

The Challenge of Countering Weapons of Mass Destruction on the Korean Peninsula

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eapons of mass destruction (WMD) create challenges for the U.S. Army that will not go away in the near term. It is

apparent that the future operating environment will include a variety of state or nonstate actors that will seek to counter U.S. influence or hold U.S. or allied forces at risk through WMD programs. Possible scenarios involving WMD span from the relatively benign, where a nation requests U.S. assistance in dismantling its own WMD program, to cases where adversary states willingly provide WMD to nonstate actors and encourage their use against American interests. The U.S. Army specifically, the conventional force—should take steps to prepare for countering WMD (CWMD) operations.

This article discusses the way in which the 2nd Infantry Division prepares for CWMD operations on the Korean Peninsula. First, it is necessary to understand the strategic background driving the requirement for developing a CWMD capability on the Korean Peninsula.

Weapons of Mass Destruction Elimination Operations Background

Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms (8 November 2010, as amended through 16 July 2014), defines WMD as "chemical, biological, radiological, or nuclear weapons capable of a high order of destruction or causing mass casualties, excluding the means of transporting or propelling the weapon where such means is a separable and divisible part from the weapon." CWMD was formerly referred to as WMD elimination, or WMD-E. As described in the 2014 Department of Defense Strategy for Countering Weapons of Mass Destruction, CWMD is a broad term used strategically to describe the full range of Department of Defense (DOD) and greater United States government efforts undertaken to ensure "the United States and its allies and partners are neither attacked nor coerced by actors with WMD."1 Since CWMD is such a broad and inclusive term in the recently published CWMD strategy document, it is necessary to further define its use here. In this article, CWMD is used specifically to describe the collective tasks identified in FM 7-15, The Army Universal Task List, Article 6.9.2.3, "Conduct Weapons of Mass Destruction Elimination Operations," as "actions undertaken in a hostile or uncertain environment to systematically locate, characterize, secure, and disable, or destroy WMD programs and related capabilities."2

Formerly the primary responsibility of niche units with specialized capabilities, such as special operations forces and technical escort units operating in specific geographic locations (such as Korea), the requirement for Army forces to understand and prepare for CWMD operations now crosses components and geographic combatant commands. CWMD operations are likely to involve direct participation by Army conventional forces.

Since 2011, the United States and its allies have conducted CWMD operations in Libya and Syria, while continuing to deter conflict with an emergent nuclear power on the Korean Peninsula. In 2012, the president issued a clear mandate stressing the importance of CWMD:

The proliferation of nuclear, biological, and chemical weapons technology has the potential to magnify the threats posed by regional state actors. ... Accordingly, the Department of Defense will continue to enhance its capabilities, acting with an array of domestic and foreign partners, to conduct effective operations to counter the proliferation of WMD.³

Similarly, the national defense strategy charges the DOD with developing capabilities to counter WMD. The 2014 Department of Defense Strategy for Countering Weapons of Mass Destruction expands the range of CWMD options to include a whole-of-government approach, taking advantage of enablers and specialty capabilities not resident in the DOD.⁴ The Capstone Concept for Joint Operations: Joint Force 2020 envisions a near-future operating environment where the United States government leverages all instruments of U.S. national power to conduct global CWMD operations.⁵ The U.S. Army supports the joint force by providing a force trained and ready to execute CWMD, specifically through CWMD operations. The CWMD mission has clearly moved out of the exclusive realm of Army special operations and is becoming more and more relevant across the entire conventional force.

Recent CWMD Initiatives

At the tactical level, the CWMD mission applies to several division headquarters and brigade combat teams (BCTs). In 2010, the 2nd Infantry Division's primary focus in the event of major combat operations or a North Korean collapse became the elimination of the North's WMD platforms and programs. The 2nd Infantry Division knows its adversary and operating environment. However, this responsibility extends beyond the forces permanently stationed on the peninsula to include BCTs tasked to deploy and fight with the division. For example, the 82nd Airborne Division, as the global response force, also shares a responsibility for executing CWMD operations; however, it differs from the 2nd Infantry Division in that it must prepare for a much broader and more inclusive range of potential adversaries and operating environments.

Other divisions could have a share of the potential CWMD tasks in troubled locations around the world. Consequently, in the future, regionally aligned forces to the Pacific, as well as rotational BCTs to the Korean theater of operations, will also be required to train on the CWMD mission set. Given this wide range of possible operating environments, commanders should understand the basic CWMD tactical tasks and prepare their forces accordingly.

The requirement to prepare forces for CWMD operations is also apparent across the Army's training and support institutions. At the time of this writing, the Army's Capabilities and Integration Center is developing the CWMD requirements and associated capabilities for the Army of 2020.

