ENFORCE Breakout-Session Summaries

By Captain Sam Hudson and the ENFORCE Team

The ENFORCE 2000 conference in May included an afternoon devoted to breakout sessions that allowed attendees to hear about, and discuss, some of the most important issues, concerns, and future programs that will likely have a tremendous impact on the Engineer Regiment. Six sessions from this year's conference are summarized below. A seventh session, which was primarily a U.S. Army Reserve general-officer session, was devoted to echelons-above-division engineer-battalion redesign.

Combat-Training Centers

By Major Daniel Dolwick

Representatives from the National Training Center (NTC), the Battle Command Training Program (BCTP), and the Combat Maneuver Training Center (CMTC) provided presentations on issues, lessons learned, and observations from their respective combat-training centers. The audience consisted of senior engineer leaders from the Active and Reserve Components and the National Guard.

The NTC representative stated that engineers need to be a force in the presence of our maneuver brethren. He encouraged attendees to use the following methodologies:

- Battle commanders should—
  - See themselves, the enemy, and the terrain, and apply the "so what" drill to each.
  - Visualize, decide, and lead.
- Understand and apply doctrine through—
  - Combined-arms integration.
  - Self-study.
  - Officer professional development.
  - Certification programs.

The BCTP representative clarified that the BCTP uses "perceptions" as opposed to "trends," since their observations are a snapshot in time of a single unit versus several units over a long duration. BCTP perceptions for mobility and survivability are that—

- Commanders and staffs do not make effective use of scatterable-mine systems.
- Neither the G2 nor the engineer S2 continuously templates enemy countermobility efforts.
- Commanders do not maximize countermobility capabilities or effects.
- Engineers participate in deep-targeting planning, but results are mixed.

In preparing for a CMTC rotation, some "keys to success" are that—

- Units must leave their home station with trained crews.
- Units must leave Grafenwhor Training Area with trained platoons.
- Commanders must personally focus on mission-critical assets (such as the Volcano and MICLIC).
- Command-and-control tools (such as timelines and synchronization matrices) must be developed and used continuously.
- Class IV/V supply movement and management depends on detailed planning and coordination before arrival.

Regimental Synergy

By Reginald Snodgrass

This session concerned synergy among the three components of the Army—Active, Reserve, and National Guard. Three main idea topics for discussion were—

- How do units learn about training exercise availability and requirements?
- How do we get the word out to units about the Center for Engineer Lessons Learned (CELL)—what the CELL can do for units, and how units can help support the CELL?
- How do we tackle the partnership problem between components to ensure a better working relationship?

The following issues and recommendations resulted from the discussion:

Issue: *There is no central location where e-mail addresses can be found for all engineer units.*

Recommendation: That a database, which is available to everyone, be established that contains addresses for all engineer units. If the unit address is a personal e-mail address, develop a method for ensuring that the address is changed if the point of contact changes, or establish a permanent e-mail address for units.

Issue: *There is no way for engineer units to determine what training exercises are being planned and which ones still need unit participation.*

Recommendations: That a database be established identifying training missions, requirements, and points of contact. That a worldwide, training-exercise conference be held to identify training missions and their requirements.

Issue: *How do we solve problems with computer systems (such as the pay system) when multicomponent exercises are being planned or conducted?*

Recommendation: That a method (an SOP) be developed for working through the system to increase the likelihood that multicomponent training exercises will be conducted.

Issue: Training exercises and requirements are not advertised in a timely manner, nor are they built on table of organization and equipment (TOE)-type structures (such as squad, platoon, and company).

Recommendation: That training exercises be advertised at least three years in advance. Encourage all agencies that are developing an exercise to establish requirements based on some type of TOE structure.

Issue: *Many units have never heard of the CELL.*

Recommendations: That the CELL be advertised in Engineer School publications (such as the *Engineer Professional Bulletin*). That units read Director of Training (DOT) and Directorate of Combat Developments (DCD) notes. (To get on the distribution list for DOT notes, contact Jim Evans by e-mail at *evansj@wood.army.mil*. Read DCD notes at *http://wood.army.mil/DCD/dcd.htm*).

Issue: *How does/should the CELL collect lessons-learned information from units conducting exercises or missions?*

Recommendations: That the CELL request after-action reviews from units that conduct exercises. That the CELL post a form on the Web site outlining the information that units should submitted.

Personnel Retention

By Major John Dvoracek

This session was designed to facilitate discussion between senior engineer commanders about current officer-retention issues, particularly captain retention. Representatives from PERSCOM, AR-PERSCOM, and the National Guard Bureau briefed attendees on current personnel-retention actions in their organizations. Discussion centered on the most common reasons cited as causes for dissatisfaction with or separation from the Army. These included—

- "Zero-defects" mentality.
- Micromanagement.
- High OPTEMPO.
- Poor leadership.
- Poor "quality of life."
- Lack of family time.
- Loss of benefits from service.
- Too much "do-more-with-less" mentality.
- Lack of faith in senior Army leadership.

