Battle Command Training Branch Capabilities
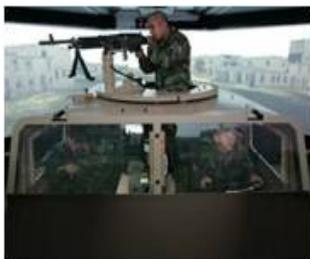
New Opportunities for Battalion and Below Training

New opportunities for Battalion and below battle command training are being created in the new Warrior Skills Training Center (WSTC), opened by Fort Hood's Battle Command Training Branch (BCTB) in October. Taking advantage of space in one of the two Close Combat Tactical Trainers (CCTT), the BCTB has consolidated a number of existing and new training enablers in Bldg 22027, on South Range Road. The Warrior Skill Skills Trainer (WST), the Tactical Ground Reporting System (TIGR) and Virtual Battle Space 2 (VBS2) join the CCTT, Reconfigurable Vehicle System (RVS) and the Aviation Close Combat Tactical Trainer (AVCATT) to provide a three dimensional world in which Soldiers can maneuver and train on terrain that replicates the current combat theater, local Fort Hood ranges, or the National Training Center (NTC). These tools enable leaders to set the conditions of their desired training based upon the unit's mission. Soldiers can execute mounted and dismounted drills, validate SOPs, practice TTPs & communication procedures and capitalize on lessons learned from theater.

Fort Hood's Warrior Skills Trainer (WST) has been a heavily used enabler since its inception in November 2003. Since that time it has trained almost 50,000 Soldiers. Moving it to the WSTC provides a better venue for the training and allows Battle Simulation Center facilities to be shaped to provide better opportunities for Division and Corps level exercises.

The WST provides Soldiers and leaders the capability to conduct unit led warrior skills training associated with conducting HMMWV mounted operations in the OIF/OEF theater. It consists of 4 mock—HMMWVs that enable the soldier to drive in a virtual representation of Baghdad. Each vehicle is equipped with radio communications, a laptop FBCB2 system and realistic weapons systems, both crew served and individual. Scenarios that use CAS, EOD, QRF and IED events are available. This systems provides the opportunity to develop or refine SOPs, TTPs and communications procedures. The BCTB is also working to improve this trainer to provide even more fidelity and to increase throughput capacity.

Two new enablers that are available at the WSTC are the first person simulation, VBS2 and TIGR. VBS2 uses current gaming technology and an Artificial Intelligence (AI) engine to create a virtual world for training. It can be linked to current command and control (C2) devices, such as FBCB2 and TIGR. It is also easily modified by our training team to increase pressure on the users and to replicate up-to-the-minute conditions in theater. The Branch's innovative approach creates 'vehicles' that operate in a 'convoy.' A 'command post' with simulated communications and C2 devices allows the entire company or platoon to practice individual and collective tasks. While commanders can select from a series of scenarios, VBS2 can also be used with a 'white cell' to provide HICON and OPFOR.

TIGR is an integrated reporting system that can be linked with the virtual systems (see related article on page 2).

The WSTC is available for training from 0730-1630 Mon—Fri. If necessary, the WSTC can be scheduled outside of normal operating hours. To schedule any of the virtual trainers contact Mr. Jay Ritz at (254) 287-4906 or jay.ritz@us.army.mil.

Tactical Integrated Ground Reporting System (TIGR)

 Background. In April 2006, the 1st Cavalry Division determined a need to enhance the net-centric data collection and reporting for Company and below operations in the Iraqi theater of Operations (ITO). An Operational Needs Statement (ONS) was developed and submitted in December 2006 and an initial operating capability (IOC) was established at Taji, Iraq. Out of the ONS process was born TIGR, a DOTMLPF solution that provides game-changing net-centric data collection, sharing, and reporting at Company and below for critical tactical missions. In April 2008, the Battle Command Training Branch at Fort Hood began training Soldiers on the TIGR system in an un-classified setting.

System Information.   TIGR provides a net-worked application for building Intelligence Preparation of the Battlefield at Company/Platoon level and below. TIGR enables information sharing and report searching with multimedia data to include photos, GPS tracks, voice recordings, office files and video. TIGR is a tremendous tool for the following:

> Mission preparation and planning
> Post-patrol debriefing and AARs at the CO level and below
> Thoroughly supports and improves the Relief in Place (RIP) and Transfer of Authority (TOA) process, primarily at Company and Platoon level.
> Supports lowest tactical level mission planning, rehearsal, execution, and after-action reporting… shared in the net-worked SIPR environment

TIGR functionally bridges the gap between "intel" and "operations" at the lowest tactical echelons and is an enabler for the Company level Effects / Intel Cell, IEDD Law Enforcement and Human Terrain Initiatives and Biometrics information (HIDE/BAT). Once information and data is loaded onto the TIGR system, it can be transferred onto CPOF (via thumb drive, external hard drive, etc) to facilitate information sharing between the company/platoon level and the battalion command post.

