

Soldier Armed

Army Modernization Moves Back into the Field

By Scott R. Gourley

In late May, the U.S. Army's 2nd Brigade Combat Team (BCT), 1st Armored Division (2/1 AD), began deploying out of Fort Bliss, Texas, for the field at White Sands Missile Range, N.M., where they will spend the next six weeks conducting the 2011 Network Integration Evaluation (NIE).

The pending NIE will facilitate formal testing for six "program of record" systems while also offering what planners dub an operationally relevant event to evaluate more than 20 additional networked and nonnetworked systems that could fill key near-term capability gaps. In addition, the June-July NIE is the first in a series of four events that will lead to executing a fully integrated brigade combat team network evaluation at the end of 2012.

The evaluation is an outgrowth of the Army's Early Infantry Brigade Combat Team (E-IBCT) effort, with planners now looking at the better alignment of both tactical and global networks with the additional linkage of those networks for the Army force generation (ARFORGEN) model. The process will better connect enhanced capabilities to deploying units, allow

the integration of network capabilities to occur prior to deployment and field those capabilities in "capability sets."

Although the predecessor E-IBCT "spin outs" or "increments" [see "Army Evaluation Task Force Expands Increment 1 Testing," ARMY, December 2010] helped build the baseline, waveforms and connectivity for the current effort, that network was not completely aligned with the other supporting capabilities. In addition, the earlier E-IBCT efforts featured a high reliance on the ability to pass sensor data throughout the brigades. The reality, according to several program participants, was that the 2010 evaluations showed that soldiers at all levels—most importantly, the small-unit levels—really preferred connectivity and the ability to collaborate throughout the brigade. That connectivity will be an important feature of the 2011 and 2012 evaluations.

The four tests that culminate in the Integrated Network Test in fall 2012 will solidify what Capability Set [fiscal year] 2013–14, seen by some as "a bridge solution," will look like. The Army is also beginning to introduce additional capabilities into this process that will look at the "out years" capa-

bility sets, with Capability Set 2015–16 currently viewed as "the first fully integrated package."

The imminent NIE marks a number of firsts for the Army, including the first time that the Army has dedicated a full brigade to this level of testing and evaluation. The evaluation brigade, 2/1 AD, currently has the role—without formal designation—of the Army Evaluation Task Force (AETF). The formerly designated 5/1 AD (AETF) was a limited-size element that was reflagged as the full-size 2/1 AD at the end of last year.

According to COL Daniel Pinnell, commander of 2/1 AD and former commander of 5/1 AD (AETF), "The construct for this summer will have the entire brigade in the field at a reasonable distance and dispersion for a brigade. That will allow us to get at all of the digital questions we have to answer—ranges and capabilities of each one of the digital and voice systems."

This summer's brigade organization includes three maneuver battalions. One of the combined arms battalions, which would normally be a Bradley/Abrams mix, will be 100 percent mine resistant ambush protected (MRAP) vehicles, split between MRAP all-terrain



Photographs by Scott R. Gourley

Members of the Network Synchronization Center (a Program Executive Office-Integration asset) at White Sands Missile Range, N.M., work on vehicle network integration designs prior to the 2011 Network Integration Evaluation (NIE).

A soldier from 2nd Brigade Combat Team, 1st Armored Division, trains in employment of the current force unattended ground sensor in preparation for the NIE.

vehicles, MaxxPros and some Caimans, to be used fundamentally in command post roles. The second combined arms battalion is a traditional combined arms battalion, trained and equipped with Abrams and Bradleys. The third battalion—a reconnaissance, surveillance target acquisition squadron—is a composite structure with one Bradley/Humvee formation, one MRAP formation and one Stryker formation.

“Last year our [AETF] evaluations fundamentally replicated an Operation Enduring Freedom (OEF) environment—a purely insurgent model based on Afghanistan,” COL Pinnell explained. “This summer we are going to simultaneously mirror two environments: the MRAP-equipped forces fighting much as last year against an OEF/insurgent enemy, with 1/6 Infantry—my ‘Brad/Tank’ battalion—facing an enemy mechanized force that will attempt to fight in a hybrid fashion. There will be significant play by civilians on the battlefield with paramilitary forces maneuvering in and among those civilian elements—both in uniform and plain clothes—adding significant friction to that fight.”

Beginning in early June, the first four weeks of the NIE will take place across the southern expanses of White Sands Missile Range on roughly the same terrain used in last fall’s AETF evaluations. The focus of that period will be on conducting formal tests for record on six systems under test (SUT): Force XXI Battle Command Brigade and Below-Blue Force Tracker joint capability release; Joint Tactical Radio System (JTRS) handheld, manpack, small form factor; JTRS ground mobile radio; Increment 1 network integration kit; mounted soldier system; and Spider networked munitions. The SUT results

Portable cell towers will facilitate the systems under evaluation for Connecting Soldiers to Digital Applications.



will be used in upcoming milestone/program acquisition decisions.

While the SUTs remain the critical focus of the NIE, additional capabilities and systems will be evaluated during the fifth and sixth weeks (approx-

mately July 1–15), when the operational area will expand to the northern reaches of White Sands.

Along with a “bridge network” using the AN/PRC-117G radio running the adaptive network wideband waveform, the Army will look at more than 20 additional systems under evaluation (SUE). Although the SUE listings were still being adjusted as of early April, they ranged from the Puma unmanned aircraft system and current force unattended ground sensors to mobile and fixed designs for a new company command post and expanded looks at Connecting Soldiers to Digital Applications. The SUEs will reportedly be assessed for maturity, technical integration readiness, military utility and doctrine.

All of the personnel involved in the NIE planning process are quick to emphasize the teamwork that has been integral to the successful planning and coordinating of the evaluation. The 2/1 AD is being supported by the efforts of many people within the Army’s new Brigade Modernization Command (BMC)—formerly the Army Capabilities Integration Center’s Future Force Integration Directorate—Program Executive Office-Integration, Army Test and Evaluation Command, White Sands Missile Range and others. ★