Feedback from the attendees indicated that most installations and organizations are actively working to solve these problems, when possible, at their level. Additionally, leaders are extremely emotional about many of the reasons officers give for leaving the service. The audience acknowledged that each leader must work harder to maintain a positive attitude and mentor the officers working for them in order to improve retention. Finally, the loss of quality officers is not confined to one component (Active, Reserve, or National Guard) and requires a number of different solutions to address each component's specific needs.

The Grizzly and Wolverine Programs

By Major Mark Streeter

The TRADOC Systems Manager - Engineer Combat Systems conducted this session and presented the current status of the Grizzly and Wolverine programs. Key points of the initial briefing were—

- Program Budget Decision 745 (PBD 745), dated 27 December 1999, cut the funding for Fiscal Years (FY) 2000, 2001, and beyond for the Grizzly and Wolverine programs.
- PBD 745 was purely a budget decision that was driven by the Army's need to find funding for the transformation.
- The Grizzly and Wolverine programs are positioning for success.
- The short-, medium-, and long-range actions for both programs and the possible outcomes after congressional markups are released.
- The days of 366 Grizzlies and 465 Wolverines are gone. We can expect about 160 Grizzlies and about 168 Wolverines for the active Army when the programs are restored.
- The bottom line is that the Grizzly and Wolverine are coming back.

The following questions, answers, and attendee feedback resulted:

Question: *When Congress plusses up the programs, will it still continue with experiments and testing?*

Answer: Yes.

Feedback: There is also a greater ripple effect. An Army-imposed 6- to 7-month delay in program startup equates to a much longer actual delay, because there is a learning curve associated with rehiring former workers or acquiring new workers. Time has passed, and former program personnel have moved on to other jobs. New employees will have to learn everything that was known about the program up until the time it was "terminated." From a contractor's viewpoint, it is difficult to hold on to people. Everyone is looking for other opportunities. This is a risky timeframe.

Question: *For the initial brigade combat team (IBCT), is there an opportunity to develop or use off-the-shelf technology (for engineers)?*

Answer: Right now the design is open for the IBCT. We will still depend on the Grizzly and Wolverine for the heavy forces. The requirement to breach complex obstacles is a simple physics problem. We need a vehicle with the weight and power of the Grizzly to plow through obstacles at the required depths.

Feedback: The government loves high-technology solutions but will not accept risk. Concerning the IBCT, engineers are low on the list and will have to wait a long time to get a new system.

Question: Will the 168 Wolverines be fielded only to III Corps? What about the rest of the force?

Answer: We are looking at our options. We could field a lower density of Wolverines to the force to spread the wealth. We could do nothing. Or we could upgrade the armored vehicle-launched bridges (AVLBs).

Question: *How about mounting the Mongoose on the Wolverine?*

Answer: Do we want to put the Mongoose on an $8 million piece of equipment? We don't want to do it right now, but we do have a preplanned product improvement for such an action to be looked at in the future.

Question: What about turning in all AVLBs?

Answer: That is an option we can consider. All options are being looked at.

Feedback: It's a political decision. As long as the AVLB is around, it provides the Army a path of least resistance. With the AVLB, we still have some gap-crossing capability. The Army can apply a "Band-Aid® fix" to the AVLBs more cheaply than it can replace them. There is not enough money available to do all the things the Army wants to do.

Question: *What about the 57 sappers the force lost when the Grizzly was terminated? Are there plans to put them back?*

Answer: Yes, there are plans to put them back in the modified table of organization and equipment (MTOE).

Feedback: Termination of the Grizzly and Wolverine becomes a retention and morale issue. It's difficult to recruit and retain quality engineer soldiers if all they have to work with is old technology and equipment. The Grizzly and Wolverine would certainly help retention among engineer units. It is a real cause for concern to start up a great program only to have it killed years later. There is a real concern from the field that without the Grizzly, soldiers are still in harm's way and still out in the open to perform breaching while the tankers sit in the comfort of their protected systems.

Engineers must make known how badly they need these programs and keep pushing for them.

Topographic Concepts

By Lieutenant Colonel Earl Hooper

The topography breakout session provided an opportunity to review the year's significant activities of the Terrain Visualization Center (TVC) and the TRADOC Program Integration Office - Terrain Data (TPIO-TD). The session opened with the results of the worldwide staffing of the National Imagery and Mapping Agency (NIMA) prototypes used to demonstrate the Foundation Data Concept. General timelines were provided with foundation data completion projected for FY05.

The status of topographic concepts for the heavy division, interim brigade, and interim division and a general review of the Corps headquarters and headquarters company O&O (currently on hold) were discussed. Although it is not a working concept, a view was provided of the notional Corps Topographic Battalion and notional options for a theater support structure. The shortage of 81T and 215D personnel to fill the expanding role and mission of these soldiers was of prime concern. The current growth in topographic structure will continue to exacerbate the shortage of soldiers over the next five to seven years. The role of terrain-data manager is the primary training concern with the emerging concepts of support. There is clear agreement that data management will require special training that currently is not available to the 81T or 215D soldier. These training issues will be addressed in the concept effort noted below.

