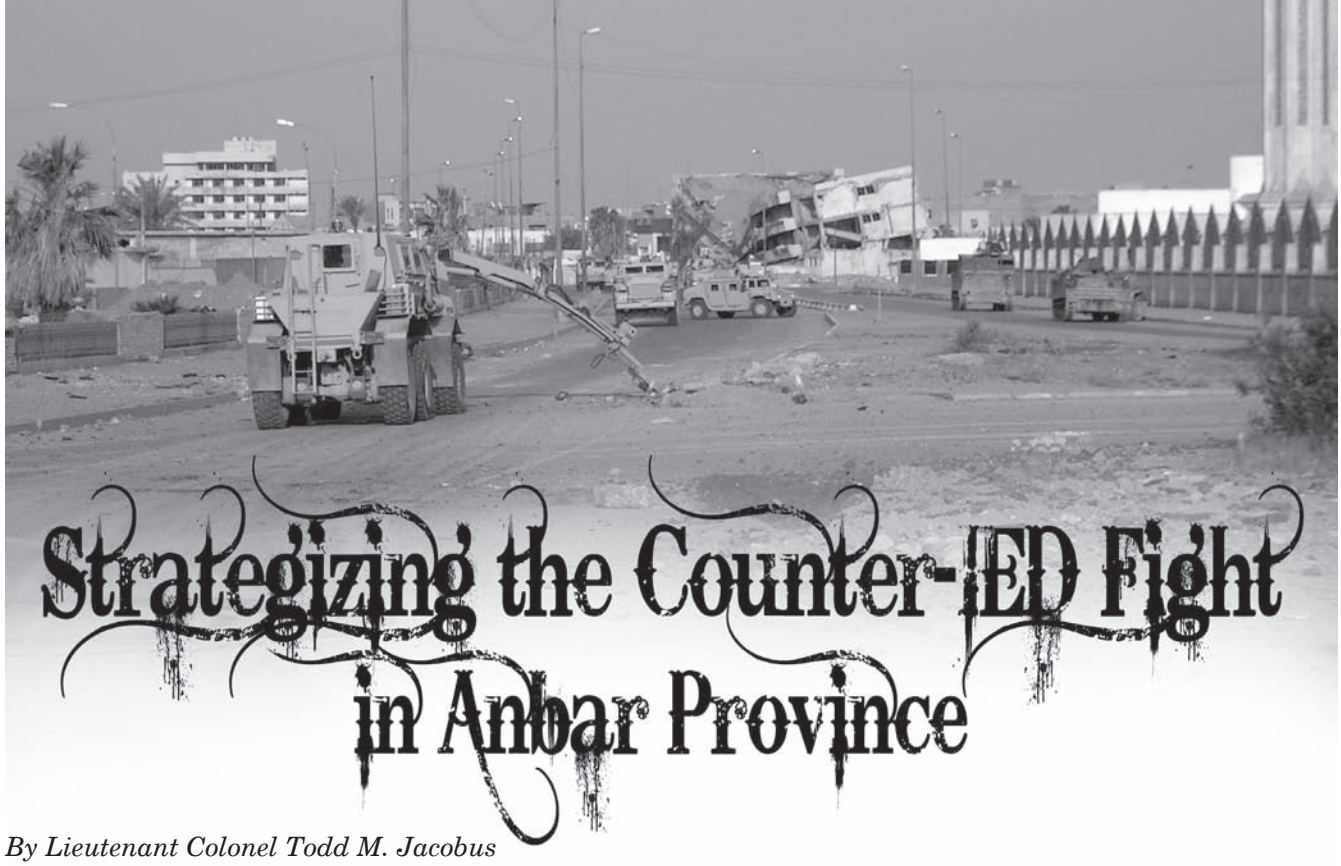

Strategizing the Counter-IED Fight in Anbar Province

By Lieutenant Colonel Todd M. Jacobus

Early in 2005, Iraq was preparing for the first of three elections. While Kurds in the north and Shiites in the south rejoiced at the opportunity to vote for the Iraqi National Assembly, the Sunnis of Anbar Province were not so positive. They saw this vote as the initial step toward their loss of influence. There was a robust insurgent presence in the province, estimated at 12,000 to 20,000 strong. They based their campaign against the coalition in the urban areas of Ramadi, Haditha, Anah, and Al Qaim, and there was a consistent increase in the number of U.S. forces killed by improvised explosive devices (IEDs).

