PROVIDING CBRN SUPPORT TO DOMESTIC DISASTERS

By Mr. Jacques A. Walden Sr.

Imagine that you are working at your desk at a military installation and you hear an explosion. Five minutes later, you notice a strong chemical smell that burns your throat and eyes. Many of your coworkers are covering their noses and eyes for protection from the irritation. You know that something is very wrong, but what you don't know is that a detonation has occurred at an industrial chemical plant just 5 miles downwind from your office, and toxic chemicals are spreading through the atmosphere. Your first thoughts are of your children attending school and your spouse working near the detonation site. Even before you have a chance to regain your composure, you hear a second explosion. You immediately think of the nuclear power plant 15 miles from your office. You are aware that an incident at the plant could create a downwind hazard area of 25 miles and expose up to 15,000 people to radiation particles.

This is a horrific scenario that we hope never plays out, but one for which we must remain vigilant. To ensure the safety of its citizens, the leaders of the U.S. Armed Forces must ensure that the appropriate tactics, techniques, and procedures (TTP) are in place to support chemical, biological, radiological, and nuclear (CBRN) operations in and around military installations in the continental United States (CONUS). Currently, the Joint Requirements Office for CBRN Defense (JRO-CBRN Defense) is sponsoring the revision of Field Manual (FM) 3-11.34, *Multiservice Procedures for Nuclear, Biological, and Chemical (NBC) Defense of Theater Fixed Sites, Ports, and Airfields.* The current publication, dated August 2000, focuses on operations outside the continental United States (OCONUS), but the events of 11 September 2001 redefined the likelihood of an attack and redirected focus on CONUS attacks.

The services are in agreement that the new title—*Multiservice Tactics, Techniques, and Procedures for Installation Chemical, Biological, Radiological, and Nuclear Defense*—reflects the essence of current MTTP operations. In the new publication, the term "installations" will refer to military bases and fixed sites, ports, and airfields. The completed publication will provide examples of installation descriptions recognized by the Army, Marine Corps, Navy, and Air Force and will create a common multiservice reference for planning, resourcing, and executing TTP for CBRN defense at CONUS and OCONUS installations. The primary users of this publication will be CBRN staff officers and noncommissioned officers, personnel assigned to perform collateral CBRN duties, commanders and staffs at tactical through operational levels, and civilian agencies. The MTTP is currently in the signature draft phase of the development process and is scheduled to be published during the third quarter of Fiscal Year 2007.

Army, Marine Corps, and Navy doctrine action officers have agreed to adopt a modified version of the Air Force counter-chemical warfare (C-CW) concept of operations (CONOPS). This agreement comes following approval from the Combating Weapons of Mass Destruction (CbtWMD) Issue Team, Force Protection Functional-Capabilities Board. The CbtWMD Issue Team was briefed by the Joint CBRN Combat Developments (JCCD) Experimentation and Analysis Branch in February 2006 reference the split mission-oriented protective posture (MOPP) concept experiment.

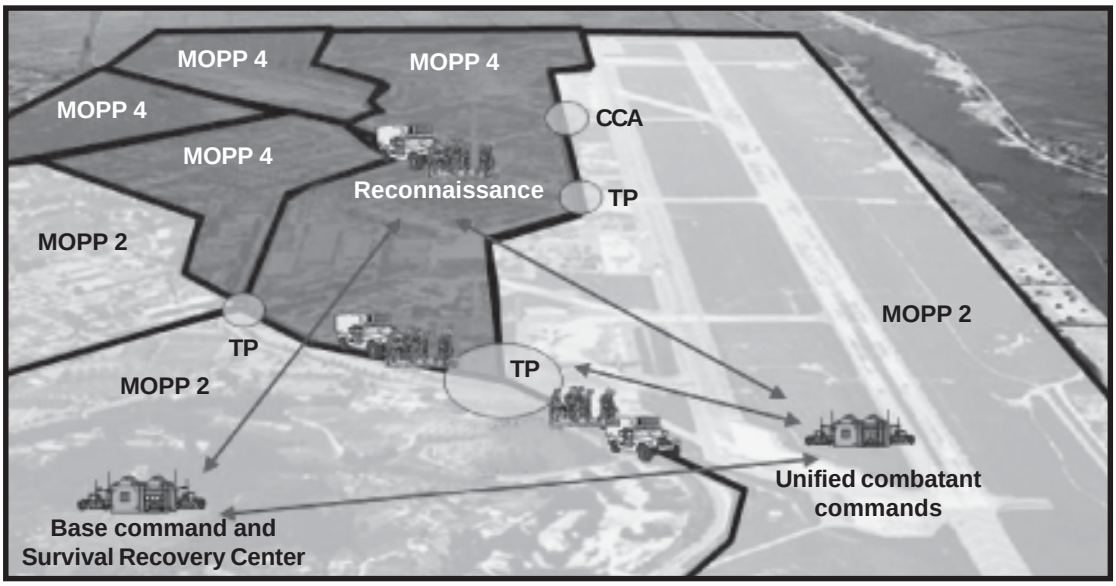
The JRO-CBRN Defense, through the JCCD, sought to validate the use of Air Force CONOPS for split MOPP operations on joint installations. Split MOPP and C-CW operations were reviewed during the literature search—the first step in conducting the concept experiment. Split

