Where Did the IEDs Go? Thoughts on Strategic and Operational Rear Areas

By Mr. William C. Dahms

"It is a myth that military organizations tend to do badly in each new war because they have studied too closely the last one; nothing could be farther from the truth. The fact is that military organizations, for the most part, study what makes them feel comfortable about themselves, not the uncongenial lessons of past conflicts. The result is that often militaries must relearn in combat and usually at a heavy cost; lessons that were readily apparent at the end of the last conflict."

—Williamson Murray[1]

During Operation Desert Shield/Storm in the early 1990s, the U.S. Army was unquestionably at its highest level of readiness. During the ensuing years leading up to 11 September 2001, Army forces gradually lost their overmatch advantage. That was a time of tranquil chaos. Our adversaries continued to examine our capabilities, attempting to better understand the magnitude and reach of our combat power. As a result, these adversaries began to formulate alternative means to threaten America. It was then that the world changed and a new era of threats that were not restrained by the previous global wars of World War I and World War II emerged. Improvised explosive devices (IEDs)—which, according to the National Security Strategy,[2] are one of the oldest forms of weapons that can be employed against any superior force—became the weapon of choice for the enemy against the United States in Iraq, Afghanistan, and South America. Our experience with IEDs and other explosive hazards (EH) had been limited to the Vietnam War and World War II.[3, 4, 5, 6]

History tends to repeat itself. For example, the recent Russian incursion into Ukraine was preceded by the Russian invasion of Crimea in 2014. However, with a return to large-scale combat operations (LSCO) and the advent of multidomain operations, the next conflict obviously will not be like those of last 2 decades. Although our adversaries will likely continue to employ IED capabilities, they will improve their effectiveness through the use of unmanned aerial vehicles for gathering intelligence, performing surveillance, conducting reconnaissance, and delivering lethal payloads. When coupled with more advanced robotics, autonomous platforms, artificial intelligence, and cyber/electromagnetic warfare operations, the protection challenge will be significant.

Our peer adversaries have already revealed how they intend to challenge us. They have created multiple layers of defensive standoff through their antiaccess and area denial systems. U.S. forces have superior weapons—maybe not in quantity, but in quality and reliability. The training proficiency and skill of U.S. forces are also superior. But what about our most vulnerable support areas, where there are fewer tactical units?

The solution to this issue most likely lies in the shaping of the environment, through the calibration of our forces, and the degree to which unified action partners are integrated. Protection, like any other response to a threat including IEDs EH is not a linear activity. It is dependent upon our ability to plan, prepare, execute, and assess our protective posture in a continuous and enduring manner. The key to success is sustaining a balanced protected support area, layered by depth, and an echelon enabled with speed and sufficient combat power while maintaining a high operational tempo.

Responsive and mobile sustainment must also keep pace with maneuver forces over extended distances. Let's set aside the discussion of tactical forces in our support areas and Threat Level I, II, and III concerns for a moment and focus on the obstacles to our freedom of movement that we are most likely to face in our support areas. Let's focus on IEDs and EH like unexploded ordnance, conventional mines, explosive booby traps, and explosive remnants of war in the battlespace. IEDs were unquestionably a challenge over the last 2 decades, and there is no clear indication that their use will be discontinued in future conflicts. IED attacks still occur daily, both abroad and in the homeland—yet, the terms IED and EH are mentioned only one time each in Army Doctrine Publication (ADP) 3-37, *Protection*[7]; the likelihood that EH will be encountered along routes is implied—but not specified—within the terms of area security and routes. So, what are we missing? We're missing the capacity for EH mitigation in our support areas and its integration into our area security activities.

Our strategic and operational support areas are vulnerable in a way that is similar to the vulnerabilities of our supply convoys of World War II. According to the March 2006 *Defense Science Board Report*, "When there are no front lines, all forces are at risk and logistics convoys, like merchant ship convoys of World War II, become 'movements to contact' or are targets for loosely organized enemy actions."[8]

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Many IED/EH employments may not be traditionally adversarial in nature (as when we are not at war) but tend to be more criminally or politically motivated and are reported with frequency. It is clear that our strategic and operational rear areas or support areas will continue to be vulnerable.