After supporting the 1st Marine Division (MarDiv) and 11th Marine Expeditionary Unit (MEU) during the election in Najaf in January 2005, the 224th Engineer Battalion, Iowa Army National Guard, relocated to Ramadi to conduct a relief in place of the 2d Battalion, 11th Marine Regiment, accepting responsibility for five convoy security escort teams. Augmented with a United States Marine Corps company, the battalion's mission was to reduce the 70 percent success rate of IED attacks against coalition forces in Anbar. Route clearance, or mobility operations, would become the 224th's main effort throughout the deployment.

A Buffalo arm investigates an IED buried on the shoulder of a road.

The area of operation (AO) was about the size of North Carolina, including a 200-mile road network that stretched from the western outskirts of Baghdad to the eastern borders at Jordan and Syria and a dozen cities of significant size. Many of the cities had a strong insurgent presence. The 224th had also replaced the 153d Engineer Battalion and immediately began receiving additional route clearance equipment. The situation in Anbar had gotten significantly worse over the previous four months, and IEDs were without question the preferred weapon of Al Qaeda. Upon transfer of authority, the 224th had only one route clearance team, headquartered in Habbaniyah, to counter the IED fight. But within six weeks, the unit had fielded two "visual" teams (which operated in rural areas) and two "mechanical" teams (which operated in urban areas).

Using Engineer Resources

While there was a 400 percent increase in engineer equipment in Anbar between 2004 and 2005, there was an even more urgent and persistent need for these precious resources throughout Anbar Province during the deployment of the 224th. Initially, engineer resources were pushed to locations where IEDs were found more frequently. While this strategy allowed commanders who had suffered recent attacks to verify that routes in their areas of responsibility (AORs) were cleared, it was a reactionary strategy. It was the responsibility of engineers to design and recommend a strategy that would make the best use of their limited resources and capitalize on their capabilities. The battalion's intelligence officer was an industrial engineer who managed a paper company in civilian life.[1] He considered the enemy's tactics, analyzed the impact they had on coalition forces, and implemented a strategy based on his civilian Lean Six Sigma® training. He pulled from Multinational Corps–Iraq and 2d MarDiv databases all IED-related activities in the Multinational Forces–West (MNF–W) AO for analysis with the division and II Marine Expeditionary Force (MEF) staffs. The aim was to determine where the enemy was having the most success with IEDs—which routes had the largest quantity, the most density, and the highest success rate against U.S. personnel and destroying U.S. equipment.

Route analysis of MNF–W provided the five most dangerous routes in Anbar Province:

- Alternate Supply Route (ASR) Michigan *(Ramadi to Abu Ghurayb)*
- Main Supply Route (MSR) Mobile *(Ramadi to Ar Rutbah)*
- MSR Mobile *(Ramadi to Abu Ghurayb)*
- ASR Tin *(Haditha to Al Qaim)*
- ASR Uranium–MSR Mobile *(Ramadi to Haditha)*

While it was important to maintain open lines of communication by clearing MSRs and ASRs, it was equally important in the fight against Al Qaeda to provide freedom of maneuver throughout MNF–W. Analysis of the same data determined which city had the most IEDs and land mines, which city had the highest density of IEDs and land mines, which city had the lowest IED "find" rate, and which city had the highest rate of insurgency success against U.S. forces and equipment through the use of IEDs and land mines. The answers to these questions led to recommendations to the 2d MarDiv on urban route clearance support. Not surprisingly, the most dangerous urban areas were Al Qaim, Ramadi, Fallujah, Haditha, and Hit. After identifying these hot spots, the same data helped determine where to focus U.S. engineer resources.