MOPP and C-CW CONOPS were reviewed in detail during a three-day, scenario-driven seminar and tabletop exercise in which Air Force personnel assisted representatives from the joint forces (including the Coast Guard) to apply the Air Force CONOPS to seaport and joint forward-operating bases. The results of the exercise were used to frame the scope of a live experiment with warfighters and subject matter experts. The results of the experiment demonstrated that the Air Force C-CW CONOPS is based on sound doctrinal principles of contamination avoidance that will work for all U.S. forces on multiservice and joint installations. Split MOPP—defined in Air Force Manual (AFMAN) 10-2602 as "a tactic that divides an airbase or operating location into two or more sectors or zones to enable a commander to tailor mission oriented protective posture (MOPP) levels and alarm conditions within each sector to reflect the current hazard and mission priorities within that area"—is part of Air Force fixed-base C-CW CONOPS.

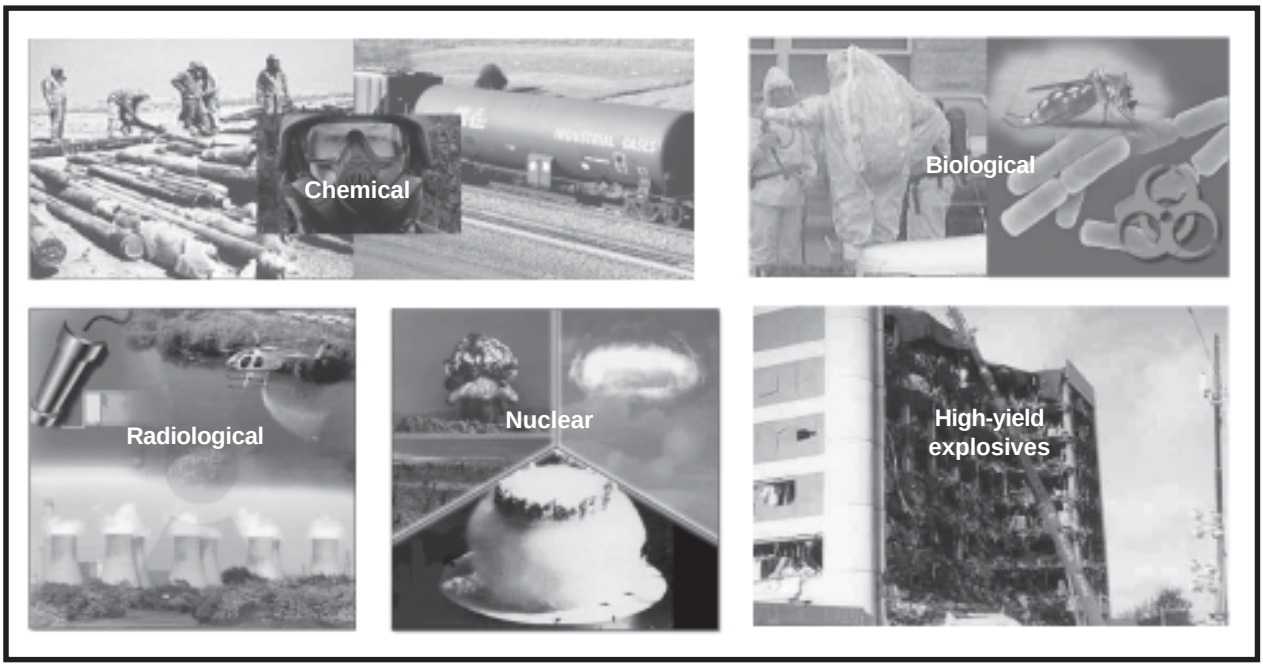
Split MOPP TTP information includes guidance on contamination control areas (CCAs), chemical-defense transition zones, and transition points. Additionally, it details standardized marking procedures for processing contaminated vehicles through transition points (TPs). Installation commanders with joint or multiservice forces must consider whether or not to implement split MOPP TTP. The procedures for implementation include—

