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Operations

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, (CBRN) DEFENSE PROGRAM

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This publication implements Air Force Policy Directive (AFPD) 10-25, *Air Force Emergency Management Program*, and is consistent with aspects of AFPD 10-26, *Countering Weapons of Mass Destruction*. It is consistent with Department of the Air Force instruction (DAFI) 10-2501, *Emergency Management Program,* and DAFI 10-2602 *Countering Weapons of Mass Destruction Enterprise*. It specifically addresses those aspects of chemical, biological, radiological, nuclear (CBRN) defense required to effectively organize, train, equip, and resource the Department of the Air Force's (DAF) preparedness to support CBRN response during combat and/or contingency operations outside the continental United States (OCONUS). This publication applies to all DAF civilian employees and uniformed members of the Regular Air Force (RegAF), Air Force Reserve (AFR), Air National Guard (ANG), and United States Space Force (USSF), the Civil Air Patrol when conducting missions as the official Air Force Auxiliary, and those with who are contractually obligated to comply with DAF publications. This publication applies to and provides mandatory guidance to members assigned or apportioned to all OCONUS DAF bases, OCONUS joint bases where the United States Air Force (USAF) or USSF are the lead, and/or DAF operating locations (OL) (e.g., installations, remote sites, and/or OL associated with agile combat employment [ACE] scheme of maneuvers). Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through appropriate functional chain of command. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with (IAW) the Air Force Records Disposition Schedule,

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Chapter 1

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE OVERVIEW AND STRATEGY

1.1. Purpose. This publication implements the DAF CBRN Defense Program and its responsibilities, procedures, and standards for organizing, training, and equipping forces to prevent, protect against, prepare for, mitigate, respond to, and recover from adversarial use of CBRN weapons/materials to effectively preserve force survivability and mission continuation. Refer to DAFI 10-2501 for guidance on CBRN preparedness and response to terrorist use of CBRN weapons/materials and other continental United States (CONUS)-specific CBRN response and preparedness requirements. Additionally, this publication establishes cross-functional concepts, policy, standards, and actions to organize, train, and equip (OT&E) combat, combat support, and combat service support forces to survive and operate in and through CBRN contested environments. Primary policy objectives are to:

1.1.1. Set conditions to synchronize, integrate, and align related Department of Defense (DoD), joint and DAF CBRN defense doctrine and DoD/DAF instructions/manuals summarized in **Chapter 1**.

1.1.2. Synchronize this publication and AFMAN 10-2503, *Operations in a Chemical, Biological, Radiological, and Nuclear (CBRN) Environment*. Guidance on synchronization is provided in Joint Publication 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear Environments* under the joint CBRN defense planning standards/mission areas. **Note:** AFMAN 10-2503 provides guidance for conducting and sustaining operations in contested and degraded environments under CBRN conditions.

1.1.3. Support operational imperatives to operationally-optimize information, generate resilient installations, and account for combat support maneuver aspects needed to protect forces from CBRN effects and continue mission operations.

1.1.4. Institutionalize CBRN defense fundamentals across the DAF to restore individual and unit CBRN defense preparedness to maintain the capabilities required to survive and operate in and through CBRN contested environments. This includes preparing and posturing forces during the Air Force Forces Generation (AFFORGEN) process and incorporating CBRN defense into ACE training, exercises, and operations.

1.1.5. Support integrated deterrence by demonstrating DAF readiness to operate in and through CBRN contested environments.

1.2. Situation. Global CBRN effects to DAF personnel and OLs will continue to create substantial risk to DAF strategic, operational, and tactical capabilities in support of combatant command (CCMD) missions.

1.3. Mission. The DAF will OT&E its forces to deter weapons of mass destruction (WMD) actors of concern and minimize the effects of adversary WMD attacks on its operations IAW AFPD 10-26. **Note:** CBRN defense is a subcomponent of countering weapons of mass destruction (CWMD) and helps to preserve force survivability and mission continuation.

1.4. Operational Environment (OE) Applicability. CBRN defense is foundational to DAF global operations. For this reason, the DAF CBRN Defense Program structure and functioning will

account for DAF warfighting operational contributions within the global operating model to 1) defend the homeland; 2) build partnership capacity through contact; and 3) support joint force blunt and surge operations. Ally and partner capability to function alongside USAF ongoing operations under CBRN conditions requires preparation of partner forces during contact layer activities (i.e., security cooperation, security force assistance [SFA], etc.). DAF CBRN Defense Programs at all echelons will integrate preparedness standards for combat operations under CBRN conditions.

1.5. Chemical, Biological, Radiological, and Nuclear (CBRN) Threat Overview. The primary CBRN threats to DAF and joint operations and forces include nation state attacks with nuclear weapons, chemical and/or biological warfare agents, and the threat of the use of those weapons. This includes both overt and covert attacks with current or novel agents. Adversaries will continue to employ information operations in conjunction with CBRN events. Additionally, state and non-state actors are capable of employing CBRN materials, including toxic industrial materials (TIM) to disrupt DAF and/or joint operations and cause casualties. The loss of control or theft of CBRN materials, TIMs, and other WMD materials constitutes a significant threat to the joint force, as can naturally occurring phenomena such as pandemic influenza and infectious disease. The deadly, destructive, and disruptive effects of these weapons, materials, and phenomena merit continuous consideration by the commanders at all levels.

1.5.1. DAF commanders utilize the joint intelligence preparation of the operating environment (JIPOE) process to assess CBRN threats. A byproduct of the JIPOE process is a comprehensive WMD threat assessment developed at the CCMD echelon. Component-major command (C-MAJCOM) Air Force Forces (AFFOR) and Air Operations Center (AOC) staff must gain access to and review their respective *CCMD WMD Threat Assessment* to ensure command operations, activities, and investments (OAI) result in an air component that is threat informed and organized, trained, and equipped to operate in a CBRN-contested environment. **(T-2)** **Note:** C-MAJCOM AFFOR and AOC staff must ensure subordinate and supporting commanders obtain shared situational awareness regarding the WMD threat. **(T-2)**

1.5.2. According to the *2023 Annual Threat Assessment of the United States (U.S.) Intelligence Community*, and unclassified threat reports from the Defense Intelligence Agency, **https://www.dia.mil/Military-Power-Publications/**, the People's Republic of China, Russia, North Korea, and Iran either have or are pursuing WMD programs including CBRN weapons/materials. Refer to the Defense Intelligence Agency for additional information.

1.5.2.1. Potential U.S. adversaries are acquiring a larger number of more capable aircraft and missiles, making U.S. air bases increasingly vulnerable to physical attack by a wider array of delivery platforms. Air and missile attacks along with cyber, electronic warfare, antisatellite, and asymmetric (e.g., WMD) capabilities also threaten the communication systems that the joint force uses to command and control (C2) air operations.

1.5.2.2. CBRN weapons/materials can be delivered overtly by various delivery systems (e.g., missiles, rockets, artillery, aircraft, mines, and torpedoes). Other delivery systems (e.g., dirty bombs, radiological dispersal devices, or the use of CBRN materials against potential friendly targets, such as the food, water, and supply systems or postal systems) could be used for covert employment.

1.5.2.3. State actor(s) doctrine for CBRN use against U.S. forces may vary; however, an adversary would likely use CBRN weapons to impact the terrain, the force, or a

combination of both. Airbases are vital to U.S. power projection which makes them an attractive target for CBRN weapons.

1.6. Chemical, Biological, Radiological, and Nuclear (CBRN) Hazards. CBRN hazards are CBRN materials that could create adverse effects if released or disseminated accidentally, deliberately, or even naturally. They include TIMs (including toxic industrial chemicals [TIC], toxic industrial biologicals, and toxic industrial radiological materials), chemical and biological agents, biological pathogens that result in the spread of infectious disease, radioactive materials, and nuclear hazards. Refer to AFMAN 10-2503 for an overview of CBRN threat and hazard effects on DAF operations.

1.7. Chemical, Biological, Radiological, and Nuclear (CBRN) Incident. A CBRN incident is any occurrence involving the emergence of CBRN hazards resulting from the use of CBRN weapons or devices; the emergence of secondary hazards due to counterforce targeting or other friendly force action; or any other occurrence that causes the release of TIMs (including TICs, toxic industrial biologicals, and toxic industrial radiological materials) into the OE.

1.8. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense. CBRN defense is the employment of aircrew CBRN (ACBRN), medical CBRN, and non-medical CBRN defense capabilities that counter the entire range of CBRN hazards. DAF commanders employ CBRN defense capabilities (e.g., integration of individual protective equipment [IPE] and other equipment to protect against CBRN effects or demonstrating to an adversary that warfighters are trained) in support of Joint Force Commander objectives to reduce or negate vulnerabilities and minimize the effects of CBRN contamination.

1.9. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Policy.

1.9.1. DoD Directive (DoDD) 2060.02, *DoD Countering Weapons of Mass Destruction (WMD) Policy*, requires the Military Services to organize, train, equip, and otherwise prepare their respective Departments to deny the effects of current and emerging WMD threats through layered and integrated defenses across a spectrum of active and passive measures.

1.9.2. DoD Instruction (DoDI) 3020.52, *DoD Installation Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Preparedness Standards*, requires DoD installation commanders to integrate and synchronize CBRN defense preparedness within the all-hazards approach for the DAF Emergency Management (EM) Program IAW DoDI 6055.17, *DoD Emergency Management (EM) Program*. **(T-0)** Refer to DAFI 10-2501 for detailed information on the DAF EM Program and CBRN defense preparedness standards for terrorist use of CBRN.

1.9.3. Department of the Air Force Policy Directive (DAFPD) 10-2, *Readiness*, states the DAF will continually assess readiness and use the Defense Readiness Reporting System (DRRS) information in assessing readiness. **(T-1)** AFI 10-201, *Force Readiness Reporting*, requires DAF commanders of measured units to report CBRN defense readiness in DRRS using the CBRN Defense Readiness Training (CBDRT) Report. **(T-1)** Refer to **paragraph 9.5** for additional information.

1.9.4. This publication, DAFI 10-2503, implements the CBRN Defense Program for the DAF and provides the policy DAF commanders require to integrate and synchronize CBRN defense at all echelons as part of a comprehensive DAF EM Program. The CBRN Defense Program refers to the employment of capabilities across the doctrine, organization, training, materiel,

leadership and education, personnel, facilities, and policy (DOTMLPF-P) spectrum, that counter the entire range of adversarial CBRN effects on DAF operations.

1.9.4.1. DAF commanders will use this publication to effectively organize, train, equip, and resource DAF personnel to obtain and maintain preparedness for CBRN warfare. **(T-2)** **Note:** unless otherwise specified, the use of "DAF commander" throughout this publication implies that the requirement applies to both USAF and USSF commanders where applicable.

1.9.4.2. AFMAN 10-2503 contains more specific and technical information and is intended to articulate procedures for conducting CBRN defense during combat and contingency operations. DAF commanders tasked with CBRN defense responsibilities in this publication will use AFMAN 10-2503 to prevent, protect against, prepare for, mitigate, respond to, and recover from adversarial use of CBRN weapons/materials on OL. **(T-2)**

1.9.4.3. CBRN defense is an inherently complex joint activity requiring a high degree of technical competency to preserve force survivability and mission continuation. DAF commanders, including their CBRN defense staff (refer to **Chapter 5** for CBRN defense staff details), will ensure DAF personnel use the Air Force Tactics, Techniques, and Procedures (AFTTP) listed in **Attachment 3** when planning and preparing for CBRN defense operations. **(T-2)**

1.9.5. AFPD 10-24, *Mission Assurance*, identifies CBRN preparedness as DAF Mission Assurance (MA) Related Programs and Activities. At a minimum, DAF commanders must ensure assigned mission essential functions (MEFs) listed in DAFI 10-208, *Continuity of Operations (COOP) Program*, will continue in a CBRN-contested environment. **(T-1)**

1.9.6. AFPD 10-25 states it is DAF policy to plan, program, and budget for CBRN defense and CBRN response requirements regarding training, exercises, evaluations, manpower, and equipment as part of the DAF EM Program.

1.9.6.1. DAF emergency managers (EM), Air Force Specialty Code [AFSC] 3E9X1, manage non-medical CBRN defense and CBRN response IAW DoDI 2000.21, *DoD Support to International Chemical, Biological, Radiological, and Nuclear (CBRN) Incidents*, DoDI 3020.52, DoDI 6055.17, and this publication. **(T-0)**

1.9.6.2. AFSC 3E9X1 (EM) are the DAF CBRN defense specialists and will wear the CBRN Tab with the black border IAW DAFI 36-2903, *Dress and Personal Appearance of United States Air Force and United States Space Force Personnel*.