A presentation was also made of the Army Imagery and Geospatial Information - Integrated Concept Team (ICT). The cosponsored ICT between the Engineer and Intelligence Schools provides the forum to jointly develop future concepts, training strategies, and system architectures required to take

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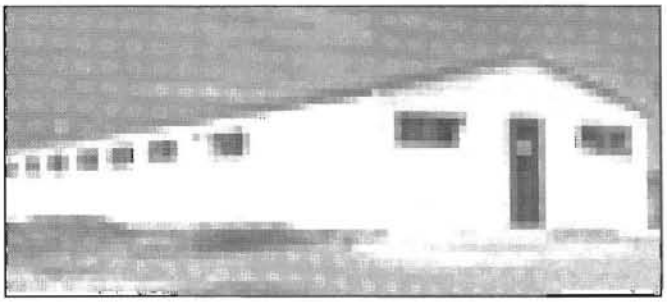

Figure 4

some of the sites need external support, such as road construction and surfacing, surveying, and abutment construction. Figure 5 shows the site plan for TA 221.

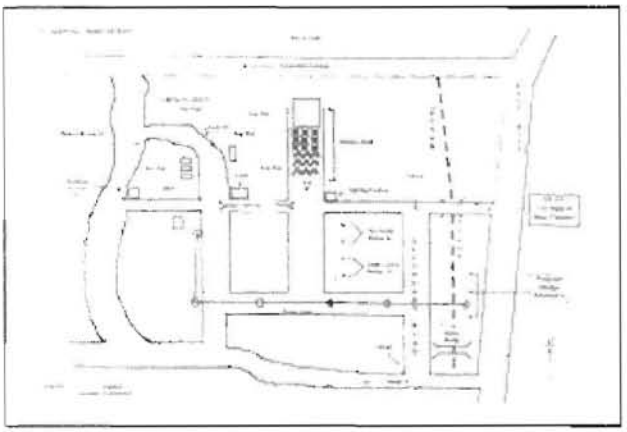

Figure 5

The one-station unit training units, the 35th and 169th Engineer Battalions, use TA 106 to conduct physical training, hand-to-hand combat, and end-of-cycle testing reinforcement. With some earthwork and simple construction, the area will accommodate a greater variety of training. It does not have a storage facility for training aids or an area for lane training. To expand the training opportunities of this area, a portion of the perimeter must be cleared and foxholes installed. The 1st Engineer Brigade's goal for TA 106 is to make it an all-encompassing site for basic combat training and refresher training for military occupational specialties 12B (combat engineer) and 12C (bridge crewman).

Some of these projects are within the capabilities of the 1st Engineer Brigade. However, due to the brigade's extensive training and support missions, it would take much longer to complete them using only internal assets. The 1st Engineer Brigade would like to offer the projects as training opportunities to other units, perhaps during their annual training. With prior coordination, interested units also can use the training ranges at Fort Leonard Wood. The post has reasonable billeting and mess arrangements that are available with proper coordination. Upon request, the brigade will provide a folder for each project described in this article. Units may view the bill of materials and project designs on the 1st Engineer Brigade's construction Web page at *http://www.wood.army.mil/1STBDE/construction*. Contact the brigade's operations officer at (573) 596-0223 or DSN 581-0223 for more details.

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the imagery and geospatial community to 2005. The concept is currently under review with the Council of Colonels. The co-effort with the Intelligence School was generally accepted as the appropriate direction forward.

TeleEngineering

By Rose Acheson

The session opened with an overview of the TeleEngineering program. TeleEngineering began as a technology demonstration to provide rapid solutions to the Department of Defense in support of maneuver engineering and force-support engineering using command-and-control architecture and existing communications systems. From the time of the Sava River flood, in 1997, to the present, the TeleEngineering Operations Center has provided more than 700 engineering solutions to requests for information that is not readily accessible in the field.

An example was given of a TeleEngineering capability—bridge assessment and repair. Several examples of damaged bridges were shown, and explanations were given on how the Engineer Research and Development Center helped identify the military load class of the damaged bridges.

Attendees also watched a short demonstration of the AntiTerrorist Planner (AT Planner), which is being developed to help engineer officers plan and implement measures required for force protection. Some comparative studies have been completed for air blast in urban areas. There are other tools for chemical and biological weapons, but they are not included in the AT Planner.

Conclusion

This year's breakout sessions provided an extremely valuable forum for senior leaders to discuss some of the most important subjects facing the Engineer Regiment. Some very important issues were raised and addressed. Session notes were forwarded to the DTLOMS integrator's office in the Engineer School for further action as necessary.