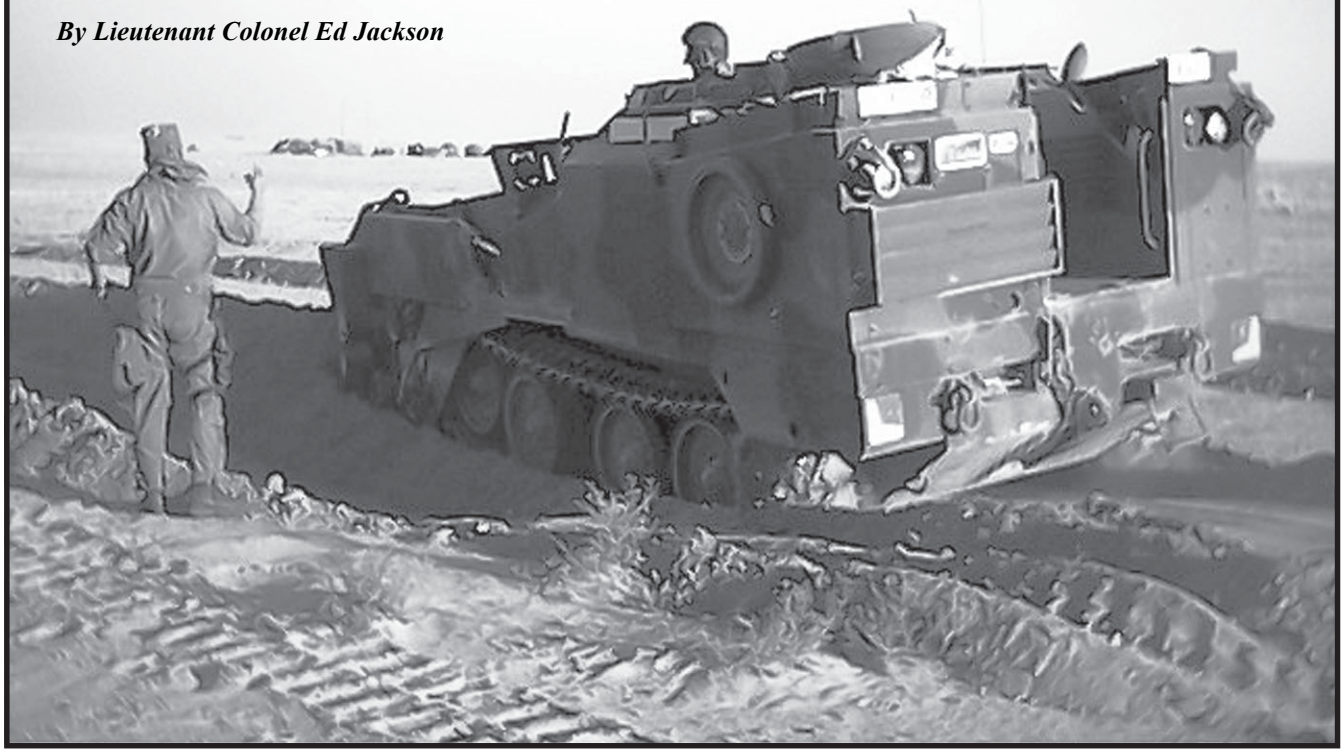
A Multifunctional Engineer Battalion

By Lieutenant Colonel Ed Jackson



*The 54th Engineer Battalion (Corps)(Mechanized) (the"Dagger Battalion") performed every type of engineering support for the 3d Infantry Division (3ID) and 3d Armored Cavalry Regiment (3ACR) in Operation Iraqi Freedom from 21 March 2003 until its relief in place at the end of May. Whether it was combat, topographic, or general engineering support, the soldier*s *and attached members of the 54th did it all.*

