



Maximizing Homeland Defense Operations Using WMD-CSTs

By Major Jim Demyanovich

In 1998, the Department of Defense (DOD) created national guard-based military teams that have come to be known as weapons of mass destruction–civil support teams (WMD-CSTs). WMD-CSTs are small military detachments with the equipment and expertise to provide military support to domestic WMD events at the state level or, when federalized, provide support to the US military. Though the initial plan was to create only a few geographically dispersed regional teams, WMD-CSTs have been created across the United States, expanding to all US states and territories.

WMD-CSTs were established to perform specialized tasks in response to WMD event consequence management and hazardous-effects mitigation. A WMD event may include chemical, biological, radiological, and nuclear (CBRN) and/or other toxic industrial material (TIM) releases. CSTs have the manning structure, training, and equipment to provide states with a trained national guard unit that has WMD-specific capabilities. The major capabilities are technical expertise and a robust communications suite, followed by portable hazardous-material (HAZMAT) analysis capabilities. CSTs also perform limited casualty handling and possess limited decontamination

equipment. In general, CSTs have less than two dozen well-trained reservists equipped with robust communications and a small set of WMD-centered response equipment to accomplish WMD support missions. *Figure 1* shows the duties for CST reconnaissance missions and for operations at a WMD incident. Specific WMD-CST capabilities are cited in Field Manual (FM) 3-11.22.^{1,2}

First Line of Defense

First responders throughout the Nation stand now, as they have throughout our history, as the on-scene

mitigators of crises in our communities. The local responders are the fire, police, emergency medical, and similar services that respond to conventional fires, earthquakes, and hurricanes and to accidental or terrorist-initiated, WMD-like events. And their role has gained increasing importance since the events of 11 September 2001, where it became evident that the goal of terrorists is to inflict maximum American casualties. The first responders and their response capabilities serve our communities and will continue to do so. WMD-CSTs

The CST provides assessments and a presumptive identification to analyze most chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) agents and substances. The CST's sophisticated detection, analytical, and protective equipment allows operations to take place in environments that contain many different CBRNE and TIM. The personal protective equipment (PPE) used by CSTs provides extensive protection from HAZMAT.

CSTs have the unique ability to assess CBRNE events. This is accomplished through the expertise of personnel and the use of several computer-based modeling programs. In addition, the survey and medical teams' high state of training and advanced technology equipment allow for accurate and timely sample collection and identification of CBRNE agents and substances. The CST also provides the ability to act as a CBRNE reconnaissance force that can provide a unique view at the incident site.

The assessment process also supports deliberate and crisis action planning. Assessments include the use of intelligence preparation of the battlespace (IPB). Needs assessments also occur to determine the capabilities required to support the required response actions. Assessments occur prior to, during, and after an incident. The assessment process is ongoing.

Figure 1. WMD-CST capabilities



have not supplanted civil first responders. The WMD-CSTs are not equipped or trained to replace local HAZMAT, fire, rescue, ambulance, or other emergency response assets.

Civil First-Response Command and Control

The Incident Command System (ICS) is a nationally adopted set of guidelines for civil emergency responders. The ICS is a formalized framework of specific methods to command, control, communicate, support, and conduct operations in incident responses. The ICS is not a new system, but formal use as a common system recently began throughout the United States. Within the military, knowledge and experience with the civil ICS is extremely limited and is primarily restricted to DOD installation first-responder forces. Military units do not normally receive ICS training.

The ICS, while structured in a framework very similar to military combat organizations and missions, uses unique language, structure, and response functions. The ICS outlines a structured response to all emergency situations, providing first responders a way of planning, organizing, and executing a mission—whether it is very small or very large. The ICS is unique. Unfortunately, Active Army military forces that could potentially be assigned to support a major domestic WMD event are largely unfamiliar with ICS and first-responder procedures.

Unique Training

Along with their military individual and unit operations training and specific training on their organic unit equipment, WMD-CSTs are trained in ICS. Hence, WMD-CSTs become a

rare DOD resource because they not only speak the language of ICS but also the language of the military. They can, therefore, be an effective on-site conduit for DOD support in a domestic incident. By virtue of their missions, WMD-CSTs will likely arrive on scene during the postevent stage of an incident (although it is possible for them to be present at locations supporting high-visibility, national security events in a preplanned mode). WMD-CSTs are normally deployed to a scene as backup to the initial call made by first responders. Since WMD-CSTs operate in fixed areas, they can use opportunities to consistently train with local first-responder forces in exercises. Over time, they can become very familiar with the particular needs and capabilities of their regional first-responder forces. When needed, WMD-CSTs provide an added backup capability in WMD events.