1.9.7. AFPD 11-3, *Aircrew Flight Equipment*, states that DAF must have effective aircrew flight equipment (AFE) and training to increase full operational effectiveness through improved performance and preserve the lives of aircrew, Special Warfare Airmen, and passengers under emergency conditions. The AFE community manages the aircrew aspects of the CBRN Defense Program. Refer to AFMAN 11-301, Volume 1, *Aircrew Flight Equipment (AFE)*, for additional information.

1.9.8. AFPD 48-1, *Aerospace & Operational Medicine Enterprise (AOME)*, states the AOME includes all health capabilities and activities that directly support execution of the DAF mission including medical response to CBRN events. Refer to AFI 10-2519, *Public Health Emergencies and Incidents of Public Health Concern*, for additional information.

1.10. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Doctrine.

1.10.1. Joint Publication 3-11 states the Joint Force Commander, and supporting commanders, train for and remain prepared to conduct the range of military operations through an OE impacted by CBRN weapons or materials.

1.10.2. Air Force doctrine publication (AFDP) 3-40, *Counter-Weapons of Mass Destruction Operations*, states Airmen and Guardians should be trained to plan operations in a distributed or decentralized manner and execute the mission when isolated from higher echelons in distributed environments and environments degraded by the effects of attacks with WMD. Airmen and Guardians at all levels should be capable of making decisions independently, operating based on commander's intent and the principles of mission command, even in conditions degraded and contaminated by WMD attacks.

1.10.2.1. The major commands (MAJCOM)/field commands (FLDCOM) Commanders must safeguard the force and manage the consequences of WMD activities through combat support, force protection, force health protection (FHP), homeland defense, and security cooperation.

1.10.2.2. Combat support includes fielding forces capable to survive and operate in a CBRN-contested environment; posturing forces in CBRN threat environments; protecting forces from CBRN weapons; generating the mission in CBRN-contested environments; and supporting and sustaining the mission, forces, and infrastructure in CBRN threat environments.

1.10.2.3. Force protection includes the DAF EM Program; CBRN defense training, exercises, and inspections; CBRN support to command and control (CSC2); first and emergency response operations; and specialized support/recovery teams (i.e., explosive ordnance disposal [EOD], rapid airfield damage repair, etc.).

1.10.2.4. FHP includes medical treatment and care as part of an all-hazards approach; aeromedical evacuation from CBRNE-contaminated environments; and medical stability operations (includes medical CBRN threat response).

1.10.2.5. Defense support to civil authorities and homeland defense.

1.10.2.6. Security cooperation includes CBRN defense relationships and foreign consequence management.

1.10.3. Joint Publication 3-11 provides joint doctrine describing the CBRN environment in a strategic context; provides necessary strategic and operational considerations; and describes CBRN defense activities and tasks applicable to joint operations.

1.10.4. Joint Publication 3-40, *Joint Countering Weapons of Mass Destruction*, provides joint doctrine describing the WMD activity continuum, operational framework for countering WMD, organizing principles, specialized activities and tasks, and the role of the functional campaign plan for countering WMD.

1.11. Chemical, Biological, Radiological, and Nuclear (CBRN) Contested Operational Environment (OE). A CBRN-contested OE include CBRN threats/hazards present and their potential effects on operations at OLs (e.g., installation, main operating bases [MOB], forward operating sites [FOS], cooperative security locations [CSL], or contingency locations [CL]). Refer to AF doctrine note (AFDN) 1-21, *Agile Combat Employment*, for additional information on OL

terms. Additionally, DAF forces may be exposed to CBRN hazards when accomplishing missions away from an OL.

1.12. Assumptions. The following greatest hazard/threat effect assumptions will guide strategic, operational, and tactical DAF CBRN Defense Program concepts; tactics, techniques, and procedures (TTP); organize, train/exercise, and equip requirements; and shape overarching deliberate to adaptive planning and risk management activities.

1.12.1. Strategic. The functions of the DAF, as specified in DoDD 5100.01, *Functions of the Department of Defense and Its Major Components*, (e.g., global strike, precision attack, global mobility, space operations, C2, agile combat support, etc.) are interdependent and mutually susceptible to degrading CBRN effects. Global CBRN threat information guides DAF wide preparation of forces necessary for the effective prosecution of war under CBRN conditions.

1.12.2. Operational. All MAJCOMs/FLDCOMs are susceptible to degrading CBRN effects. The DAF CBRN Defense Program generates shared battle space awareness along the C2 continuum and enables AFFOR to generate and employ in and through a CBRN-contested environment.

1.12.3. Tactical. No DAF OL is a sanctuary from CBRN effects. No OL has sufficient resources, capabilities, and/or capacity to prevent, protect, prepare, mitigate, respond to, and recover on its own from the greatest CBRN hazards/threats. Reliance on mission partners and varying schemes of maneuver (i.e., avoidance, dispersal, return to operate, etc.) is essential to enable force survivability and mission continuation. Speed and timing of the conflict continuum, including adversarial fires and effects, requires the ability to quickly execute CBRN defense tasks to mitigate enemy CBRN fires and effects.

Chapter 2

ROLES AND RESPONSIBILITIES

Section 2A—Air Staff

2.1. Deputy Chief of Staff for Manpower, Personnel, and Services (AF/A1). The AF/A1 will provide strategy, guidance, and oversight to MAJCOMs/FLDCOMs, AF Personnel Center, and Force Support units and activities for the DAF CBRN Defense Program IAW DoDI 6055.17, DoDI 3020.52, and this publication. AF/A1 will:

2.1.1. Provide subject matter expertise (SME) concerning mass care, housing, and human services, sheltering, emergency assistance, search and recovery support, mortuary support, and housing assistance for noncombatant evacuees or incident-displaced personnel.

2.1.2. Develop guidance for the recovery, handling, and storage and return of human remains (to include remains contaminated by CBRN materials) and any associated personal items in coordination with the Air Force Surgeon General (AF/SG).

2.1.3. Develop guidance for conducting noncombatant evacuation operations under CBRN conditions.

2.1.4. Coordinate with AF/A4 to develop standards to posture and distribute noncombatant IPE.

2.1.5. Develop guidance for conducting personnel accountability and family member support actions during and after a CBRN incident.

2.1.6. Incorporate CBRN defense fundamentals into formal training at all levels of the continuum of training.

2.1.7. Coordinate with the DAF CBRN defense SMEs at Air Force Installation and Mission Support Center (AFIMSC) and AF/A4, for assistance.

2.2. Deputy Chief of Staff for Intelligence, Surveillance, and Reconnaissance and Cyber Effects Operations (AF/A2/6). The AF/A2/6, in partnership with the Deputy Chief of Space Operation for Intelligence (SF/S2), will provide strategy, guidance, and oversight to MAJCOMs/FLDCOMs, and intelligence activities for intelligence support to CBRN defense operations. AF/A2/6 will:

2.2.1. In partnership with SF/S2, advise the Secretary of the Air Force (SecAF), Chief of Staff of the Air Force (CSAF), and other DAF leadership on foreign CBRN threats to all OLs.

2.2.2. In partnership with SF/S2, develop and maintain an annual DAF-wide CBRN threat assessment for presentation to the CBRN Defense Modernization Working Group (MWG) hosted by AF/A4C.

2.2.3. In partnership with SF/S2, develop, or coordinate, and maintain an annual DAF-wide CBRN threat assessment for presentation to the DAF CWMD Operations Integration Group hosted by the Countering Weapons of Mass Destruction Division (AF/A10S), when requested.

2.2.4. In partnership with SF/S2, oversee activities to ensure DAF-wide awareness of CBRN threat assessments by commanders and staffs.

2.3. Deputy Chief of Staff for Operations (AF/A3). The AF/A3 will provide strategy, guidance, and oversight to MAJCOMs/FLDCOMs, operating units, and activities for AFE, operational and readiness reporting, weather, defense support to international CBRN incidents IAW DoDI 2000.21 and this publication. AF/A3 will:

2.3.1. Provide current and future year sustainment funding requirements for AFE to AFIMSC by 1 October annually.

2.3.2. Oversee DAF-wide organizing, training, and equipping of weather organizations responsible for providing weather support (e.g., chemical downwind messages and effective downwind messages) to CBRN defense C2 operations.

2.3.3. Oversee and interpret guidance on how to conduct integrated combat turns and step-launch-recovery procedures in a CBRN-contested environment.

2.3.4. Develop guidance for assessing CBRN defense requirements in capability reporting as part of mission essential task (MET) assessments and associated resource readiness reporting.

2.3.5. Oversee and maintain AFTTP 3-4, *Airman's Manual*.

2.3.6. Develop policy and guidance for C2 structure standards at the installation/wing level ensuring the Crisis Action Team (CAT) or battle staff equivalent, has standard processes and procedures for uninterrupted operations in a CBRN-contested environment.

2.3.7. Coordinate CBRN defense exercise and training readiness requirements with the Ready Airman Training Council.

2.3.8. Develop guidance for determining ally and partner CBRN requirements needed to support operations and coordinate with C-MAJCOMs, MAJCOMs, FLDCOMs, C-NAFs, and other staff as needed, to ensure those requirements are planned, programmed, and executed through security cooperation OAIs.

2.3.9. Designate Air Combat Flight Operations Division (ACC/A3T) as the ACBRN, and Air Force Global Strike Command Bomber Support Division (AFGSC/A5B) as the aircrew radiological/nuclear requirements development leads (following Joint Capabilities Integration and Development System [JCIDS] process) and coordinates as required with Air Force Material Command (AFMC), and respective centers, on the development of science and technology (S&T), Research Development Test and Evaluation, and materiel acquisition in support of the DAF CBRN Defense Program. Requirements are coordinated through Air Force Deputy Chief of Staff, Operations, Director of Training and Readiness, Aircrew Performance Division (AF/A3TH) prior to formal submission.

2.4. Deputy Chief of Staff for Logistics, Engineering, and Force Protection (AF/A4). The AF/A4 will manage strategy, guidance, and oversight, in coordination with the USSF Mission Sustainment Division (SF/S4O), of the DAF CBRN Defense Program pursuant to AFPD 10-26, DoDD 5160.05E, *Roles and Responsibilities Associated with the Chemical and Biological Defense Program*, DoDI 6055.17, DoDI 3020.52, and IAW authorities delegated to AF/A4 as set out in HAF Mission Directive (HAFMD) 1-38, *Deputy Chief of Staff, Logistics, Engineering, and Force Protection*. AF/A4 will:

2.4.1. Provide guidance, resource advocacy, and oversight for the DAF non-medical and non-ACBRN Defense Program.

2.4.2. Develop and implement procedures for funding, certifying, and reporting on non-medical and non-ACBRN defense capabilities.

2.4.3. Director of Civil Engineers (AF/A4C). The AF/A4C under the authority, direction, and control of the AF/A4, will serve as the OPR, in coordination with SF/S4O, for development and implementation of the DAF CBRN Defense Program. The AF/A4C will provide strategy, guidance, and oversight for the DAF CBRN Defense Program IAW DoDI 6055.17 and DoDI 3020.52. AF/A4C will:

2.4.3.1. Serve as the DAF non-medical/non-aircrew lead for CBRN defense and the CBRN Defense Program IAW HAFMD 1-38. AF/A4C will serve as the OPR for the development and maintenance of this publication and AFMAN 10-2503.

2.4.3.2. Serve as the DAF lead for service component support to DoD during the development of DoD directives, instructions, and/or manuals and JPs that are primarily focused on DAF CBRN Defense Program equities and issues.

2.4.3.3. Represent the DAF in joint, DoD, and external CBRN defense governance activities.

2.4.3.4. Serve as the DAF modernization and sustainment lead for CBRN defense and the Chemical and Biological Defense (CBD) Program (CBDP), as delegated by AF/A10 in AFPD 10-26.

2.4.3.4.1. Coordinate with the J8, Joint Requirements Office (JRO), and the Joint Program Executive Office for CBD (JPEO-CBD).

2.4.3.4.2. Advocate for DAF modernization requirements via established joint and rapid acquisition processes for prioritization, development, acquisition, and sustainment of CBRN defense capabilities.

2.4.3.4.3. Responsible for prioritization and resource advocacy for all CBD efforts, including aircrew and medical capabilities.

2.4.3.5. Ensure changes to DoDI 3020.52, DoDI 6055.17, and other applicable federal and DoD guidance are incorporated into DAF CBRN defense strategy and guidance.

2.4.3.6. Coordinate on any non-medical CBRN defense METs, METs that assess CBRN defense as part of their standards utilized for capability assessments and training and equipment reporting utilized for resource assessments in the DRRS.

2.4.3.7. Develop guidance for unexploded ordnance (UXO) disposal during a CBRN-contested environment.

2.4.3.8. Develop guidance for firefighting response operations during a CBRN-contested environment.

2.4.3.9. Incorporate AFSC 3E9X1 (EM), in Joint Operation Planning and Execution System under CBRN unit type code (UTC) posturing.