On 8 January 2003, the 54th was alerted for deployment to Kuwait in support of Operation Iraqi Freedom. Within five days, the battalion had assembled its companies and loaded its equipment on the train for its journey toward Baghdad. The 54th is assigned to the 130th Engineer Brigade, V Corps, in Bamberg, Germany. It has developed a training support relationship with the divisional cavalry squadrons of the 1st Infantry Division and 1st Armored Division, the 173d Infantry Brigade (Airborne), and the Allied Command Europe's Allied Mobile Force (Land). During Operation Iraqi Freedom, the battalion supported 3ID in much the same fashion. Headquarters and Headquarters Company (HHC) and Bravo Company, 54th Engineer Battalion, and two Reserve Component multirole bridge companies (MRBCs) were attached to the Raiders of 1st Brigade Combat Team (1BCT). Alpha Company was attached, for combat operations, to the Spartans of 2BCT, and Charlie Company to the Sabres of the 3d Squadron, 7th Cavalry Regiment. Throughout the war and subsequent stability operations and support operations (SOSO), the 54th gained and lost numerous company- and detachment-sized forces, and changed colonel-level commands nine times.

Crossing the Berm

On 21 March, the 54th crossed into Iraq with the 3ID. The mission of breaching, marking, and controlling five lanes through the complex border obstacle fell to 1BCT. The 54th Engineer Battalion (-), attached to 1BCT, served as the crossing area engineer. Marking breach lanes and manning traffic control points, the battalion managed traffic across the border for the majority of 3ID and several corps and theater enablers. The battalion's Bravo Company, the 1st Platoon of the 3d Military Police Company, and elements of the 299th MRBC manned traffic control points on both borders, ensuring smooth traffic flow and rapid vehicle recovery operations to keep the lanes clear. Using shipping containers mounted on MRBC common bridge transporters twelve feet above the ground and marked with orange panels, our soldiers funneled traffic from numerous unit staging areas and sent them onward to Iraq. Within hours, several thousand coalition vehicles streamed across the border. The soldiers in the 54th assured the mobility of 3ID forces, setting the conditions for rapid momentum in the initial stages of Operation Iraqi Freedom.

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Attacking Into Iraq

Crossing the Iraqi border, the battalion moved quickly across open desert to keep up with the attack. Our routes were primarily along unimproved roads, which became a challenge for many of the MRBCs. The battalion was tasked to mark one of the two main supply routes for follow-on forces. The battalion also provided Team Panther to 3d Battalion, 69th Armor Regiment, and then to 317th Engineer Battalion, to clear Jalibah and Tallil Airfields in southern Iraq. Before combat operations, the battalion formed Team Panther, consisting of two M1A1 Panther II systems, a heavy equipment transporter, and a command and control high-mobility multipurpose wheeled vehicle (HMMWV). Team Panther leaders developed battle drills to maximize coverage of the roller team and to allow rapid connection and disconnection of the Panther's mine rollers. The Panthers self-deployed across the border with the roller nose cone attached. The team's mission was to clear unexploded ordnance (UXO) and land mines on both airfields. The 3ID planned to use Jalibah as a forward area refueling point to push attack aviation assets forward during the first day and Tallil as a logistics base throughout the rest of the operation. In 13 hours, the team cleared and proofed an area ten times larger than an entire combat engineer company could accomplish in the same time. Although the Panther system has long been used in Balkan area clearance operations, this is the first time the system was used in combat.

Actions at An Najaf

After three days of continuous movement through traffic jams, enemy contact, and a dust storm, the battalion finally reached Tactical Assembly Area Raiders, outside An Najaf. There, the 54th built survivability positions with assigned armored combat earthmovers and dozers from the attached MRBC units. The battalion recovered vehicles and dug a mass grave for Iraqi soldiers killed in initial combat operations outside An Najaf. The battalion also conducted bridge reconnaissance in support of combat operations in An Najaf. At Objective Jenkins, Iraqi paramilitary forces had damaged a reinforced concrete bridge over the Euphrates River, threatening to trap U.S. forces in enemy territory. The 54th sent in its recon-naissance team, equipped with the engineer reconnaissance kit. The unit sent detailed information on the bridge to the Engineer Research and Development Center (ERDC) at Vicksburg, Mississippi, for detailed analysis and a solution. Although the solution was never implemented, we validated our reachback connectivity from Iraq to Mississippi.

The Panther was used in combat for the first time.

