18th Engineer Brigade Validated for Afghanistan Deployment

By Captain Kathryn A. Werback

The 18th Engineer Brigade headquarters in Schwetzingen, Germany, completed its validation exercise in February 2011 for deployment to Afghanistan later in the year. The headquarters would deploy off-cycle from its subordinate units, requiring additional coordination throughout the staff to prepare and execute training for the various levels within the brigade. When the brigade arrived in theater, it would be responsible for supporting Regional Commands–East, –North, and –Capital with engineering efforts.

To become validated for deployment, the brigade developed an aim point model to lay out the exercise objectives for each crawl-walk-run-validate phase of training, with deployment as the end state. Although the initial objectives were based on the mission-essential task list, the staff learned to use the Combined Arms Training Strategy and Battle Command Knowledge System to identify tasks and subtasks for each objective. Staff sections also identified section-focused tasks based on the initial training objectives. At the after action review for training events, each subtask training level was identified as *trained*, *needs practice*, or *untrained* and the way ahead was noted, giving a consistent and logical approach to planning future training.

Crawl Phase

In September 2010, the staff participated in a battle command seminar (BCS) for the crawl phase of deployment preparation. Members of the Battle Command Training Program (BCTP) Operations Group Foxtrot went to Schwetzingen to lead a series of workshops for the brigade staff. In preparing for the BCTP, the brigade developed a list of topics that the staff would initially conduct as internal professional development workshops, then interact with various staff sections during the BCTP seminar, and carry that knowledge into theater. Remaining on course with the aim point would keep the brigade on its glide path to deploy fully trained and on time.

Discussion topics led by BCTP included the operational environment and battle command from Field Manual (FM) 3-0, *Operations*; knowledge management from FM 6-0, *Mission Command: Command and Control of Army Forces*; battle staff synchronization, the military decisionmaking process, rapid decisionmaking, and the synchronization process from FM 5-0, *The Operations Process*; and targeting from FM 3-60, *The Targeting Process*.

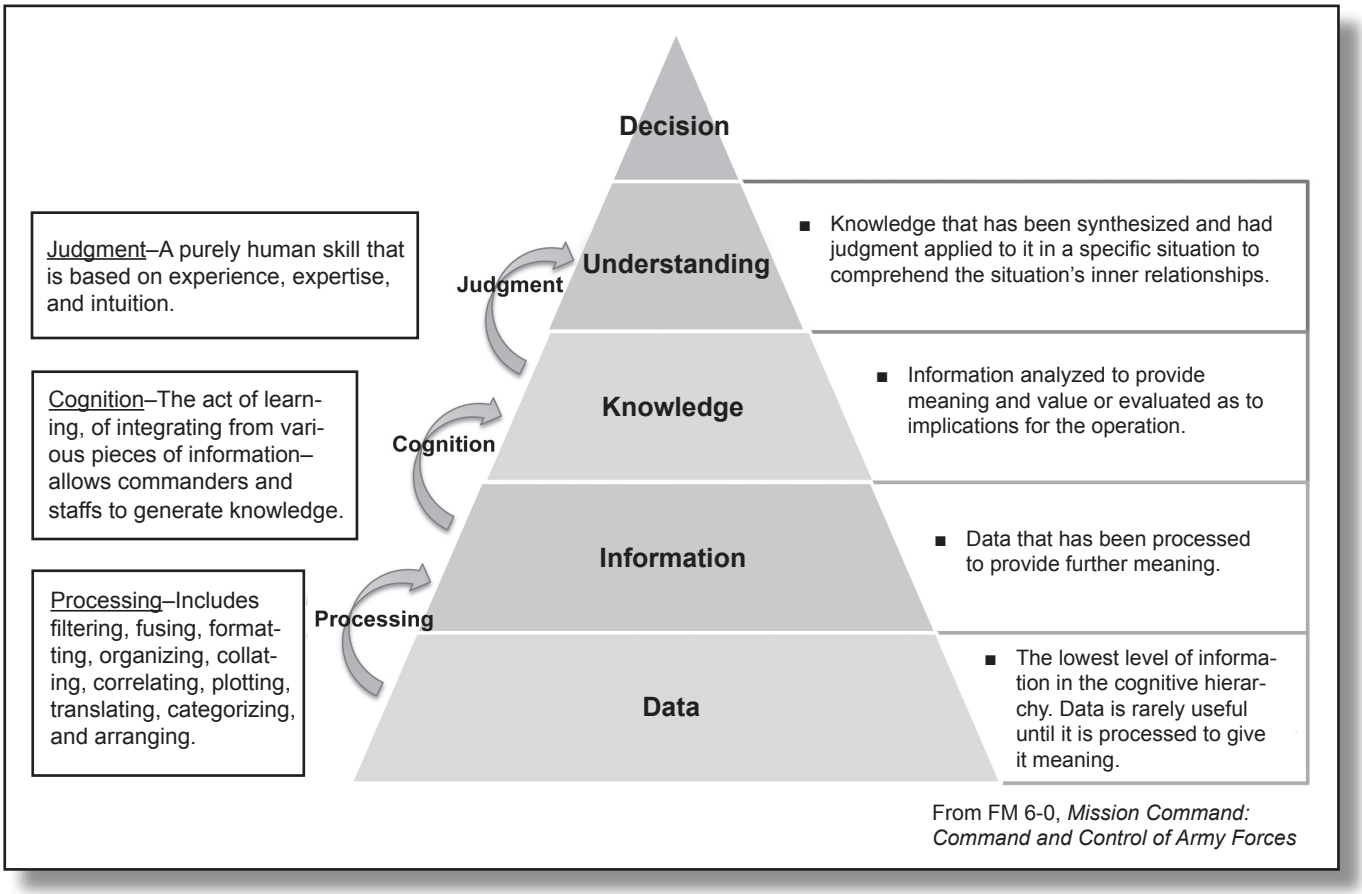
In discussing knowledge management, the staff interacted with the commander to understand the best way to transfer the knowledge the commander would need to make decisions. This was based on the cognitive hierarchy, which became a focal point for brigade briefings to the commander throughout the trainup. While having data and trackers is essential, data must be transformed into information and later into knowledge so that the brigade can maintain a holistic picture of operations.

