THE EVOLUTION OF JMSC

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Photos courtsy of JMSC Visual Information

Emerging Training Capabilities

Col. Stephen Seitz, Director of Simulations (left), Mr. Sherman Watts, JMSC Facilities Manager (middle) and Col. Timothy Touzinsky, JMTC Chisf of Staff cut the ribbon at the JMSC opening ceremony, Nov. 12.

New technology, new training tools and a changing force structure in Europe, can only mean one thing to the Joint Multinational Simulations Center — be part of the change or be left behind. The later isn't an option.

The most visible change - an addition to the JMSC is the conversion of Building 2000 into a multi-purpose training facility.

The building is now home to the JMSC Operations and Communication Branches, a team from the 69th Signal Battalion, the Global News Network (GNN) exercise support media studio, and the Digital University (DU).

The building features five separate networks that support exercises at various classification levels and enables linkage to world-wide simulation centers.

The facility provides 26 reconfigurable training areas, supports 500 computer work-stations, and has mobile video teleconferencing capabilities and collaborative tools.

The main bay is 30,000 sq. ft. and was successfully christened during the exercise AUSTERE CHALLENGE 2009 (AC09) Main Planning Conference (MPC).

The JMSC inherited the 50,000 sq. ft. building in 2007 and began converting it into the organizations center of gravity.

It was previously the Close Combat Tactical Trainer (CCTT) facility, used to train tank and mechanized infantry crews in virtual simulators. However, because of USAREUR down-sizing and restructuring, the large CCTT facility was no longer needed. The Mobile CCTT (MCCTT) trailer mounted systems, managed by the JMTC's Directorate of Training (DOT), met remaining training requirements.

The MCCTT will be one of many semi-trailer enclosed virtual training devices stationed in a virtual motor park planned for construction in the spring within the JMSC footprint. Other mobile virtual devices to also be stationed there include: the Virtual Combat Convoy Trainer (VCCT), Mobile Conduct of Fire Trainer (MCOFT), and the Aviation Combined Arms Tactical Trainer (AVCATT).

Many improvements are still underway in Build-

Aerial view of Building 2000, which is now the JMSC center-of-gravity.

JMSC staff in Building 2000 new After Action Review (AAR) Room, January 2009

One of 18 training rooms in Building 2000 supporting 800 computers in 40,000 sq. ft. of space used for theater-wide exercises and simultaneous training events.

BCST

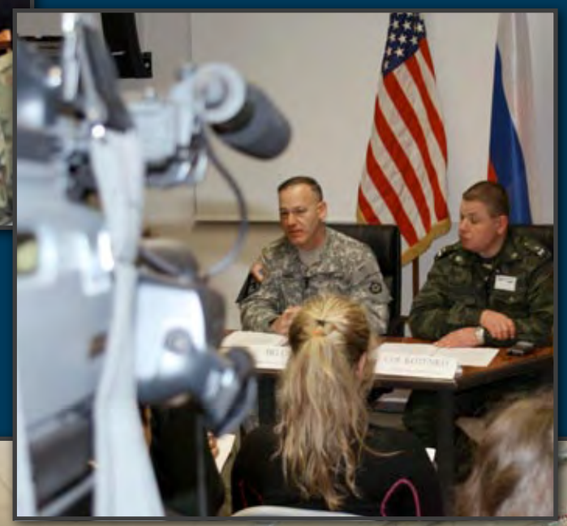
High Tech Training Low Cost

The JMSC has also been using a prototype version of the Battle Command Staff Trainer (BCST) to train staffs and experiment with multi-echelon training. It was fielded to the JMSC by the U.S. Army National Simulation Center (NSC) from Fort Leavenworth, Kansas. The JMSC has used it several times as a low-overhead training enabler for staffs learning to use their battle command systems and to collaborate between them effectively. It generates battle command messages to stimulate interaction between staff members. It is a great tool for "crawl-level" training as a staff is preparing for a major exercise; it only requires a little preparation time, a couple of laptops, and a few instructors.

