Bombing in Baghdad! You have probably heard that often in the past year or so and seen images of people digging through rubble with their bare hands to help those who are trapped in a building partially destroyed by a bomb. But after the bombing of the United Nations compound in the summer of 2003, we knew that something had to be done to protect the force during incidents such as this. We needed to be able to react appropriately in a chaotic situation and turn it into a managed process. The purpose of this article is to show how the 458th Engineer Battalion (Corps)(Wheeled) took a division-directed mission and turned it into a force multiplier for the 1st Cavalry Division.

Battalion Structure

The 458th, an Army Reserve unit from Johnstown, Pennsylvania, was alerted and mobilized in support of Operation Iraqi Freedom in November 2003. The battalion consists of a headquarters and headquarters company, three line companies—each with three line platoons of combat engineers transported by 5-ton dump trucks—and a support platoon with a complement of heavy construction equipment. The unit’s wartime higher headquarters, the 1st Cavalry Division, directed heavy rescue training as a component of consequence management, resulting from vehicle-borne improvised explosive devices (VBIEDs) or other catastrophic incidents in the division sector. The 458th is ideally suited to perform these functions due to the following organic assets:

- An ample supply of highly adaptable combat engineers
- Heavy equipment
- Experience in identifying and clearing unexploded ordnance (UXO) and improvised explosive devices (IEDs)
- Skills acquired from civilian experience

Mission

A team of battalion personnel who have civilian-acquired skills in heavy rescue, firefighting, emergency management, and US Army search and rescue performed a mission analysis. This team has experience at the 11 September 2001 Twin Towers and Pentagon attacks. The mission of the 458th—the Rescue One organization—is to conduct initial consequence management operations in response to civil disturbances, weapons of mass destruction (WMD), or VBIED mass-casualty incidents in the 1st Cavalry Division area of responsibility, providing heavy rescue and urban search-and-rescue assistance in a tactical environment to solve or mitigate the incident.

By Major Adam S. Roth
**Heavy Rescue Operations During Operation Iraqi Freedom**

**U.S. Army Engineer School, 14010 MSCoE Loop BLDG 3201, Suite 2661, Fort Leonard Wood, MO, 65473-8702**

**Approved for public release; distribution unlimited**

**Security Classification of:**

<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

**Number of Pages:** 3
Vision

The training vision that emanated from this mission statement was a platoon for each of the three line companies capable of performing initial incident command and search-and-rescue assistance at a secure site. The core of Rescue One’s leadership started to come to grips with a mission that has no formal US Army mission training plan. We relied on our collective experience and basic fundamentals from the Federal Emergency Management Agency (FEMA). We developed a four-phase training program with assistance from the Fort McCoy (Wisconsin) Fire Department while Rescue One was at the Fort McCoy Mobilization Station. The program included a selection process, classroom instruction, lane training, and confined-space training. The selection process included both technical skills and mental evaluation (for the stresses that the rescuer would experience). Classroom instruction focused on incident command, planning and organization, search-and-rescue techniques, basic rescue knots, shoring and cribbing, and patient packaging. Lanes training included surface search procedures for victims, confined-space rescue, and low-angle victim extraction using rope rescue techniques. The culminating event was a full-blown incident simulating a three-story building destroyed by a VBIED with full incident command and search for victims. Confined-space training focused on a low-light constricted environment with small search teams.

The Rescue One officers then developed follow-on training and sustainment training in theater that included mission readiness exercises, brigade-level rock drills, incident preplanning, and incident scenarios. Mission readiness exercises focused on being able to move out with all equipment and personnel—implementing the lariat advance (alert advance call) used in Cold War Germany. The brigade-level rock drill rehearsed a major high-value target, including all subordinate staff down to the squad leader level. Incident preplanning of high-value targets included all required coordination between landowners, facility owners, staff, and emergency managers. Incident scenarios were coordinated with landowning brigade combat teams (BCTs).

Organization

The Rescue One organization is broken into three separate alarm responses: Alpha, Bravo, and Charlie.