Several members of the 372d Engineer Brigade who were redeploying from Afghanistan also attended the BCS. Their knowledge of the battlefield and current practices tied into the seminars and brought the first glimpse of the deployment to the BCS. At the brigade level, they suggested having a budget section and as many personnel trained as contracting officer representatives as possible. This amounted to the need for additional personnel and training. Another advantage for the staff was the BCTP's continued involvement in the deployment process, as instructors continued to teach and mentor the staff to the completion of the validation exercise. At the validation exercise, the BCTP drew from the original aim point to tailor training events specifically to the brigade.

Walk Phase

In October 2010, the unit set up a deployable rapid assembly shelter to simulate a deployed environment and give the staff the opportunity to execute a staff exercise. In addition to the topics addressed in the BCS, the staff added skills, including—

- Army Battle Command Systems.
- Decisionmaking.
- Common operational picture (COP) management.
- Significant activity (SIGACT) management.
- Battle rhythm management.
- Battle drills.



Cognitive hierarchy

During this exercise, the staff moved from PowerPoint®-based briefings to Command Post of the Future (CPOF) to centralize information and generate the brigade commander's update brief. Having the information for that brief on the CPOF was the first step in generating the COP. Because units would be located throughout northeastern Afghanistan, and because it was a necessary tool for staff planning, the COP had to be accessible from any location. As the COP was developed further in the training, it would become a tool for mission analysis. During the walk phase, creating overlays, understanding the system, and populating it with data were the first steps toward a comprehensive COP. Soldiers and leaders alike received training on the CPOF to create initial products for the COP.

With the transition from PowerPoint to CPOF, the staff experienced growing difficulties with transforming their data into knowledge for the COP and the commander's update brief. By the end of the exercise, data was refined so that information was being briefed. This met the goal set in the aim point model of teaching the staff to acquire and process data so that it could be transformed into information and knowledge before being briefed to the commander, enabling the commander to make informed decisions. The ultimate goal of transferring knowledge—one step up from information—would be refined after the exercise so that the brigade could easily move into tracking combat operations when deployed.

Run Phase

The final training event before the validation exercise was a tactical operations center exercise in November 2010 at Grafenwoehr Training Area. New exercise objectives included—

- Operational environment.
- Theater command and control structure.
- Request for information management.
- Commander's critical information requirement management.

Although the staff had previously generated CPOF material, returning to daily operations had also caused a return to PowerPoint. By the close of the exercise, the staff had created a living document in CPOF, which could be updated by any staff section as information arrived. In this manner, the COP had up-to-date information for any recent SIGACT, projected for all to view in the tactical operations center.

This exercise was the first opportunity for the staff to react to events on the battlefield. All training "injects"—reality-based scenarios designed to force the staff to adapt to new situations—were initiated by a designated "white cell" of exercise controllers, giving staff members a chance to interact with very limited outside units. This required

staff members to manage SIGACTs and requests for information and to set the stage for other staff activities, such as fragmentary order management. The standing operating procedure at the brigade tactical operations center was put to use in response to SIGACTs. Walking through the battle drills in response to SIGACTs required the staff to begin exercising cohesively. Different sections realized the need to overlap in order to cover all requirements. Later, during the validation exercise, the staff would not only execute the battle drills, but would also refine them toward current operations.

Although the rapid decisionmaking and synchronization process had been discussed at the BCS, this event was the first opportunity to practice it during an operational event. The process gave the staff a tool to make a quick and informed decision versus the military decisionmaking process, which produces optimal decisions but is a much deeper and longer process. When time is important, producing a good decision and enabling troops on the ground to execute in a timely manner becomes more important than finding the perfect solution but allowing no time to execute it. As the staff became aware of the value of time, rapid decisionmaking gained in importance to produce an order and initiate movement.