Additionally, the National Training Center and the Joint Readiness Training Center, in coordination with the 20th Chemical, Biological, Radiological, Nuclear,



Soldiers take a break during a mission at Camp Stanley, South Korea, 9 November 2011. The 23rd Chemical Battalion and 110th Chemical Battalion soldiers, from Joint Base Lewis-McChord, Wash., participated in Operation Saber Strike II, a combined U.S. and Republic of Korea exercise that focused on detection of, identification of, and defense against chemical, biological, radiological, and nuclear threats. (Photo by Staff Sgt. Antwaun Parrish, 5th Mobile Public Affairs Detachment)

and High-Yield Explosives (CBRNE) Command and other organizations, and in collaboration with the 2nd Infantry Division, are expanding their facilities and changing exercise scenarios to incorporate CWMD missions in iteratively greater complexity.⁶

Also, the Mission Command Center of Excellence and the Maneuver Support Center of Excellence are working to capture the lessons learned from each of these training rotations and incorporate those lessons into emerging doctrine for CWMD operations.

While these organizations continue to develop the tasks to support the CWMD fight, numerous others are making major contributions to the force in training and equipping, in contributing subject matter expertise and advanced modeling and simulation, and in serving as a conduit to the interagency community. These include the Asymmetric Warfare Group, the Joint Improvised Explosive Device-Defeat Organization, the Defense Threat Reduction Agency, the U.S. Strategic Command Center for Combating Weapons of Mass Destruction, and the newly activated Standing Joint Force Headquarters for WMD Elimination.

This growing community of interest demonstrates the large number of joint and interagency stakeholders in CWMD.

Meanwhile, the 2nd Infantry Division, in partner-

ship with the Republic of Korea (ROK) Army, has conducted a two-year-long series of increasingly complex CWMDfocused training events. These have included both live and virtual training exercises, leveraging the training venues available in the ROK.

Beginning with a basic command, control, computers, and intelligence integration exercise, training has since evolved into combined ROK-U.S. exercises, integrating conventional forces, special operations forces, specialized CBRNE elements, and explosive ordnance disposal elements. This process provided numerous lessons and revealed a number of capability gaps associated with the division's ability to execute CWMD operations.

During a recent conference with Naval Postgraduate School students, Maj. Gen. Thomas Vandal, commanding general of the 2nd Infantry Division, noted, "If anything, the emphasis we've placed on this mission and on training for it has highlighted how far yet we have to go."⁷ The complexities inherent in CWMD missions run the full spectrum: from policy issues that have the potential to affect tactical operations, to materiel gaps, to emerging doctrine and tactics, techniques, and procedures.

Tactical CWMD Challenges

Tactical CWMD operations pose unique challenges to maneuver forces. First, conventional forces tasked with CWMD may not necessarily own their operational area. Those forces may have a requirement to isolate, seize, and secure certain facilities; yet, they could be required to coordinate—gain permission of allies—to move through friendly operational areas to the specified objective. Units can expect to execute passages of lines across each individual alliance unit boundary to their assigned objective area. Therefore, each phase of a CWMD mission may be conducted in an environment where movement is constrained by the speed and quality of coordination with the terrain owner. Additionally, operational areas, designated by allied or coalition units, are small enough to effectively limit the effects a commander can employ inside them.

A unit that does not own the terrain may be executing CWMD operations within another force's operational area, with a lack of compatible communications systems, and with friendly units comprised largely of an amalgam of survivors from former jihadist formations that the United States spent over a decade fighting in Iraq and Afghanistan. This is the scenario that Army conventional forces could face in a number of places throughout the Middle East and North Africa today.

In contrast, although the 2nd Infantry Division would operate in an environment where it has lived and trained for over 60 years, the process of coordinating movement and operations is uniquely complex and challenging. This coordination requires a minimum of five combat support liaison teams, each composed of 20 to 25 soldiers, embedded with five different ROK Army corps headquarters. These teams are not standard table-of-organization-and-equipment elements, which requires the division to create them from within the staff. During combat operations, the division would likely reduce its staff by more than 100 personnel to meet these liaison requirements.

The 2nd Infantry Division headquarters is able to train for this coordination routinely through a robust annual exercise program. Two theater exercises and one to two division command post exercises afford the division the ability to train with its ROK Army partners. Additionally, echelons from platoon to brigade headquarters routinely train with ROK Army units, further building the common understanding necessary for interoperability. This would not be the case with a contingency CWMD operation in another theater. Units should prepare to create liaison teams to support



operations within a yet unnamed partner's operational area.