Anbar Province AORs

While route clearance recommendations were made to the 2d MarDiv operations, plans, and training (G-3) staff, the brigade and regimental command teams in MNF–W also requested 224th route clearance resources—known as Task Force Ironhawk—through the division G-3. The 2d MarDiv operated with three maneuver brigades, including the 2d Brigade Combat Team, 2d Infantry Division (Ramadi–AO Topeka); Regimental Combat Team 2 (Al Asad–AO Denver), and Regimental Combat Team 8 (Fallujah–AO Raleigh). In addition, the 155th Brigade Combat Team, Mississippi Army National Guard, attached to the II MEF, also was allowed to request Task

A "mechanical" route clearance team operates on MSR Mobile in Anbar Province.

A 224th Engineer Battalion officer gives a briefing at Fort Hood in 2004.

Force Ironhawk support throughout the MEF. Commanders of all these units asked for engineer support with great frequency. The 2d MarDiv commanding general made the final approval on who received which resources.

Urban Route Clearance in Ramadi

The fight inside the city of Ramadi (AO Topeka) was the 2d MarDiv's main effort and included the most intense insurgent activity in the province. Al Qaeda blended in with the local population and enjoyed freedom of maneuver throughout the city, resulting in the most challenging urban route clearance fight in recent history. While Task Force Ironhawk consistently operated in a number of cities, it had at least one route clearance team supporting AO Topeka at all times. As with Anbar Province as a whole, data on IED strikes were analyzed; it was determined whether routes would best be cleared by mechanical or visual means; and recommendations were made to the brigade on which routes should be cleared. The maneuver commanders could weigh in with their mission requirements that needed route clearance support, and sometimes their needs resulted in a change of mission for route clearance teams. All areas of the city were dangerous, but certain routes—such as the main thoroughfare across the city and several routes in central Ramadi—were covered routinely. As a rule, leaders tried to lock in plans several days in advance in order to provide plenty of time for preparations.

A major problem was that with a population of approximately 500,000, Ramadi was a perfect destination for insurgents who were fortunate enough to get out of Fallujah alive. It was quite easy for them to blend in with the local population and continue their fight against the coalition through irregular warfare. Due to violence in the area, many factories closed, including the glass factory that was the largest employer in the province. As a result, the unemployment rate skyrocketed, and many young men were looking for ways to support their families. In 2005, members of Al Qaeda could maneuver throughout the city virtually at their discretion. Along with this freedom of maneuver came the opportunity to threaten, coerce, and influence the local populace and to emplace complex subsurface IEDs, with devastating effects.

The tactical fight in Ramadi lacked the continuous kinetic nature that resulted in the demise of thousands of insurgents in Fallujah; this was a battle against an enemy with no face. U.S. combat engineers cleared the same routes each night to open up the lines of communication throughout the city in order to allow freedom of maneuver to Soldiers and Marines of the 2d BCT. This urban route clearance effort was incredibly frustrating for the engineers, since frequently they would clear a route and remove an IED, then proof the route a few hours later, only to find another IED in the same hole. While it was frustrating work, it was also necessary work; if the insurgents had the will to emplace IEDs, then the engineers needed to match that will with the effort to quickly locate and remove them. U.S. combat engineers performed magnificently at this task.

