Engineers Support the United Nations in Macedonia

By Major Richard Hook and Patrick Siska

Since July 1993, the United Nations has conducted peacekeeping operations in the Former Yugoslav Republic of Macedonia (FYROM). A 500-soldier U.S. battalion supports the mission from Camp Able Sentry and 12 outlying observation posts along the northern and northeastern borders of Macedonia and Serbia. A Nordic battalion shares the U.N. mission within its sector west and southwest of the U.S. battalion (see figure, page 8).

U.N. Mission

The "Macedonian Command" operation was originally called the United Nations Protection Force (UNPROFOR). In March 1995, the operation was changed by U.N. resolutions and renamed United Nations Preventive Deployment (UNPREDEP). Their peacekeeping mission is to—

- Maintain a U.N. presence at borders with Albania and the Federal Republic of Yugoslavia (Serbia and Montenegro) to monitor border areas.
- Strengthen mutual understanding and dialogue among its political, social, and ethnic forces and groups.
- Assist in advancing social progress and development.
- Promote multicultural and multiethnic cooperation.

U.S. Mission

Eight U.S. infantry, cavalry, and armor units have served six-month tours in Macedonia as Task Force Able Sentry. Their mission is to conduct peacekeeping operations in support of the UNPREDEP Force. The U.S. battalion currently there is the 1-63rd Armor, 3rd Brigade, 1st Infantry Division. The supporting engineer platoon (1st Platoon, B Company, 46th Engineer Battalion) provides carpentry, earthmoving, electrical, mechanical, and plumbing support at the base camp and observation posts (OPs).

Task Force Able Sentry accomplishes its mission with four companies that rotate from the base camp to the OPs every three weeks. In the western sector, B and D companies control five border OPs and one company OP. In the eastern sector, A and C companies also control five border OPs and one company OP (see figure, page 8). While in sector, the companies maintain the OPs with ten soldiers. Patrols monitor the situation along the border 24 hours daily—on foot or by vehicle or helicopter.

During the task force's mission in sector, engineers at the base camp receive work orders from the company OPs to make repairs at the border OPs. 1st Platoon deploys a "quick-fix team," which stays at the site until repairs are completed—usually one to three days, depending on the difficulty of the work and the weather. Additionally, 1st Platoon's heavy equipment squad repairs the vehicle fighting positions and maintains the roads in sector.

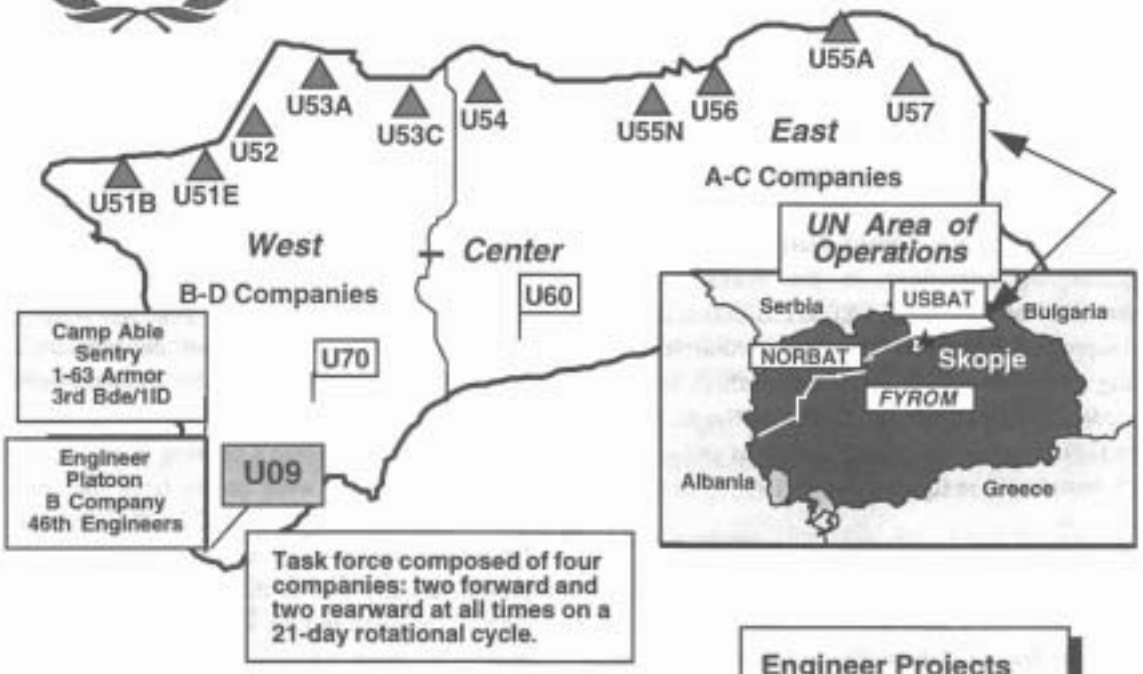
While two of the four companies maintain the OPs in the task force sector, the third company remains at the base camp as the Force Protection Company. The fourth company provides the Quick Reaction Force (the security element) and rotates its tank crews through the Mobile Conduct-of-Fire Trainer (MCOFT). This equipment allows the tank crews from the 1-63rd Armor to maintain basic tank gunnery skills.