Alpha Response

This is the initial response where all Rescue One officers respond to the incident scene, once dispatched by the 1st Cavalry Division. The primary purpose of the Alpha response unit is to size up the initial incident and determine additional resources. The incident commander makes two critical determinations upon arrival: expected duration of the incident (longer or shorter than 12 hours) and overall incident site security. The primary concern when operating in central Baghdad, instead of downtown New York City, is that security is crucial in all vehicular movements. Driving with lights and sirens is not possible.

Bravo Response

This is a single sapper platoon of search-and-rescue specialists, transported in organic vehicles. The Bravo
response unit can perform search-and-rescue operations and shoring.

**Charlie Response**

The Charlie response unit—the remaining two platoons from each of the line companies—sustains operations for a longer duration. The unit brings life support items such as tentage and lighting for sustained operations in a secure location.

**Incident Command**

A secure scene is key to a successful deployment. There must be 360-degree security around the incident scene prior to employment of rescue personnel. This is normally provided by the landowning BCT. Once the site is secure, each element is assigned a sector by the incident commander and maintains radio communications with all employed search teams during the entire operation.

Accountability of personnel, tools, and equipment (controlled through regulated access to the site) and rescuer safety is critical for the incident commander. He must also manage many external assets contributed by US military, coalition, and host nation forces:

- Firefighting forces
- Police and security forces
- Hazardous material (HAZMAT) and nuclear, biological, and chemical (NBC) agents
- Public Affairs Office
- Host nation government
- Local utilities

Unity of command is imperative in this structure so all components are working toward the same goal. The use of interpreters is also critical when working through the myriad of issues that the host nation can assist with.

**Actions on Scene**

Once incident command is established, as with all military operations, a priority of work is established. The steps, generally followed in this order, are site survey, surface search, confined-space rescue, and high- and low-angle rescue.

- **Site Survey.** After arriving on scene, the officers of Rescue One quickly ascertain which portions of a structure, or structures, are accessible.
- **Surface Search.** The Halo search method (systematic calling and listening) is used.
- **Confined-Space Rescue.** Once it is determined that a victim is in a confined space, rescuers use a combination of mechanical tools, air-monitoring equipment, and hand tools to enter the confined space. With a combination of searching and shoring, the team enters the void and extracts the victims.

- **High- and Low-Angle Rescue.** Frequently, the effects of bomb blasts will either create a deep crater or take out normal means of egress (such as a stairwell).

**Training**

The battalion’s heavy rescue unit has conducted numerous training events in conjunction with the supported BCTs. Training always began with an alert phase, followed by either a ground or an airmobile movement of the Alpha and portions of the Bravo response units to the incident location. Due to heightened security concerns post-blast, the unit often traveled via air since ground main supply routes and entry control points were frequently secured. The scenario included employment of the Charlie response unit’s staging of equipment for later employment. Training scenarios also included integration of supporting firefighting organizations (fighting real fires developed for the scenario) and medical organizations (establish a casualty collection point, conduct triage, and transport casualties) under the incident command of Rescue One. Rescuers had the opportunity to perform technical rescue operations.

**Employment**

The battalion’s heavy rescue unit met with many of the supported BCTs within the Task Force Baghdad area of responsibility very early in the deployment and conducted site assessments of major high-value targets. Critical structural, contact, and accountability information saves time in the event of an actual incident. Rescue One supported postblast consequence management at two vehicular bombings and assisted in numerous vehicular entrapments and mass-casualty events as a result of VBIEDs.

**Summary**

The 458th Engineer Battalion provides a substantial capability, tackling a nonstandard—but very critical—mission for forces entering a battlespace lacking the infrastructure (either coalition or host nation) to conduct rescue operations in the event of WMD or VBIED incidents. This enhances force protection for the entire force and is a force multiplier for all maneuver commanders in a postblast environment with multiple entrapped casualties. The framework of Rescue One provides a critical asset to the maneuver commander in an expeditionary theater and, given the current operating tempo and threat, should be considered as a primary mission in Future Force development and deployment decisions.

Major Roth is the executive officer of the 458th Engineer Battalion and the battalion chief of Rescue One. He is also a volunteer firefighter in Johnstown, Pennsylvania. He has commanded a combat heavy company and has served in numerous staff and leadership positions. He holds a master's in mechanical engineering from Boston University.