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Transformation Challenges Soldiers

By Sergeant Roger D. Ashley

A pipeline snakes across eastern Virginia, weaving through streams and woods, tunneling under roads, and bridging difficult terrain to test Soldiers in a real-world environment. Many of the units have never worked together and have no prior experience but still they push forward. The 377th and 439th Engineer Companies also learn about the new engineer's role in the Army's future at the United States Army Forces Command's (FORSCOM's) Petroleum Training Module (PTM), an annual training event beginning in April at Fort Pickett, Virginia. Quartermaster Soldiers from Regular Army units and engineer Soldiers from United States Army Reserve units integrate and augment each other to accomplish the pipeline mission.

The mission goal was to join 5,402 sections of 20-foot pipe and maintain the resulting 20-mile stretch of pipeline throughout the summer. The exercise, which



A small emplacement excavator pushes the pipeline through a culvert under a road.

entailed constructing and operating an inland petroleum distribution system (IPDS), began on 19 April and is scheduled to run through 28 September. As part of the Army's Transformation, pipeline units are disappearing and their mission is falling to vertical and horizontal



Engineers align the pipeline for clamping. The varying contours and elevations presented some challenges to Soldiers placing the pipeline.



A Quartermaster Corps Soldier steadies a joint while it is clamped. Quartermaster Soldiers augmented the United States Army Reserve engineer units as needed throughout the exercise.

construction units unaccustomed to the job. The pipeline remain in place all summer while various Reserve Component units operated it for two weeks at a time. At the end of the summer, other engineer units dismantled and retrieved the pipeline.

Research shows that a large percentage of the supply tonnage moved on the battlefield is petroleum. In World War II, Field Marshall Erwin Rommel said, "Before the shooting begins, the bravest men can do nothing without guns, the guns nothing without ammunition, and neither guns or ammunition are of much use in mobile warfare unless there are vehicles with sufficient petroleum to haul them around." During the 1970s, the United States Army researched the need for a distribution system to meet wartime needs and developed the IPDS by the mid-1980s. It is designed to be a highly mobile, deployable fuel storage and pipeline system that can be easily modified and interchanged with other types of distribution systems.

The Army identified the need for training and developed PTMs to fill the void. Each year, 700 to 1,200 Soldiers train at the PTM at Fort Pickett, which provides nearly every type of terrain Soldiers will encounter around the world. The 49th Quartermaster Brigade and the 240th Quartermaster Battalion provided command and control during the exercise, augmenting units that were understrength, providing subject matter experts, and assigning civilian contractors as trainers and liaisons. The 109th Quartermaster Company

was in charge of constructing the first leg of the pipeline, from the refinery to pump No. 2. The 439th Engineer Company had the second section, and the 377th Engineer Company had the third. The fourth and final leg of the pipeline was operated by members of the Korean Service Corps, a paramilitary group formed during the Korean War to provide labor support to U.S. forces. The group has the same mission today.

The new engineer units had some obstacles to overcome. Terrain, logistics, their integration with unfamiliar units, and the training in new tasks presented the engineers with challenges to complete the mission. The engineers of both companies faced unfamiliar requirements, with many Soldiers having to take on new military occupational specialties. But the PTM's mixture of classroom instruction and hands-on training successfully helped to ease the engineers into their new jobs; the mission that was scheduled to take eight days took only five to complete. 

Sergeant Ashley is a United States Army Reserve journalist with the 412th Theater Engineer Command in Vicksburg, Mississippi. He has deployed to Iraq as an engineer technician with the 130th Engineer Brigade and will deploy again soon as a construction management sergeant. In civilian life, he works as a railroad conductor for the Kansas City Southern Railway.