The task force engineer, the platoon leader, and the platoon sergeant operate from the base camp. The task force engineer works with the commander and executive officer to prioritize, budget, and coordinate projects. In addition to managing the platoon, the platoon leader and platoon sergeant share the task force engineer's workload. They also brief high-level civilian and military dignitaries who visit the area. Some of the projects engineers manage at Camp Able Sentry and the OPs are shown on page 8.

Engineer Support

Although the United Nations approves its mandate to Macedonia every six months, the engineer assets available to engineers supporting Task Force Able Sentry are limited (see figure, page 8). The original allocation of 15 engineers per rotation in 1993 gradually increased to 32 by 1996. But the continual, daily "breakdown maintenance" program was beyond the capabilities of the engineer platoon.

Task Force Able Sentry Engineer Operations



Task force composed of four companies: two forward and two rearward at all times on a 21-day rotational cycle.

Engineer Projects

- U54 Retaining wall
- Guard tower
- Road maintenance
- Facilities maintenance
- Snow removal

USAREUR/ODCSENG Base Camp Projects

- 7 Observation post road upgrades
- Electrical upgrade
- Heating/water upgrade
- Plumbing/sewer upgrade

Equipment/Personnel

Heavy Equipment Squad
2 M920 trailers
2 Dozers
2 SEEs
1 Bucket loader
2 Graders
4 HMMWVs

Vertical Squad
8 Carpenters
1 Plumber
1 Electrician

Quick-Fix Team
8 Carpenters
1 Plumber
1 Electrician

Engineer Force Protection Work

- Protective barrier
- Concertina
- Additional tower
- Perimeter lighting
- Perimeter clearing

Legend:

- Border Observation Post (10 personnel)
- Company Observation Post (20 personnel)
- Base Camp Able Sentry (360 personnel)

USBAT - U.S. battalion

NORBAT - Nordic battalion

The Office of the Deputy Chief of Staff for Engineers (ODCSENG) and the 1st Infantry Division completed several studies to determine how to improve base camp facilities and upgrade roads leading to the OPs. Because of significant resource constraints, the UNPREDEP Engineer Services Section could not help upgrade Camp Able Sentry. In April 1996, as part of a major initiative to improve a quickly deteriorating situation, the U.S. Army Europe (USAREUR) commander approved the allocation of $3.2 million to improve the base camp and seven OP roads. Since the task force staff could not manage all of these projects, both the Facility Engineer Division and the Military Engineering and Topography Office of ODCSENG, HQ, USAREUR, supervised project management. Started in July 1996, the road upgrades were completed in November. The first phase of base camp improvements was finished in December; the second phase should be completed by the end of March 1997.

As with all engineer operations and projects, numerous lessons were learned that can benefit many in the Corps of Engineers. The following lessons are provided to assist engineers on future deployments to Task Force Able Sentry or similar U.N. operations.

