

Lessons Learned: Operations Other Than War

By Major Bill Breyfogle

As an engineer commander, you and your staff have been closely watching a developing situation. Knowing that you may be deployed for an operation other than war mission, you have done some homework and are prepared for almost any contingency. Your personnel are familiar with the mission's requirements and you have reviewed the appropriate regulations and manuals. Most importantly, your dynamic staff have gone the extra mile—they have dug through the "lessons learned" from previous operations. Now you stand ready to deploy.

Operations other than war (OOTW) cover a wide spectrum of missions, from disaster relief and humanitarian assistance to peacekeeping, but some lessons learned ring true through them all. This article addresses lessons from a variety of OOTW missions; they are organized into phases experienced in most force projection operations.

Predeployment

Engineer Assessment. Early in all OOTW missions, commanders must conduct an accurate engineer assessment to determine the engineer effort required. For some missions this is fairly easy. Identifying the priority of effort for a peacekeeping mission, for example, is similar in many ways to the engineers' normal war-fighting support mission.

Disaster relief operations, however, present very different challenges. Lessons from recent disaster relief operations show that the priority of effort must include the needs of local governments. Commanders and staff must work with the local civilian leadership early in the process to establish work priorities. Local fire, police, water, sewage, electrical and telephone service agencies all play critical roles in re-establishing order and control. Be sure to also consult relief agencies such as the Red Cross, Salvation Army and United Way to help identify priorities.

LESSON: Conduct an accurate "on-the ground" engineer assessment to identify personnel and

equipment requirements and priorities of effort before the main body is deployed.

Center of Gravity. Determining an operation's "center of gravity" is important to the success of every OOTW mission. For peacekeeping operations, the center of gravity may be opening main supply routes, controlling key terrain, or maintaining boundaries that separate belligerent forces. For a disaster relief operation such as Hurricane Andrew, it was opening the schools. The simple fact of children returning to school established an atmosphere of normalcy that showed the local population that things were getting better.

LESSON: For every OOTW, determine centers of gravity that help focus mission accomplishment.

Maps. Regardless of the type of operation, don't overlook the importance of timely topographic support. During disaster relief operations it is crucial to establish one specific map or map series for operations. This may be a standard U.S. Geological Survey (USGS) map sheet, a city or county map sheet, or even a realtor map. Whenever possible, planners must be proactive in identifying required topographic products before they are needed during crisis actions. Units alerted for deployment to theaters without standard map coverage must quickly identify their topographic requirements and pass them through their respective operations channels for validation.

LESSON: Identify and pass standard map and other topographic product requirements through operations channels as quickly as possible, either before a crisis occurs or early in the response effort.

Deployment

Take It All! It is critical that units deploy with all of their equipment! While this seems obvious, many units have deployed recently without their full table of organization and equipment (TOE). Examples include engineer units that deployed for Operation Just Cause without taking demolitions, and engineer units that deployed for Hurricane Andrew relief

operations without such basic debris-clearing tools as chain saws. Units that fail to deploy with all personnel and equipment may seriously hinder their ability to provide critical engineer support to the commander; this failure may ultimately jeopardize overall mission accomplishment.

LESSON: Deploy with your entire range of engineer personnel, equipment and supplies and be prepared to provide flexible and versatile support.

Class IV Supplies. Many past OOTW demonstrate that Class IV supplies were critical to successful mission accomplishment, but often those supplies were delayed due to low shipping priorities. These experiences show that units need to preposition and stockpile critical Class IV items in possible force projection theaters, especially when deploying to austere environments. Follow-on airlift and sealift shipments should include frequent loads of the Class IV items required to support follow-on operations. By stockpiling supplies and ensuring the steady flow of Class IV items into the theater, units can avoid problems associated with large bulk supplies taking up critical space on ships.

In some recent operations, the problem was not so much in obtaining Class IV items as it was in controlling the storage and issuing the supplies. A solution that worked well in some cases was to make an engineer the S4 or liaison officer to help identify, order, store and distribute Class IV materials.

LESSON: The success of engineer support to OOTW is closely associated with the availability of Class IV materials. Leaders must be proactive to ensure that required Class IV materials are on hand when they are needed.

Entry

Rules of Engagement and Force Protection. Force protection in any OOTW mission requires units to follow appropriate rules of engagement (ROE). Units training for OOTW missions usually need extensive training on the application of the ROE. Engineer soldiers should reinforce the tactics, techniques and procedures for situations they expect to encounter when executing OOTW, such as how to execute a road block or checkpoint and react to sniper fire or an ambush. When engineer units deploy for disaster-relief missions, they are often called to assist local law-enforcement authorities. Effective ROE training and battle drills will enable soldiers to respond immediately in various law enforcement situations.

LESSON: Develop ROE for individual soldiers that are clear, concise, simple, and unclassified, and that allow soldiers to implement them under stress without referring to a ROE pocket card. Develop and train OOTW battle drills to protect the force, especially in the areas of troop movement and security.

Real Property Maintenance Activities. Engineers play a critical role in developing the infrastructure needed for any OOTW mission. Engineers provide real property maintenance activities (RPMA) capabilities such as base camps for disaster relief operations and lodgement and expansion operations in austere theaters. To facilitate RPMA, commanders should identify a terrain manager before they deploy for a joint operation and use a joint facilities utilization board to resolve RPMA problems that develop on-site. For disaster relief operations, a joint coordination board composed of impacted federal, state and local governments and agencies as well as the public may be extremely useful. During Hurricane Iniki recovery operations, a board composed of interested parties determined priorities for allocating available electrical resources.