Lucrative locations, such as those containing transportation hubs, power or electrical substations, water supplies, sewage systems, administrative facilities, infrastructure, communications equipment, and religious convergencies will remain soft targets. This vulnerability affects our ability to project power and to sustain force tactical operations. In the past, we focused upon the effects to tactical operations. We now need to consider expanding the threat environment to include our support areas. Events in Ukraine serve as a recent example of how a combination of IEDs and technology can be employed against a superior force in order to delay, disrupt, deter, and deny operations and command and control. Other examples include the fighting in Crimea in 2014 and the little-known Karabakh War of 2020 between Azerbaijan and Armenia. A key theme of recent and historical events is clear: It is essential to have consistent sustainment flow to forward support areas in order to maintain offensive momentum.

During the February 2022 Maneuver Conference at Fort Benning, Georgia, 1st Cavalry Division leaders provided an insightful review of how they intend to initially fight in a LSCO environment. The vulnerabilities of our support areas were specifically called out during this conference. Operations in Crimea in 2014, Azerbaijan in 2020, and Ukraine in 2022 have made it clear that mines, IEDs, and other EH will remain a part of the future battlefield; where and how these explosives are used are what we need to prepare for now. It is clear that, for successful operations, the penetration division requires a protection brigade and substantial reinforcements. This includes an engineer brigade just to mitigate risks associated with gap crossings (LSCO Gap 8) to set conditions for operational success. The general nature of a heavy-division fight is as a high-risk/high-reward operation. U.S. Marine Corps leaders are also advocating for the reestablishment of counter-improvised explosive device (C-IED) programs and training before deployments.[9] Naturally, commanders are in favor of risk reduction and advocate for what their experiences have shown to be effective ends-ways-means risk. Risk mitigation and force structure/budgetary restrictions are two parts of the Army and Marine Corps challenge. The ability to balance threats against force structure with the reality of our budget and manpower limitations will remain a significant challenge to both Services.

When considering how EH may be viewed on the future battlefield in the context of protection, some specific questions come to mind. We have an opportunity to address identified shortfalls, while preparing the best we can for future conflicts. With some modifications, the protection brigade for EH operations is needed to augment LSCO operations. To that end, the following thought-provoking questions should be asked and addressed:

- Has the Army adequately designed the protection brigade to conduct C-IED operations for corps and divisions?
- Does the Army have enough capacity to mitigate the effects of EH in our support areas in terms of route clearance companies, explosive-ordnance disposal, engineer brigades/battalions, or EH coordination cells or organizations?
- How would adversaries most likely employ IEDs during LSCO?
- Is the United States adequately training Soldiers and combined arms formations to mitigate the effects of EH in support areas?
- Where can commanders receive attack-the-network/network engagement, military search, and site-exploitation training?
- Will military search (intermediate and advanced) and site exploitation operations be needed?

Fortunately, the purpose of the Counter Explosive Hazards Center (CEHC), Fort Leonard Wood, Missouri, is to preserve the fighting force by providing EH awareness to deploying forces, assisting in identifying and fielding viable countermeasure solutions and technologies, and developing the intellectual and situational superiority of combat units. CEHC also collects, analyzes, and stores C-IED/EH information in such a manner as to allow easy access by warfighters. The repository is aligned with the current U.S. Army "C-IED Strategy Lines of Effort."[10] Each line of effort is organized with knowledge from past conflicts and a mix of historical, current, and technical resources. Community resources for C-IED/EH Army professionals are available at: <https://www.milsuite.mil/book/community/spaces/apf/counter-ied> (common access card-enabled/protected).

