

# Assured Mobility

By Major Craig Wertheim

**D**uring its year in Iraq, the 411th Engineer Brigade (Theater Army) designated key individuals for its assured mobility cell, which supported the brigade's main effort of keeping the corps main supply routes (MSRs) open for coalition forces. The missions consisted of—

- Route clearance.
- Blast hole repair.
- Route sanitation.

The first step in this main effort was route clearance. Planning for it started at the intelligence section, which compiled and analyzed all of the significant events from the previous weeks that occurred on the routes. The assured mobility cell then derived targeting recommendations for the brigade's route clearance battalion. Based on the slate of targeting recommendations, the route clearance battalion produced schedules that the companies used to perform their route clearance missions to force open the MSRs in support of coalition forces and the Iraqi people. During these long and dangerous missions, the engineers looked for improvised explosive devices (IEDs). The route clearance missions took up a good part of the day on the road. The Soldiers were

engaged frequently by the enemy either with IEDs, small arms fire, or a combination of both.

The benefit of being a corps asset was the ability to send Soldiers wherever they were needed during operations. This support was in the form of additional route clearance assets when the maneuver units needed them. On numerous occasions, the 411th route clearance teams were called to clear the way for combat teams, allowing them to project combat power during operations. During the year-long tour, the route clearance teams performed 2,800 patrols, traveled more than 350,000 kilometers, and cleared more than 1,000 IEDs.

The second step to assured mobility was to deal with the blast holes formed when an IED detonated on a road. These holes ranged from a small indentation up to a crater that could swallow a truck. To combat these holes, the brigade used construction assets from its construction and combat engineer battalions. This operation took not only engineers but also a combined arms team to make it a success. Frequently, the brigade sent out reconnaissance teams to identify and inventory new holes throughout the area of operations, and this data was made available to all units that crossed the area. It was important to inventory these obstacles to speed repair operations and prevent future IED attacks.

Once the engineers performing the work identified which holes would be filled on a mission, the brigade contacted the brigade combat teams (BCT) that owned the battlespace to coordinate security for the operation. Then the mission was confirmed, supplies were ordered, and the mission was executed. On a given mission the team could fill three to eight holes, depending on their size. The final job for the team was to mark each hole with a distinctive number and symbol. This allowed identification by friendly forces and helped track whether the hole was ever used again by anti-Iraqi forces (AIF). Security was needed to observe the blast holes to ensure that AIF did not emplace another IED in the hole just filled in. When the holes were repaired, the



**Soldiers from the 92d Engineer Battalion repair a blast hole formed by an IED detonation.**



**Vegetation and debris are cleared from the median and shoulders of the MSR as part of route sanitation.**

road was ready for traffic to resume. The 411th filled more than 600 blast holes along the corps MSR during its deployment.

The third step toward assured mobility was route sanitation, which consists of clearing vegetation and debris from the median and shoulders of the MSR. In Iraq, where IEDs are placed in every imaginable shrub or piece of trash, route sanitation is essential to keeping the MSR open. It was left to the route clearance battalion to decide when and where

to perform this mission. Clearing the MSR of vegetation and debris disrupts the enemy's ability to emplace IEDs close to where coalition and civilian vehicles travel. It also inhibits concealed movement by AIF, diminishes their ability to set up traps, and forces them to place their IEDs farther back from the road. This standoff increases the survivability of coalition forces. Route sanitation is a never-ending battle in Iraq. The brigade usually ran multiple sanitation missions each week.



**After finding an IED during one of its missions, the route clearance team blows it in place.**

The 411th made great strides in assured mobility. The route clearance teams' rates for IEDs found and cleared rose steadily, but this was not without sacrifice. The brigade had 10 Soldiers killed in action and numerous Soldiers wounded. As the corps brigade, it had the flexibility to help reach out and impact the corps mission. The 411th saved countless lives, not only for the coalition but for the Iraqi people as well. IEDs will continue to be the enemy's weapon of choice, and engineers will continue to clear a path through them to victory.



*Major Wertheim was the 411th Engineer Brigade assured mobility section leader. Previous assignments include vertical construction platoon leader, aide-de-camp, company commander, and battalion intelligence officer. In the civilian sector, he is the sales manager for Holland & Sherry Incorporated, a luxury fabric importer.*