2.4.3.10. Serve as the DAF representative to DoD governance processes with radiological/nuclear defense equities, as delegated by AF/A10 in AFPD 10-26 and IAW HAFMD 1-38. Advocate for DAF radiological/nuclear defense modernization requirements via established joint and rapid acquisition processes for prioritization,

development, acquisition, and sustainment of chemical, biological, and related defense capabilities.

2.4.3.11. Provide CBRN hazard mitigation guidance (i.e., high-altitude electromagnetic pulse [HEMP], collective protection [COLPRO], etc.) as it relates to any new construction from OCONUS and mission critical infrastructure.

2.4.3.12. In coordination with A4L, will develop guidance for sustaining contamination control team (CCT) activities including contaminated waste management procedures for OLs.

2.4.3.13. After formal staffing to all DAF staff elements and MAJCOMs/FLDCOMs, provide the final capability requirement change approval and the materiel capability decision authority for CBRN defense capabilities and priorities for all DAF CBRN defense capability developers to the J8 Joint Requirements Oversight Council.

2.4.3.14. Coordinate DAF CBRN Defense Program policy and guidance with USSF equities with the SF/S4O.

2.4.3.15. Develop, oversee, and manage standardized CBRN defense related METs and standards to assess the AFFOR's ability to survive and operate in a CBRN-contested environment. Annually evaluate the METs to ensure alignment and synchronization with CBRN defense METs listed in the Universal Joint Task Library (UJTL).

2.4.3.16. Serve as the OPR for non-aircrew/non-medical chemical biological COLPRO requirements.

2.4.3.17. Appoint a primary and alternate MA-related programs and activities representative to serve as the CBRN preparedness liaison supporting MA coordination. Appointed personnel will participate in the appropriate DAF MA forums to address CBRN issues that directly relate to strategic mission execution.

2.4.4. Director of Logistics (AF/A4L). The AF/A4L will provide guidance to MAJCOM/FLDCOM and OL logistics readiness and/or materiel management activities for materiel management and sustainment initiatives to support the DAF CBRN Defense Program. AF/A4L will:

2.4.4.1. Develop guidance for procuring, stocking, storing, maintaining, and issuing training and operational CBRN defense IPE and CBRN defense equipment to meet C-bag basis of issue (BOI) requirements.

2.4.4.2. Develop guidance for establishing support agreements with host nations for stocking, storing, and issuing training and operational CBRN defense IPE for foreign nationals.

2.4.4.3. Develop guidance for procedures and certification requirements for driving vehicular and non-vehicular equipment while wearing CBRN defense IPE.

2.4.4.4. Develop guidance for sustaining materiel support (i.e., IPE and/or C-bag resupply, etc.) for fixed-site COLPRO and/or expeditionary COLPRO systems.

2.4.4.5. Develop guidance for sustaining CBRN defense equipment supplies.

2.4.4.6. In coordination with A4C, will develop guidance for sustaining CCT activities including contaminated waste management procedures for OLs.

2.4.4.7. Develop guidance for vehicle and non-vehicular equipment decontamination including guidance for marking contaminated equipment.

2.4.4.8. Develop guidance for managing CBRN defense equipment postured as war reserve materiel (WRM).

2.4.4.9. Provide guidance to MAJCOM/FLDCOM and OL maintenance units for aircraft and supporting system maintenance activities to support the DAF CBRN Defense Program.

2.4.4.10. Develop guidance for providing a contamination control capability when detection and decontamination capacities are operationally relevant, including the ability to identify contamination, to decontaminate aircraft and aerospace ground equipment within their capabilities, and to mark contaminated areas as appropriate in support of recovery operations.

2.4.4.11. Develop guidance to specify the level of performance required by aircraft maintenance and munitions personnel performing immediate, operational, thorough, or clearance-level decontamination operations.

2.4.4.12. Develop guidance for the dispersal and protection of aircraft, munitions, and support equipment in a CBRN-contested environment.

2.4.4.13. Develop guidance for identifying, marking, and decontaminating aircraft and aerospace ground equipment. **Note:** While aircraft and munitions decontamination are an inherent aircraft maintenance and munition's function, AF/A4L guidance will note that the Special Program Office for all DAF mission design series will stipulate specific actions aircraft maintenance personnel would perform when decontaminating aircraft and aerospace ground equipment (e.g., a Home Stations Check or a Dash 6/-6 Inspection).

2.4.4.14. Develop standardized guidance for assessing IPE, CBRN defense equipment supplies, and CBRN defense WRM for reporting by units in the CBDRT Report within DRRS.

2.4.5. Director of Security Forces (AF/A4S). The AF/A4S will provide guidance to MAJCOM/FLDCOM and OL Security Forces units or activities for base defense and antiterrorism initiatives to support the DAF CBRN Defense Program. AF/A4S will:

2.4.5.1. Develop guidance for ensuring base defense plans include measures for executing operations in a CBRN-contested environment.

2.4.5.2. Develop guidance for DAF personnel to obtain weapon handling proficiency while wearing CBRN defense IPE during weapons qualification.

2.4.5.3. Develop guidance for protecting military working dogs (MWD) when operating in a CBRN-contested environment. **Note:** Protective equipment is not available for MWDs; however, protection of the animal's feet and body must be considered.

2.5. Deputy Chief of Staff for Air Force Futures (AF/A5/7). The AF/A5/7 will incorporate CBRN defense capabilities, equities, doctrine, guidance, and instructions into future DAF operational strategies, concepts, and requirements, as appropriate.

2.6. Deputy Chief of Staff for Plans and Programs (AF/A8). The AF/A8 will incorporate DAF CBRN defense capabilities, equities, doctrine, guidance, and instructions into DAF planning and programming development activities, as appropriate.

2.7. Deputy Chief of Staff for Strategic Deterrence and Nuclear Integration (AF/A10). The AF/A10 will provide support and oversight for CBRN defense aspects within the CWMD portfolio IAW DoDI 6055.17, DoDI 3020.52, AFPD 10-26, and this publication. AF/A10 will:

2.7.1. Serve as the DAF operations lead for CBRN defense and the CBRN Defense Program IAW AFPD 10-26 to ensure DAF forces maintain the ability to survive and operate in a CBRN-contested environment.

2.7.2. Advise DAF staff and combat developers on CBRN defense capability requirements based on operational and technical analysis.

2.7.3. Assess the AF/A3/5 operational plans (OPLAN), Time-Phased Force Development Document, and Air Tasking Order for impacts to DAF air operations across all component requirements.

2.8. The Air Force Surgeon General (AF/SG). The AF/SG will provide support, guidance, and oversight for all medical aspects of the DAF CBRN Defense Program IAW DoDI 6055.17, DoDI 3020.52, and this publication. AF/SG will:

2.8.1. Serve as the DAF medical lead for CBRN defense and the CBRN Defense Program IAW AFPD 10-26. Advise the AF Council, SecAF, CSAF, and joint staff on medical aspects of the DAF CBRN Defense Program. Provide medical expertise to aid in the development of CBRN defense response policies, guidance, and procedures.

2.8.2. Administer health surveillance, incidents of public health concern, and advise on operational exposure guidance (OEG).

2.8.3. Utilize sampling data to complete health risk assessments and monitor CBRN health hazards.

2.8.4. Oversee operational location medical response programs. Ensure equipment and capability requirements for medical CBRN defense are within appropriate allowance standards.

2.8.5. Provide medical SME for aspects of CBRN defense projects and acquisition programs. Monitor medical limiting factors and shortfalls of MAJCOM/FLDCOM CBRN Defense Programs and equipment.

2.8.6. Develop and oversee medical aspects related to CBRN defense training for medical personnel to enhance survivability and mission effectiveness in a CBRN-contested environment.

2.8.7. Provide SME on medical aspects of DAF CBRN defense to the HAF Staff, other service components, joint staff, Office of the Secretary of Defense, and congressional liaisons.

2.8.8. Support AF/A4C with advocacy for DAF medical CBRN defense modernization priorities through the DAF CBDP and Program Objective Memorandums (POM) process. Review applicable JCIDS documents and monitor joint CBRN defense POM submissions to ensure they address medical CBRN capability requirements.

2.8.9. Provide guidance, resource advocacy, and oversight for the DAF medical CBRN Defense Program.

2.8.10. Develop and implement procedures for funding, certifying, and reporting on medical CBRN defense capabilities.

2.8.11. Ensure tactical combat casualty care curriculum includes performing casualty care on personnel contaminated by CBRN hazards and/or performing casualty care in a CBRN-contested environment.

2.8.12. Provide policy and guidance for commanders to track radiation exposures derived from dosimeters and for radiological exposure control responsibilities for DAF personnel during combat operations.

2.8.13. In coordination with AF/A1, will develop guidance on the recovery, handling, storage, and return of contaminated human remains.

2.8.14. Develop standardized guidance for assessing medical CBRN defense equipment and supplies and medical CBRN WRM for reporting by units in the CBDRT Report assessment within DRRS.

2.9. Secretary of the Air Force Inspector General (SAF/IG). The SAF/IG, pursuant to DAFI 90-302, *The Inspection System of the Department of the Air Force*, will provide oversight to ensure execution of inspection policy pertaining to MAJCOM/FLDCOM IG assessments of CBRN defense program management and readiness exercise verifications. **Note:** SAF/IG may integrate CBRN defense exercise and evaluation guidance contained in **Chapter 7** of this publication into the DAF Inspection Program and associated inspection and exercise training products.

Section 2B—Space Staff

2.10. Deputy Chief of Space Operations for Operations, Mission Sustainment Division (SF/S4O). The SF/S4O will provide oversight to ensure DAF CBRN Defense Program requirements outlined in this publication are coordinated across the USSF where applicable. Refer to Program Action Directive (PAD) 20-1, *Establishment of the United States Space Force (USSF) and the Office of the Assistant Secretary of the Air Force for Space Acquisition and Integration (SAF/SQ)*, and its implementing guidance for additional information. SF/S4O will:

2.10.1. Coordinate with AF/A4C to ensure DAF CBRN Defense Program policy and guidance addresses USSF Space Base Delta (SBD)/Space Launch Delta (SLD) OT&E requirements where applicable.

2.10.2. Develop and publish DAF CBRN Defense Program supplemental guidance to this publication for USSF SBDs/SLDs where applicable.

2.11. United States Space Force (USSF) Space Base Delta (SBD)/Space Launch Delta (SLD) Commanders. USSF SBD/SLD commanders will coordinate CBRN defense requirements outlined in this publication through the local Installation Office of Emergency Management (IOEM). The IOEM will submit SBD/SLD CBRN defense requirements through the AFIMSC who will provide installation and mission support advocacy. **Note:** AFMC, including AFIMSC, serves as the CBRN defense capability force provider to USSF IAW PAD 20-1 and its implementing guidance. USSF SBD/SLD will:

2.11.1. Commanders will ensure Airmen and Guardians postured to deploy and operate at an OCONUS OLs in support of combat and/or contingency operations are trained and equipped for CBRN defense operations IAW **Chapter 6**, **Chapter 7**, and **Chapter 8** of this publication.

2.11.2. Commanders will submit CBRN defense capability requirements IAW **Chapter 10** of this publication.

Section 2C—Major Commands (MAJCOM)/Field Commands (FLDCOM) and Subordinate Centers

2.12. Air Force Materiel Command (AFMC). AFMC, and its subordinate centers listed below, delivers integrated capabilities through research, development, test, sustainment, support, and infrastructure to maximize readiness and lethality for CBRN defense capabilities.

2.12.1. As the CBRN defense capabilities force provider to USSF, will ensure USAF forces assigned to USSF SBD/SLD are organized, trained, equipped, and are supported by the AFIMSC to fulfill their assigned responsibilities. Refer to PAD 20-1 and its implementing guidance for additional information.

2.12.2. AFIMSC. The AFIMSC will provide integration and resourcing oversight for the DAF CBRN Defense Program IAW DoDI 3020.52 and this publication. AFIMSC will:

2.12.2.1. Integrate CBRN Defense Program requirements across the installation and mission enterprise ensuring critical asset risks are effectively managed and MA programs are synchronized IAW AFI 10-2402, *Critical Asset Risk Management Program*.

2.12.2.2. Manage the planning, programming, budgeting, and execution (PPBE) activities for program element code (PEC) 27593F (CBRN Defense) and 28028F (Contingency Operations).

2.12.2.3. Oversee DAF CBRN defense readiness reporting in the DRRS, monitor program and capability health indicators, and develop and coordinate readiness reporting products to inform PPBE activities.

2.12.2.4. Evaluate DRRS readiness data for unit CBRN defense limiting factors, Deliberate and Crisis Action Planning and Execution System shortfalls for CBRN defense related UTCs, develop mitigation strategies, and coordinate related activities during the PPBE process.

