The 1995 Engineer Functional Area Assessment

By Alan Schlie

Ever wonder what happens to the soldiers and equipment of an Army unit when it inactivates? After all, each unit has a specific battlefield mission, and the soldiers and equipment represent the capabilities to accomplish that mission. So if the unit goes away, what happens to those resources?

While the "drawdown" may be the most publicized, it is not the most demanding element affecting a unit's environment. Managing the impacts of modernization— new equipment fielding and training, equipment redistribution, changing doctrine, and reorganization—is by far the most demanding. A unit's environment consists of overlapping domains of doctrine, training, leader development, organization, materiel, and soldiers (DTLOMS). An action causing a change in any of these domains will affect the other five. And the elimination of an entire unit affects the environment of many other units. Consider the fielding of the first Grizzly: the DTLOMS impacts on the company, the battalion, and the supporting units will be considerable. The Army has a number of procedures to ensure that modernization takes place without adversely affecting the DTLOMS domains.

Modernization Impacts

The answer to the original question, simply stated, is that inactivating a unit moves its resources (soldiers and materiel) into pools from which redistribution is made. But the process

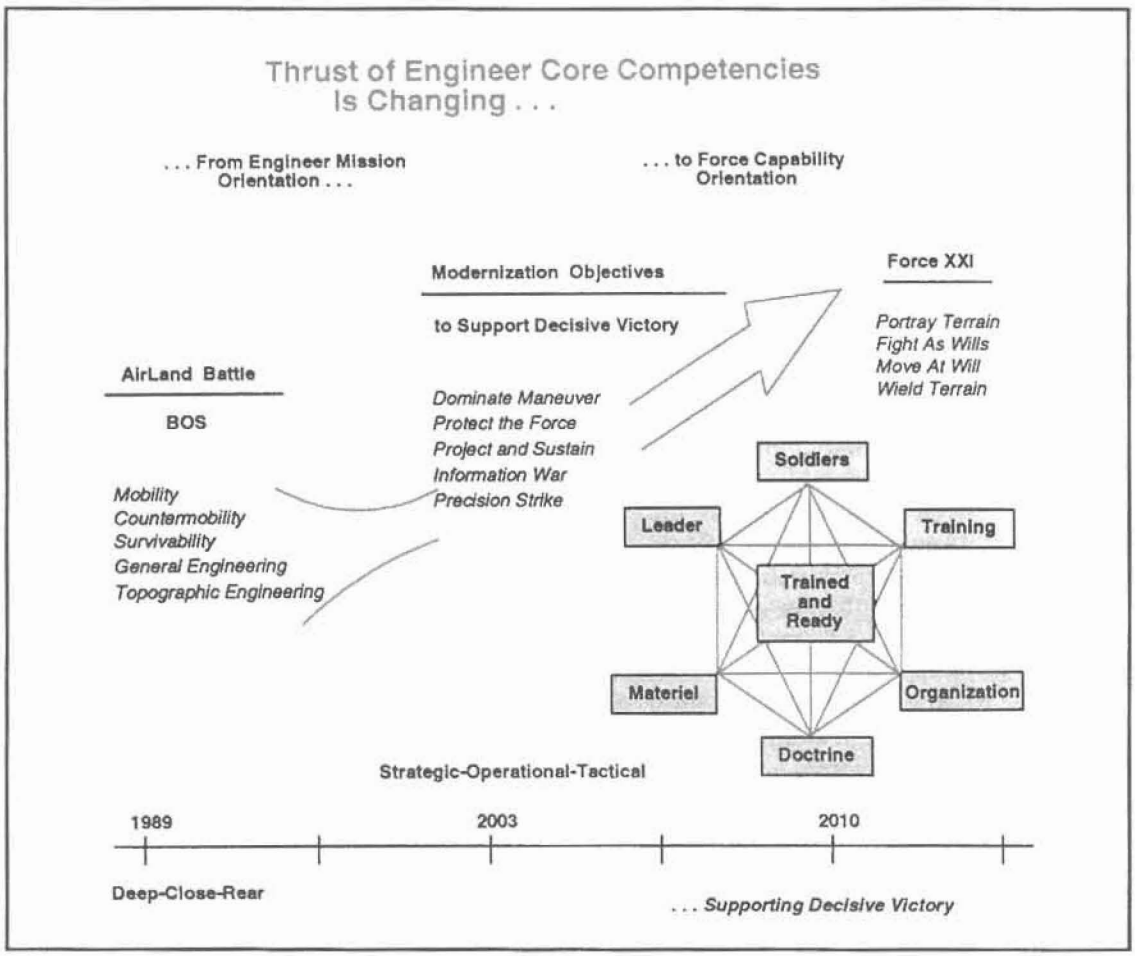


Figure 1



Figure 2

does not always run smoothly, so procedures have been developed to ensure that all actions are completed. Each of the numerous procedures has an oversight mechanism to validate compliance. As an overarching forum, the functional area assessment (FAA) was established years ago so that Army leaders can examine the impacts of force modernization. The focus of the FAA is on how well the force can maintain its readiness and force capability while undergoing change. The FAA ensures that the Army's force integration efforts are accomplished with minimal adverse impacts on readiness, modernization, personnel and training, materiel distribution and redistribution, doctrine application, total force integration, base operations, quality of life, and execution of USC Title 10 functions.

