Countering Weapons of Mass Destruction:

The Mission That Every Unit in the Army Has... But Doesn't Know It... Yet

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In an increasingly volatile, uncertain, complex and ambiguous operating environment, not many things in the world are certain.[1] One thing that is certain is that conventional forces will have a significant role to play in countering weapons of mass destruction (CWMD) operations. Therefore, all conventional units in the U.S. Army need to be familiar with the concepts of CWMD operations because units could potentially face WMD on the battlefield or during stability operations.

This article is a synthesis of the lessons learned from the year and a half that the 1st Battalion, 16th Infantry Regiment spent training and serving as a CWMD task force in the Republic of Korea (RoK). The following will discuss the mission, how to train for it, and challenges that exist in current CWMD operations.

CWMD operations are defined as "activities across the U.S. government to ensure that the United States, its armed forces, allies, partners, and interests are not attacked or coerced by actors of concern possessing [WMD]. CWMD operations are inclusive to the prevention of the use of nuclear and radiological weapons, biological weapons, chemical weapons [and] cruise and ballistic missiles, or other improvised mass-destruction weapons."[2]

From the perspective of conventional forces, we often view these functions as responsibilities of politicians or leaders in the Department of State, but the fact is that we all have valuable roles to play in CWMD. CWMD operations are essential in preventing the spread of technology or means of its implementation by both actors and non-state actors.

Since we all have a role, we all need to better understand the role of conventional forces.

Soldiers from the 23rd Chemical Battalion, 2nd Infantry Division/ROK-U.S. Combined Division analyze simulated chemical substances during an exercise in the Republic of Korea on 15 February 2017. (Photo by CPT Jonathan Camire)

Why Conventional Forces?

The size and scope of CWMD operations are too large for special purpose forces alone to execute. For example, in North Korea, there are thousands of possible CWMD special-interest sites.[3] Locating, exploiting, and securing all these sites could take months, if not years, to complete. Even if the North Korean regime collapses from internal pressure or external conflict, the problem would remain.

In the event of the collapse of any other foreign country, the security of possible WMD sites would be a mission that U.S. and coalition forces will assume.

While North Korea is the most notable modern example, the possibility of these types of operations extends to operations in wartime or even in peace. CWMD exists in offense, defense, stability, and defense support of civil authorities (DSCA) operations.

CWMD History

CWMD operations are nothing new. Since 1945, it is clear that maintaining the technological advantage the United States has over its peers is key to keeping the current world order. The proliferation of technologies and WMD unsettles the world order and causes strategic shifts in the balance of power.

For example, in the days following Germany's collapse in 1945 and that of the Union of Soviet Socialist Republics (USSR) in 1991, the proliferation of weapons and technologies established the foundation of the current world order. When Germany collapsed, both the United States and the USSR raced across Europe to secure V-2 rocket and research sites. Following the USSR's collapse, both state and non-state entities acquired WMDs and associated technologies, spreading the threat of new WMD-armed states.

Looking to the future, the likelihood increases of a breach in the security of a WMD or the frightening use of WMDs against military or civilian targets. In the past, only state actors employed WMD. However, in the future, non-state actors could play a more significant role in developing or employing WMDs. Therefore, securing possible WMD sites will continue to play a considerable strategic role in maintaining the worldwide balance of power and defending U.S. strategic interests.

Agencies like the International Atomic Energy Agency (https://www.iaea.org) and the Comprehensive Nuclear-Test-Ban Treaty Organization (https://www.ctbto.org) exist to monitor the use of nuclear and WMD materials around the world. These organizations are comprised of scientists and specialists with specific knowledge of WMDs, but these organizations are tiny. While they maintain all the core knowledge on WMDs, they do not have the requisite manpower to execute on behalf of the United Nations or the United States. Augmentation and development of specialized task forces are the means by which CMWD operations become feasible.

A myriad of organizations and stakeholders in CWMD operations come together to form CWMD task forces. Much like in the aftermath of World War II, conventional forces are assigned to enable specialized teams to secure materials by providing security and ensuring mobility in and around WMD areas.

Mission

The mission of a CMWD task force is to secure the zone surrounding a potential WMD site to allow specialists to exploit the site for materials or intelligence. WMD sites are high-security assets of nation-states. Nation-states often hide their high-security research and military facilities to protect their assets. High-level reconnaissance assets of the United States and its allies have tens of thousands of potential sites around the world under surveillance. The CWMD forces' main mission is to confirm or deny what reconnaissance assets report and to secure the potential WMD site until completion of exploitation, when a designated authority assumes responsibility for the site.

Currently more than 40 countries possess chemical, biological, radiological and/or nuclear (CBRN) capabilities.[4] While many of these countries don't want to use their current capabilities to engage in offensive operations, there is risk of the technology, information, and materials falling into the hands of rogue states or terrorist organizations.

The risk in unstable countries of the intentional or unintentional loss of WMDs is extremely high. These countries all possess varying levels of technology to maintain their stockpiles, but if a nation collapses, the risk to proliferation is high.