Evolution of IED Initiation Systems

Technology played a significant role in the counter-improvised explosive device (C-IED) fight, and the division and battalion information management resources were integrally involved in the incorporation of frequency technology into the tactical fight. Initially, insurgents in Ramadi used command-detonated initiation systems, which used signals from key fobs, garage door openers, toy remote-control units, and two-way radios. Engineers counteracted this signal using IED countermeasure equipment that jammed the signals intended to detonate the device. As U.S. forces became more proficient at locating

IEDs and preventing their detonation, the insurgents transitioned to using long-range cordless telephones, which had a much more powerful signal, to initiate detonations. U.S. forces countered by using a stronger jamming signal. The C-IED fight escalated and the insurgents transitioned to using pressure-activated and passive/active infrared initiating systems, which are as easily activated by innocent civilians as they are by coalition forces. This tactic began to telegraph to the local population the "win by all means, at all costs" philosophy of Al Qaeda, who explain away the injury and death of innocent civilians as "the will of God."

Going After the Emplacer

Targeting the IED itself was not resolving the bigger problem. To truly engage the problem at a higher level, it was necessary to get inside the decision-making process of the individuals who emplaced the IEDs. Specifically, answers were needed to three questions:

- Where was the enemy?
- When would he be there?
- How could he be attacked?

Information from an existing database helped to locate the enemy and plot his locations on a map by using commercial off-the-shelf (COTS) software. It was a bit more challenging to determine when he would be at each location. Using another COTS system, the amount of time between attacks and finds at each location was calculated. The IED emplacers had a system: they located a place and time when they could safely drop off the components and set up an IED. Once the IED detonated, they would go back and reseed the same general location with another IED at the same time of day. Once the location and reseed time were identified, it could be determined which areas were likely to be reseeded soon. This became part of the battalion's information exchange with the maneuver commanders, who in turn pushed this data out to their respective task forces as actionable intelligence against which they could direct combat power. This engineer effort allowed the commanders to implement their skills and military art in taking out the IED emplacers, a mission that was accomplished with great success across Anbar Province—particularly in Ramadi—as 2005 progressed. Engineers who followed in the route clearance effort, including the 54th and 321st Engineer Battalions, built on this effort.

The enemy in Anbar Province was influenced by human nature, which meant that he found and frequented favorite spots to emplace IEDs. While some of these spots merited continuous clearance operations, others did not. The 244th had a tool to help it focus on where the enemy would be and when he would be there. Human nature led him back to locations where he'd had success, until he was either interdicted (which we controlled) or until he changed his mind (which he controlled). For an enemy that was hard to see, we had an opportunity to meet him by following him to his favorite locations, watching his patterns through collected data, and calculating when we would have our meeting. The C-IED fight was challenging, dangerous, and frustrating, but determined combat engineers—armed with the tools and intelligence of the battalion, brigade, and division staffs—succeeded in turning the trend established in October 2004, when 70 percent of IEDs were located when they successfully detonated on a vehicle. By December 2005, more than 70 percent of the IEDs in the province were located by mechanical or visual means and only 30 percent were successful in engaging targets. While the commanding general's objective was achieved, this was but the first step of a long campaign.

Leaders of the 1st and 2d Marine Divisions pose during their transfer of authority conference.

News of the 224th Engineer Battalion's use of COTS software to analyze data from existing databases arrived at the Joint IED Defeat Task Force in midsummer 2005, and the task force commander visited the 224th in Ramadi. After participating in a route clearance mission there, using the battalion S-2's projection tools and operating picture, he said that the S-2 section provided more real-time, usable, and actionable intelligence than any other S-2 section he had ever seen. An overview of the process was briefed for the staffs of the 101st Airborne and 3d Infantry Divisions, the 130th Engineer Brigade, and other organizations.

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long-established crawl-walk-run methodology. This is when "infield practice" occurs as staffs/teams work through standard battle drills, staff processes, and knowledge management practices. These tailored training events may be single or multiple echelons and are supported by the BCTC's unique set of training enabler capabilities, including the Joint Land Component Constructive Training Capability (JLCCTC), Battle Command Staff Trainer (BCST), and virtual and gaming systems—such as HUMINT (human intelligence) Control Cell (HCC) and Virtual Battlespace System 2 (VBS2™). An example of a highly integrated multiple echelon CPX may include a brigade TOC, several battalion TOCs, and several company command posts/company intelligence support teams (CoIST) executing their mission with a full complement of battle command technologies to provide communications and situational awareness—as well as a platoon or squad performing missions within a VBS2 scenario. These CPX solutions serve to guarantee success of staffs and teams in their culminating training event (CTE) and ultimately in their downrange mission.