2.12.2.5. Oversee and manage non-mission readiness training CBRN defense training courses (e.g., Defense Nuclear Weapons School course such as Nuclear Emergency Team Operations) to include, scheduling and seat quota management, and coordination with unit training managers on seat availability.

2.12.2.6. Conjunction with IGs at all echelons, will consolidate and track CBRN Defense Program exercise findings, deficiencies, and recommended improvement areas. Provide IGs with advice and assistance in developing corrective action plans.

2.12.2.7. Provide CBRN defense SME reach back support to all echelons and ensure SMEs have appropriate clearance and access to classified information.

2.12.2.8. Develop and manage CBRN defense planning tools (e.g., Installation Emergency Management Plan [IEMP] 10-2 Planning Tool, All-hazards Threat Assessment planning tool) in support of the Integrated Risk Management Process.

2.12.2.9. In coordination with the Air Education and Training Command (AETC) and others as needed to develop, implement, and sustain effective CBRN defense education, formal training, and ancillary training programs.

2.12.2.10. Oversee the development and maintenance of DAF-wide CBRN defense training products and materials. CBRN defense training products and materials are developed IAW Allied Tactical Publication (ATP) 3.8.1, Volume III, C*BRN Defence Standards for Education, Training and Evaluation*.

2.12.2.11. Provide SME support for the development of CBRN defense training and exercise standards for Civil Engineer (CE) Silver Flag curriculum and CBRN defense training and exercise standards for DAF regional training sites (where applicable).

2.12.2.12. Serve as the DAF EM/CBRN SME to inform the development of CBRN defense competencies evaluated during AFFORGEN validation.

2.12.2.13. Validate and manage non-medical/non-ACBRN defense capability requirements requiring resourcing in PECs 27593F, 27594F, and/or 28028F.

2.12.2.14. Oversee and manage the mission capability statements for AFSC 3E9X1 (EM) UTCs.

2.12.2.15. Provide sufficient trained personnel to act as DAF non-medical and non-aircrew capability developers for JPEO-CBD and DAF CBRN Defense Programs.

2.12.2.16. Serve as the DAF voting member on multi-service writers working groups and will oversee the development and maintenance of CBRN defense AFTTPs becoming multi-service TTPs (MTTP).

2.12.2.17. Develop and maintain CBRN defense training courses that align competencies and proficiencies with AFFORGEN and ACE schemes of maneuver under contested and/or degraded CBRN conditions.

2.12.2.18. Assist the CE enterprise and EM career field with obtaining decision-relevant information regarding the nature and extent of EM/CBRN threats, hazards, and effects. **Note:** AFIMSC will distribute threat/hazard updates to DAF, MAJCOMs/FLDCOMs, and the IOEM when requested or changes occur.

2.12.2.19. Conduct trend analysis on EM and CBRN Defense Program requirements and provide trend analysis reports to the DAF enterprise (e.g., HAF, MAJCOMs/FLDCOMs, and installations) when required.

2.12.2.20. Serve as the capability requirement validation authority for non-aircrew/non-medical CBRN defense capabilities and is the primary advisor to AF/A4C for non-aircrew/non-medical CBRN defense materiel capability decisions.

2.12.2.21. AFIMSC, as the capability developer for non-aircrew/non-medical CBRN defense requirements, will serve as an AF representative to the JRO, review JCIDS documents, and monitor the joint nuclear, biological, and chemical defense POM submission to ensure it addresses DAF requirements.

2.12.2.22. Conduct the necessary studies and analyses using DAF and Joint Concepts, Theater Operations Plans, Threat Assessments, Theater Concept of Operations (CONOPS), and strategic guidance to identify and document operational capability gaps, risks, requirements, and courses of action (COA) within the DOTMLPF-P trade space.

2.12.2.23. Conduct requirements management through the life cycle of CBRN defense capabilities to include the development and update of Initial Capabilities Documents and Capability Development Documents.

2.12.2.24. Conduct capability development management through the life cycle of CBRN defense capabilities to include DOTMLPF-P change recommendation, fielding strategies, sustainment plans, training plans, standard operating procedures and TTPs, and replacement strategies.

2.12.2.25. Conduct a semi-annual non-aircrew/non-medical CBRN modernization requirements review (MRR) in support of the DAF CBRN Defense Program governance process. The purpose of the annual MRR is to conduct a full-scale review of DAF non-aircrew/non-medical CBRN defense requirements with all MAJCOMs/Air Staff affected agencies (A-1 through A-10, SG, or equivalents) and construct the MRR Report based on application of the DAF CBRN modernization process and Defense Planning Guidance.

2.12.3. Air Force Lifecyle Management Center (AFLCMC). AFLCMC will:

2.12.3.1. Serve as the DAF materiel developers directly supporting the DoD JPEO-CBD Programs.

2.12.3.1.1. Provide direct support as liaisons between JPEO-CBD, AF/A4C, and AF/A10S in the advocacy for DAF modernization requirements via established joint and rapid acquisition processes for prioritization, development, acquisition, and sustainment of chemical, biological, and related defense capabilities.

2.12.3.1.2. Assign materiel developers (military/civilian/contractor) to support joint CBD programs and, in coordination with AF/A4C and DAF capability developer inputs and priorities, ensure the full spectrum of DAF programs are represented and advocated for on behalf of the enterprise. These assignments will be in line with the memorandum of understanding between AFLCMC/WNU and JPEO-CBD related to materiel developer responsibilities.

2.12.3.2. Provide acquisition and sustainment recommendations and oversight to ensure DAF capability needs are addressed by CBRN defense programs and initiatives.

2.12.3.3. Review capability documentation DAF Annexes and ensure that they are both included as appropriate to CBRN acquisition and sustainment documents and consistent across documents.

2.12.3.4. Provide recommendations to DAF to accept or reject submitted CBRN defense equipment and procedures based on acquisition expertise and a thorough understanding of USAF and USSF warfighter needs and requirements to ensure those needs and requirements are achievable.

2.12.3.5. Review and provide comments to capabilities documents to ensure the proposed solution adequately meets mission needs by participating in requirements generation through the JRO for CBRN Defense Integrated Concept Teams for CBRN defense.

2.12.3.6. Support development of USAF and USSF TTPs in coordination with ACC/A3, AF/A4C, AF/A10S, AFIMSC, AFMRA, MAJCOMs, FLDCOMs, and Direct Reporting Units.

2.12.3.7. Collaborate with the medical, non-medical, and aircrew capability developers to provide the CBRN defense MWG program status of the CBDP portfolio.

2.12.3.8. Provide lifecycle management of sustainment for CBRN defense equipment (e.g., operational safety, suitability and effectiveness, provisioning, technical data, and Technical Orders [T.O.]).

2.12.3.9. Provide trained personnel to act as DAF materiel developers supporting JPEO-CBD and the DAF CBRN Defense Program.

2.12.3.10. Coordinate with AF/A4C, AF/A10S, ACC/A3T, AFMRA/SGX and AFIMSC to ensure materiel developers are effectively trained on current and emerging DAF CBRN defense CONOPS and TTPS, capability gaps, and other requirements essential to providing effective support to JPEO-CBD and related programs.

2.13. Air Mobility Command (AMC).

2.13.1. AMC develops and maintains a CONOPS for how mobility air forces (MAF) will operate in a CBRN-contested environment.

2.13.2. Civil aircraft under DoD contract and the Civil Reserve Air Fleet (CRAF) may conduct operations in CBRN-contested areas assessed as CBRN Defense Risk Index Low, as required by the 618th AOC and IAW AMC Instructions, the CRAF Chemical-Biological Warfare Defense Procedures, and MAF CWMD CONOPS.

2.14. Air Force Special Operations Command (AFSOC).

2.14.1. AFSOC will procure, maintain, and sustain expeditionary CBRN defense capabilities postured as capability enhancement team (CET) to support assigned Tier 2 units. Postured CBRN defense capabilities supporting Tier 2 units should be exercised and evaluated with their respective joint CBRN defense counterparts where feasible.

2.14.2. AFSOC, 209th Special Operations Civil Engineer Squadron Office of Emergency Management (SOCES/CEX), will manage a mobile and transportable expeditionary COLPRO system of systems and supporting CBRN defense reconnaissance, surveillance, and contamination reduction capabilities to support assigned Tier 2 units.

Section 2D—Field Operating Agencies and Direct Reporting Units

2.15. Headquarters (HQ) Cyberspace Capabilities Center (HQ CCC). The HQ CCC will coordinate with AF/A4C, the AF Operations Group (AF/A3OG) and Chief Information Officer (SAF/CN), to ensure CBRN defense automated communication and information systems are compatible with DAF-approved communication and information systems.

2.16. Air Force Operational Test and Evaluation Center. The Air Force Operational Test and Evaluation Center will support the DAF CBRN defense MWG with operational and test result data and reports from acquisition programs with DAF CBRN defense equities.

Section 2E—Component-Major Command (C-MAJCOM) and Component-Numbered Air Force (C-NAF)

2.17. Component-Major Command (C-MAJCOM) and Component-Numbered Air Force (C-NAF) Roles and Responsibilities. These roles and responsibilities are developed primarily for C-MAJCOMs and C-NAF but will be considered by non-component HQ and staff for applicability. C-MAJCOMs and C-NAFs will:

2.17.1. Review this publication and develop supplemental command specific CBRN defense guidance.

2.17.2. Prioritize CBRN defense planning into the AFFOR A-staff and, where applicable, the AOC warfighting functions and tasks.

2.17.3. Coordinate AFFOR OT&E requirements for CBRN defense with AFIMSC.

2.17.4. Execute and evaluate CBRN defense OT&E activities IAW assigned CBRN defense related METs. In the absence of assigned CBRN defense related METs, coordinate with the CCMD and DAF HQ staff to confirm reporting is not required. **Note:** For all measured units as defined in AFI 10-201, some level of CBRN defense MET reporting should be conducted.

2.17.5. Evaluate CBRN defense MET data reported by subordinate units in the DRRS to ensure accurate and timely reporting and to assess overall CBRN defense readiness.

2.17.6. Assess potential adversary offensive CBRN capabilities when developing strategy, plans, policy, operations, and doctrine.

2.17.6.1. Obtain and use the CCMD WMD threat assessment (where available) as the minimum CBRN threat baseline for operational planning. If a CCMD WMD threat assessment is not available or not current, refer to **paragraph 2.17.12**.

2.17.6.2. Intelligence analysts should collaborate with all-source analysts to produce tailored JIPOE products to support the commander's operational planning efforts by assessing the potential for the employment of CBRN weapons and/or materials and characterizing the enemy intent of actual or anticipated offensive CBRN activities.

2.17.6.3. The AFFOR A-staff and AOC must identify adversary CBRN capabilities in terms of COAs and supporting operations that the adversary can take to interfere with the accomplishment of the mission.

2.17.6.4. The AFFOR A-staff and AOC must plan for adversary CBRN employment tactics and options by developing time-event matrices to describe how an adversary could employ CBRN weapons/materials.

2.17.6.5. The AFFOR A-staff and AOC must develop a geospatial perspective of the OE by analyzing the impact of the environment and weather on adversary CBRN employment effects. **(T-2)**

2.17.6.6. The AFFOR A-staff and AOC will use the WMD/CBRN threat assessments and estimates to develop the commander's intent, commander's critical information requirements, and initial priority intelligence requirements to establish priorities for CBRN-related intelligence collection, processing, production, and dissemination.

2.17.7. The AFFOR A-staff and AOC will ensure the operational planning process accounts for CBRN defense FHP requirements IAW JP 3-11 and JP 3-40. FHP requirements include but are not limited to health protection condition framework's, decontamination, medical countermeasures, vaccination, contact tracing, testing, surveillance, personnel protective equipment (PPE), travel and other restriction of movement guidance.

2.17.8. The AFFOR A-staff and AOC will plan for CBRN impacts on theater air operations, including air mobility and ACE.

2.17.8.1. In coordination with U.S. Transportation Command (USTRANSCOM), develop planning assumptions and considerations for supporting transload exchange zone operations between uncontaminated and contaminated OLs. See the MAF CWMD CONOPS for additional information.

2.17.8.2. Develop planning assumptions and considerations for conducting ACE under chemical, biological, and radiological contamination. Address ways to manage and/or mitigate potential and/or perceived risks from moving casualties, personnel, aircraft, equipment, and munitions from contaminated OLs to uncontaminated OLs.

2.17.9. The AFFOR A-staff will integrate joint, combined, and/or host nation CBRN defense procedures (where applicable) into supplemental guidance to this publication. International CBRN response TTPs must be known, exercised, and deconflicted to preserve force survivability and mission continuation.

2.17.9.1. Integrate senior component liaisons into the CBRN defense planning process to integrate and deconflict joint force CBRN defense planning assumptions, where applicable.

