Volume 1, Issue 2

Monday, 15 September 2003

LVC ICT Newsletter

National Simulation Center, Ft. Leavenworth, KS

Special points of interest:

- **Next LVC Rock Drill: I Corps, Ft. Lewis, WA; 4-7 November 2003**

Inside this issue:

LVC MoSSC Address:
https://leavenworth.army.mil/

Call for Submissions!

It is important to us to hear what ICT members in the field are thinking and what they're working. That's why the LVC ICT Newsletter wants to feature ANY article from ANY organization connected even tangentially to the LVC ICT. So if you and your office have something to say about LVC, let us know! In every issue we will include comments from the field. Submissions may be sent to the editor. We want to hear from YOU!

Chris Dufour , Editor
913-684-8386
chris.dufour@leavenworth.army.mil
FAX: 913-684-8311

LVC ICT Core Gains Consensus

by Chris Dufour

KANSAS CITY—The LVC ICT Core Members met at the Kansas City International Airport Hilton on 20-21 August for the purpose of reaching concurrence on the LVC required capabilities and recommended materiel solutions. In attendance were core members from JFCOM, ATSC, TPIO-Virtual, TPIO-Terrain, PEO-STRI, and other organizations.

Mr. Dennis Chrisman, NSC, and Mr. Mark Jazwick, PEO-STRI, briefed capabilities and recommendations to the core ICT. Chaired by TPIO-LVC, COL Eric Wildermann, the ICT discussed specific issues pertaining to each capability and how they were to be addressed in the materiel recommendation. Work proceeded apace with slight revisions to some capabilities, and the ICT adjourned early on 21 August with a consensus on the 21 capabilities and accompanying materiel recommendations.

"The LVC ICT conference was a huge success," said Mr. Joe Henry, NSC-FID. "I greatly appreciate the support from the LVC combat/materiel development team."

Upon adjournment of the LVC ICT, LTC Marco Conners (NSC-FID) briefed BG Timothy Livsey on the LVC ICT findings. BG Livsey approved the findings and way ahead and emailed ICT member headquarters and materiel developers, thanking them for their hard work and continued support of the LVC ICT.

The next step for the LVC ICT is staffing the LVC Integrated Architecture (LVC-IA) Initial Capability Document (ICD) through TRADOC in preparation for the POM 06-11 submission. "ICD consensus sets the conditions to execute the next phase of operations in the LVC ICD axis," Henry said; "which is to begin refining the 06-11 POM input for the LVC program as well as prepare the ICD for AROC submission and presentation."

The LVC ICT Core Member "class picture" from the KC Airport Hilton.

LT2 Product Focus: NTC-CIS

by Lisa Pdus

This is the first of a series of articles that will focus on different Live Training Transformation (LT2) family of products. This first will be focused on the replacement system for the current NTC Instrumentation System.

FT. EUSTIS—The NTC-CIS will replace the current NTC Instrumentation system and will be designed to meet the full range of Force on Force (FOF) and Force on Target (FOT) live collective instrumented training requirements for Army units as defined in FORSCOM Regulation 350-50-1. The NTC-CIS will be an integrated system of computer software and hardware; workstations; databases; voice and video recording, production, and presentation equipment; interface devices; and communication systems designed to accomplish the following functions: Exercise Planning, System Preparation, Exercise Management, Training Performance Feedback, and System Support. The NTC-CIS will be capable of collecting exercise data from the TADSS family as well as from C/C's, exercise controllers, role players, OPFOR and other designated collectors. Further, NTC-CIS will take full advantage of the training capabilities of the virtual and constructive training domains to enhance the battlefield realism and fidelity of the NTC battlespace.

The NTC-CIS is critical to the maintenance of Army training readiness, maintenance of Army collective battle skills, and the conduct of live collective FOF and FOT combined arms training as well as the integration of joint and other forces. The transforming Army with its heavy reliance on digitized C4ISR infrastructures mandates a change as to how we collect battle command (BC) and situational awareness (SA) data across the training continuum and most importantly at the Combat Training Centers (CTC).

Current instrumentation systems cannot accomplish this task. Additionally, the current instrumentation at the CTCs is in many cases outdated, becoming costly to maintain and reaching the end of their operational life cycles. This older technology can not adequately support the training of the Stryker Brigade Combat Team (SBCT) forces and will not support the training of the FCS.

The NTC-CIS, a Common Training Instrumentation Architecture (CTIA) compliant system, is the baseline for LT2 training systems to be developed and fielded using the product line development approach promoting interoperability, standardization, and reuse across the entire CTIA product line (CTCs, Homestation, MOUT, and DMPRC). In January 2003, Lockheed Martin Information System (LMIS) was selected as the Lead System Integrator (LSI) for the NTC-CIS and is well underway after hosting their first Product Design Review (PDRs) on 26-28 August 2003. As such, LMIS has the overall responsibility for the development, integration, and fielding of the major NTC-CIS components. During the development of NTC-CIS, annual PDRs are one of the many avenues that LMIS will provide increasing levels of detail of the system and an opportunity to review the added Technology Capability Groups (TCG). These TCGs are categorized by the major NTC-CIS capabilities. Seventeen of the 23 capabilities will be contracted through the Broad Industry Announcements (BIA). This will allow industry the opportunity to share in this development through the TCGs. The remaining six will be developed by LMIS or provided as Government Furnished Equipment (GFE). NTC-CIS Initial Operational Capability (IOC) is scheduled for FY07.