Preparing for CWMD Tactical Operations

One of the first lessons that the 2nd Infantry Division learned as it began focusing on CWMD is that these operations are not raids; they are deliberate combined arms maneuver operations conducted over extended periods. U.S. Army units excel at the rapid isolation, seizure, and securing of terrain.

However, CWMD missions extend beyond taking control of a piece of ground. The time involved in the exploitation phase of a CWMD operation in an



industrial-sized WMD complex—using explosive ordnance disposal, *s*pecialty CBRNE forces, and military intelligence units—is almost impossible to estimate until the force is physically on the objective and the various technical enablers conduct an initial tactical site exploitation and facilities assessment. Depending on the size of the objective, this process alone can take several days. Often, depending on what the unit finds on site, the reward for success could be a lengthy stay, waiting for completion of tactical exploitation and for follow-on forces to arrive and take over security on the objective. This requires tactical patience on the part of commanders who may be accustomed to seizing an objective and then moving on to the next objective.

Nevertheless, CWMD operations require CBRNE training beyond simple passive defense. CBRNE passive defense—hard, realistic training in mission-oriented protective posture, instilling the physical and psychological hardening required to operate for extended periods—has not been a priority over the last decade or so of counterinsurgency operations. The CBRN noncommissioned officer position is no longer part of most line companies, adding to the challenge of regaining lost skill sets. CBRN training management and CBRN equipment maintenance became additional duties.

Further complicating things, Skill Level 1 CBRNE task competency is only the start of preparing for CWMD operations, not the end state. Getting a unit to where it can shoot, move, communicate, and sustain in mission-oriented protective posture 4 is the bare minimum. Units will need to become comfortable operating in full protective posture for extended periods. They will need to incorporate psychological hardening into their training, as soldiers will potentially operate with dangerous materials in unfamiliar, hostile environments.

Additionally, units must understand how to integrate technical enablers—CBRN response teams, nuclear disablement teams, explosive ordnance disposal teams—and their equipment during CWMD

Soldiers from several units located in the ROK participated in training and team certification on avoidance, decontamination, and protection from chemical, biological, radiological, and nuclear threats, 9 February 2012.

(Photo by 1st Lt. Foss Davis, 2nd Battalion, 1st Air Defense Artillery Regiment)

missions. Each of these teams is a highly specialized, extremely low-density asset. Conventional forces should seek opportunities to train with these specialty forces to understand their capabilities, limitations, and operational requirements. Training ensures familiarity with these forces as well as their unique support requirements.

Conventional forces must be trained on the basics of target recognition and facility familiarization. Teaching soldiers to recognize a gas hexafluoride container, or to identify and report the J-hooks indicating glass-lined reactor vessels in a chemical plant, or to know the difference between reactor vessels and fermenters in a biological plant, pays dividends in reducing the time spent on the objective doing initial assessment.

In addition, there is a survivability benefit to training. Most of the material in a WMD production or storage site is sensitive or physically unstable. This requires caution in handling and the implementation of fire control measures to prevent collateral damage from a potential firefight. Training to control weapons effects around the exterior and within the interior of a nerve agent plant, for example, can make the difference between success and catastrophic failure. Likewise, a door built like a bank vault cannot be breached like a bank vault. In a biological weapons plant or a nuclear materials storage area, the big door is there to keep hazardous materials inside.

It is imperative commanders understand that it takes a combination of time, education, and training to achieve proficiency in CWMD operations. At the time of this writing, numerous organizations throughout the Army and other services, the DOD, the intelligence community, and the interagency community are aggressively pursuing material and nonmaterial solutions to the challenges associated with CWMD.

Notwithstanding, one final challenge remains: synchronization among the different stakeholders. No single authority in the United States government is synchronizing efforts toward established end states. Consequently, duplication of effort is likely to occur.

Recommendations

Commanders should prepare their units for CWMD by focusing on a number of high-payoff individual and collective tasks. Individually, the eleven Skill Level 1 CBRN defensive tasks listed in Soldier Training Publication (STP) 21-1 SMCT are the minimum requirements for successfully operating in and around a WMD site.⁸

Small-unit collective training should include the following tactical tasks, found in FM 7-15:

• Conduct Tactical Troop Movements (Army Tactical Task 1.3), especially within another formation's area of operations.

• Isolate WMD Sites (Army Tactical Task 6.9.2.3.1).

• Exploit WMD Sites (Army Tactical Task 6.9.2.3.2).

• Conduct CBRN Defense (Army Tactical Task 6.9.3).

• Conduct CBRN Surveillance (Army Tactical Task 6.9.3.2.1.2), including radiation exposure tasks.

