Technical rescue is a discipline most commonly associated with civilian firefighters and local emergency responders, but the principles of technical rescue are exercised quite frequently throughout the Engineer Branch of the United States Army. Technical rescue refers to those aspects of saving life or property that employ the use of tools and skills that exceed those normally reserved for firefighting, medical emergency, and rescue crews. These disciplines include the following:

- Rope rescue
- Swiftwater rescue
- Confined-space rescue
- Ski rescue
- Cave rescue
- Trench/excavation rescue
- Building collapse rescue

Although the Branch is consumed by the need to sustain combat, geospatial, and general engineering operations throughout the world, the fourth element of operations—civil support—must not be overlooked. The United States Army is continually called on to serve at home and abroad in response to natural and man-made catastrophes. In 2001, the Army helped after the attacks of 11 September; in 2005, it responded to Hurricane Katrina; and in 2010, it sent troops to help after the catastrophic earthquakes in Haiti on 12 January.

In 2002, United States Northern Command (NORTHCOM) was established to assist federal homeland defense efforts and coordinate support for civil authorities. Since then, three brigades have been scheduled to serve as Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Consequence Management Reaction Forces (CCMRFs). Although tailored to CBRNE events, a natural prerequisite exists for the incorporation of a technical rescue element within these brigades. Most of the contingency plans require that the military provide elements to help coordinate and execute response to events perpetrated against the United States.

In July 2009, the commander of NORTHCOM testified before Congress about the CCMRF’s composition and capabilities. He explained that a CCMRF is a task force of approximately 4,700 people that operates under the authority of Title 10. It is self-sustaining and may be tailored to any CBRNE event. A CCMRF is composed of units with unique CBRNE training and equipment from the Army, the United States Marine Corps, the United States Navy, the United States Air Force, and general purpose units trained to operate in proximity to a hazardous or contaminated environment. CCMRF capabilities include the following:
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Although focused toward United States Army Chemical Corps responsibility, a dedicated technical rescue company providing rescue efforts would alleviate some of the burdens of the chemical response force, allowing it to focus primarily on the chemical response. According to a former commander of the Army’s 911th Engineer Company (Technical Rescue), Fort Belvoir, Virginia, CCMRFs already have a technical rescue capability requirement. CCMRF-1 uses a chemical-biological incident response force platoon and CCMRF-2 and CCMRF-3 use United States Army Reserve firefighting detachments combined to form a platoon-size capability. However, a platoon-size element cannot conduct sustained technical rescue operations, especially in response to a major collapse mission. The CCMRF also has a heavy equipment requirement, which has been filled by the Air Force.

If a company structured the same as the 911th were established, it could provide an immediate capability even greater than that of typical civilian first responders. It could provide an intermediary between civilian and Department of Defense (DOD) responders, and also provide assets such as heavy lifting capabilities through the use of engineering equipment not commonly found outside of dedicated Federal Emergency Management Agency (FEMA) task forces located nationwide.

DOD now has two units with bioterrorism response capabilities—the Army’s Technical Escort Unit and the Marine Corps’s Chemical-Biological Incident Response Force. Separating the technical rescue aspect from these elements and structuring self-sustaining units focused on technical rescue would allow mobilization of the elements to disasters without compromising the overall effectiveness of our national security posture.

The U.S. response to the 12 January earthquakes in Haiti illustrates the need to strengthen the nation’s technical rescue response capability. U.S. military engineers used heavy equipment to clear rubble obstructing rescue sites and assessed the stability of damaged structures. While focusing on the restoration of essential public services such as electricity and water, U.S. military engineers also had an important role to play in search and rescue activities, working with civilian structural experts from the United States Army Corps of Engineers. Personnel trained in multiple aspects of technical rescue are in extremely high demand, and FEMA task forces from all over the nation were deployed to conduct rescue operations after the earthquakes. It was the first time that California Task Force 1 (CA-TF1) from Los Angeles was deployed as an entire element of more than 200 personnel.
Unfortunately, once Los Angeles’s best-trained personnel were deployed to Haiti, California itself suffered from catastrophic landslides resulting in a need for technical rescue personnel to respond. If more Soldiers who deployed to Haiti had been ready to perform urban search and rescue operations without on-site training, perhaps more CA-TF1 personnel could have remained stateside to perform their missions of national response. An alternative plan would be for the Army to send a small element, proficient in technical rescue, embedded in DOD assets such as FEMA. The technicians in that element could bridge the gap between military and civilian responders, knowing how to allocate assets and which military personnel were best suited to the situation.

Looking downrange also highlights the possible need for elements trained and equipped to conduct technical rescue operations. Some of the skills—especially rope rescue—associated with technical rescue could be essential. Also, being able to provide relief efforts after insurgent attacks could greatly aid in the campaign of winning over the trust of the local populace. On numerous occasions in Iraq, civilians tried to handle rescue efforts following large-scale insurgent attacks. Having elements trained, or being able to train, local responders in rescue efforts would show our continual dedication to improving local conditions. Already in place within the armed forces are elements that serve as combat search and rescue (CSAR) teams. One element in the forefront in these operations is the United States Air Force CSAR teams. According to one estimate, 2,800 lives have been saved by Air Force CSAR since 2001. The Air Force even has a specialty—combat rescue officer—which was created to help strengthen the service’s ability to conduct personnel recovery. One phase of the combat rescue officer course focuses specifically on technical rescue.

Having engineer companies or components trained in technical rescue would greatly strengthen the Army’s response capabilities when called on to deploy for support operations throughout the world. A United States Government Accountability Office (GAO) report about Hurricane Katrina stated: “Several factors affected the military’s ability to gain situational awareness and organize and execute its response, including a lack of timely damage assessments, communications difficulties, force integration problems, uncoordinated search and rescue efforts, and unexpected logistics responsibilities. Without detailed plans to address these factors, DOD and the federal government risk being unprepared for the next catastrophe.” Task forces composed of air assets, medical personnel, and construction engineers were developed and put into play. On multiple occasions throughout the GAO report, the call for a structured military element to coordinate and execute search and rescue efforts—from the actual efforts to the logistical planning and coordination—was highlighted. The report emphasizes the inability to find common ground between civilian and DOD elements to allow a fluid response. One issue is a lack of common terminology, which is a key component of the National Incident Management System used by civilian authorities to coordinate joint efforts at an emergency site.
Having engineers throughout key response divisions such as the 82d Airborne Division would greatly enhance their response efforts. Sending selected Soldiers and officers to technical rescue training with the 312th Training Squadron at Goodfellow Air Force Base, San Angelo, Texas, and the 911th Engineer Company could ensure that the military had personnel trained in rescue who could respond to future incidents. There are already officers throughout the Army who are dedicated to the coordination of federal, civilian, and DOD operations, but having lower-echelon personnel who can coordinate those elements could greatly improve efficiency. Having a foundation in various rescue disciplines would permit an easy transition from Soldier to first responder. This would eliminate the need to get on-the-spot training on marking buildings according to FEMA standards or conducting personnel search and recovery using the right tools.

The Engineer Regiment’s motto of “Essayons” is demonstrated, time and time again, as members of the 911th Engineer Company show their resiliency and no-quit attitude on every rescue operation. Establishing that capability in key regions throughout the nation would greatly contribute to the Army’s overall readiness posture when performing civil support operations.

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Endnotes