Attacking to Objective Peach

Early on 1 April, the battalion attacked with 1BCT through the Karbala Gap to the Euphrates River. The 299th MRBC provided rubber assault boats, which the 11th Engineer Battalion used in the assault to ferry infantry troops across the river, under fire, to secure the far side and neutralize explosives on the fixed bridge. Unfortunately, retreating Iraqi soldiers detonated explosive charges, causing minor damage to one side of the bridge. The battalion again conducted a technical reconnaissance of the bridge, this time under mortar and small arms fire. The team transmitted the data via satellite to ERDC, which responded with a technical solution of using a single-story medium girder bridge. The 299th MRBC easily installed the bridge, bringing it up to full operational capability. In addition to the hasty repair of the fixed bridge, the 299th MRBC built a 200-meter float bridge, at night, near the fixed-bridge site. In a single day, 299th soldiers emplaced every piece of Class VII bridging they had carried across the border.

Soldiers observe damage at Objective Peach.

Actions at Objective Peach

Following the initial assault at Objective Peach, the 54th established a detailed traffic control plan and emplaced traffic control points throughout the bridgehead. Attached to the Engineer Brigade of 3ID, the 54th served as the crossing area engineer headquarters, executing the division and corps movement plan across the Euphrates River and

A HMMWV crosses a newly completed medium girder bridge at Objective Peach.

into Baghdad. The battalion also built the division enemy prisoner of war compound and operated it for approximately two weeks until relieved by 3ID military police forces. The fighting at Objective Peach inflicted great damage and loss of life on the local civilian population. In response, the 54th Engineer Battalion established an internal, ad hoc Civil-Military Operations Center. A small team met with local civilians to show them that the U.S. Army was there to help, not to hurt, innocent civilians. As a result of their efforts, the battalion identified and cleared a number of UXO fields and treated a large number of civilians who had been injured during the battle. Their actions helped create and maintain a friendly environment at the bridgehead.

Actions in the 3ID Rear Area

After several weeks of managing traffic, the 54th was given more responsibility in the 3ID rear area. The battalion reorganized under the 937th Engineer Group and became responsible for traffic control, security of the bridgehead east of the Euphrates River, maintenance of existing military bridges, and construction of a second military float bridge. The 671st MRBC built the bridge at Objective Chamberlain, outside a small farming community about 20 kilometers upstream from Objective Peach. The 3ID needed additional supply routes across the Euphrates River for enhanced logistics flow and chose this site because of its proximity to the division rear area and to Baghdad International Airport. The 671st overcame significant obstacles during bank preparation to emplace the bridge, which became more popular with the local populace than it was with 3ID.

The 54th reorganized HHC as a combat force and assigned it the mission of securing the eastern side of the bridgehead. The company had command and control of a Linebacker air defense artillery platoon, an Avenger air defense artillery section, and two battalion Panther II crews. HHC reorganized internally as well and integrated the entire support platoon into the security role. HHC conducted presence patrols, performed cordon-and-search operations, and operated traffic control points along the main supply route across Objective Peach. While HHC managed the eastern shore, Bravo Company conducted security patrols and cordon-and-search operations along the western banks of the river. Upon the return of Alpha Company to the 54th, they were given similar responsibilities in support of the Objective Chamberlain bridgehead. Alpha and Bravo Companies uncovered vast amounts of weapons and ammunition during search operations, including more than 33 Seersucker surface-to-surface missiles in an abandoned warehouse. These were destroyed with the assistance of the 937th Explosive Ordnance Disposal (EOD) Team. Bravo Company also cleared a runway for the 1st Battalion, 101st Aviation Regiment of the 101st Airborne Division. The 814th MRBC joined the 54th and performed traffic control and managed the digging assets across the division rear footprint.