2.17.9.2. Ensure required ally and partner force CBRN training and preparation is included in theater security cooperating planning and SFA operational advising plans and OAIs.

2.17.10. The AFFOR A-staff will supplement CCMD or theater guidance for planning and conducting Joint, combined, and/or host nation CBRN defense exercises and/or engagements. In the absence of CCMD or theater guidance, the A-staff will establish guidance to enable subordinate commanders to plan and conduct CBRN defense exercises and/or engagements with joint, combined, and/or host nation partners. **Note:** CBRN defense exercises and engagements (where applicable) are normally identified in the CCMD Campaign Plan.

2.17.11. The AFFOR A-staff, in collaboration with the MAJCOM/A2/6, Component FLDCOM/S2, MAJCOM/SG, all-source analysts, and CBRN defense specialists on staff, will develop a CBRN threat assessment during the JIPOE. The A-staff and AOC will use the assessment during the planning process by assessing the most dangerous and most likely enemy CBRN COAs. Refer to JP 3-11 and AFTTP 3-2.70, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear (CBRN) Planning*, for additional information.

2.17.12. The AFFOR A-staff and AOC will establish cooperative policies and procedures for routinely sharing CBRN threat information as part of a defined battle rhythm. Information sharing ensures the A-staff remains focused on CBRN threats as they evolve.

2.17.13. C-MAJCOM/C-NAF emergency managers, in collaboration with the A2/6, will establish CBRN intelligence requirements and support the identification of CBRN threats and

hazards. **(T-2)** This information is used to support the commander's priority intelligence requirements concerning the threat's ability to use CBRN weapons.

2.17.14. C-MAJCOM/C-NAF emergency managers will establish and maintain a CBRN Control Center to provide a CBRN warning and reporting and hazard prediction capability. This capability must provide CSC2 IAW **Chapter 4** and **Attachment 3** of this publication.

2.17.14.1. At a minimum, the CBRN Control Center capability must be able to transmit (send and receive) missile intercept reports, strike warning, CBRN hazard warning and meteorological messages using cross-domain solutions. Refer to AFTTP 3-2.56, *Multi-Service Reference for Chemical, Biological, Radiological, and Nuclear Warning and Reporting Hazard Prediction Procedures*, for additional information.

2.17.14.2. The CBRN Control Center, where applicable, will be physically collocated with the AOC to enable real-time decisive information advantage between CBRN defense specialists (AFSC 3E9X1) and those with integrated air and missile defense responsibilities.

2.17.14.3. When conducting operations by, with, and through ally and partner infrastructure and forces, the CBRN Control Center will ensure that means have been established to communicate timely CBRN threat warnings to ally and partner leadership/forces.

2.17.15. C-MAJCOM/C-NAF emergency managers should obtain and maintain an adjudicated Top Secret level clearance and be eligible for Sensitive Compartmented Information clearance. Appropriate access is required to effectively understand and assess CBRN threats. Refer to DAFI 10-2602 for additional information.

2.17.16. C-MAJCOM/C-NAF emergency managers will plan for and exercise environmental sample collection, transport, and chain of custody of an environmental sample for verification within their respective theater of operation in support of strategic national objectives. Refer to AFTTP 3-2.70 for additional information.

2.17.17. C-MAJCOM/C-NAF emergency managers will review applicable campaign and/or operational plans for CBRN defense equities and develop CBRN defense related operations order/tasking order templates to support timely higher headquarters (HHQ) direction to subordinate units.

2.17.18. A-staff personnel assigned to positions with inherent CBRN defense roles and responsibilities may be scheduled to attend the U.S. Army CBRN School, *Joint Senior Leader Course* (Course Number: 4K-74A/494-F18), upon assignment.

Section 2F—Air Expeditionary Wing (AEW) Commanders

2.18. Air Expeditionary Wing (AEW) Commander Roles and Responsibilities. The term AEW commander is used in this chapter to identify DAF commanders OCONUS who currently have or are planned to have Base Operating Support-Integrator (BOS-I) and/or Senior Airfield Authority responsibilities at an OCONUS MOB, FOS, CSL, or CL during combat and/or contingency operations. While developed primarily for AEW commanders, these roles and responsibilities will be considered by all DAF base commanders at CONUS and OCONUS

locations responsible for combat or contingency operations that must continue despite the threat, or actual use of WMD. AEW Commanders will:

2.18.1. Through the IOEM, establish and maintain an IEMP 10-2 containing a CBRN defense annex that establishes the guidance and describes the CBRN defense measures the MOB will take before, during, and after a CBRN incident. **Note:** Classify the CBRN defense annex of the IEMP 10-2 IAW the current Security Classification Guide (SCG). Refer to DAFI 10-2501 for additional information regarding the IEMP 10-2.

2.18.1.1. For OLs without an IOEM and where the DAF will have BOS-I and/or Senior Airfield Authority responsibilities, coordinate with the CBRN defense specialists to develop and document CBRN defense measures for each supported OL.

2.18.1.2. Train, rehearse, and exercise the CBRN defense planning standards IAW **Chapter 3** of this publication. Validate unit reported capability and resource CBRN defense readiness data.

2.18.2. Establish cooperative policies, procedures, and networks (where feasible) to enable joint forces, host nation, and other friendly forces to operate cohesively in a CBRN environment. Cooperative policies and procedures are used during CBRN defense exercises to evaluate unity of effort and unified action.

2.18.3. Through the IOEM or CBRN defense specialists, and in collaboration with intelligence planners and all-source analysts, develop a CBRN threat assessment during the JIPOE process. **(T-3)** AEW commanders must use the assessment during the operational planning process by assessing the most dangerous and most likely enemy CBRN employment COAs.

2.18.3.1. Through AFE, will use the CBRN threat assessment to conduct a vulnerability analysis to assess the risks posed by CBRN weapon and/or material effects on the ability to generate aircrew to conduct operations in a CBRN-contested environment. Refer to AFMAN 11-301, Volume 3, *Aircrew Flight Equipment (AFE) Contingency Operations and Planning*, for additional information.

2.18.3.2. Through Bioenvironmental Engineering, will use the CBRN threat assessment to develop a site and population-based health risk assessment to characterize exposure pathways to inform of signs, symptoms, health risks, and prophylaxis. Bioenvironmental Engineering will use the radiological and nuclear threat assessment to guide in the collection and integration of site-specific data to characterize exposure pathways and levels of contamination to inform of signs, symptoms, and health risks as well as advise on OEG based on AEW commander's risk acceptance.

2.18.3.3. Through CE Operations (CEO) and CE Engineering, will use the CBRN threat assessment to develop a CE Contingency Response Plan outlining the capabilities and procedures for conducting integrated base response and recovery.

2.18.3.4. Through Logistics Readiness, will use the CBRN threat assessment to plan for sustainment operations during all phases, including pre-deployment and redeployment, and to ensure adequate stocks of CBRN defense equipment are on-hand, available, and serviceable.

2.18.3.5. Through Maintenance and Munitions, will use the CBRN threat assessment to develop standard operating procedures for decontaminating aircraft, weapon system

platforms, and/or air ground equipment for inter and intra-theater movement. **Note:** Thorough decontamination may not be desired or achievable during operations due to the time and resources required.

2.18.3.6. Through the Medical Emergency Manager, FHP, and the Public Health Emergency Officer (PHEO), will use the CBRN threat assessment to develop the Medical Contingency Response Plan IAW AFI 41-106, *Medical Readiness Program*. Medical planning for FHP activities includes, but are not limited to, medical countermeasures; patient/casualty decontamination; diagnostic testing activities; prophylaxis and treatment; disease containment; health monitoring; and/or CBRN exposure data capture.

2.18.3.7. Through Mortuary Affairs, will use the CBRN threat assessment to conduct planning to develop procedures for processing contaminated remains.

2.18.3.8. Through Security Forces, will use the CBRN threat assessment to conduct planning OL integrated defense/force protection and for the protection of defense personnel, MWDs, and equipment from the effects of CBRN contamination.

2.18.3.9. Through Force Support, will use the CBRN threat assessment to plan for the provision, dispersal, and distribution of food and water in the early stages of ACE schemes of maneuver.

2.18.4. Through the IOEM or CBRN defense specialists, and in collaboration with intelligence planners, establish CBRN intelligence requirements and support the identification of CBRN threats and hazards. This information is used to support the commander's priority intelligence requirements concerning the threat's ability to use CBRN weapons. Refer to JP 2-0, *Joint Intelligence*, for additional information.

2.18.5. Establish an Emergency Operations Center (EOC) capability to oversee and manage CBRN defense activities before, during, and after CBRN response operations IAW **Chapter 4**.

2.18.5.1. Design EOC C2 processes to allow individuals and functions flexibility to shift decisively from one incident or objective to another. The EOC must have the capability to process and integrate information in real-time before, during, and after CBRN response operations to produce coherent CBRN defense COAs or modifications to existing ones enabling decision advantage.

2.18.5.2. The EOC C2 capability may be virtual or physically located and integrated with other OL C2 systems and processes. AEW commanders should leverage mission command and task orders to the greatest extent possible for EOC C2.

2.18.6. Through the IOEM and/or CBRN defense specialists, establish and maintain a virtual and physical (manual) CBRN warning and reporting and hazard prediction capability. This capability provides CSC2 to the Wing Operations Center (WOC), or equivalent OL C2 node.

2.18.6.1. At a minimum, the capability must be able to transmit (send and receive) missile intercept reports, strike warning, CBRN hazard warning, counter small unmanned aerial system reports, and meteorological messages using cross-domain solutions. Refer to AFTTP 3-2.56 for additional information.

2.18.6.2. At a minimum, the CBRN defense staff must test and evaluate this capability annually with all applicable HHQ and subordinate level CBRN defense area, zone, collection, and/or sub-collection centers.

2.18.6.3. AEW commanders planned to execute ACE (maneuver/dispersal operations) must evaluate both the virtual and physical (manual) CBRN warning, reporting and hazard prediction capability between the MOB, FOS, CSL, CL and/or other applicable OLs during a CBRN defense exercise and ensure that CBRN warning systems integrate with ally and partner force systems integrate with ally and partner force systems as required of the OL.

2.18.7. Ensure individuals performing inherently CBRN defense related duties and responsibilities (i.e., installation emergency manager/planner, CBRN defense specialists [AFSC 3E9X1], etc.) obtain and maintain an adjudicated Top Secret level clearance and be eligible for Special Compartmented Information clearance, where applicable. Appropriate access is required to effectively understand and assess CBRN threats in real time.

2.18.8. Ensure the IOEM develops a criticality, hazard, vulnerability, and capability assessment through the Integrated Risk Management Process IAW DAFI 10-2501. AEW commanders will use these assessments to identify and prioritize CBRN defense risks. **Note:** Refer to the applicable SCG when developing these assessments.

2.18.8.1. Commanders must develop and document risk mitigation strategies for all identified CBRN defense mission risks.

2.18.8.2. Commanders must submit identified CBRN defense capability requirements to HHQ IAW **Chapter 10** of this publication and AFI 10-601, *Operational Capability Requirements Documentation and Validation*.

2.18.9. Ensure assigned CBRN defense specialists plan for and exercise environmental sample collection, transport, and chain of custody of an environmental sample for verification within the respective theater of operation. Additionally, ensure procedures are included in the IEMP 10-2. Security and movement of environmental samples in a CBRN environment directly supports strategic national objectives. Refer to AFTTP 3-2.70 and the IEMP 10-2 for additional information.

2.18.10. Refer to the applicable criticality list developed by the DAF, MAJCOM/FLDCOM, or CCMD. **Note:** These lists are used to prioritize CBRN defense investments through the POM and PPBE process.

2.18.11. Through the CBRN defense staff, review the alarm signals listed in AFTTP 3-2.46, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Passive Defense,* and obtain the DAF attack warning signals and mission-oriented protective postures (MOPP) visual aids through the DAF Be Ready Campaign centrally managed by AFIMSC. Once obtained, tailor the attack warning to the most dangerous enemy COAs then implement, integrate, and evaluate the use of attack warning signals and MOPP levels during CBRN defense exercises.

2.18.12. Through the CBRN defense staff, divide the MOB into CBRN defense sectors on base grid maps and/or within the digital common operating environment. Consider aligning the CBRN defense sectors to any force protection sectors already established. Sectoring the MOB provides flexibility, through mission command, in CBRN defense preparations, response

and recovery. **Note:** Do not use the term "zone" in place of "sectoring" since "zone" is already used in joint CBRN doctrine to identify specific areas within a given CBRN hazard (i.e., downwind distance of Zone I during nuclear fallout).

2.18.12.1. Assign CBRN defense sector responsibilities to a lead unit as appropriate. Conventional and asymmetric fires and effects will challenge our ability to maneuver. Leverage mission command to designate CBRN defense sector responsibilities to lead units or groups to enable a more fluid C2 environment.

