Training Strategies, The Army Training Strategy, the Army Training Concept, and the Army Learning Concept.

- Supports leader/commander and battalion staff training.

- Institutional instruction includes virtual simulations (e.g. basic, AIT, MCoE, USAACoE, FCoE).

- Virtual simulations allow leaders/instructors to inexpensively train and retrain tasks under varying conditions.

- New (Counter-Improvised Explosive Devices [CIED]) and emerging (unmanned systems) training requirements are supported by virtual simulations.

- Support and sustainment of virtual simulations is the U.S. Army's responsibility, not a unit or school's responsibility.

- Virtual simulations support training for Combined Arms Maneuver and Wide Area Security missions.

Synthetic Environment Core (SE Core) governs the virtual component of the ITE

- Enables interoperability between CCTT and AVCATT in FY13.

- Provides geotypical and geospecific terrain databases (e.g., home station training areas and Afghanistan).

- Uses OneSemi-Automated Forces (OneSAF) as the common SAF for CCTT and AVCATT in FY13.

- Expands the SE Core components to other virtual system and non-system training aids, devices, simulators and simulations (TADSS).

- Enables virtual simulations to interoperate with live, constructive and gaming training enablers in the ITE.

Dismounted Soldier Training *System (DSTS) Program provides the means for* dismounted Soldiers in the virtual environment to participate as part of the LVC ITE

- The DSTS program integrates dismounted Soldiers and formations into the LVC ITE; closes a critical training gap.

- DSTS is an integral component of the CCTT program of record; as such, it is integral to the LVC ITE.

- DSTS is an immersive virtual training simulation for Infantry, Ranger, SOF or any dismounted Soldier.

- The DSTS virtual simulation will provide the capability for:

- **Soldiers and small units to train individual and collective tasks as well as conduct mission rehearsals using a wide array of scenarios based on the actual terrain where they may fight.**

- **Training in selected warrior tasks and battle drills for squad-through company-level Infantry, Bradley, Stryker and SOF units. DS also can support specified tasks for non-infantry organizations and enablers.**

- **Small unit leaders to select and train in complex urban environments using a wide selection of typical or specific terrain databases.**

- **Dismounted Soldiers to train as equal partners with other ground systems in CCTT (Bradley or tank) or linked to AVCATT. Soldiers will be able to dismount from vehicles or aircraft and train for full spectrum operations.**

- **Soldiers to rehearse tasks that are too complex or high risk to train in a live environment. A Soldier will be able to engage point or area targets with doctrinally assigned weapons, move in doctrinally correct formations and at designated rates of movement, and communicate/identify with vehicle/unit personnel.**

Virtual training augments live training

- Leaders are responsible for integrating and effectively using virtual TADSS.

- Virtual simulations replicate the conditions of Unified Land Operations.

- Virtual simulations complement but do not replace the need for live training.

- As operational environments become more complex and resources become scarcer, virtual simulations become more valuable.

- Virtual simulations provide variable conditions supporting the crawl-walk-run training approach.

Virtual training offsets training challenges of time, cost, safety and environment

Time:

- **Provides on-demand training availability.**

- **Reduces exercise planning and preparation.**

- **Eliminates travel time to and within training areas.**

- **Enables greater frequency and more repetitions.**

Cost:

- **Virtual training enablers offer flexibility, efficiencies and a broad range of capabilities for leaders to maintain an agile and ready Army in a period of reduced resourcing.**

- **Reduces ammunition and fuel expenditures in preparation for live training.**

- **Reduces training area and range maintenance.**

- **Avoids wear and tear on equipment.**

- **Provides computer-generated OPFOR, Joint, BLUFOR and other elements on the battlefield.**

Safety:

- **Increases training frequency while mitigating safety risks.**

- **Enables training that would be too dangerous to conduct in a live environment.**

Environment:

- **Eliminates impact on or constraints related to the environment.**

- **Enables training on all types of terrain (urban, desert, mountains, etc.).**

- **Supports increased battlespace requirements.**

- **Augments small local training areas.**

Virtual simulations are integral enablers that support ARFORGEN resulting in a sustained flow of trained and ready forces for full spectrum operations

- Trains Soldiers, leaders and units for unexpected contingencies operating on a rotational cycle, ARFORGEN, which is predictable and sustainable for our all volunteer force.

- Virtual simulation usage supports the Army challenge involving setting the condition for the future through RESET by retraining Soldiers, leaders and units to build critical skills necessary to operate across the spectrum of conflict in the current security environment.

- Investment in virtual simulation supports the Army challenge involving setting the conditions for the future through business transformation by better managing and allocating its resources ensuring taxpayer money is spent wisely, while continuing to provide a world-class Army.

Funding Implications

- The Army will continue to face decreases in funding for the foreseeable future especially in light of the recently announced White House (Jan 12) changes to the defense strategy which would dramatically reshape the needs of the Department of Defense and cut defense spending by nearly $500B over ten years. Details of the program and personnel cuts will be laid out in the upcoming Defense budget request. In addition, the Budget Control Act of 2011 mandates huge cuts totaling about $984B over ten years, half of which would come from Defense ($492B). The Army's final share is yet to be determined, but all indications are that the programmed funding for the period FY13-17 will be reduced. This will clearly impact our ability to deliver virtual simulation products in the quantities and timeframe desired.

TCM Virtual is here for the Soldier

- Have a new requirement that isn't being met? If you are unsure of the process for getting a new or emerging requirement recognized, accepted and validated, contact the TCM Virtual Operations Officer at 913-684-8259 or adam.torres@us.army.mil

- Having problems with a virtual simulation at your installation? Contact us and we will figure out a solution.

- If you or your organization identifies a new technique for training with any of the TCM Virtual portfolio of simulations, contact us and we'll ensure the field is notified about your great idea.