LESSON: Commanders must plan to provide real property maintenance activities in any OOTW mission. Use terrain managers and joint facilities boards to coordinate RPMA support with all concerned civilian and military agencies and groups.

Sanitation and Hazardous Waste Control. Sanitation and hazardous waste control will be a critical engineer mission during any OOTW. Commanders must ensure waste management capabilities are emplaced early in the deployment cycle. In Somalia, engineer units immediately needed Class IV construction materials and heavy earthmoving equipment to collect and dispose of human and solid wastes. Following Hurricane Andrew, engineer units found it difficult to properly identify, locate, and control all commercial assets such as portable toilets. Another problem arose when some contractors refused to service any portable toilets except their own. Procedures are also needed to direct the disposal of hazardous wastes, such as waste oil, PCBs (found in electric transformers), asbestos and medical wastes. Publicize these procedures as early as possible once operations begin.

LESSON: Be prepared to perform sanitation and hazardous waste disposal operations during OOTW to protect the environment while meeting mission requirements.

Operations

Communications. Communications are especially vital during OOTW missions because of the many diverse services, agencies, and personnel involved in them. Commanders should consider purchasing cellular phones and police-compatible radios for disaster relief missions. Coordinate communications equipment frequency requirements with local supporting forces and local agencies prior to deployment. Purchase or lease fax machines, copiers, and E-MAIL capability and provide them down to the task force level. Also consider deploying tactical satellite

(TACSAT) to enhance communications in austere environments.

LESSON: Deployed units must maintain effective communications with all personnel and agencies involved in the operation. It may be necessary to supplement military communications equipment with off-shelf, commercial communications equipment.

Contracting. Do not overlook the different contracting mechanisms available for OOTW missions. During Hurricane Andrew relief operations, the use of contracted civilian engineer equipment increased productivity and dramatically improved debris removal. Command and control of the contractors' equipment, however, became significant. In this operations, engineer company grade officers and noncommissioned officers were required to supervise contracted work. Prior to deployment, units should identify the names, locations and telephone numbers of authorized dealerships capable of providing contracted engineer parts and equipment in theater. Dealership parts manuals should also be acquired. To ensure timely contracted services are provided for follow-on forces, contracting officers should deploy with the advance party.

LESSON: Plan on contracting for civilian services and/or equipment. Be prepared to provide contracting officers.

Termination and Post-OOTW Operations

End State. "Determining the end state and ensuring that it accomplishes the national objectives are the critical first steps in the operational planning process. Failure to make this determination will waste scarce resources and put the entire effort at risk." (FM 100-5, Operations). While determining the end state is difficult during combat, it is more difficult during OOTW.

Commanders must focus their vision beyond the immediate OOTW objective and clearly articulate the conditions of success or the end state. For example, during the 1993 midwest flood-relief operations, the National Guard developed consensus by mutual agreement with local authorities to help determine an end state. A common technique was to tie the disengagement of National Guard forces to a measurable event such as river depth or opening of a bridge. Once an end state is identified, it is crucial that disengagement actions be fully announced and understood by all concerned parties. Where appropriate, establish disengagement criteria with the Federal Emergency Management Agency (FEMA) and state and local authorities.

LESSON: The importance of defining an end state and the requisite conditions for mission success cannot be overstated. Use quantifiable measures to define the end state. Whenever possible, gain consensus

among all interested parties and ensure all parties are informed when the end state has been reached.

Redeployment, Reconstitution and Demobilization

Redeployment. Commanders must focus on many of the same requirements during the redeployment phase that they had to contend with during the deployment phase, including a plan for the orderly flow of personnel, equipment and supplies. This requirement became blatantly obvious after Hurricane Andrew, when an engineer brigade, an engineer group, two combat heavy engineer battalions and two engineer combat support equipment companies received redeployment orders within three days of each other. Their requirements overtaxed engineer line-haul capabilities and caused long delays in redeploying equipment.

An important consideration on redeployments from OCONUS is the need to perform customs inspections prior to redeployment. Extensive cleaning will be required before engineer equipment can be loaded on ships or planes. Commercial steam cleaners provide valuable assistance in this endeavor.

LESSON: Be prepared to support redeployment operations, while simultaneously redeploying yourself and your unit.

Your unit has just returned from a successful deployment. All personnel and equipment performed exactly as planned. The time spent reviewing the lessons learned from previous operations was well spent. As with any operation, however, the mission is not finished until the paperwork is done. You have incorporated lessons learned into your after-action report planning. Throughout the entire operation you ensured that observations and lessons learned were captured when they occurred, while they were fresh in everyone's mind. As a result, the after-action report was completed almost as soon as the last vehicle closed on the motor pool. After completing the report, you sent a copy to the Directorate of Evaluation and Standardization at Fort Leonard Wood, which serves as the Center for Engineer Lessons Learned for the U.S. Army Engineer School.

For more information write to: Commandant, U.S. Army Engineer School, ATTN: ATSE-ESA-L, Fort Leonard Wood, MO 65473-6630 or call (314) 563-4005 or DSN 676-4005.

Major Breyfogle is the senior analyst in the Directorate of Evaluation and Standardization at the Engineer School. Previous assignments include executive officer, deputy district commander, battalion S3, and company commander. He holds a masters' degree in civil engineering from the University of Florida.