2.18.12.2. Establish mission type orders for each CBRN defense sector lead. These orders must include guidance for increasing/decreasing CBRN defense protection measures (e.g., alarm condition, MOPP level, split MOPP, and demasking criteria) and which CBRN defense activities are authorized within a given sector during a communication-denied environment.

2.18.13. Through Bioenvironmental Engineering, medical representatives and the PHEO will use the CBRN threat assessment to develop a site and population-based health risk assessment to characterize exposure pathways and contamination to inform of signs, symptoms, health risk, and prophylaxis. Bioenvironmental Engineering, medical representatives, and the PHEO, select and publish CBRN OEG and recommended masking procedures.

2.18.14. Through CE (Operations and Engineering), assess the requirement for fixed site and/or expeditionary chemical and biological COLPRO. Refer to AFMAN 10-2503 and Unified Facilities Criteria (UFC) 4-024-01, *Security Engineering: Procedures for Designing Airborne Chemical, Biological, and Radiological Protection for Buildings*, for additional guidance on COLRPO requirements.

2.18.14.1. Identify, plan, and program COLPRO requirements for enduring and CLs based on a current CBRN threat assessment derived from the JIPOE process and using the planning guidance below. At a minimum, consider COLPRO requirements for facilities providing C2, mission generation, rest and relief, and/or medical care.

2.18.14.2. Refer to AFMAN 10-2503 for the types of chemical and biological COLPRO and use AFTTP 3-2.46 for COLPRO planning including the development of a shelter management plan. Include localized COLPRO planning factors in the CBRN defense annex to the IEMP 10-2.

2.18.14.2.1. Fixed-site chemical and biological COLPRO systems for sustaining uninterrupted C2 force elements (FE) and associated operations at MOBs for 30 continuous days without resupply.

2.18.14.2.2. Fixed-site chemical and biological COLPRO systems for sustaining uninterrupted medical FEs and associated operations at MOBs for 30 continuous days without resupply.

2.18.14.2.3. Expeditionary chemical and biological COLPRO systems to provide rest and relief for C2 and/or mission generation FEs at FOS, CSL and/or CLs for 14 continuous days without resupply. Regardless of function, assume all FEs will be performing 12 hours on/12 hours off (e.g., shift work) when assessing COLPRO requirements for rest and relief operations.

2.18.14.2.4. Other mission areas listed in AFMAN 10-2503 as required.

2.18.14.2.5. Use assigned and planned apportioned force numbers to inform the quantity of COLPRO shelter space(s) and overall capacity required.

2.18.15. Through Force Support, and in coordination with CE (Operations and Engineering), establish a shelter management program, including a shelter management plan, for COLPRO systems IAW AFMAN 10-2503 and AFTTP 3-2.46.

2.18.16. Through CE (Operations and Engineering), and in coordination with medical representatives, assess the requirement for and establish facility protection factors to support radiological/nuclear fallout protection. Refer to Air Force handbook (AFH) 10-2603-O, *Operations in a Nuclear Environment*, for additional information. Include protection factor determinations for the applicable facilities in the CBRN defense annex to the IEMP 10-2.

2.18.17. Through Logistics Readiness or equivalent activity, review the CBRN defense IPE/PPE BOI in **Table 8.4** of this publication and validate identified on-hand versus required quantities. Refer to AFI 23-101, *Materiel Management Policy*, for additional guidance.

2.18.17.1. Develop a CBRN defense IPE and equipment distribution and sustainment plan. The plan must consider the following:

2.18.17.1.1. Initial distribution before hostilities.

2.18.17.1.2. Resupply during hostilities and under CBRN conditions.

2.18.17.1.3. Resupply to support open-air contamination control area (CCA) systems.

2.18.17.1.4. Resupply to support fixed-site and/or expeditionary COLPRO systems/shelters.

2.18.17.1.5. Resupply to support distributed/dispersed force elements at a FOS and/or CSL/CL.

2.18.17.1.6. Resupply for apportioned forces. **Note:** See JP 5-0, *Joint Planning*, and Chairman of the Joint Chiefs of Staff (CJCS) Guide 3130, *Joint Planning and Execution Overview and Policy Framework.*

2.18.17.1.7. Resupply of decontamination materials.

2.18.17.2. Develop a process for collecting and/or disposing of individual and unit CBRN contaminated waste at each assigned/supported OL. Include this contaminated waste collection/disposal process in the CBRN defense annex to the IEMP 10-2.

2.18.18. Establish procedures for camouflage, concealment, and deception to the extent practical ensuring personnel avoid being targeted and to reduce the effects of a CBRN attack.

2.18.19. Establish procedures for accessing safe and secure sustenance (e.g., food and water) and protecting sustenance supply chains from CBRN effects.

2.18.19.1. Establish procedures for resupply of potable water and ensure individuals drink water regularly before, during, and after each MOPP level adjustment.

2.18.19.2. After consultation with appropriate medical personnel, and when personnel operate in MOPP levels (exercise and/or real world), all AEW commanders, supervisors, and the C2 functions will observe fluid replacement guidelines IAW DAFI 48-151,

Thermal Stress Program, and the Medical Technical Bulletin 507, *Heat Stress Control and Heat Casualty Management*.

2.18.19.3. Through Bioenvironmental Engineering and/or or other medical support staff, in close coordination with EM and the C2 focal points, are responsible for associating and communicating work-rest cycles and heat categorization into localized planning during elevated MOPP levels.

2.18.19.4. Follow the guidance in DAFI 48-151 to establish work-rest cycles and hydration requirements in CBRN-contested environments. **Note:** Commanders and supervisors are responsible for balancing work-rest cycles with operational mission needs and will ensure individuals hydrate while at rest or work/generating the mission.

2.18.20. Establish procedures for personnel to access IPE in hardened facilities or bunkers (where available).

2.18.21. Establish procedures for dispersing assets to reduce vulnerabilities during a CBRN attack.

2.18.22. Establish procedures for issuing and maintaining CBRN defense IPE, and medical countermeasures.

2.18.23. Establish procedures for resupply of additional sets of CBRN defense IPE within combat-configured loads. Procedures will include how to accomplish the palletizing of CBRN defense IPE to create a push package to support the resupply of IPE for FEs who may disperse to a FOS and/or CSL/CL.

2.18.24. Establish procedures for monitoring serviceability of CBRN defense IPE.

2.18.25. Establish procedures for protecting U.S. government mission-essential civilians, contractors, and/or dependents including the distribution of CBRN defense IPE where appropriate. **Note:** Ensure the target populace receives just-in-time training on CBRN defense IPE wear before issue.

2.18.26. Establish procedures for establishing clean (contamination free or contamination mitigated to acceptable levels) CBRN defense sectors.

2.18.27. Establish procedures for providing security at OLs during decontamination operations to ensure activities are conducted without interference.

2.18.28. Establish procedures for documenting and reporting personnel, equipment, and facilities decontamination and contaminated waste collection and disposal. At a minimum, develop procedures for documenting and reporting the following:

2.18.28.1. Quantity and types of vehicles decontaminated.

2.18.28.2. Quantity and type of equipment that could not be decontaminated.

2.18.28.3. Number of personnel decontaminated.

2.18.28.4. Number of CBRN casualties.

2.18.28.5. Time decontamination operations started and ended.

2.18.28.6. Quantity of facilities contaminated.

2.18.28.7. Number of critical personnel displaced.

2.18.28.8. Through the SG or medical representatives, document levels of contamination associates with activities.

2.18.29. Through CE (Operations and Engineering), assess the requirement for the HEMP hardening of identified CBRN mission critical facilities and/or infrastructure.

2.18.30. Through CE (Operations and Engineering), develop and publish procedures for shutting down heating, ventilation, and air conditioning systems in a CBRN-contested environment.

2.18.31. Consider whether to develop procedures for implementing split-MOPP procedures. The decision to implement split-MOPP could incur significant risk to force survivability and mission continuation depending on the CBRN hazard effects. Refer to AFMAN 10-2503 for additional split-MOPP planning considerations.

2.18.32. Establish procedures for identifying, training, and exercising personnel for CCT and CCA, to include aircrew CCA, operations.

2.18.33. Through the SG or medical representatives, develop procedures for collecting and documenting individual chemical, biological, and radiological exposure.

2.18.34. Through the CBRN defense staff and logistics representatives, develop procedures for marking contaminated areas (sectors), equipment, vehicles, and systems.

2.18.35. Ensure the Base Emergency Preparedness Orientation (BEPO) includes a localized CBRN threat briefing and overview of CBRN defense alarm conditions, MOPP levels, and initial emergency response procedures during a CBRN attack.

2.18.36. Ensure all required personnel attend CBRN defense training IAW **Chapter 6** of this publication.

2.18.37. Ensure all required personnel complete CBRN defense task qualification training (TQT) IAW **Chapter 6** of this publication.

2.18.38. Ensure all required personnel are exercised and evaluated on their ability to obtain and maintain proficiency on the CBRN defense standards IAW **Chapter 6** of this publication.

2.18.39. Conduct reviews of base support agreements to ensure no logistical, contractual, or procedural obstructions prevent needed survivability and/or endurability actions from being accomplished.

2.18.40. Review/establish support agreements ensuring required food (human consumption); water (human consumption, hygienic needs; environmental sustainment); fuel (aircraft; emergency/back-up power for diesel generators); and spare parts (especially those with high failure rates) are available (when and where required) to enable mission continuation throughout tasked endurability periods.

2.18.41. Where applicable, commanders will ensure shelter-in-place (SIP) plans are established and SIP kits (e.g., plastic sheeting, tape, flashlights/batteries, etc.) are available for continued indoor operations at locations with extended survivability/endurability requirements; especially at locations where IPE is not issued.

2.18.42. When electromagnetic pulse (EMP) hardness is required for CBRN mission critical facilities (and/or the equipment they house), commanders will ensure plans are developed and

practiced minimizing the effects of a HEMP attack (e.g., isolate mission critical equipment/facilities from commercial power; implement use of uninterruptible power supplies; transfer equipment to internal/organic power sources [e.g., backup generators]; etc.). Additionally, commanders will ensure required hardness maintenance/hardness surveillance programs are established and periodically reviewed for acceptability.

2.18.43. Plan to triple-wrap air cargo with plastic tarps or other contamination avoidance materials prior to transportation to/from an OL. Refer to the MAF CWMD CONOPS for additional information on conducting MAF operations in a CBRN-contested environment. **Note:** For airlift operations, only critical retrograde cargo will be moved from a contaminated to uncontaminated OL. Critical requirements are pre-designated in theater operational plans.

2.18.44. Coordinate with applicable civilian authorities and will only issue guidance on contaminated aircraft movement after obtaining approval from the President of the U.S. and U.S. Secretary of Defense through the respective CCMD. Contract carriers are issued War-Risk-Insurance and any claims for hull loss and/or damage, including CBRN contamination, will be processed through USTRANSCOM and the Federal Aviation Administration. **Note:** Refer to Department of Defense Manual (DoDM) 3145.03, *DoD Chemical, Biological, and Radiological (CBR) Clearance Guidelines for Platforms and Materiel*.

2.18.45. Coordinate Portable Patient Transport System requirements with the medical SMEs and IAW DoDI 6000.11, *Patient Movement (PM)*.

Chapter 3

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE PLANNING STANDARDS

3.1. Air Expeditionary Wing (AEW) Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Planning Standards for Air Force Forces Generation (AFFORGEN) Mission Sustainment. AEW commanders must be prepared to conduct prompt and sustained air, space, and cyber operations in CBRN-contested environments. Adversarial use of CBRN weapons or materials can create effects that disrupt or delay operations. The DAF CBRN defense standards for AFFORGEN mission sustainment following a CBRN incident are listed below. AEW commanders and their CBRN defense staff should refer to AFMAN 10-2503 for additional CBRN threat planning information in relation to the DAF standards for AFFORGEN mission sustainment. **(T-2)**

3.1.1. In the absence of CCMD or C-MAJCOM operational and/or contingency planning guidance, commanders at an OCONUS MOB will plan to conduct and sustain operations under CBRN conditions for a minimum of 30 days without resupply and resume their primary mission capability within six hours after a CBRN incident occurs. **(T-2)**

3.1.2. In the absence of CCMD or C-MAJCOM operational and/or contingency planning guidance, commanders at an OCONUS FOS will plan to conduct and sustain operations under CBRN conditions for a minimum of 14 days without resupply and resume their primary mission capability within 12 hours after a CBRN incident occurs or be prepared to maneuver (disperse) to another OL. **(T-2)**

3.1.3. In the absence of CCMD or C-MAJCOM operational and/or contingency planning guidance, commanders at an OCONUS CSL or CL (e.g., Pacific Air Force and U.S. Air Force in Europe) will plan to conduct and sustain operations under CBRN conditions for a minimum of seven days without resupply or be prepared to maneuver (disperse) to another OL. **(T-2)**

3.1.4. Commanders at all OCONUS OLs must assume that apportioned AFFORGEN FEs tasked with establish the airbase, operate the airbase, and/or robust the airbase responsibilities will be contaminated while executing their METs. **(T-2) Note:** Contamination and hazards caused by WMD could last for weeks to months.