In December 1995, the Engineer School Commandant and the Director of Combat Developments presented the engineer Functional Area Assessment to the Vice Chief of Staff of the Army (VCSA) and key principals from the Army Staff. The presentation highlighted the diversity of responsibilities and missions that engineers accomplish in support of decisive victory (see Figure 1, page 31). As engineer core competencies change from a mission orientation to a force-capability orientation, the need to leverage and integrate technology through sound doctrine, battle-focused training, and effective organizations becomes more acute. Engineers must be viewed as vital, integral members of the combined arms team in the pursuit of a more versatile, capable, and combat-ready Force XXI.

The Commandant addressed the most critical issue facing engineers today—the hemorrhage of engineers from the Active Component force structure when current operations indicate an ever-increasing requirement (see Figure 2). A 52 percent reduction in Active Component engineers since 1988 impacts our ability to shape the terrain—and terrain is never neutral. Even with the Reserve Components shouldering an increased load, our ability to project and then protect and sustain deployed forces is critically hampered when an immediate response is needed.

Engineer Obstacles

The Commandant discussed seven additional obstacles in the path of engineers and our ability to support decisive victory (see Figure 3, page 33). Each obstacle was examined for impacts on doctrine, training, leader development, organization, materiel, and soldiers. Then the obstacle was balanced against its effect on maintaining the engineering capability during force restructuring.

- Modernization of combat engineer equipment is lagging behind that of the maneuver force. Engineers are equipped with old and slow systems that impact operating and support costs and combat capability.
- There are too few of the new systems, and new equipment fielding in incomplete packages reduces maneuver capabilities. Many current technological insertions could provide a quantitative leap in capability at a much lower cost than the cost of a new system.

Engineer Battlefield Assessment Obstacles

- ***Modernization of combat engineer equipment is lagging behind the maneuver force.***
- ***Tiered fielding is building incompatible teams.***
- ***Aging construction equipment is presenting problems.***
- ***Terrain realism is ignored in training, and data is not available for operations.***
- ***Countermine is very difficult with solutions taking too long.***
- ***Antimine legislation threatens force survivability.***
- ***Training base cuts could mortgage our Army in the 21st century.***

Figure 3

- The aging construction fleet affects many proponents and impacts all modernization objectives. Results of a Center for Army Analysis study imply that the Army must spend a minimum of $50 million annually to improve fleet aging and shortage fill.
- Terrain realism is ignored in training. Current terrain data is not available for operations in more than 95 percent of the world.
- In countermine operations, technology is not the silver bullet. Investigation into the most promising solutions, regardless of the DTLOMS domain, is needed to protect the soldier in the field.
- Antimine legislation strips away the self-protection and freedom-of-action options of the commander.
- A commitment to provide appropriate equipment and training is necessary to properly prepare the next generation of American soldiers.

The FAA presentation was not so much about fixing engineers as it was about optimizing the Army's engineering capabilities.

VCSA Solution

The FAA presenters were successful in obtaining support for numerous battlefield initiatives at a critical time near the beginning of the FY98-03 budget-planning cycle. The VCSA:

- Promised support in programming procurement of the Grizzly, the Wolverine, the Hornet, the Heavy Dry Support Bridge, and 24 other combat programs, plus construction equipment as a whole. The VCSA instructed the Engineer School to move ahead with the technical insertion package for the engineer squad vehicle. He was enthusiastic about the proposed M1-based engineer vehicle replacement and any other application using the M1 chassis.
- Wanted our full involvement in developing the terrain and engineer play for war simulations.
- Liked the interim contingency operations countermine packages. He highlighted the need to invest in countermine technologies available now but cautioned about getting a proper return for the investment. Engineers need to leverage the Bosnian requirements to make gains in this area.
- Agreed that current legislation would hinder our operational choices and promised support.
- Encouraged a reevaluation of the requirements generated in the training environment in order to identify more efficiencies.

Using Technology

The Commandant closed the forum by saying, "The Essayons spirit has carried us across many battlefields. It will continue to do so. However, we must not depend overly on the spirit of our soldiers and leaders to support the Force XXI Army. We must seize on technological advances to ensure that we do not place engineer soldiers, units, and missions at unnecessary risk. The Engineer Regiment is trained and ready, a rapidly deployable and versatile member of the strategic force...combining efficiencies of information with physical and technical capabilities to master terrain in support of decisive victory."

CSM (RET) Schlie is a force development analyst with the Directorate of Combat Developments, U.S. Army Engineer School. He served in various capacities in Europe, Korea, and CONUS during a 22-year military career.