Training. The Fort Hood Battle Command Training Center (BCTC) was fielded with TIGR in April 2008. The Fort Hood BCTC currently provides Individual Operator Training for Soldiers requiring TIGR training as needed. The unclassified course is taught in the TIGR classroom located in Building 22027 off of South Range Road. We have the capability to train 8 soldiers per class and currently run two classes per day. We are available to train Soldiers on TIGR five days a week (Monday-Friday). In November, because of an additional fielding initiative, the BCTC will be able to expand its training capability and train 12 Soldiers per class. Based on operational requirements and need, we can further expand our ability to train more Soldiers. Simply, if a Command determines that the number of TIGR courses aren't adequate, we will create more. Coordination for additional training can be accomplished by contacting Mike Hilliard, Chief, Fort Hood BCTC at 254.288.1446 or Kevin Pillsbury, TIGR Training Coordinator at 254.287-4906.

Way Ahead. In November 2008, the Fort Hood BCTC will expand its TIGR capabilities to include SIPR. A SIPR Café with TIGR (Classified) embedded will be established in Room J215 one the 2nd Floor of the Fort Hood BCTC. Ten laptop computers will be dedicated to TIGR operations and will provide a "reach forward" capability into Theater. This will provide commanders a venue at which they may begin to conduct a "Virtual" Right Seat Ride with the unit they will replace in theater. We expect that the SIPR Café will be operational by 1 December 2008.

> **POC.** POC for this information paper is Mike Hilliard, Chief, Fort Hood BCTC at 254.288.1446 or Mi-chael.hilliard2@us.army.mil

Additional Virtual Training Capabilities at Fort Hood

Close Combat Tactical Training (CCTT)

The CCTT was designed to train FBCB2 equipped Armor, Cavalry and Mechanized Infantry Soldiers from platoon through battalion. It can stimulate ABCS and C4ISR systems in Brigade and Battalion TOCs.   CCTT manned modules replicate the M1A2 Abrams main battle tank, the M2A2 Bradley Fighting Vehicle and the High Mobility Multipurpose Wheeled Vehicle (HMMWV). CCTT manned modules can simulate most, but not all, functions found in the actual combat vehicle.

Unit leaders can also modify the attributes (fuel, ammunition, and maintenance levels) of individual vehicles or units to increase or decrease the level of difficulty experienced during the battle.

Manned modules are subject to combat damage and equipment failures. Crews will experience combat damage when their vehicle runs over a mine, is hit with direct or indirect fire from opposing or friendly forces, or when the vehicle is hit by exploding ordnance during the battle. Additionally, modules are subject to equipment failures. Equipment failures include depletion of fuel and ammunition, collisions, and thrown tracks (resulting from high speeds and turns, or attempting steep inclines beyond the capability of the module). Both combat damage and equipment failures can be reversed to allow additional training time.

The CCTT can train a variety of collective tasks for platoon and company level units. It can also train selected individual tasks.   The CCTT is located in Bldg 22028 on South Range Road and may be scheduled by contacting Andy Stilley, 288-5026 or **andrew.stilley@us.army.mil**

Reconfigurable Vehicle System (RVS)

The Reconfigurable Vehicle Simulator (RVS) trains Soldiers in a realistic reconnaissance, convoy environment featuring a three-dimensional view and accurate weapons systems (small arms and crew served). Each RVS Trainer supports up to five crewmembers – vehicle commander, driver, two crew and gunner. Fort Hood's RVS simulates either a HMMWV or HEMTT and integrates with the CCTT or may be used in a stand-alone configuration as a patrol/scout vehicle.

Like the CCTT, the RVS can operate in a simulated night environment. It accommodates missions such as Fire Coordination, Call for Fire, and Close Air Support.   Crewmembers can dismount the vehicle to engage threats and communicate using simulated voice and digital communications systems.