3.2. Air Force Forces Generation (AFFORGEN) Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Mission Sustainment Planning Guidance. AFFORGEN FEs could be vulnerable to mass enemy conventional and CBRN threats regardless of OL.

3.2.1. AEW commanders OCONUS will conduct deliberate and adaptive mission planning against a current CBRN threat assessment to inform COA development to account for adversarial conventional and CBRN mass fires and effects at enduring and CLs. **(T-2)** Ensure that CBRN planning and COA development factor in ally and partner force requirements and roles at enduring and CLs. **(T-2)**

3.2.2. AEW commanders OCONUS and all functional communities with CBRN defense roles and responsibilities identified in **Chapter 2** will use AFMAN 10-2503, AFTTP 3-2.46 and this publication to conduct CBRN defense planning. **(T-2)**

3.3. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Force Protection Planning. Commanders will plan to provide force protection using the guidance in this publication, AFMAN 10-2503, JP 3-11, and the Military Exposure Guidelines contained in the U.S. Army Public Health Command, Technical Guide 230, *Environmental Health Exposure Risks Assessment and Chemical Exposure Guidelines for Deployed Military Personnel*. **(T-2)** At a minimum, the following force protection capabilities will include:

3.3.1. IPE and PPE requirements for OLs used to support ACE schemes of maneuver. **(T-2)**

3.3.2. Biological and chemical warfare exposure guidance. **(T-2)**

3.3.3. Radiological risks and exposure status guidelines (Refer to AFH 10-2603-O). **(T-2)**

3.3.4. Consider the logistical burden of obtaining decontaminants, augmentation support required beyond the unit level, CBRN detection equipment to verify decontamination was effective, and contaminated waste generation. **(T-2)** Also consider the differences between chemical and biological warfare decontamination processes and procedures. **(T-2)**

3.3.5. CBRN defense protection requirements for civilian and contractor personnel. **(T-2)**

3.3.6. Chemical and biological COLPRO requirements. Including throughput times based on estimated time for MOPP gear doffing and patient decontamination, shelter locations, maintenance, setup/teardown times, power supply, communications requirements, security, additional gas/particulate filters, CBRN detection devices for personnel and to warn of system failure, etc. **(T-2)**

3.3.7. Open-air CCAs available to perform individual decontamination operations. This includes CCA prior to entry into fixed-site and/or expeditionary COLPRO. **(T-2)**

3.3.8. SIP requirements for chemical warfare incidents where COLPRO is not available. **(T-2)** **Note:** In the event of a biological attack, treat in-place pending determination of the agent and contagiousness.

3.3.9. Contamination mitigation and avoidance requirements for chemical warfare incidents to include covering, shielding, contaminated waste storage, management, and disposal. **(T-2)** **Note:** Refer to the U.S. Army Medical Research Institute of Infectious Diseases, *Medical Management of Biological Casualties Handbook*, for information related to biological warfare incidents.

3.3.10. Selective unmasking procedures and protective mask filter exchanges. **(T-2)**

3.3.11. Contamination control requirements including for airlift operations. **(T-2)**

3.3.12. Casualty care in CBRN contaminated areas using the massive hemorrhage, airway, respirations, circulation, hypothermia (MARCH) and mask, antidotes, rapid spot decontamination, countermeasures, extraction, and evacuation ($MARCHE^2$). Combining these two approaches gives the acronym $MARCHE^2$ or "MARCH-squared." **(T-2)**

3.3.13. CBRN warning and reporting and hazard prediction. **(T-2)**

3.3.14. Attack warning signals, alarm conditions, and MOPP levels. **(T-2)** **Note:** Refer to the U.S. Army Medical Research Institute of Infectious Diseases *Medical Management of Biological Casualties Handbook* for information related to biological warfare incidents.

3.3.15. Social distancing and restriction of movement (e.g., quarantine and/or isolation) and PPE as required. **(T-2)**

3.3.16. CBRN defense IPE shortages and reuse strategies. **(T-2)**

3.3.17. CBRN reconnaissance and surveillance monitoring assets (i.e., field detectors, laboratory testing, contract tracing, etc.). **(T-2)**

3.3.18. Medical countermeasures. **(T-2)**

3.3.19. Mitigation of nuclear-generated EMP (e.g., HEMP and low-altitude EMP). **(T-2)**

3.3.20. Toxic free areas available to conduct rest and relief for the AFFORGEN FEs. **(T-2)**

3.3.21. Shelter management requirements including developing a shelter management plan IAW the planning guidance in **paragraph 2.18.14.2**. **Note:** Commanders will coordinate with the IOEM for an immersion briefing on specific unit roles and responsibilities for shelter management operations. **(T-2)**

3.4. Chemical, Biological, Radiological, and Nuclear (CBRN) Preparedness Planning.

3.4.1. The DAF supports installation CBRN preparedness by ensuring BOS-I responsibilities identifies in program action directives, mission directives, and/or support agreements are adequately organized, trained, and equipped to prevent, protect against, prepare for, mitigate, respond to, and recover from CBRN incidents affecting CCMD and/or MAJCOM/FLDCOM identified mission-critical systems and infrastructure required to survive and/or operate in a CBRN-contested environment.

3.4.2. To the maximum extent practical, DAF commanders at all levels must ensure individuals and mission critical systems can conduct and sustain operations in CBRN-contested environments in the theater during combat operations.

3.4.3. AEW commanders at OCONUS OLs with mission-critical systems must ensure emergency essential personnel are adequately protected to enable execution of mission-critical tasks in a CBRN-contested environment. CBRN survivability TTPs will be documented in a site-specific plan developed for each mission-critical system.

3.4.3.1. AEW commanders at OCONUS OLs will plan to provide individual CBRN protection for emergency essential personnel. **(T-2)** Where hazardous material (TICs/TIMs) threats exist, commanders will establish a SIP and evacuation program. **(T-3)**

3.4.3.2. AEW commanders at OCONUS OLs will provide a CBRN emergency response capability in support of CBRN mission-critical systems. **(T-2)** Commanders should consider the availability and capacity of on/off base emergency response capabilities to meet this response requirement.

3.4.3.3. AEW commanders at OCONUS OLs will ensure CBRN response TTPs used during CBRN defense exercises directly support mission objectives. **(T-3)**

3.5. Chemical Warfare Agent (CWA) Challenge Levels. The DAF adopts the CWA challenge levels developed by AF/A10SA and the Air Force Research Laboratory to inform CBRN defense capability requirements. DAF commanders with responsibilities listed in **Chapter 2** will use the CWA challenge levels listed in **Table 3.1** and **Table 3.2** when developing CBRN defense capability requirements. **(T-1)**

Table 3.1. Chemical Warfare Agent (CWA) Liquid Deposition Challenge Levels.

CWA Liquid Deposition Challenge Level			
Functional Community	**A232 (Novichok) TVX (Thickened VX)**	**HD (Sulfur Mustard) THD (Thickened Sulfur Mustard)**	**GD (Soman)**
Aircrew CBRN	2.5 g/m^2	500 mg/m^2	500 mg/m^2
Groundcrew CBRN – Minimal Exposure Risk[1]	2.2 g/m^2	500 mg/m^2	500 mg/m^2
Groundcrew CBRN – High Exposure Risk[2]	3 g/m^2	500 mg/m^2	500 mg/m^2
Notes: [1] Minimal exposure risk is used for functional communities most likely to be inside during a CWA attack. [2] High exposure risk is used for functional communities (e.g., Security Forces) most likely to remain outside without overhead cover despite receiving ample pre-attack warning.			

Table 3.2. Chemical Warfare Agent (CWA) Vapor Deposition Challenge Levels.

Agent	CWA Vapor Challenge Levels
A232	6 $mg\text{-}min/m^3$
TVX	12 $mg\text{-}min/m^3$
HD	268 $mg\text{-}min/m^3$
THD	160 $mg\text{-}min/m^3$
GD	734 $mg\text{-}min/m^3$
GB (Sarin)	100 $mg\text{-}min/m^3$

3.6. Chemical, Biological, Radiological, and Nuclear (CBRN) Threat Planning Assumptions. This section establishes planning assumptions to characterize the CBRN threat and associated OE from a tactical echelon level perspective. DAF commanders will consider these planning assumptions when developing CBRN response COAs when planning for distributed operations. These assumptions are derived from JP 3-11, AFMAN 10-2503, and various technical reports developed by AF/A10S and available through the Defense Technical Information Center.

3.6.1. An enemy order of battle would include both conventional and asymmetric capabilities delivered by a wide variety of platforms/systems. As a result, the enemy's range to target would reduce the amount of warning time available.

3.6.2. Adversarial use of certain biological warfare agents prior to the start of conflict would significantly degrade force survivability as the onset of symptoms would begin appearing during the early hours/days of conflict.

3.6.3. An adversary would likely use conventional weapons to target centers of gravity (e.g., airfield, runways, fuel depot, C2 nodes, and/or maintenance/munition production facilities) throughout a regional cluster followed by a targeted CBRN attack.

3.6.4. Enemy mass fires/effects would significantly degrade communication capabilities dependent on existing physical infrastructure, lines of communication, and/or standard operating procedures designed for permissive operations.

3.6.5. An adversary would employ persistent, nonpersistent, or a combination of both types of CWA to degrade force survivability and mission continuation.

3.6.6. An adversary would most likely target an OL with an air bursting nuclear weapon. Nuclear effects (e.g., nuclear fallout) from surface or sub-surface attacks on nearby locations is also a threat.

3.7. Air Component Chemical, Biological, Radiological, and Nuclear (CBRN) Threat Overview. C-MAJCOM and subordinate commanders should rely on their respective CCMD WMD Threat Assessment to guide command CBRN defense OT&E activities. However, DAFI 10-2501 provides a CBRN Risk Index tool C-MAJCOM and subordinate commanders will use when a CCMD WMD Threat Assessment is not available. **(T-2)**

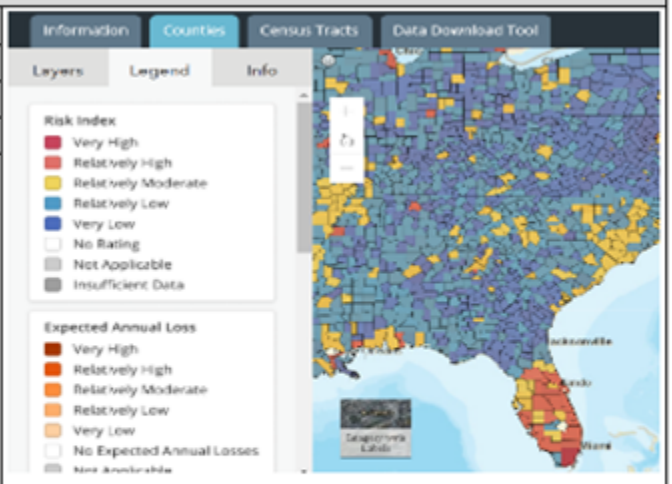
3.7.1. DAFI 10-2501 introduces the installation tactical EM program execution requirements (TEMPER) to inform and shape advanced EM and CBRN defense capabilities. This publication adopts TEMPER from DAFI 10-2501 and uses it to characterize the CBRN threats to the air component and associated risk index as listed in **Table 3.3**.

3.7.2. DAF commanders will reference **Table 3.3** and apply the installation TEMPER to inform how AFFORGEN FEs are organized, trained, and equipped to execute distributed operations in a CBRN-contested environment. **Note:** Refer to AFMAN 10-2503 for additional information on using the installation TEMPER.

Table 3.3. Installation Tactical Emergency Management Program Execution Requirements (TEMPER) Determinant.

CBRN Risk Index[2]	Natural Disaster Risk Index[1]
1 - High	A - High
2 - Significant	B - Significant
3 - Moderate	C - Moderate
4 - Low	D - Low

Note 1: CONUS installations will reference the National Natural Disaster Risk Index and the Department of Homeland Security Resilience Analysis and Planning Tool to support natural disaster risk determination. For OCONUS installations, C-MAJCOMs should determine similar authoritative natural disaster risk determination tools and provide guidance to installations.



Note 2: CBRN risk index relates to adversarial nation-state CBRN weapons/threats translated into effects and risk to lives, key resources, facilities, infrastructure, and operational missions (tactical to strategic) for OCONUS OLs. A risk index of 1 represents a high risk, a risk index of 2 represents a significant risk, a risk index 3 represents moderate risk, and a risk index 4 represents a low risk.

