Virtual Training Opportunities at FTIG

Location of virtual simulators at FTIG
Area 5
Virtual Training Opportunities
at FTIG
Virtual Training Opportunities at FTIG

- Aviation Combined Arms Tactical Trainer (AVCATT)
- Call For Fire Trainer (CFFT)
- Common Driver Trainer (CDT)
- Engagement Skills Trainer 2000 (EST 2000)
- Fire Arms Training System (FATS)
- Fixed Tactical Internet (FTI)
- High-Mobility Multi-Wheeled Vehicle Egress Assistance Trainer (HEAT)
- Mine Resistant Ambush Protected (MET)
- Mobile Close Combat Tactical Trainer (MCCTT)
- Operator Driving Simulator (ODS)
- Shadow Crew Trainer (SCT)
- Stryker Mobile Gun System (MGS) Advanced Gunnery Training System (AGTS)
- Virtual Battlespace 2 (VBS2)
- Virtual Convoy Operations Trainers (VCOT)
Virtual Training Opportunities

at FTIG

• 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 in 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 man modules, re-configurable to any combination of attack, reconnaissance, lift and/or cargo helicopters. AVCATT is a mobile system that provides training for active and reserve component aircrews deploying in support of Overseas Contingency Operations. Ongoing updates to AVCATT include a visual re-architecture, classified operations and the adoption of One Semi-Automated Forces (OneSAF). AVCATT is interoperable with a variety of simulators including the Close Combat Tactical Trainer (CCTT), the Virtual Combat Convoy Trainer (VCCT), the CCTT Reconfigurable Vehicle Simulator (RVS) and the Reconfigurable Vehicle Tactical Trainer (RVTT).
Virtual Training Opportunities

at FTIG

• Call For Fire Trainer (CFFT)

MISSION:
To provide observed fire training in support of all fire support missions.

DESCRIPTION:
The CFFT is a lightweight, rapidly deployable, observed fire-training system that provides simulated battlefield environments for instructing fire support specialists, joint fires observers and Soldiers at the institutional and unit level. The CFFT is capable of training Artillery, Type II and III Close Air Support, Naval Gunfire and Mortar Missions. It is fielded 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 classified environments and are fully interoperable with AFATDS. Near term enhancements will fully integrate SE Core and OneSAF and leverage capabilities developed for the Joint Fires and Effects Trainer System through use of the JFPL architecture. These include high-fidelity, immersive visual displays for the institution and helmet mounted displays, voice communications, C4ISR capabilities (i.e. ROVER), and improved after action review for the operational force.
Virtual Training Opportunities at FTIG

• 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 (AAR) 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, viewing the scene, introducing malfunctions and emergency control situations, monitoring each trainee’s performance and providing recorded AAR feedback. The reconfigurable common platform will allow driver training for various U.S. Army tactical vehicles. The Stryker Driver Trainer is the baseline of the CDT architecture.
Virtual Training Opportunities
at FTIG

• Engagement Skills Trainer 2000 (EST 2000)

EST 2000 Location
BLDG 5-2

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 11 small arms and is deployable with its own system shelter. All EST 2000 training scenarios are U.S. Army Training and Doctrine Command (TRADOC) validated.
Virtual Training Opportunities at FTIG

• Fire Arms Training System (FATS)

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

DESCRIPTION: Meggitt Training Systems Small Arms Trainer (SAT) replaces the FATS and supports both individual and collective training throughout the full spectrum of military operations. Individual training consists of Marksmanship and Judgmental training. Marksmanship training encompasses the fundamentals of individual marksmanship, crew served weapons training and sustainment training for both. Judgmental training includes target discrimination, force escalation/de-escalation, and individual leadership imperatives.
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• Fixed Tactical Internet (FTI)

MISSION:
To provide digital communications support and equipment for digitized units at brigade-and-below forces at homestation.

DESCRIPTION:
The Fixed Tactical Internet (FTI) is a semi-permanently installed network of enhanced position location and reporting system radio sets that provide an alternative means for on-demand digital communications to support training, testing, maintenance and experimentation. The FTI provides a means of injecting simulation into the tactical Command, Control, Communications, Computers and Information (C4I) environment.
Virtual Training Opportunities
at FTIG

• High-Mobility Multi-Wheeled Vehicle
• Egress Assistance Trainer (HEAT)

MISSION: To provide training to Soldiers on the effects of rollover and to conduct drills that will provide the skills to react properly during a rollover and/or egress situation in an up-armored HMMWV.

DESCRIPTION: The HEAT increases the situational awareness of vehicle rollover by permitting the instructor to observe driver 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 rollover procedures. The trainer allows individuals and crews to rehearse and physically execute the necessary steps required to survive a vehicle rollover.
Virtual Training Opportunities
at FTIG

• Mine Resistant Ambush Protected (MET)

The simulator is the Mine-Resistant Ambush-Protected Egress Trainer, or MET, and is the military's latest initiative to prepare troops how to react in the event of a rollover. According to Army statistics, there were 121 non-hostile-related MRAP rollover incidents in the military between Nov. 1, 2007 and Mar. 31, 2009. Since April 2007, the military has fielded approximately 12,000 MRAPS. The MET consists of a vehicle cab mounted to two rotating wheels on a raised platform, and is based on an earlier humvee rollover trainer. The MET comes in five variants for different MRAP models currently fielded by the military - the RG-33, RG-31, MaxxPro, Caiman and Cougar. PEO-STRI is an Army agency responsible for developing and fielding new equipment.
Virtual Training Opportunities at FTIG