The staff also focused on developing the initial commander's critical information requirement. This requirement would develop throughout the remainder of the exercises as the brigade pulled data from existing commander and theater critical information requirements, following the basic concept of keeping only those things that the commander would need for decisionmaking. During the exercise, staff sections in various locations worked to improve communication with each other. This trend would continue through the validation exercise as the staff trained on CPOF with different types of group communications software.

Validate Phase

The validation exercise—Unified Endeavor (UE) 11-2—took place in January and February 2011 at Fort Hood, Texas, alongside the future Regional Command–East team, the 1st Cavalry Division. During the exercise, relationships grew between the brigade and the cavalry, the future members of Task Force Lafayette (which would operate in several provinces of Regional Command–East). Creating the link between the staffs would allow smoother transitions once arriving in theater because dialogue was already open.

Additional training objectives for UE included—

- Force protection.
- Information operations.
- Fragmentary order management.
- Boards, bureaus, centers, cells, and working groups.
- Information management.

The initial push of the exercise was to generate the engineer campaign support plan through the military decisionmaking process. Although this facet of the exercise trained the staff on that process, the real success occurred once the campaign plan was disseminated throughout the staff. The final product enabled Soldiers to quickly grasp the brigade's downrange focus. Additional value was gained from learning how to use the Central Command Regional Intelligence Exchange System (CENTRIX)—a network separate from the U.S.-only secret platform, which was designed to transfer sensitive information between North Atlantic Treaty Organization allies—and from understanding the community stabilization programs for the current engineer brigade and regional commands.

From the stabilization program, a "Commander's Card" was developed. This one-page slide showed the task organization and the brigade's mission, intent, lines of effort, and shaping and sustaining operations. Not only did this give a quick reference to the staff, but anyone briefing outside units could do so in a comprehensive and understandable manner. This training exercise was the first that had CENTRIX access and worked with units that the brigade would work with in theater. The coordination required by the training established a firm base for all levels to communicate and learn from one another. The systems at UE, including the CENTRIX network with CPOFs, allowed the staff to use SharePoint™ (a Web site that allows files to be posted, checked out, and modified and allows information to be managed more effectively across the brigade). Staff sections based away from the main body could access up-to-date information via CPOF, tie in to working groups, and update their information for the main body to see. The transfer of information using SharePoint and CPOF expanded to the point that it was knowledge management instead of simply data and information saved on individual computers.

CENTRIX accessibility was augmented with the arrival from Afghanistan of the 176th Engineer Brigade, which the 18th Engineer Brigade would replace. The addition of the operations officer and International Security Assistance Force Joint Command liaison officer helped the brigade understand current operations and the systems that staff members could now link with online. Access to CENTRIX allowed research into various portals and gave personnel a firm grasp of current operations during training. Seeing and working with real-world data helped the staff grasp what the brigade would be doing in theater.

By the end of the exercise, the brigade could display a COP with pertinent overlays and running estimates that would allow operations to be executed in a leader's absence. In its progress from crawl to validate, the brigade had steadily developed its targeting process as a means to direct operations. Although the result might not have been direct fire, the decide-detect-deliver-assess concept had been applied to the brigade's method of deciding which projects or route clearance routes would have priority and what support would be needed. As the brigade reassesses its campaign plan, this process will allocate Soldier effort

in construction and combat, resulting in a comprehensive engineer plan for northeastern Afghanistan.

At the close of the exercise, sections exported their products and processes. Some will be used in Germany, while others—such as the COP—will be trained on and taken to Afghanistan.

Conclusions and Recommendations

Returning to doctrine is the key for success. This ranges from such basics as ensuring the proper use of doctrinal terms and graphics all the way to embracing targeting as a means of prioritizing brigade operations. Using an aim point model and fleshing out training objectives allowed the staff to gain knowledge and experience to the point of validation. Using and building on the original training objectives enabled a comprehensive approach to validation. Also, the brigade can look back and see all the steps required for deployment. After the primary training exercises were complete, the staff continued to train on areas highlighted in after action reviews. As the brigade learned during validation, not everyone had developed the same base of information, and information is a perishable commodity. The staff had to amend its operations to ensure that lessons learned from UE were integrated into their daily operations in preparation for deployment. Because CENTRIX connectivity in Germany is limited, daily operations there will not be based on that program. And although there will not be a CPOF in every section, the use of SharePoint and other products developed at UE will make the transition to theater much smoother.

Captain Werback is the 18th Engineer Brigade public affairs officer, currently deployed in support of Operation Enduring Freedom. A graduate of the Engineer Captains Career Course, she holds a bachelor's degree in civil engineering from the University of California, Davis, and a master's degree in engineering management from Missouri University of Science and Technology at Rolla.

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