Echelons Above Corps Lessons Learned (ODCSENG, HQ, USAREUR)

Coordination With Local Contractors

Discussion: Most host nations welcome U.N. operations. Developing countries are very hospitable and want to establish a strong market economy with close western ties. Their desire to be friendly and avoid problems may challenge the interpersonal skills of any engineer. Meetings with local contractors must occur at least once a week and on the same day of each week. The goals of the meetings must be outlined prior to the meeting. After the meeting, providing the contractor with a summary of what was agreed (or disagreed) upon will help if issues resurface two or three months later. Workers in Macedonia are not well paid, so it is not in their best interest to complete a project on time. The daily work hours are short (0900 to 1500 hours) and the workers' productivity is low. The contracting officer's representative must always be visible so the contractor can ask questions and workers can see that someone is pushing the project to completion.

Recommendation: Develop a comprehensive contractor assessment plan for the duration of the contract. Consider incentives such as award-type contracts so contractors will provide quality and timely performance.

Coordination With the Host Nation Ministry of Defense

Discussion: The civilian engineer staff found that having a "green suiter" present when coordinating with the Macedonian Ministry of Defense helped develop a successful working relationship. For example, on a water line project outside of the base camp, the Ministry of Defense wanted to control the project, so they awarded the contract. When the contractor had financial problems, another company was contracted to furnish pipeline materials. This was a difficult project to manage and often required that UNPREDEP military leaders apply appropriate political pressure to resolve problems and keep the project moving.

Recommendation: Deploying units should coordinate closely with civil affairs units or military liaison teams in the host country. These elements can provide accurate information on departments or personnel to support the planning process. They can also assist with complicated political contractual agreements.

Project Scheduling and Quality Control/Assessment

Discussion: In many parts of the world, the democratic process is still in its infancy. The work ethic in these countries differs significantly from what we expect from contractors in the U.S. or NATO countries. Engineers must be realistic in developing project time lines. Extended research on how contractors in the host nation work will save a lot of headaches. For example, examine projects a contractor has completed or review recommendations from other sources when selecting a contractor. The project manager must set goals based on known capabilities of the host nation's managers and workers. Finally, question the contractor on other projects that it is conducting. You may find that trucks bringing gravel to your roads actually belong at another project site!

Recommendation: The project manager must quickly learn the capabilities of potential contractors. Identify companies with potential money problems or corruption due to many layers of "management." Question contractors in detail about their quality-control measures.

Project Status Reports

Discussion: Develop status reports for ongoing projects. The reporting officer must ensure that coordination occurs with budget, intelligence, logistics, and operations staffs to avoid confusion over ongoing or completed actions. Most headquarters will want reports two or three times a week. Continuous coordination with all staffs on the reporting format ensures that the project manager does not allow a reported problem to get out of control. Checking with the various staffs on incoming and outgoing personnel helps ensure that new personnel understand the reports.

Recommendation: When developing project reports, ensure that all staff agencies agree with the format. Have them provide telephone, fax, and e-mail numbers/addresses. Resolve any misunderstandings on reported items.



A Baumholder DEH employee teaches engineers from B Company, 46th Engineer Battalion, how to operate and maintain a snowplow.

Snowplow Training for Winter Operations

Discussion: After spending $2.4 million on seven observation post roads, the ODCSENG staff realized the need for classes on snowplow equipment operation and maintenance so that the roads would not be destroyed during one winter. The staff coordinated with the Directorate of Logistics, in Baumholder, and the Cold Regions Research Engineer Laboratory (CRREL) for classes. Conducted in October 1996, the training helped engineer soldiers understand the operational and maintenance requirements of the four German-made Schmidt plows assigned to the task force. The CRREL representative also provided an assessment of additional snowplow equipment the unit needed.

Recommendation: Before deploying to an area with a potential for winter operations, request soldier and unit training packages from CRREL. The laboratory staff is very responsive to requests for training materials.

