BUILDING STRONG ROADS

hands-on training in Fuertes Caminos-'88 Honduras

by CPT Roy W. Rieder

"Gentlemen, this is not a training exercise. This is an operation as real as any operation ever performed in combat." These were the first words heard by the staff of the U.S. Army, Fort Meade, MD, in connection with Fuertes Caminos-'88 Honduras, the successor to the Blazing Trails exercises.

About 7,500 Reserve Component soldiers worked on the road from November 1987 to June 1988, both in engineering and support roles.

The road was constructed in a mountainous region between the town of Yoro and the village of Jacon. The elevation varied from 400 meters at Jacon to 1100 meters at the quarry, three kilometers from the start of the new road.

The mission, at first, was to construct 5.5 kilometers of new road in the Yoro province in northern-central Honduras. This was later expanded to 11.5 kilometers and the reconstruction of 2.5 kilometers of road from Blazing Trails '87.

As originally designed by SECOPT, the Honduran equivalent of our Department of Transportation, the road would have followed a ridge line passing north of the village of Jacon where it was to join the Cabonis Trail. This route cuts through 30 meters of limestone in some areas. An alternate route was found, slightly longer than the SECOPT design, but was easier to construct because deep cuts through rock were avoided.

The road was divided into nine worksites; seven on the new road and two on the '87 road. Seven sites would be worked simultaneously beginning with the '87 road. The last two sites on the new road near Jacon were considered to be easily done and would be saved for last.

Task Force 111, West Virginia National Guard, was selected to oversee the project. It was required to establish and operate a quarry which would produce over 29,000 cubic meters of approximately two-inch stone.

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A base camp, to house and support the engineers during the road construction, and six access roads to the worksites and the quarry were also built.

The construction of the road had some unique characteristics. The terrain was steep, with drops of 150 meters in several areas. Some fill slopes had to be modified to avoid placing the toe of the slope more than 1,000 meters out from the centerline.

At one culvert site, the fill on the right toe was 37 meters. The Honduran engineers made the largest cut—a sidehill cut of about 30 meters. The terrain was so difficult, the Honduran sergeants major argued over who would get the honor of making the first, and most dangerous cut.

Two active component engineer battalions and one engineer company were selected to assist the task force. The 52d Engineer Battalion from Fort Carson, CO, constructed the base camp and the access roads prior to the arrival of the main body of Task Force 111. The 92d Engineer Battalion, from Forts Stewart and Gordon, GA, worked with the task force on the road itself.

The 13th Engineer Company (Construction Support), from Fort Knox, KY, established and ran the quarry and provided technical expertise and supervision for all demolition operations. The Honduran Armed Forces provided soldiers from their 1st Engineer Battalion to work on the road.

Another aspect of the construction was the integrated composition of the task force. Because of the distance from the United States to Honduras, it became clear that the task force could not afford the loss of construction time it would experience every two weeks—as all National



First Army engineers construct a stone masonry headwall at culvert #38 of the road.

Guardsmen and reservists rotated in for annual training.

Not only were American National Guard and Reserves working with active component soldiers as one Army, but the Honduran soldiers worked alongside the Americans.

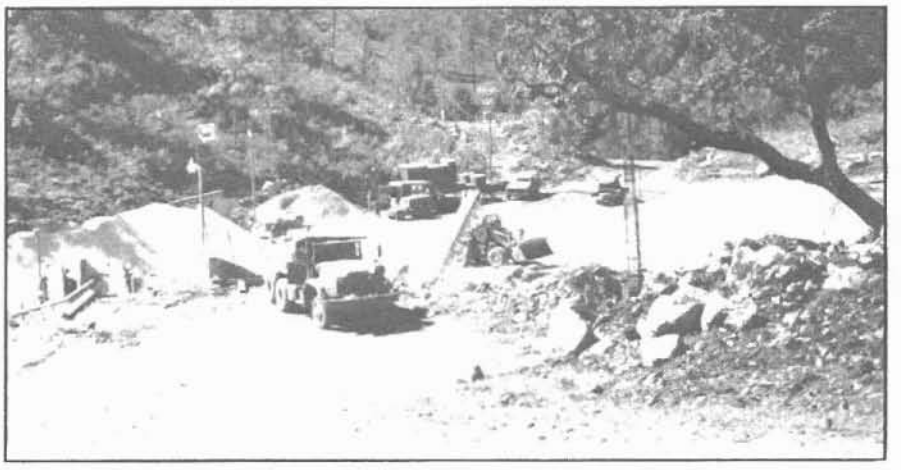
During the planning of the road, serious consideration was given to the types of equipment used. The task force decided to use D8 dozers extensively. Previously, D7 dozers were used and were required to do extensive blasting in the schist which lies below the surface. With their greatest drawbar pull, the D8s were able to rip the schist avoiding a great deal of blasting.

Despite using the heavy dozers, the task force knew that a significant amount of drilling and blasting would still be required. The staff estimated that 12 rock drills were needed in view of the long lead time to obtain repair parts. After contacting the Engineer School and the Quarry Operator's Course at Fort Leonard Wood, MO, the staff determined that relying on the standard military rock drill was unwise and obtained approval to lease five self-contained rock drills from a commercial vendor. The task force leased a 200 TPH crusher and used two 75 TPH sets as backups.

Another unique aspect in the construction of the road was the use of Army aviation. Due to the isolation of some of the work sites, it was difficult to bring in water and construction materials.

The Colorado National Guard assisted by lending a 200-gallon water bucket used to fight forest fires. A UH-1H helicopter used the bucket to drop water on remote areas of the road for compaction where water distributors had a difficult time gaining access.

The UH-1H was also used to haul 24-inch reinforced concrete pipe with a long sling to the worksites where access was difficult. Transporting the 60- and 48-inch culvert sections on five-ton dumps proved to be dangerous, and larger



Facing the headwall of the quarry site, material is moved from one place to another. About 29,000 cubic meters of stone was crushed for the road-building.

trucks could not negotiate the winding trails leading to the worksite. The the larger sections were transported by CH-47s from Joint Task Force Bravo at Palmerola Air Base.

Another unique aspect of the exercise was going through a new learning curve with every rotation. By the time the soldiers actually learned their jobs, there were only a few days remaining in country before their annual training was over. This is where the active component soldiers and Honduran engineers became the key to success since they only needed to learn the standards one time.

Not only were there American National Guard and Reserves working with active component soldiers as one Army, but the Honduran soldiers worked side by side the Americans.

The 92d Engineer Battalion took advantage of the rotation weekends by using the equipment allocated to the Reserve Component engineers.

Every operator available manned a piece of equipment—from the newest soldier just out of AIT to the platoon sergeant. The results obtained in these two days were staggering—up to 3,000 cubic meters of soil were excavated, hauled and compacted in one day.

Fuertes Caminos was truly an operation and a training exercise on the largest scale. Soldiers received intensive hands-on training in their MOS, officers and NCOs saw the results of proper planning and tack organization for their missions. Leaders learned how to coordinate with support activities, and soldiers of all ranks developed a better understanding and appreciation for the people of Honduras.

The local Hondurans benefited most of all. The farm-to-market road reduced a four-day journey, on foot, to two days, giving them access to markets, medical care and a better way of life.

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