• Mobile Close Combat Tactical Trainer (MCCTT)

MISSION: To provide armor, mechanized infantry, cavalry and recon crews, units and staffs with a virtual, collective training capability. DESCRIPTION: The MCCTT supports training of armor, mechanized infantry, cavalry units and recon units from platoon through battalion/squadron echelon, including the staff. The primary training audience operates from both full-crew simulators and mock-up or real command posts. Simulators have sufficient fidelity for individuals and crews to accomplish their collective missions. Simulators replicate the Abrams and Bradley Fighting vehicles and selected tactical wheeled vehicles through the use of the Reconfigurable Vehicle Simulator (RVC) and the Reconfigurable Vehicle Tactical Trainer (RVTT). The system is equipped with the latest Force XXI Battle Command Brigade-and-Below (FBCB2) in support of training the digital force. A combination of tactical and simulated equipment located in mock-up command posts or real command posts provides artillery, mortar, combat engineers and logistics units a link to training in the synthetic battlefield. Semi-automated forces workstations provide additional supporting units (i.e., aviation and air defense artillery) and all opposing forces within the battlefield. Thus, while maneuver units (combat crews and battalion-level staff members) constitute the MCCTT's primary training audience, all battlefield operating systems are represented in the simulation. This ensures effective simulation within a combined arms training environment that encompasses daylight, night and fog conditions. Mobile versions of MCCTT are fielded to the Army National Guard and U.S. Army units. MCCTT is interoperable with the Aviation Combined Arms Tactical Trainer and is moving towards being Synthetic Environment Core compliant.
Virtual Training Opportunities

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• Operator Driving Simulator (ODS)

MISSION: In 2005, the U.S. Marine Corps selected FAAC to expand MTVR driver training beyond the schoolhouse to operational and Reserve units. The Marine Corps chose FAAC’s Military Operator Driving Simulator (ODS) design, widely used by the U.S. Army to train motor transport operators in the M915, M939, FMTV, PLS, HET and HEMTT.

DESCRIPTION: The ODS design utilizes high-fidelity vehicle dynamics software and interchangeable dash panels. Vehicle simulations include appropriate payloads, trailers and liquid loads. The ODS program has extended vehicle configurations to include the Marine Corps MTVR, M1114 Up-Armored HMMWV, Cougar Category I MRAP and Buffalo. All vehicle simulations include simulated appended armor panels which provide realistic restrictions to the driver’s field of view, while the vehicle dynamics software modifies the handling characteristics to account for the changes in weight and center of gravity.
Virtual Training Opportunities

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• Shadow Crew Trainer (SCT)

MISSION: To provide sustainment and proficiency classroom/desktop training for every member of the 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 Battlefield commander a day/night multi-sensor intelligence collection system. The SCT provides training positions for the air vehicle operator, payload operator, launch and recovery crew, staff/leader station, instructor operator station and interactive multimedia instruction.
Virtual Training Opportunities

at FTIG

• 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. A pre-brief after-action review capability is provided for exercise management and conducting AARs.
Virtual Training Opportunities

at FTIG

• Virtual Battlespace 2 (VBS2)

MISSION: To field and support an Army-wide, game-based training system that provides the Warfighter with a platform to train small unit tactics, techniques and procedures in a contemporary operational environment.

DESCRIPTION: VBS2 is a commercial-off-the-shelf game-based training platform, incorporating a high-fidelity virtual environment, scenario and mission editors, after action review and a powerful development suite. Soldiers move in a shared, immersive, first-person environment that supports mounted and dismounted operations. The system provides ground and air vehicles, small arms and vehicle-mounted weapons, communications, and interactive opposing forces of the contemporary operational environment, including improvised explosive devices. Warfighters learn to anticipate and respond to tactical situations by practicing existing and developing tactics, techniques and procedures. Trainers and leaders use VBS2 to rehearse tactical missions and conduct after reviews of training sessions using easy-to-use authoring tools integrated in the simulation.
Virtual Training Opportunities at FTIG

• Virtual Convoy Operations Trainers (VCOT)

The VCOT provides training for combat convoys under realistic conditions through the streets of Baghdad and other areas. VCOT ensures that soldiers are trained to anticipate ambushes and other insurgent actions from all possible directions by allowing the crew to observe, maneuver, and fire their weapons through a full 360 circumference. Crewmembers are not limited by fixed screen projections; they have a complete and continuous view of the entire virtual world around them – as they would under real combat conditions. Three distinct levels of trainers are available: (1) a trainer that appends directly to a tactical vehicle and transforms it into a trainer – for the period of time that training is desired, (2) a trainer that is composed of crew stations for each crew member, (3) a trainer that is composed of tabletop crew stations for each crew member. All three levels of trainers are available and have been deployed for training. The VCOT system has the flexibility to allow users to choose: (1) the vehicle mix for their convoy, (2) the weapon system employed on each vehicle, (3) the routes along which the convoy will travel, (4) the type and strength of enemy activity along the convoy route. This system is the best answer for training soldiers for combat convoys and for rehearsals of actual convoy missions available in the world today.
Virtual Training Opportunities at FTIG

• HUMINT Control Cell Trainer (FY11)
  
  – Gaming program for HUMINT MOSs
  
  – Negotiate with locals to develop Human Intelligence information
  
  – Capable to integrate with other systems.