For further information on NTC-CIS or CTIA please go to the following websites: www.ntc-cis.net and www.ideorlando.net.

LVC in Action from 7th ATC

by Don Stockton

GRAFENWOHR—The TPIO-LVC conducted "Rock Drill 3" on 2-5 September at Grafenwohr, Germany. The host was 7th Army Training Center (7ATC), Director Of Simulation-Forward (DOS-F). The LVC work group was composed of members from 7ATC, DOS-F, CMTC and DOT as well as combat and materiel developers from the TPIO-LVC and PEO-STRI. ATSC (TPO-Live) was a teleparticipant on Friday, 5 September 2003.

The Rock Drill resulted in the production of draft Brigade Combat Team Mission Essential Task List training requirements with the association of LVC training support requirements.

COL Mike Smith, 7ATC DOT, was provided an information briefing on 6 September by Mr. Joe Henry, Mr. Tom Lasch, Mr. Arnie Geisler, and Mr. Bruce Ballinger. (The information briefing is posted at the NSC MaSS C in the Rock Drill 3 folder.) COL Smith concurred with accomplishments of the week and the way ahead.

The LVC effort will continue until 19 September with LVC technical integration efforts at the 7ATC Battle Simulation Center. It is estimated that the technical integration effort will be complete NLT 20 September.

Mr. Bruce Uphoff (NSG FID) details the challenges involved with DBST-CCTT Integration at 7ATC

TPIO-LVC is making plans to conduct Rock Drill 4 at Ft. Lewis, WA 4-6 November 2003, in order to develop LVC training support plans for that location.

You are encouraged to review the ROCK DRILL 3 information folder at the NSC MASSC.

Synthetic Environment (SE) Core Update

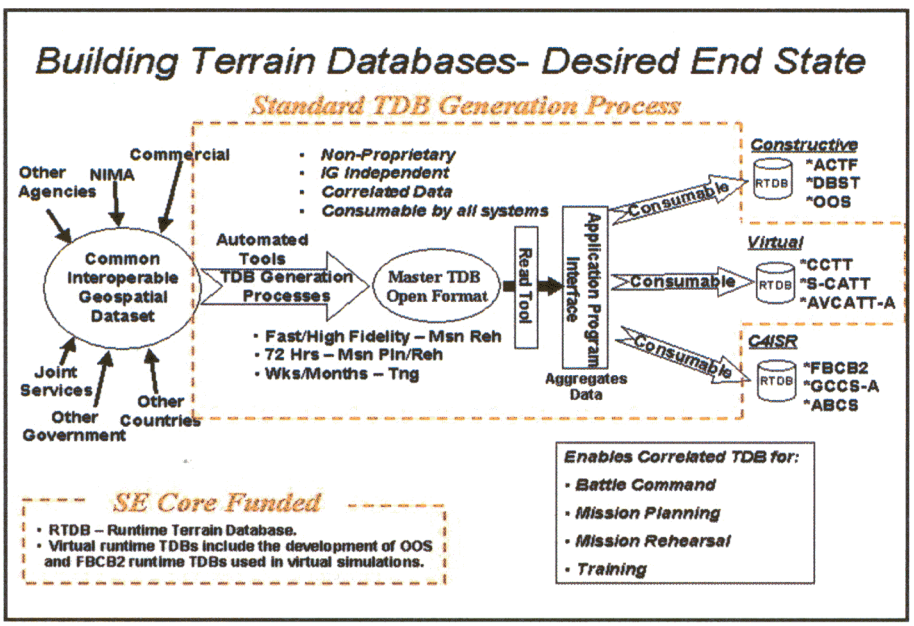
by Tim Sayers

FT. LEAVENWORTH—SE Core is the Army's virtual component of the integrated live, virtual, constructive (LVC) training environment (TE). Worldwide staffing of the SE Core operational requirements document (ORD) was completed 19 Aug 2003. Currently the ORD is being reviewed and staffed by the Army Training Support Center and is scheduled to arrive at the Department of the Army NLT 15 Sep 2003. SE Core components currently funded beginning FY 05 are the standard terrain database (TDB) generation process, Objective OneSAF integration, LVC interfaces and exercise management tools.