The facilities and sites in question generally vary in size, scope, and complexity. A site may be a basic chemical

A Soldier with the 1st Armored Brigade Combat Team, 1st Infantry Division uses a handheld chemical detection device during a chemical, biological, radiological, and nuclear training event at Camp Casey, Republic of Korea, on 16 October 2016. (Photo by SSG Warren W. Wright)

storage facility that has a primary responsibility of temporarily storing filled chemical munitions. In comparison, the Yongbyon Nuclear Scientific Research Center in North Korea spans nearly nine square kilometers and is comprised of roughly 390 buildings with about 15,000 workers.[5] A large site such as Yongbyon may require simultaneous efforts of containment, isolation, clearing, and exploitation; this is a difficult process even during peacetime conditions.

Nation-states harden their critical facilities and use underground facilities (UGFs) to protect critical assets from observation or exploitation. UGFs such as the Punggye-ri Nuclear Test Facility in North Korea demand extensive mission planning and equipment not organic to many CWMD task forces. These complexities, combined with the lack of information on the locations, reinforce the need for units to train for many contingencies.

The sheer size of some of these facilities will require CWMD task forces to spend an extended period completing thorough exploitation. Units will need specific equipment and weapon systems to execute underground operations. For this reason, sustainment and a resupply plan for all classes of supply must be included during mission planning.

Planning Considerations

CWMD operations include special planning considerations for the battalion. These considerations include air assault operations, ground-movement operations, integration of specialized enablers, forward passage with coalition partners or U.S. forces, and the handoff of the site to a designated authority. All these planning considerations are significant factors for CWMD operations that could last several days to several months.

The most efficient means of quickly moving troops to the area is air movement via helicopter. The 101st Airborne Division's (Air Assault) Gold Book aids in hasty air assault planning. The necessity of speed in operations is vital in moving critical assets around the battlespace.

The limited number of specialized enablers for CWMD operations makes the employment of these assets rapidly and efficiently crucial to mission success. That's why air assault operations are preferred to enable the rapid confirmation or denial of CWMD sites. If reconnaissance assets arrive early, they can confirm or deny the presence of WMDs and save the task force from wasting valuable time on a dry hole.

Specialized enablers assigned to the CWMD task force enable the maneuver force to detect WMD rapidly and to determine courses of action for confirmed WMD. These enablers are:

• The hazard assessment platoon (HAP) is a reconnaissance asset used to identify WMD. This asset is one of the first to be employed on the site to confirm what maneuver forces may have already detected through ground reconnaissance. HAPs are task organized to chemical brigades in the U.S. Army.

• The tactical human intelligence team (THT) is a brigade-level asset assigned to assist the maneuver unit with tactical questioning of personnel at the objective. Many CWMD sites contain a myriad of scientists, security forces, civilian workers, and their associated families. A rapid tactical examination can render valuable intelligence to the maneuver force.

• The chemical response team (CRT) is an asset that provides systems and equipment to help render an objective safe and to conduct exploitation within a facility, making recommendations for courses of action about items found on the objective. The CRT is also a unit task organized within a chemical brigade.

Each one of these assets has specialized equipment and personnel factored into mission planning.

CWMD task forces must also be experts in forward passage-of-lines (FPOL) and rearward passage-of-lines operations. In most cases, the CWMD task force conducts FPOL through a coalition or U.S. unit as those units move the forward edge of the battle area. The units that make initial contact with these sites secure an outer cordon and request the CWMD task force to move forward to assume the inner cordon and execute exploitation operations. Units may work together for the first time as the CWMD task force arrives on site to conduct the initial assessment. CWMD task forces will work across unit boundaries and battlespace. This cross-boundary use of the CWMD task force adds to the complexities of clearance of fires, air corridors, and sustainment operations.

The planning assumption is that the operations will exceed 24-48 hours for a small facility. Larger sites may require 30 days or longer. Sustainment becomes an issue beyond what the initial air movement brings forward. The CWMD task force will secure and exploit facilities that are widely dispersed over the battlespace or in remote areas. The vast expanse of operations can require the CWMD task force to develop multiple mission-command nodes to maintain mission command with units on the ground and the various headquarters with which those units are aligned.

Training

During our battalion's train-up for deployment to the RoK, we worked alongside the Asymmetric Warfare Group (AWG) to prepare for CWMD operations. Initial notification that we would assume the CWMD mission allowed only three months before the deployment to prepare for a mission that no one in our combined arms battalion knew how to do. With only a short amount of time to prepare for the mission, AWG was the only resource in the U.S. Army that allowed us to rapidly overcome our knowledge gap. AWG introduced us to the basics of CWMD planning, CWMD operations, and UGF operations. We worked in partnership with AWG throughout our brief train-up and during the deployment to the RoK.

AWG assisted the 1-16 Infantry companies in focusing their efforts on company- and platoon-level training. The interactions centered on planning considerations; tactics, techniques and procedures (TTPs); communication; and recommended equipment. Before 1-16's National Training Center (NTC) rotation, AWG conducted classroom instruction with teams, squads, platoon leaders, and company commanders. These classes and the associated training helped leaders across the battalion understand CWMD operations and how to train CWMD within the battalion.