Critical Value

The most critical aspect of WMD-CST support is the *value added*, which includes providing significant support to an event response and a leverage of available resources through the use of local, state, and federal forces. Instead of acting as reconnaissance or recovery forces under HAZMAT conditions, the WMD-CST possesses the ability to conduct planning and communicate needs and assessments between military and civil response forces. In this way, they serve as a military support command post (WMD center) for the on-scene command. In large military organizations, the WMD center is called the Nuclear, Biological, and Chemical Center (NBCC) and is operated by trained WMD technical specialists. The NBCC is a key command post element and a

knowledge-gathering and assessment center focused on subject matter expertise, information assessment, situational awareness, and critical decision-making recommendations on WMD event consequence management. (*Figure 2* depicts military NBCC³ and WMD-CST⁴ missions.)

In many ways, CSTs, with their technical experts and communications gear, are equipped to be a WMD response command/evaluation post. For myself, having served for many years as the NBCC chief in tactical command posts (but not in WMD-CSTs), it appears that WMD-CSTs are most effectively employed much like tactical military NBCCs. The dedicated tactical mission of the NBCC is to maintain CBRN (the military parlance to WMD) situational awareness in a geographic area during tactical operations. In many ways, the WMD-CSTs can act as the states' NBCCs during WMD events and as a forward NBCC to support state, DOD, or other federal WMD incidents.

This forward-NBCC concept provides an enormous function at a WMD scene that belies the WMD-CST unit size. The function is largely due to WMD-CST military and civil response familiarity and organic communications capabilities. This niche or key role in military support to domestic civil response appears to be the command post functionality. With expertise in both military and civil response methods of operations, plans, and procedures, this unique functionality within the DOD could facilitate interagency support in homeland security.

The WMD-CST command post has all the essential ingredients to be an effective NBCC. It has extensive, organic communication equipment that is staffed with personnel who



NBCC

The critical mission of the NBCC is to conduct CBRN battle management. This mission includes—

- Planning and coordinating chemical unit operations.
- Conducting CBRN vulnerability analyses.
- Receiving, processing, and disseminating CBRN reports.
- Maintaining and evaluating contamination information.
- Advising the commander and staff on CBRN defense measures and smoke and flame operations.

NOTE: The commander may supplement this mission with his own.

WMD-CST

The mission of the CST is to support civil authorities at domestic CBRNE incident sites. This mission includes—

- Identifying CBRNE agents and substances.
- Assessing current and projected consequences.
- Providing advice on response measures.
- Providing assistance with appropriate requests for additional support.

Figure 2. Missions

have expertise in military operations and ICS. This command post function is a unique and key feature that WMD-CSTs can provide to the homeland defense effort. CSTs also possess unique, though limited, capabilities to perform small-unit physical WMD *boots-in-the-hot-zone* missions. But the communications, command, and control links of the WMD-CST can dramatically leverage strength, facilitate federal incident support, and provide the military with the catalyst needed for military forces to effectively integrate their abilities into the existing ICS structure established at an incident.

The current WMD-CST missions to conduct reconnaissance or HAZMAT operations dilute and detract from the ability of the WMD-CST to perform the most critical mission of providing continuous on-scene event information and

assessments at a WMD incident. Using continuous, 24-hour, 7-day operations during a post-WMD event, two shifts of personnel could easily consume all WMD-CST personnel resources in real-world responses.

Achieving Maximum Effect

The WMD-CSTs are manned, equipped, and tasked to perform missions akin to the tactical NBCC. Other missions currently envisioned for the CSTs can be conducted by civil first responders (such as HAZMAT teams). In civil response events requiring deployment, WMD-CSTs must focus their capabilities on a primary mission that can support (mitigate) mass effects at a WMD scene by acting as the on-scene NBCC. Naturally, local first responders will always be the first on scene (regardless of the event) to provide a HAZMAT response and

assessment. The mitigation operations possible through the use of WMD-CSTs come from expertise in WMD and communications functions. WMD-CSTs should focus their efforts on becoming the best they can be as NBCC equivalents—a full mission unto itself in a WMD incident.

The capabilities of the WMD-CST are broad, but shallow. I believe that WMD-CSTs can play an important role for our Nation and government, one that allows them to focus their capabilities on particular areas—WMD-centric communications expertise; facilitated reach-back capability; military-operations experience; and the knowledge of civil first-responder functions, roles, and missions. These important missions are unique and should become the primary focus in the DOD military support channel to civil response command post operations. ☐☐

Endnotes

¹FM 3-11.22, *Weapons of Mass Destruction Civil Support Team Tactics, Techniques, and Procedures*, 6 June 2003.

²FM 3-11.22 is currently under revision. The broad mission of the WMD-CSTs will likely continue as written, although a more-focused approach that maximizes capabilities may occur.

³Army Training and Evaluation Program 3-117-40-MTP, *Mission Training Plan for the Chemical Section and Nuclear, Biological, and Chemical Center*, 26 September 2003.

⁴FM 3-11.22, *Weapons of Mass Destruction Civil Support Team Tactics, Techniques, and Procedures*, 6 June 2003.

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