SE Core will consist of hardware and software components that enable a common virtual environment (CVE) for virtual simulations. Developing a CVE for virtual simulations enables LVC integration through the LVC integrated architecture. The cornerstone of SE Core is its Standard TDB Generation Process. The SE Core standard TDB generation process will increase unit readiness by enabling rapid TDB generation within 72 hours to support training and mission planning/rehearsal requirements at home stations, combat training centers, and en-route to and at deployed locations. Using automation tools, the Standard TDB Generation Process takes common interoperable geospatial datasets and catalogs the data into several master TDBs, in an open format. The process of taking common interoperable geospatial data and cataloging it into several different TDBs is known as Data Fusion. Some of the TDBs that will be created during the TDB generation process are: vehicle models, terrain skin, feature models, visual database and video maps. During the system development and demonstration phase, material developers will identify which types of TDBs need to be created during the process to support virtual and constructive simulations, and C4ISR applications.

Once the common interoperable geospatial data has been stored into several types of master TDBs, read tools and application program interface (API) tools convert the TDBs into correlated runtime databases for virtual simulations. The read tool simply tells the API how to read the format and how to access the master TDBs. The API then thins and aggregates the master TDBs into correlated runtime databases based on the requirements of the application. Constructive and C4ISR applications should also use the master TDBs in order to support integrated LVC training and operations. The SE Core program will only develop the APIs for virtual systems.

The combat developer for SE Core is the TRADOC Program Integration Office Virtual Training Environment (TPIO Virtual) located at Fort Leavenworth, Kansas. TPIO Virtual is working with the Future Combat System Lead Systems Integrator, the Army's Geospatial Data Integrated Master Plan Working Group, et al to reduce redundancy and develop a common virtual environment that supports Current, Stryker and Future Force training and operational requirements.



Army Constructive Training Federation (ACTF)

by Mike Collins

FT. LEAVENWORTH—The NSC's ACTF Directorate was formed in May 2003 from the NSC's Constructive and Next Generation Directorates. ACTF Directorate is responsible to provide field support to all currently fielded training models and simulations and to provide combat development for all emerging training simulations.

ACTF Directorate is currently conducting the initial validation effort to baseline the Digital Battle Staff Trainer (DBST) while fielding CBS 1.8/TACSIM 6.0 and conducting BETA tests on JANUS 7.2. DBST Validation test results should be available in October 2003.

Design efforts for linking JCATS to CBS continue with integration occurring in December at the NSC. This linkage will allow greater resolution of selected training exercise events like MOUT and a link to JDLM as another exercise logistics driver.

ACTF Version 1 will include the CBS/JCATS linkage, CBS/TACSIM/CSSTSS update and the 2d DBST validation that is planned to include SELS if it receives security accreditation.

ACTF is already planning for four major test efforts in Spring and Summer 2004. They include a Block A and B OneSAF User Assessment, an HLA (CBS/TACSIM/CSSTSS, CBS/JCATS link) validation, a DIS (DBST) validation, an ACTF Version Operational Readiness Test, and a WARSIM Assessment. All these tests will be done at the NSC in Fort Leavenworth. Following the testing ACTF Version 1 will be fielded starting July 2004.

National Simulation Center, Ft. Leavenworth, KS

Bldg 45
410 Kearney Ave
Fort Leavenworth, Kansas 66027

Phone: 913-684-5555
Fax: 913-684-8311

Futures Integration Directorate (FID) Phone: 913-684-8385

In Pursuit of an Integrated LVC Training Environment

LVC ICT Key Objective

Define the Army training requirements in accordance with Objective Force Training & Leader Development O& O Plan enabled by a fully integrated LVC that is interoperable with the joint force LVC capability.

COL Eric Wildemann (TPIO-LVC); Director, NSC
eric.wildemann@leavenworth.army.mil

COL Jim Nunn, Commander, ATSC
James.Nunn@atsc.army.mil

COL Mark Vinson, TPIO-Virtual
mark.vinson@leavenworth.army.mil

Joe Henry, Director, NSC-FID
frank.henry@leavenworth.army.mil

Jack Gleason, Chief of Operations, NSC-FID
jack.gleason@leavenworth.army.mil

LTC Marco Conners, Chief, Futures Division, NSC-FID
marco.conners@leavenworth.army.mil

Dennis Chrisman, Requirements Branch Chief, Futures, Division, NSC-FID *dennis.chrisman@leavenworth.army.mil*

Don Stockton, Operations, Futures Division, NSC-FID
donald.stockton@leavenworth.army.mil

Chris Dufour (Editor), Operations, NSC-FID
chris.dufour@leavenworth.army.mil

LVC Calendar

September

LVC-IA ICD staffing

22-24: JNTC Thrust 1 MPC, Suffolk, VA

30-2 Oct: LVC TEPR, Ft. Leavenworth

October

LVC-IA ICD revisions & TRADOC staffing

6-17: LVC POP Event Tests 2 & 3, NTC/Ft. Rucker

13-19: JAGCE

November

PM LVC Activated

3-7: LVC POP #1, NTC-Ft. Rucker

3-7: LVC Rock Drill 4, I Corps; Ft. Lewis, WA

4-6: JNTC Thrust 3 (CJTFEX) MPC, Suffolk, VA

11-13: JNTC Thrust 1 FPC, Suffolk, VA

December

January 2004

12-14: JNTC Thrust 2 (UE) MPC

17-31: JNTC Thrust 1 Event Execution

February 2004