During NTC Rotation 16-08, the battalion received all the specialized enablers and assistance from AWG to execute the rotational CWMD mission. The NTC rotation was the first time the battalion was able to work directly with all the specialized assets in a training environment. The battalion received HAP, CRT, THT, and a nuclear disarmament team (NDT) for the military decision-making process and mission execution. This experience helped the battalion tie theory to application, and it served as the pre-deployment culminating exercise.

The battalion took the after action review from NTC and directly applied it to its training glidepath for deployment to Korea. Training in the RoK started with a CBRN academy to train new members of the battalion and to certify leaders. Training then moved to the execution of two 2nd Infantry Division Warrior Strike exercises. These exercises

helped refine 1-16's TTPs and mission planning, combined air/ground operations, air assaults, operational decontamination, CBRN academies, and combined training with the RoK Army. Each training event included comprehensive enabler-integration training and coordination with the aviation brigade, the organic chemical battalion in Korea, the brigade's organic dismounted engineers, and the RoK Army. This glidepath enabled our battalion to achieve success in all training objectives during the Warrior Strike exercises.

Equipment

The current modified table of organization and equipment (MTOE) of an armored brigade combat team has capability gaps that were identified during training in Korea. Throughout the leader training program, NTC rotation, and several CBRN academy training events, the AWG assisted in developing an operational needs statement (ONS) aimed at closing these gaps.

The current combined arms battalion MTOE does not support CWMD operations. To conduct the assigned air assault/CWMD operations, mechanized infantry companies require equipment and quantities more suitable to light infantry operations. Units will require enhancement of their mission-command systems with equipment such as Iridium Phones, PRC-150 manpacks, PRC-152s, and dismounted power amps. Platoon and smaller elements will need reachback capabilities with their higher headquarters while the battalion takes necessary steps to bring command-and-control systems forward.

UGF operations will require specific equipment to navigate/orient underground. This equipment includes M4 flashlights with pressure switches, night-observation device compasses, and underground communications equipment.

Mission Command

In CWMD operations, units move rapidly over long distances to multiple sites throughout various friendly forces' battlespace. Multiple mission-command nodes and means of communication are necessary to support mission success. When passing information over long distances among different levels of command, there are several

Soldiers from 1st Battalion, 16th Infantry Regiment, 1st Armored Brigade Combat Team, 1st Infantry Division, prepare to conduct an attack on simulated enemy forces during an exercise at the Rodriguez Live-Fire Complex in the Republic of Korea on 16 February 2017. (Photo by CPT Jonathan Camire)

critical pieces of equipment that need to be present in the tactical command post (TAC) and the tactical operations center (TOC): satellite communication system; high-frequency radio system; Joint Capabilities Release, a software-enhanced version of Force XXI Battle Command Brigade-and-Below/Blue Force Tracking; and a Combined Operational Very Small Aperture Terminal Network-Korea Lite (COVN-K) that enables the tactical Combined Enterprise Regional Information Exchange in a small, more portable package. Given the terrain surrounding most of the templated WMD sites, any wave-based communication system is an unreliable method beyond a clear line of sight.

All nodes must train to support dispersed mission command over rough terrain. As an air assault CWMD task force, we focused on developing our initial element with necessary staff members, enablers, and required equipment. This initial element acted as the TOC for the first identified objective. The remaining personnel established a TAC and waited on standby to conduct a ground movement to support the TOC or prepare for a subsequent air assault to a follow-on objective. The liaison officer (LNO) team serves as the initial link-up element with coalition or U.S. forces, and it facilitates the battalion's FPOL.

Conclusion

Unless the United States and its allies can control and prevent the proliferation of WMDs, we face the stark possibility that these deadly weapons will be used in our lifetimes. We do not know where we will execute CWMD operations around the world, but that should not give us pause. It is not a question of if we will do CWMD operations — rather, it is a question of when.

Leaders should continue to exercise their systems to execute CWMD operations with their current forces and equipment. They should also continue to refine equipment requests to bring CWMD task forces to a higher level of readiness. Units must remain ready to do their part in enabling strategic assets to execute their assigned missions. If we fail to do our mission, we risk the dystopian "sticks and stones" future forewarned by Albert Einstein. ("I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones.")

Notes

[1] U.S. Army Heritage and Education Center, "Who first originated the term VUCA [volatility, uncertainty, complexity and ambiguity]?" accessed from http://usawc.libanswers.com/faq/84869 on 22 February 2019.
[2] Joint Publication 3-40, *Countering Weapons of Mass Destruction*, 2014.
[3] Nuclear Threat Initiative, North Korea overview, accessed from https://www.nti.org/learn/countries/north-korea/facilities/ on 15 January 2019.
[4] Nuclear Threat Initiative, country profiles," accessed from https://www.nti.org/learn/countries/ on 18 January 2019.
[5] Nuclear Threat Initiative, Yonghbyon Nuclear Research Center, accessed from https://www.nti.org/learn/facilities/777/ on 22 February 2019.

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