The RVS is located on the east side of the CCTT and may be scheduled by contacting Andy Stilley, 288-5026 or **andrew.stilley@us.army.mil**

Aviation Combined Arms Tactical Trainer (AVCATT)

The Aviation Combined Arms Tactical Trainer (AVCATT) is a mobile, reconfigurable, aviation-based collective trainer. Each AVCATT trailer supports three manned modules (cockpits) and is capable of training up to 6 crews. AVCATT currently supports UH-60 Blackhawk, OH-58D Kiowa Warrior, AH-64A Apache, AH-64D Longbow and CH-47 Chinook platforms.

AVCATT has demonstrated the capability to be interoperable with a variety of other simulators including the Close Combat Tactical Trainer (CCTT), the Virtual Combat Convoy Trainer (VCCT), and the CCTT Reconfigurable Vehicle Simulator (RVS). This systems supports collective & combined arms training and is a tremendous tool for training Air to Ground Integration.

The AVCATT is located behind the CCTT building and may be scheduled by contacting Andy Stilley, 288-5026 or **andrew.stilley@us.army.mil**

Battle Command System Sustainment, New Operator, and Staff Integration Training

Fort Hood's Battle Command Training Center (BCTC) opened in July 2002 with the mission of **providing sustainment, new operator, and staff collective training** for Soldiers and leaders on Army Battle Command Systems (ABCS) in an integrated environment.

Located in the J-wing of the Soldier Development Center, Bldg 33009, the BCTC currently provides scheduled classes in **AFATDS, BCS3, C2PC, CPOF, FBCB2, BFT, JADOCS, ASAS-L, MCS, TIGR, and unit level maintenance courses for FBCB2 and BFT.** Using an integrated classroom to demonstrate system capabilities and their interface with other systems, the courses produce trained operators with an awareness that goes beyond keyboarding. To enroll in any of the BCTC's courses, contact Peyton Randolph at 285-6827 or pey-ton.randolph@us.army.mil.

The **Battle Staff Integration Course (BSIC)** facilitates staff interaction for both mission planning and operations, using digital systems and scenarios that range from COIC/stability operations for OIF/OEF to NTC preparation (low and high intensity conflict). The course includes COP, C2, and UAV environments driven by simulations. Commanders can select from a variety of scenarios to create training that matches their objectives.

The course is taught in Bldg 40028, just behind the Soldier Development Center. To schedule training, contact Ray Castillo at 285-6197 or ray-mond.castillo1@us.army.mil.

Other Training Resources at the BCTC

Tactical Iraqi, using PC gaming technology, provides the individual solider an opportunity to learn or enhance language and customs skills in an interactive, virtual environment. This self-paced Iraqi language program teaches Soldiers what to say, how to say it, and when to say it. Tactical Iraqi puts Soldiers in real world situations. It is not simply a language learning program. If trainees speak and behave correctly, virtual humans become trustful and cooperative, and provide information that trainees need to progress in the training environment. Training is conducted in the BCTC, Room J2___. To schedule, contact Peyton Randolph at 285-6827 or pey-ton.randolph@us.army.mil.

Reconfigurable TOC (RTOC) is located in the BCTC, on the first floor. It was designed to support Brigade and below command posts and can support a Brigade Combat Team TOC with up to six Battalion TOCs at one time. It offers a great battle staff training site for units in Reset. Commanders can set up their TOC the way they want it and, with coordination, a full suite of ABCS, CPOF, BFT/FBCB2 can be made available. DSN/VOIP phones are also available. Currently the First Cavalry Division has their Main Command Post set up in the RTOC for their mission rehearsal exercise and will be followed by III Corps. For additional information or to schedule, contact Mike Hilliard at 288-1446 or mi-chael.hillliard2@us.army.mil

Battle Simulation Capabilities for Battalion to Corps

The Battle Simulation Center provides years of experience in executing simulation-supported training events at all levels. The BSC can operate in classified or unclassified environments.

The process begins with a systematic approach to plan and exercise Commander's training objectives/specific guidance/intent. Once that is identified, an appropriate constructive/virtual simulation package is designed. To further facilitate the assimilation of the unit into the planning and execution of the exercise, the Technical Integration Working Group (TiWG) process is used. Units are also given a comprehensive, easy-to-execute pre-exercise checklist. The BSC staff also assists units in preparing Interim Authorities to Connect (IAC) for networks, coordination for funding, and other support services as required.

In executing a simulation-driven exercise, the BSC can provide digital Common Operating Picture (COP) on unit C2 devices, a virtual Unmanned Aerial System (vUAS) environment (if appropriate), intelligence system support using TACSIM or other simulation capabilities, logistics system support with LOGFED/JDLM, recommended COAs for the use of MSEL injects, and building a simulation database that reflects all unit capabilities.