Endnotes:

[1]Williamson Murray, "Thinking about Innovation," *Naval College Review*, Vol. 54, Issue 2, 2001, <https://digital-commons.usnwc.edu/nwc-review/vol54/iss2/11>, accessed on 9 September 2022.

(Continued on page 39)

traverse through wooded terrain—and they were still capable of digging the necessary fighting positions.

Based on an assessment of overall mission and applicability, miniature excavators are a beneficial asset for supporting an infantry brigade combat team in the defense. One constraint that was identified was the limited power of the vehicles. Difficulties were encountered with the rubber-tracked miniature excavators in the woods under the adverse weather conditions. In one case, a miniature excavator threw track and it took an experienced operator 45 minutes to recover the vehicle from the muddy terrain. The open cab of the excavator also posed a threat to the operator, who had no protection from external hazards. Further iterations of integration testing revealed that it took more than 30 minutes to load and unload the miniature excavators on the trailers, which also significantly slowed progress.

Conclusion

Altogether, miniature excavators are useful dig assets that can be used to accomplish the mission of rapid engineer support via air assault. The ability to quickly transport miniature excavators via air increases the amount of dig time available to the maneuver unit before the "no-later-than" defend time. These assets should be allocated to the supported unit from the onset of the operation, offsetting the delay in further assets arriving via ground. The major constraint is that miniature excavators are not included in the BEB MTOE or Army inventory. Possible resourcing solutions include submitting a request for needed equipment to the division acquisition review board. Through this process, types of equipment not currently residing in the unit are reviewed and may be validated and approved for funding. The addition of miniature excavators could provide the BEB with the adaptability necessary for diverse missions and the capability of restructuring to compete in future large-scale combat operations.

Endnotes:

[1]*101st Airborne Division (Air Assault) Gold Book*, U.S. Army, February 2019.

[2]FM 3-99, *Airborne and Air Assault Operations*, 6 March 2015, p. 8-2.

[3]TM 4-48.11, *Multiservice Helicopter Sling Load: Dual-Point Load Rigging Procedures*, 5 July 2013.

[4]ATP 3-21.8, *Infantry Platoon and Squad*, 12 April 2016.

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("Where Did the IEDs Go? . . . ," continued from page 17)

[2]*Standing Well Back* website, <https:\\standingwellback.com>, accessed on 1 September 2022.

[3]Glenn K. Otis, "Threat to the Rear: Real or Myth?" Land Warfare Paper No. 2, Association of the U.S. Army, November 1989, <https://www.ausa.org/sites/default/files/LWP-2-Threat-to-the-Rear-Real-or-Myth.pdf>, accessed on 2 September 2022.

[4]Mark Gilchrist, "Reconsidering Rear Area Security—The 101st Airborne Experience During Operation Market Garden," *The Strategy Bridge*, 17 September 2017, <https://thestrategybridge.org/the-bridge/2017/9/17/reconsidering-rear-area-security>, accessed on 1 September 2022.

[5]Lester Grau and Charles Bartles, *The Russian Way of War: Force Structure, Tactics, and Modernization of the Russian Ground Forces*, Foreign Military Studies Office, Fort Leavenworth, Kansas, 2016.

[6]Marc Tranchemontagne, "The Enduring IED Problem: Why We Need Doctrine," *Joint Force Quarterly 80*, 1st quarter, 2016, <https://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-80/Article/643235/the-enduring-ied-problem-why-we-need-doctrine/>, accessed on 1 September 2022.

[7]ADP 3-37, *Protection*, 31 July 2019.

[8]*Defense Science Board Report*, March 2006, <https//dsb.cto.mil>, accessed on 9 September 2022.

[9]Marine Corps Order (MCO) 3502.10, *Counter-Improvised Explosive Device Training and Education Program*, 11 December 2018, <https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/1714284/mco-350210/>, accessed on 9 September 2022.

[10]"C-IED Strategy Lines of Effort," U.S. Army, 2022, <https://www.milsuite.mil/book/community/spaces/apf/counter-ied>, accessed on 9 September 2022.

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