

verted to VBIEDs, and nine other big IEDs being built with “victim-operated” triggers, such as pressure plates.

The investigators also found weapons and armaments, electronics training manuals in Arabic, \$16 800 in \$100 bills, some Sudanese money, and lots of ball bearings, which insurgents pack around an IED’s main charge to maximize death and destruction. There were also personal computers and simple video-production facilities to make and mass-produce grisly propaganda video discs, which the team found stacked by the thousands in one of the underground chambers.

It was a standard insurgent camp. During the several weeks I spent north of Baghdad, raids like that one occurred at a rate of several a week within a 75-km radius of Tikrit. Virtually all of them began in the same way, with a tip from a local resident or a former insurgent who was fed up with al-Qaeda or other foreign fighters.

The cumulative effect of those and countless other raids, several months later, was a steep decrease in the rate of IED attacks in Iraq. The tip-offs and raids did what billions of dollars spent developing technologies, some exotic, apparently could not. Can it be that old-fashioned community relations and police work are all that matter and that the technological solutions the U.S. military has been chasing are a mirage?

It’s a tempting argument, at least superficially, but it overlooks the many factors and chores beyond tips and firefights that are necessary to take apart an IED network. Also, it underestimates what technology does, because much of the technology is classified. U.S. military officials will say only that technology-based forensics from captured IEDs, postblast analysis, and other sources are helping them to understand networks and even identify individual bomb makers. “They’re tracking those guys a lot better than they were a couple years ago,” said Lt. j.g. Scott Bryant, a Navy EOD tech at Forward Operating Base Falcon, south of Baghdad, in an interview a few weeks after the Fulton Harvest raid.

Even a straightforward raid on an insurgent camp involves technology: the mission often begins with overhead reconnaissance and surveillance, often from pilotless drone aircraft. And as far as I could tell from my interviews in Iraq, no commanders would think of raiding a camp without taking along EOD techs trained in the use of classified technologies to sweep the roads and footpaths for IEDs.

“We absolutely need science and technology,” says Col. Kevin Lutz, the commander of Combined Joint Task Force Troy, the U.S. military organization that oversees EOD and related activities in Iraq. “It’s not a panacea, but we cannot do without it.”

**I** HAD A COW ON MY LAST DEPLOYMENT,” the team leader reminisces. Insurgents have often concealed IEDs in dead (and occasionally live) animals. So EOD operators generally blow up any animal carcass they come across. “We put four blocks of C-4 in its ass.”

We’re about 8 hours into the mission and we’re getting a little bored.

At 2:33 p.m., with Led Zeppelin’s “Black Dog” playing on the sound system, the radio hisses the words that suddenly make life interesting: “Possible IED on southbound lane. Wires running west.”

“Well, we’re gonna get to blow something up,” the team leader says. He says it the way a farmer might say, “It looks like we’re gonna get a little rain.”

Ten minutes later we see the IED, or fake IED, in the road.

“I think I see our present up here,” the team leader says.

“Yeah, that’s cute,” replies the robot operator.

We pull up near the two donkeys, next to a soldier who is holding an M-16 across his chest. The team leader leans out the door and asks, “What’s going on?”

The soldier says the thing looks like two 120-mm artillery rounds in a burlap bag with wires coming out of it.

The robot operator sends out the Talon. He finds bags inside the burlap that are too heavy to push or pull with the robot’s arm. “That’s UBE or sand,” he says. “We’ll find out when we blow it.” (UBE means “unidentified bulk explosive.”)

**“WHERE DO YOU TURN OFF YOUR AGGRESSION LEVEL?”** the team leader muses.

He steers the robot back to the JERRV. The team leader ties a big knot in some shock tube and tapes it up with a blasting cap and two blocks of C-4 plastic explosive. Shock tube is plastic hose a few millimeters in diameter, lined inside with a dusting of HMX explosive and fine aluminum powder. One end of the tube is attached to an igniter, and the other to a blasting cap wrapped up in some blocks of C-4. The igniter, a tube 12 centimeters long with a pin in one end, starts a shock wave that travels down the tube at 2000 meters per second, sustained by the explosive inner lining. The shock wave triggers the blasting cap, which detonates the C-4.

“Stand by for fire in the hole in 15 seconds,” the team leader announces. “Fire in the hole in 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.”

I pull the pin on the igniter. There’s an orange fireball, maybe 12 meters in diameter. I feel a thump like a punch in the chest. The igniter sparks and sizzles in my hand. A cloud of black smoke drifts toward us.

“Yep, that was definitely some s—t,” the team leader says. He keys the iPod and blasts “Play That Funky Music” while he and the robot operator play air drums.

There’s frag in the road around the blast site, which means that in among the bags of UBE there was also almost certainly an artillery shell or two, to create shrapnel.

We gather up the IED’s command wires, enamel-covered copper. They clearly lead to a one-story building, about 25 meters square, a kilometer or so away. The team leader and the robot operator debate about what they should do. “Whoever was there, dude, they’re gone now,” the team leader says. “I guarantee it.”

“Still, we could find s—t. Make the house go away.”

In the end, they decide to let the house stand. “My experience with command wire,” the team leader tells me, “is that when you trace it out, there’s rarely anything at the end of it except a power source and a switch.”

“Where do you turn off your aggression level?” he muses. He’s been in situations where there was also a combat team, whose commander was “basing his decision on what you say—whether they destroy a house or knock down a building.”

We do some postblast analysis and then drive back to Speicher. At the EOD tactical operations center, we learn that five U.S. soldiers in a Humvee have just been killed in an IED attack and coordinated ambush from a mosque in Mosul, north of where we were. No one says anything for a minute or two.

The buzz from having blown up a bomb is gone. □