• Perform CBRN Decontamination (Army Tactical Task 6.9.3.2.3).⁹

Large-unit collective training should focus on controlling unit radiation exposure. Ideally, a large-unit collective training event will culminate in a CWMD situational training exercise or command post exercise specifically tailored to an assigned theater or area of operations, focused on isolating the objective and the initial assessment.

Finally, units must deploy with all authorized CBRN defense equipment, and before deployment every soldier should have a current mask fit and validation.

To overcome the challenges associated with the lack of synchronization of CWMD efforts, the United States government must establish a holistic program, one that ties the vast and dispersed members of the CMWD community into a common campaign plan.

The simplest and least expensive way ahead is to capitalize on processes that already exist. The Counter Weapons of Mass Destruction Warfighting Forum is one such process. Chaired by the Eighth U.S. Army commanding general, it meets every quarter, with council of colonel meetings to shape the agenda during the off months. This forum, or a comparable one, should be expanded from its present, largely technical discussion, to include members from across the CWMD community and incorporate material more relevant to warfighters at every echelon.

Conclusion

The U.S. Army will face the challenges associated with preparing for and executing CWMD operations for some time to come. Dealing with CWMD operations will likely include conventional forces. To this end, the 2nd Infantry Division has been preparing for such missions in close coordination with its ROK Army partners for several years, developing a number of tactics, techniques, and procedures to enable tactical CWMD operations. Moreover, the wider CWMD community continues to work to support soldier and unit preparation in anticipation of such missions. Nonetheless, success in the event of a crisis will ultimately depend on unity of effort at the operational and strategic levels.

Using an expanded medium modeled after initiatives such as the Eighth Army CWMD Warfighting Forum could help synchronize the whole-of-government effort to prepare for dealing with CWMD events.

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Notes

1. Department of Defense, Department of Defense Strategy for Countering Weapons of Mass Destruction (Washington, DC: Department of Defense, June 2014), <u>http://www.defense.gov/</u> <u>pubs/DoD_Strategy_for_Countering_Weapons_of_Mass_Destruc-</u> tion_dated_June_2014.pdf.

2. Field Manual (FM) 7-15, *The Army Universal Task List*, (Washington, DC: U.S. Government Printing Office [GPO],29 June 2012). Note that FM 7-15 quotes FM 3-11, *Multi-Service Doctrine for Chemical, Biological, Radiological, and Nuclear Operations* (Washington, DC: U.S. GPO, July 2011).

3. Office of the Secretary of Defense, Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, January 2012: 3, http://www.defense.gov/news/defense_strategic_guidance.pdf.

4. DOD Strategy to Counter Weapons of Mass Destruction, v.

5. Chairman of the Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020*, 10 September 2012, <u>http://www.dtic.mil/doctrine/concepts/ccjo_jointforce2020</u>. pdf.

6. JRTC rotation XX-XX, in October of 2013 contained a CWMD mission that looked at small-scale facilities. The recently completed NTC rotation 14-03, in January 2014 expanded this training to include multiple CBRNE facilities and EOD events, as well as the creation of a new Observer/Controller team, Team Desert Fox, specifically for the CBRN Task Force that consisted of maneuver



elements and specialty CBRN and EOD technical enablers. NTC rotation 14-08 in June of 2014 expanded this training even further to include CWMD operations in industrial-sized facilities and incorporate ROK maneuver and technical forces.

7. Maj. Gen. Vandal, video teleconference during the Naval Post-Graduate School CWMD Seminar, 17 January 2014.

8. STP 21-1, Soldier's Manual of Common Tasks: Warrior Skills Level 1 (Washington, DC: U.S. Government Printing Office [GPO], April 2014). The eleven individual CBRN defensive tasks are Maintain Your Assigned Protective Mask, Protect Yourself from Chemical and Biological Contamination (CB) Using Your Assigned Protective Mask, React to Chemical or Biological (CB) Hazard/Attack, Protect Yourself from CBRN Injury/Contamination with the JSLIST Chemical-Protective Ensemble, Mark CBRN-Contaminated Areas, Decontaminate Yourself and Individual Equipment Using Chemical Decontaminating Kits, Detect Chemical

> Agents Using M8/M9 Detector Paper, Respond to Depleted Uranium DU, React to Nuclear Hazard/Attack, Protect Yourself from CBRN Injury/Contamination When Changing MOPP Using the JLIST Chemical-Protective Ensemble, and Perform First Aid for Nerve Agent Injury.

> 9. See FM 7-15. The small-unit collective task, "Conduct CBRN Decontamination," specifically refers to "Conduct Operational Decontamination Using Unit MTOE Equipment."