BCST can also bridge the gap between several battle command systems, VBS2, and the Joint Conflict and Tactical Simulation (JCATS) simultaneously. Linking VBS2 at the tactical level (platoon) and JCATS (at the battalion to CJTF level) with battle command systems has the potential to enable break-through multi-echelon training capabilities. The JMSC is experimenting with the best ways to capitalize on this emerging capability.

The NSC is also expected to field a version of WARSIM in 2009 for use during major exercises. It will be used along with a federation of mutually supporting simulations such as the Joint Non-kinetic Effects Module (JNEM). JNEM is designed to immerse the training audience in a Stabilization and Reconstruction Operations (S&RO) environment where civilians and civilian groups are centers of gravity and commanders are faced with competing satisfaction levels amongst competing groups.

(Above) Soldiers from the 39th Transportation Company receiving operator training on Blue Force Tracker in the new Digital University portion of Bld 2000. (Below) BG Lanza participates in a simulated press conference during a bi-lateral exercise; the JMSC Global News Network (GNN) brings realism and dynamic feedback to staff training exercises.



(Above) Mr. Joel Fischer, JMSC Lead NATO Exercise Planner, addresses participants attending a planning conference. (Below) LTC Koch, JMSC Operations Officer, gives tour of the new JMSC Models and Simulation Lab to visiting dignitaries from the Uganda Peoples Defense Force.

ing 2000. This spring, new thin client technology will be operational at the JMSC. This will enable the traditional computer hard drive capability to remain on a server, which is particularly beneficial on classified networks since the workstations will no longer contain classified data when the servers are shutdown.

This will reduce security and manpower requirements significantly for the JMSC by eliminating the need to regularly install, recover, and secure hundreds of hard drives in support of large-scale exercises. It will also allow more efficient software changes and network management. This technology upgrade will gradually be expanded across the JMSC networks using existing computers as thin client hosts.

Digital University

Building 2000 is the new base of operations for the 7th Army JMTC Digital University (DU). In the past year, the DU has trained nearly 3,000 system operators.

Recently, Distributed Common Ground System-Army (DCGS-A) and the Tactical Ground Reporting System (TIGR), battle command courses, have been added to the list of available courses taught by DU staff.

DCGS-A provides integrated Intelligence, Surveillance, and Reconnaissance (ISR) information fusion. It facilitates timely information exchange and collaboration with other battle command systems. DCGS-A is intended to consolidate functions that previously were provided by 12 separate ISR information management systems.

TIGR is a multimedia system that enables timely reporting by Soldiers at the patrol level. It is particularly useful in providing detailed intelligence information related to personnel, their locations, and capabilities associated with counterinsurgency operations.

The JMSC has used DARWARS-Ambush for several years as an Intermediate Desktop Simulation (IDS) to train small units on tactics, techniques, and procedures. The software, created by the Defense Research Project Agency (DARPA), used existing gaming technology to help Soldiers prepare for convoy operations in hostile areas and actions on contact during deployment. The Virtual Battlespace 2 (VBS2), an Intermediate Desktop Simulation (IDS) is a newer derivative of the original DARWARS-Ambush gaming technology. The U.S. Army is recently selected it as the new first-person shooter IDS to replace DARWARS-Ambush.

This collection of screen shots from VBS2 depict scenes that could be used for IED training.

The Next Steps

The JMSC is planning some Joint Improvised Explosive Device Defeat Organization (JIEDDO) funded facilities and systems upgrades that will support expanded use of the next-generation IDS gaming technology. This effort will expand existing capabilities to better support collective small unit training prior to live training with inert IEDs.

The JMSC provides oversight for simulations contractors at several locations to include the Joint Multinational Readiness Center (JMRC) at Hohenfels. Recent efforts have found better ways to push simulated intelligence information, such as ISR feeds, from the JMSC to the JMRC during live training rotations. It will be done with TACSIM, a specialty simulation that uses classified databases. This is another initiative that will enhance realism and training value.

The JMSC is always ready to assist in training U.S. personnel and current or potential coalition partners. Top priority is of course given to Soldiers preparing to deploy. Contact the JMSC today to coordinate training for your unit at DSN 314-474-2622.