Unit-Level Lessons Learned (1st Platoon, B Company, 46th Engineer Battalion)

Predeployment Training and Turnover of Engineer Responsibilities

Discussion: Engineers supporting Task Force Able Sentry faced two challenges: deploying from the continental United States and conducting home station training compatible with the USAREUR designated training tasks to validate the unit entering the theater. The previous engineer unit (A/94th Engineer Battalion) rotated two platoons through two rotations at Task Force Able Sentry and was familiar with the USAREUR predeployment training and validation requirements. Task force personnel sent a training package to B/46th Engineers, who completed the tasks at Fort Rucker, Alabama. Once in Macedonia, a sergeant from A/94th Engineers spent a week with the task force engineer, the platoon leader, and the platoon sergeant from B/46th Engineers to explain the engineer missions and the status of projects. The most important aspect of the turnover was that the early coordination between the two units allowed B Company to quickly take over the Task Force Able Sentry engineer mission. Later, the task force engineer and the platoon leader developed a training plan for the follow-on engineer unit, which deployed to Macedonia in March 1997.

Recommendation: Units deployed to support any U.N. operation should develop a "smart book" or "scrapbook" of coordinated actions, points of contact, and other information that may help follow-on units as they assume the same duties. Develop detailed checklists on work orders and project management to assist engineer leaders in briefing their follow-on counterparts.

Engineer Equipment Under U.N. Control

Discussion: Another important aspect of early coordination between the outgoing and incoming engineer units is understanding the types and quantities of equipment on hand. Units must bring a robust prescribed load list (PLL) to support the U.N. engineer equipment already there. The figure on page 8 shows the engineer equipment allocated for Task Force Able Sentry.

Recommendation: Before deployment, request a PLL from the current engineer unit, with suggestions on items that might be most critical during the rotation. The logistics assistance officer can notify units if certain parts must be purchased locally or special ordered from the United States.

Engineer Personnel

Discussion: The task force cannot change the allocation of engineer personnel above the 32 currently designated. The two most important skills required for supporting Task Force



The Facilities Engineer Division staff checks the concrete work on the Camp Able Sentry water tank.

Able Sentry are those of the electricians and plumbers. The engineer equipment mechanic has the next most critical skill. The two mechanics allocated to the previous task forces could not keep up with the intense repair requirements of the low-density engineer equipment.

Recommendation: Engineers deploying on engineer missions must assess the types of horizontal and vertical tasks required in the area of operations. Engineer equipment is used often and takes a beating on job sites. Engineer platoons deploying to Macedonia need three mechanics.

Repairing Electrical/Mechanical Equipment

Discussion: Engineers must often repair electrical and mechanical equipment that is critical for the task force to sustain operations. For example, engineers in Macedonia repaired water, sump, and condensation pumps; dining facility equipment; and components for heating and water systems. Many of these repairs were on equipment that is considered outdated in the United States.

Recommendation: Engineers should receive more training on electrical and mechanical components and systems during Noncommissioned Officer Education System (NCOES) courses. Additionally, units deploying to countries with older engineer equipment and systems should work with the Civil Affairs personnel to identify local firms with knowledge of that particular equipment or machinery.

Establishing a Base Operations Contract

Discussion: The greatest management challenge for engineers supporting a task force in Macedonia is balancing the work orders for the 12 outlying OPs with the facility maintenance requirements of Camp Able Sentry. The task force commander's priority is to maintain the carpentry, electrical, plumbing, and water requirements at all of the OPs. Unfortunately, things continue to break on the four buildings that serve as headquarters and living quarters at the base camp as well. The task force engineer, platoon leader, and platoon sergeant must find supplies on the local economy to repair items at the OPs and the base camp.

Recommendation: Engineers deploying to fixed sites, such as Camp Able Sentry, need the capability to organize a base operations contract. This capability would allow the task force engineer to contract locally for a building maintenance contractor who would report daily for emergency and routine electrical, plumbing, sewer, and water repairs. Such a contract would allow task force engineers to focus more attention on repairs at outlying OPs.

Conclusion

As with all engineer operations, the lists of lessons learned from Macedonia are long and varied. This article provides some of the most beneficial lessons to assist engineers on future deployments to Task Force Able Sentry or to similar U.N. operations. Many civilian and military members of the U.S. Corps of Engineers contributed to the success of the Task Force Able Sentry deployments. To them, we say "Essayons!"

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