Supporting 3ACR in Western Iraq

In late April, the battalion was reassigned to the newly arrived 3ACR in Area of Operations West. Charlie Company remained with 3-7 Cavalry Regiment for continued operations near Baghdad International Airport. For the mission in support of 3ACR, the battalion had control of a terrain team from the 320th Engineer Company; the 761st Ordnance Company (EOD); and Alpha Company, 142d Engineer Battalion, from the North Dakota Army National Guard. Our support of 3ACR was not only combat engineering but also infantry- and construction-related projects. Because the area of operations extended from the borders of Syria, Jordan, and Saudi Arabia to the outskirts of Baghdad, we

assigned engineer companies to the maneuver squadrons. Alpha Company was attached to 1st Squadron for operations along the Syrian border and Bravo Company to the 3d Squadron for operations along the Jordanian border. The 2d Squadron did not receive any 54th Engineer Battalion augmentation since it had the 43d Engineer Company, which is organic to the regiment. The battalion tactical operations center (TOC) colocated with the regimental TOC in Ar Ramadi, and the remainder of HHC located at Al Asad Air Base, about two hours west, where it supported the Support Squadron and 4th Squadron of 3ACR. Each company was augmented with an EOD team to destroy caches and clear UXO.

Commanders had instructions to be the total force engineer for their squadron commanders. Combat engineers served as construction engineers building field latrines, hand-washing stations, and showers. They set up minor power grids, rewired lights and sockets, repaired air conditioners, and installed ceiling fans.

Engineers teamed with civil affairs teams for infrastructure assessments in local towns, looking at water and power production and distribution systems, sewage treatment facilities, and garbage collection. In addition, they identified numerous goodwill projects such as the construction of soccer fields, playgrounds, and central parks. Engineers assessed facility damage to schools and hospitals. HHC hired the former Al Asad base engineer (an Iraqi) and a team of local nationals to get the facility operating at prewar standards. Companies also operated traffic control points, conducted presence patrols and search operations, and helped civil affairs teams with civil servant wage distribution.

The battalion served with the 761st Ordnance Company (EOD), which embraced our engineer/EOD integration. Although there were not extensive combat operations at Area of Operations West, there were numerous UXO, arms and ammunition caches, and major ammunition supply points in the sector. Leaders developed plans to consolidate and remove captured ammunition. Engineers were used effectively to handle UXO inside towns and the many ammunition supply points looted by locals. Using FalconView® software, the battalion also developed a tool for tracking the numerous cache locations to template and refine search operations for engineers and maneuver forces. The 320th Engineer Company produced topographic products for the squadrons, to include town studies, infrastructure analyses, border-crossing analyses, population density studies, and detailed products to help units plan raids and seizure operations. Alpha Company, 142d Engineer Battalion, supported the regiment through force protection improvements and quality-of-life upgrades at the regimental TOC and the regimental rear area at Objective Redskins and for the troops of 1-5 Field Artillery Battalion.

The 54th Engineer Battalion S3 established an internal construction management section (CMS) that established contracts for improved life support for the regimental TOC and for the soldiers of the 1-5 Field Artillery Battalion, living

Soldiers construct a latrine at Ar Ramadi, west of al Fallujah.

near the university in Ar Ramadi. Improvements included emplacing gravel, paving, installing an improved power grid, and air-conditioning tents and dining facilities. The battalion exercised engineering muscles rarely used in peacetime. With help from the 130th Engineer Brigade CMS and a small U.S. Army Corps of Engineers Forward Engineer Support Team (FEST), the battalion made great strides in engineering assistance to Area of Operations West and 3ACR before our relief in place by the 122d Engineer Battalion (Corps) (Wheeled) in late May/early June. Our time with 3ACR reinforced the need for engineer units to supply the full spectrum of engineer services to the maneuver force. These missions tested our creativity, imagination, and ability to make something out of nothing.

Conclusion

Soldiers from the 54th Engineer Battalion executed tasks covering the full spectrum of engineer operations in Operation Iraqi Freedom, including combat, construction, and topographic engineering. The flexibility the battalion gave maneuver commanders helped assure mobility during high-intensity combat and SOSO. The ability to accomplish a myriad of tasks made the 54th a combat multiplier and a true multifunctional engineer battalion.

Lieutenant Colonel Jackson is the commander of the 54th Engineer Battalion. He previously served in engineer staff positions at Personnel Command; in Korea; and in Europe; as well as in the 4th Engineer Battalion at Fort Carson, Colorado; the 554th and 5th Engineer Battalions at Fort Leonard Wood, Missouri; and the 41st Engineer Battalion at Fort Drum, New York. Lieutenant Colonel Jackson is a graduate of Clemson University.