Facility support available at the BSC includes a conference room that can set approximately 100 and is fully audio-visual capable, an auditorium that seats 150-200 also with AV capabilities, and a secure video-teleconferencing suite. We can also provide some short term support for small groups, such as seminars.

BSC Coming Events

15 Sep - 7 Nov 08: Unified Endeavor (UE) 09-1
12-23 Jan 09: Fielding of new simulation version
19 - 27 Feb 09: 321 Sustainment BDE exercise
13 Apr - 8 May 09: Fielding of new simulation version
21 Sep - 3 Oct 09: UE 09-3
PLEASE NOTE: dates are subject to change based on emerging requirements.

Fixed Tactical Internet (FTI)

The Fixed Tactical Internet is a network of enhance position location and reporting system (EPLRS) radio sets that provide an alternative means for on-demand digital communications to support training. It does not prevent units from using signal assets; it simply provides an alternative. It can also support Brigade and below training by injecting simulation into the tactical Command, Control, Communications, Computers and Information (C4I) environment. The FTI allows integration of live-virtual-constructive training domains by linking the CCTT, WSTC, BCTC, maneuver training areas and the digital multipurpose range complexes.

The FTI office is located in Building 22028 (CCTT). For additional information or to schedule, contact Dave Yonkey, 288-5907 or email david.yonkey@us.army.mil.

Contact Information

Battle Command Training Branch

Chief, BCTB	Ms. Georgie McAteer	Tel (254) 288-6715	georgie.mcateer@us.army.mil
Chief, BCTC	Mr. Mike Hilliard	Tel (254) 288-1446	Michael.hilliard2@us.army.mil
BCTC Lead Contractor	Mr. Doug McNeese	Tel (254) 285-6199	douglas.mcneese@us.army.mil
BCTC Scheduler	Mr. Peyton Randolph	Tel (254) 285-6827	peyton.randolph@us.army.mil
Battle Staff Integration Course	Mr. Ray Castillo	Tel (254) 285-6197	Raymond.castillo1@us.army.mil
Chief, BSC	Mr. Bill Nance	Tel (254) 288-2915	william.nance1@us.army.mil
BSC Lead Contractor	Mr. Mike Washko	Tel (254) 288-2341	mike.vincent.washko@us.army.mil
Event Integration	Mr. Bob Graham	Tel (254) 287-5711	robert.graham@us.army.mil
BSC Facility Scheduling	Mr. Larry Holly	Tel (254) 288-4098	larry.holly@us.army.mil
Conference Room/VTC/Auditorium		Tel (254) 288-2176/2909	
Warrior Skills Training Center	Mr. Jay Ritz	Tel (254) 287-4906	jay.ritz@us.army.mil
Virtual Training Coordinator	Mr. Dave Chambers	(254) 286-6516	david.w.chambers@us.army.mil
CCTT Lead Contractor/Scheduler	Mr. Andy Stilley	Tel (254) 288-5026	andrew.stilley@us.army.mil
FTI Scheduler	Mr. Dave Yonkey	Tel (254) 288-5907	david.yonkey@us.army.mil

The Fort Hood Battle Command Training Branch (BCTB), as part of the Army's Hub and Spoke concept, includes direct management of the Battle Command Training Centers (BCTCs) and Battle Simulation Centers (BSCs) at Forts Hood, Carson, Riley, Sill, Bliss and Knox and indirect management of the family of Virtual Tactical Trainers (CCTT, AVCATT, and Convoy Training) and the Fixed Tactical Internets (FTIs) at Forts Hood, Carson, Riley and Bliss. This unification of existing functions build a versatile team across the III Corps Battle Command training spectrum to leverage personnel from the live, virtual and constructive training environments. Point of contact information is provided below for each site.

Fort Bliss BCTC	Mr. David Hieatt	Tel (915) 568-6242	david.hieatt@us.army.mil
Fort Carson BCTC	Mr. Mike While	Tel (719) 526-5410	michael.e.white@us.army.mil
Fort Knox BCTC	Mr. George Helton	Tel (502) 624-2389	george.helton1@us.army.mil
Fort Riley BCTC	Mr. Randy Curry	Tel (785) 239-1492	randall.curry@us.army.mil
Fort Sill BCTC	Ms. Ilean Phillips	Tel (580) 442-9514	ilean.phillips@us.army.mil