



# COUNTER EXPLOSIVE HAZARDS CENTER

By Major Iain Church

**T**he United States Army Engineer School Counter Explosive Hazards Center (CEHC) at Fort Leonard Wood, Missouri, is a fully operational and enduring organization providing the Army with innovative solutions to counter explosive hazards. Approved by the Army Assistant Chief of Staff, and Plans Operations (G3) in November 2004 with an effective date of October 2005, the CEHC has rapidly transformed from an ad hoc team to a fully functional Center of Excellence, while simultaneously supporting the Global War on Terrorism. The mission of the CEHC is to “*synchronize and integrate explosive hazards countermeasure concepts, technology, and materiel across the [doctrine, organization, training, materiel, leadership and education, personnel, and facilities] DOTMLPF spectrum to support assured mobility, protect the force, and counter explosive hazards in the contemporary environment.*”

## CEHC Initiatives

**T**o stay ahead of the improvised explosive device (IED) threat in the contemporary operational environment (COE), the CEHC is working several initiatives to enable assured mobility in urban and complex terrain. Some major areas of focus are IED defeat contingency training, training

integration with the combat training centers (CTCs), route reconnaissance and clearance operations, military search operations, enhanced sapper company skills and tools, explosive ordnance disposal (EOD)/engineer integration, an engineer robotics system, and IED defeat information management.

## IED Defeat Contingency Training

The CEHC fills the gap between institutional training and unit training requirements for the COE. Using state-of-the-art equipment and field-tested techniques, the CEHC develops and continually updates courses on IED awareness and defeat and delivers world-class training and support to joint forces involved in the Global War on Terrorism. This instruction enables units to receive theater-specific training prior to deployment, allowing them to focus on the mission during transition of authority. To ensure that the training is up-to-date and relevant, the CEHC gathers the latest intelligence on explosive hazards tactics, techniques, and procedures (TTP) employed by the enemy, as well as TTP developed by deployed units to counter that threat.

## Training Integration With the CTCs

The CEHC; the National Training Center (NTC) at Fort Irwin, California; and the Joint Improvised Explosive Device Defeat



**Students become familiar with using the Buffalo's arm in a static environment before operating the arm from inside the vehicle.**

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(JIEDD) Task Force (TF) have teamed to form the Joint Center of Excellence for IED Defeat. The CEHC provides the individual and unit training on IED defeat equipment and techniques, while the NTC integrates these new capabilities into task force operations and validates emerging concepts in a joint and combined arms environment. The JIEDD TF evaluates these promising technologies and provides the resources required to enable the force. This team will be expanded to include all three CTCs and joint training centers.

### **Route Reconnaissance and Clearance Operations**

The purpose of route reconnaissance and clearance operations is to detect and neutralize explosive hazards, thus protecting the force and providing commanders freedom of maneuver. Successful route reconnaissance and clearance requires the ability to improve or sanitize routes, a thorough knowledge of the route to detect changes, and the ability to safely neutralize explosive hazards. As the Army's lead for route reconnaissance and clearance, the CEHC has played a significant role in formalizing our doctrine and equipment sets currently used in theater and is forging ahead to test and validate new technologies to enhance the route clearance package. In addition, the CEHC has developed a course to train operators, mechanics, and leaders to conduct route reconnaissance and clearance operations. Since conception, this course has been attended by every deploying unit identified to conduct this mission in theater.

### **Military Search Operations**

Military search is the application of systematic procedures at every level of command to locate specified targets in support of military or civil police operations. Specified targets include people, information, and materiel employed by an adversary. As the Army's lead for military search operations, the CEHC equips unit searchers and search advisors with a wide range of skills and tools that allow them to conduct person, vehicle, unoccupied and occupied building, and area searches, as well as manual route clearance. Emphasis is placed on conducting searches that stand up to legal scrutiny.

### **Enhanced Sapper Company Skills and Tools**

Through intelligence-gathering efforts and analysis, the CEHC led an Engineer School team to identify means to increase the near-term capabilities of the brigade combat team (BCT) sapper company. Several innovative tools were identified to augment the reconnaissance capabilities, explosives, communications, and weapons already embedded in this vital sapper unit. The team also cross-walked the additional skills that unit leaders can obtain through existing courses (such as the Explosive Ordnance Clearance Agent, Urban Mobility Breaching, and Sapper Leader Courses) or new training in areas like special infrastructure assessment (sewage, water, electricity, academics, and trash [SWEAT]).

### **EOD/Engineer Integration**

EOD and engineer units have unique and complementary roles regarding explosive hazards, and this necessitates close



**Students are instructed in the use of remote pulling techniques where a high risk of booby traps exists.**

coordination when operating in the COE. To better support assured mobility, EOD and engineer leadership recently changed the approach to IED neutralization in theater. Under certain situations, IEDs are designated as obstacles and can be breached (neutralized) by engineer companies. To provide this IED-neutralization capability to engineers, the CEHC has formed a liaison with the United States Army Ordnance Munitions and Electronic Maintenance School, Redstone Arsenal, Alabama, to develop a 2-week Improvised Explosive Device Breacher Course. This course will concentrate specifically on the interrogation of suspect devices and the remote neutralization of simple IEDs.

### **Engineer Robotics System**

The change in the IED neutralization approach has led to the development of an engineer robotics system that allows IEDs to be interrogated and neutralized from a safe distance. The CEHC has investigated multiple robotic systems that meet theater requirements and is working fielding and training initiatives to rapidly increase capabilities in the force. The intent is to further enhance route clearance teams and sapper companies.

### **IED Defeat Information Management**

Information management is a critical component of IED defeat. The CEHC is collecting, vetting, analyzing, organizing, and disseminating the myriad of information on this pertinent subject. The CEHC was instrumental in developing Field Manual Interim (FMI) 3-34.119, *Improvised Explosive Device Defeat*, published in September 2005. This interim manual made significant changes to a commander's doctrinal options for dealing with IEDs. The CEHC is transforming Field Manual



**Students conduct a route reconnaissance and clearance operation.**

(FM) 20-32, *Mine/Countermining Operations*, into FM 3-34.210, *Explosive Hazards Operations*, which is scheduled to be published in fiscal year 2006.

The CEHC developed an Improvised Explosive Device Defeat Train-the-Trainer (IEDD-T3) Course to enable trainers to prepare their units for the current IED threat. The training audience was recently expanded to include deploying units from all services. The CEHC conducts IEDD-T3 training at Fort Leonard Wood and via mobile training teams.

### **Summary**

**T**he CEHC has made dramatic progress over the past year, in both supporting the Global War on Terrorism and standing up an enduring Center of Excellence. CEHC initiatives have played a vital role in preparing units for operations in theater with emphasis on IED defeat. The center is focused on future needs, and systems are in place for continued progress to meet the needs of our force in the coming years. The CEHC will continue to market its capabilities to the field to enable the leadership to understand how these capabilities can be used to increase operational success and force protection.



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