- Making preattack preparations.
  - Developing a plan that divides the installation into zone sectors which mirror base installation defense sectors.
  - Providing guidance on contamination avoidance, including instructions on donning MOPP gear and seeking protection with overhead cover.
- Making postattack preparations.
  - Organizing reconnaissance teams for each zone to determine contaminated and uncontaminated areas.
  - Designating guidance for lowering MOPP levels in zones free of contamination.
  - Establishing possible locations for TPs and CCAs between hot and cold zones.[1, 2, 3]

The JRO-CBRN Defense also has the lead on the revision to FM 3-11.21, *Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Aspects of Consequence Management.* Joint Publication (JP) 3-41 defines chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) consequence management (CM) as "actions taken to address the consequences from all deliberate and inadvertent releases of chemical, biological, radiological, nuclear agents or substances, and high-yield explosives with potential to cause mass casualties and large levels of destruction." The U.S. Army Chemical School staffed the revised document to Army, Marine Corps, Navy, and Air Force doctrine action officers for service distribution and comments. The service comments were adjudicated during a multiservice working group in November 2006. This publication, scheduled for completion in November 2007, will be designed for use from the joint task force (JTF) level to the tactical unit leaders performing CBRN CM.



Split MOPP scenario



CBRNE consequence management

It will also support functional and service staffs in foreign and domestic locations that are tasked with planning, preparing, and conducting CBRN CM operations. The revised FM 3-11.21 will—

- Define the roles of military units and staffs involved in planning and executing integrated CBRN CM in foreign and domestic environments.
- Consider a large spectrum of CBRN potential incidents, whether the result of natural, deliberate, or accidental release (including toxic industrial material).
- Address the integration of active and reserve component forces in conducting CBRN CM.
- Address the employment of military CBRN defense capabilities (as authorized) in support of federal, state, and local civil authorities.
- Fill the gap between MTTPs and joint doctrine publications (such as JP 3-40 and JP 3-41).

The new FM 3-11.21 will include chapters on the doctrinal aspects of planning, preparation, and response and recovery operations, while the appendices will include TTP. The TTP information will consist of Department of Defense CM assets, vulnerability reduction measures, CBRN incident site assessment, and decontamination operations. The JRO-CBRN Defense looks forward to comments from Army, Marine Corps, Navy, and Air Force CBRN subject matter experts on the final coordination draft. This input will assist service-appointed CBRN doctrine action officers in developing a quality publication which ensures that our military has the appropriate MTTP required to respond to a CBRN CM incident.

Endnotes:

[1]TPs are used to admit uncontaminated personnel into MOPP 4 zones and to transition personnel with minimal contamination between hot and cold zones (following the decontamination of boots and gloves and the completion of cleanliness verification). TPs are also used to partially decontaminate mission-essential vehicles that move between hot and cold zones to perform specific missions.

[2]CCAs are used to perform a thorough decontamination on personnel who have been grossly contaminated and cannot be cleaned at the TPs. A thorough decontamination of vehicles and equipment is not performed during a split MOPP operation.

[3]Additional split MOPP TTP will be written into the revised FM 3-11.34.

References:

AFMAN 10-2602, *Nuclear, Biological, Chemical, and Conventional (NBCC) Defense Operations and Standards*, 29 May 2003.

FM 3-11.21, *Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Aspects of Consequence Management*, 12 December 2001.

FM 3-11.34, *Multiservice Procedures for Nuclear, Biological, and Chemical (NBC) Defense of Theater Fixed Sites, Ports, and Airfields*, 29 September 2000.

JP 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction*, 8 July 2004.

JP 3-41, *Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management*, 2 October 2006.

Mr. Walden is an employee of Battelle Memorial Institute and serves on the JRO-CBRN Defense staff at Fort Leonard Wood, Missouri, as a doctrine integrator. He is a U.S. Army officer with 9 years of Active Army and 11 years of U.S. Army Reserve duty.