The Army's evolving battle command training requirements are no different than the age-old individual and collective common task training (CTT)—the shortstop needs to know how to field the ball and what play to make, and the team must know what to expect. The BTP developed at the Fort Bragg BCTC provides the training solutions necessary to bridge the current gap in battle command training and serve as the home station nucleus of the Army's current live, virtual, constructive, and gaming (LVCG) and future integrated training environment (ITE) initiatives. BCTCs are poised to continue leading the way as the Army faces the daunting task of delivering relevant and realistic training for its ever-expanding "digital tool kit" in the 21st century.

It is "game time," the final phase of an operation: Two of three objectives have been achieved; the enemy is neutralized, and remaining threats are in retreat; a size, activity, location, and time (SALT) report on a possible vehicle-borne improvised explosive device (VBIED) is received via BFT; and this is a commander's critical intelligence requirement (CCIR). What does the operator do, and how does he do it? What is the battle drill, and how does the staff execute it? With fundamentals learned through specificity and repetition at a home station BCTC, the team will make the split-second decision, complete the play, and win.

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More information about the XVIII Airborne Corps BCTC training program may be found at Army Knowledge Online (AKO), <*http://bit.ly/BCTC-on-AKO*>, and by visiting the BCTC on Facebook and Twitter.

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Contributions of the Engineer Regiment

Much has been written about the transition of the people of Anbar Province from active support for the insurgency in late 2004 and 2005, to neutrality, to eventual support for the coalition. The insurgency was more focused on reinforcing anarchy and disrupting security and stability than it was concerned with the welfare of the people; certainly this contributed to its demise in the province. There were many factors contributing to the success of U.S. forces in this part of Iraq. One key was the investment of 4,000 combat troops during the surge, since it provided commanders with options and flexibility and demonstrated commitment to the citizens. Much of the credit goes to the sheiks, imams, and local mayors, who led the Sunni Awakening movement at great risk to themselves. In addition, it took the exhaustive efforts of the II MEF and its ground combat element, the 2d MarDiv, to endure what amounted to an economy-of-force strategy in the province during the violent years of 2005–2006.

On 1 September 2008, the commander of U.S. forces in Anbar Province formally handed control to the people, an event that symbolized the greatest defeat of Al Qaeda since the Taliban had been initially dislodged in Afghanistan. The Engineer Regiment's leaders, noncommissioned officers, and Soldiers played a critical role in the tactical fight that set the conditions for slow but steady progress, resulting in a secure and stable environment in the province. The Regiment used initiative, flexibility, and ingenuity to provide the commanders with freedom of maneuver in their AOs in an environment of persistent unrest. It should come as no surprise that the C-IED fight in Anbar Province was executed with all three components of the Engineer Regiment: the 224th is an Army National Guard battalion, the 54th is an Active Army battalion, and the 321st is a United States Army Reserve battalion. It's an honor to serve.

Lieutenant Colonel Jacobus was a United States Army War College Senior Service Fellow at the Fletcher School of Law and Diplomacy at Tufts University when this article was written. He is currently the officer in charge of the Iowa National Guard Installation Component. He has served as Commander, Iowa Army National Guard Recruiting and Retention Battalion, and Commander, 224th Engineer Battalion, Iowa Army National Guard, including a deployment to support Operation Iraqi Freedom, where the 224th served as the divisional engineer battalion for the First, then the Second, Marine Division. He holds a bachelor's from the University of Iowa and a master's in public administration from Drake University.