Chapter 4

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) SUPPORT TO COMMAND AND CONTROL (CSC2)

4.1. Overview. CSC2 provides DAF commanders with the capabilities required to understand and assess CBRN threats and effects in real-time. CSC2 assists the DAF commander in identifying those critical CBRN-related objectives and the operational end state so the commander can visualize the sequence of events in each COA that moves the force from its current state to the envisioned state. It also provides the ability to:

4.1.1. Report all CBRN attacks and resulting contamination.

4.1.2. Predict and warn of hazard areas from CBRN incidents.

4.1.3. Contribute to the evaluation of CBRN information to gain decision advantage.

4.1.4. Informs friendly force capabilities and an integrated warning capability for inbound threats.

4.1.5. Transmits advanced hazard warning of a potential CBRN agent/material.

4.1.6. Enables the interchange of CBRN reports with mission command partners, including co-located ally and partner leadership/forces.

4.1.7. Transmit processed sensor data from the lower tactical internet to the upper tactical internet or service equivalent, between unclassified to classified systems, utilizing service provided cross domain solutions.

4.2. Chemical, Biological, Radiological, and Nuclear (CBRN) Support to Command and Control (CSC2) Systems. CSC2 systems must be resilient to physical, cyber, and electro-magnetic spectrum threats to the confidentiality, integrity, and availability of the data; have a near real-time update and refresh capability; and maintain the ability to detect, identify, and track CBRN threats to support the Advanced Battle Management System attribute of advanced sensing. **(T-2)**

4.2.1. DAF communication networks, by which, CSC2 information will be passed and posted to the DAF and Joint Service C2 common operating pictures (e.g., CBRN-Information System [CBRN-IS], Global Command and Control System [GCCS]/GCCS-Korea/GCCS-Japan/GCCS-Europe) must be designated CBRN mission critical. **(T-2)**

4.2.2. CBRN-IS (including Joint Warning and Reporting Network [JWARN] and Joint Effects Module [JEM]) must be sustained throughout combat operations to ensure integrated early warning and joint all domain C2 objectives are accomplished for CBRN defense reporting and warning requirements. **(T-2)**

4.3. Chemical, Biological, Radiological, and Nuclear (CBRN) Support to Command and Control (CSC2) Enabling Tasks. AEW commanders at OCONUS OLs will establish CSC2 system capabilities that meet the minimum enabling tasks listed in **Table 4.1**.

Table 4.1. Support to Command and Control (CSC2) Enabling Tasks.

Communicate information to maintain or restore C2 over ground and airborne systems. **(T-2)**

Communicate information to maintain or restore primary mission capability. **(T-2)**
Communicate information to provide support to joint service, coalition, and host nation forces. **(T-2)**
Communicate information to direct alarm conditions and MOPP levels. **(T-2)**
Communicate information to warn joint service, coalition, and host nation forces of CBRN hazards. **(T-2)**
Communicate information to implement pre-, trans-, and post-attack activities. **(T-2)**
Communicate information to survive attacks and restore operations. **(T-2)**
Communicate information required to support non-combatant evacuation order operations. **(T-2)**
Communicate information required to support CBRN warning and reporting. **(T-2)**
Communicate information required for contamination avoidance and dispersal. **(T-2)**
Communicate information required for blackout procedures; hardening; and camouflage, concealment, and deception activities. **(T-2)**
Communicate information required for personnel and resource accountability. **(T-2)**
Communicate information required to deploy and employ CBRN defense specialists and support teams. **(T-2)**

4.4. Air Expeditionary Wing (AEW) Support to Command and Control (CSC2) and Mission Command. The Airman's philosophy for the C2 of airpower is mission command. Mission command is an approach to C2 that empowers subordinate decision-making for flexibility, initiative, and responsiveness in the accomplishment of commander's intent IAW AFDP 1. AEW commanders use the mission command philosophy to C2 personnel under their command for operations in a CBRN-contested environment.

4.5. Crisis Action Team (CAT). The CAT is the top echelon of airbase CBRN defense operations and is led by the AEW commander from the Expeditionary Air Base. The primary focus of the CAT is force survivability and mission continuation.

4.5.1. The CAT typically includes commanders and senior enlisted leaders from the AFFORGEN FEs. Members of joint, coalition, and/or partner nation may also be present. The CAT supports the AEW commander by assessing the situation, determining mission priorities and defensive actions, and directing subordinate units.

4.5.2. Effective CBRN defense operations require a team effort since most CBRN defense countermeasures and response actions have far-reaching impact on mission accomplishment and sustainment. The direction provided by the AEW commander and staff integrates actions of all warfighting functions across the OL. This integration requires direct input and feedback from other C2 centers (i.e., WOC, EOC, etc.) Refer to **Table 4.2** for CAT CBRN defense enabling tasks.

Table 4.2. Crisis Action Team (CAT) Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Enabling Tasks.

CAT CBRN Defense Enabling Tasks	
1	Preserve life.
2	Prevent further loss of combat air, space, and cyberspace power.
3	Maintain or restore OL security and integrity.
4	Maintain or restore C2 with AFFORGEN FEs.

5	Maintain or restore primary mission capability.
6	Provide support to joint, coalition, and/or host nation forces.
7	Direct OL alarm conditions and MOPP levels.
8	Provide attack warning to joint, coalition, and/or host nation forces.

4.6. Emergency Operations Center (EOC). AEW commanders at MOBs and semi-permanent CLs OCONUS will establish an EOC capability IAW DAFI 10-2501 to oversee and manage CBRN defense activities before, during, and after CBRN response operations. AEW commanders at other OCONUS OLs (e.g., FOS, CSL) can request and employ the EM C2 manpower (4FPWC) and equipment (4F9WC) UTCs, to provide an expeditionary EOC capability to support ACE schemes of maneuver. **Note:** The EM C2 UTCs may only be available as a CET.

4.6.1. Refer to UFC 4-141-04 when designing EOCs as new military construction. **(T-3) Note:** At OCONUS OLs, survivability and resiliency from enemy mass conventional and asymmetric fires/effects is the most important design consideration.

4.6.2. Design EOC C2 processes to allow individuals and functions flexibility to shift decisively from one incident or objective to another. **(T-3)** The EOC must have the capability to process and integrate information in real-time before, during, and after CBRN response operations to produce coherent CBRN defense COAs or modifications to existing ones enabling decision advantage. **(T-3)**

4.6.3. The EOC C2 capability may be virtual or physically located and integrated with other OL C2 systems and processes. AEW commanders should leverage mission command and task orders to the greatest extent possible for CSC2.

4.7. Chemical, Biological, Radiological, and Nuclear (CBRN) Control Center. AEW commanders OCONUS will establish a CBRN Control Center capability, operated by the CBRN defense staff, to enable CSC2 for each OL. **(T-2)** IAW North Atlantic Treaty Organization (NATO) standards and AFTTP 3-2.56, the CBRN Control Center serves as a CBRN Sub Collection Center providing information enabling commanders to make risk management decisions and to warn of CBRN hazards.

4.7.1. CBRN defense specialists will manage and execute the CBRN Control Center capabilities. **(T-2)** The CBRN Control Center will use all sources of information (i.e., open source, CBRN sensor data, non-CBRN data, plume modeling, etc.) and intelligence to provide the needed battlespace awareness and understanding to maintain freedom of action and decision advantage in a CBRN environment. **(T-2)**

4.7.2. The CBRN Control Center will follow AFTTP 3-2.56 and ATP 45, *Warning and Reporting and Hazard Prediction of CBRN Incidents* (where applicable), to ensure CSC2 capabilities are standardized across the DAF. **(T-2)**

4.7.3. The CBRN Control Center must have redundant and secure capabilities to transmit information to each supported and supporting echelon. **(T-2)** This includes receiving and transmitting information from CBRN defense specialists at one or more OLs.

4.7.4. The CBRN Control Center will coordinate with mission planners to provide mitigation recommendations for potential CBRN threats to force survivability and mission continuation. **(T-2)**

4.7.5. The CBRN Control Center will maintain the capability to conduct its responsibilities using electronic capabilities (e.g., JWARN and JEM) in a permissive environment and the ability to execute in an electronically denied or contested environment under ACE at a given OL. **(T-2)**

4.7.6. CBRN defense specialists postured to 4FPWC UTC and required to perform CBRN Control Center duties at any echelon must attend the CBRN C2 training course (JCACP3E971 0A1A) at Fort Leonard Wood, Missouri, to obtain initial training certification and then attend the CBRN-IS training course offered by AFIMSC or the JPEO-CBDP to obtain currency. **(T-2)** Additionally, CBRN defense specialists must obtain and maintain training currency on new capabilities introduced to the CBRN Control Center. **(T-3)**

4.7.7. The CBRN Control Center may include augmentees, host nation and/or joint/coalition personnel as part of the CBRN defense staff. **(T-3).** AEW commanders OCONUS should consider coordinating localized CBRN Control Center training for host national or joint/coalition personnel. **(T-3)**

4.7.8. The CBRN Control Center will be organized, trained, equipped, and operated IAW ATP 45, AFMAN 10-206, *Operational Reporting (OPREP),* AFTTP 3-2.56, and AFTTP 3-2.70.

4.7.8.1. An OPREP is required IAW AFMAN 10-206 to provide the information necessary for timely operational decisions in support of C2 for aerospace forces. CBRN defense specialists must remain in close coordination with command post personnel to support OPREP during CBRN incidents.

4.7.8.2. CSC2, including warning and reporting activities of CBRN information, provides AEW commanders with essential information required to execute CBRN defense protection measures to preserve force survivability and mission continuation.

4.7.9. AEW commanders OCONUS should plan for providing an expeditionary CBRN Control Center capability at each FOS and/or CSL/CL. Submit a Request for Forces for the 4FPWC UTC when assigned forces are inadequate to effectively plan for and execute CBRN Control Center operations. **(T-2)**

4.8. Chemical, Biological, Radiological, and Nuclear (CBRN) Information System (CBRN-IS). CBRN defense staff will analyze the CBRN threat assessment developed during the JIPOE process and use the CBRN-IS to develop most dangerous and most likely CBRN effects models for each potential OL. **(T-2)**

4.8.1. AFIMSC maintains an operational analysis and integration section. This section publishes CBRN defense related information obtained from open source and publicly available information in a read book format for command teams through the Installation Emergency Manager (IEM). The IEM must share the CBRN defense read book as "INFO ONLY" with senior leaders and command teams to provide a shared understanding of the OE in real-time. **(T-3)**

4.8.2. AEW commanders OCONUS will use the CBRN threat assessment, time event matrices, and effects models developed through the JIPOE process to establish and tailor alarm conditions and MOPP levels for each OL. **(T-2)** AEW commanders must establish and publish authorities for changing alarm conditions and MOPP levels. **(T-3)** All AEW commanders must assume adversarial employment of CBRN weapons could occur with little to no warning. **(T-2)**

4.8.2.1. AEW commanders OCONUS will adopt and implement attack warning signals, alarm conditions and MOPP levels listed in AFMAN 10-2503, and the related visual aids procured through the DAF Be Ready Program IAW DAFI 10-2501. Commanders may elect to tailor the attack warning signals, alarm conditions and MOPP levels based on CBRN threat assessment, time event matrices, and effects models developed through the JIPOE process. **(T-3)** Regardless of warning and notification products utilized, AEW commanders must assume that an attack could occur with little to no notice and be prepared to effectively warn personnel in a manner that best preserves force survivability and mission continuation.

4.8.2.1.1. Attack Warning Signals. AEW commanders OCONUS use DAF standardized warning signals to posture OLs for attacks, warn of attacks in progress, initiate post-attack recovery actions, and return the OL to the required state of readiness. Refer to AFMAN 10-2503 for additional information.

4.8.2.1.2. Alarm Conditions. AEW commanders OCONUS declare alarm conditions to initiate passive defense actions in wartime. Alarm conditions, combined with supplemental instructions through the chain of command, are the most effective way to establish the defense posture of an OL. Refer to AFMAN 10-2503 for additional information.

4.8.2.1.3. MOPP Levels. MOPP levels are protection options allowing the commander to balance protection requirements and performance degradation with mission requirements. Refer to AFMAN 10-2503 for additional information.

4.8.2.2. AEW commanders at MOBs OCONUS will enhance force survivability and mission continuation by planning to disperse CSC2 capabilities within defined OLs. **(T-3)** Each FOS and/or CSL/CL may have an individual C2 capability to communicate with a centralized MOB C2 node, but, at a minimum, each OL must also maintain the ability to communicate alarm conditions and MOPP levels independently from the MOB to all individuals at the OL. **(T-3)**

4.8.2.3. AEW commanders OCONUS with CBRN Collection and Sub Collection Centers at OLs will conduct a biannual test, or more frequently IAW command policy, of the CSC2 capability including testing attack warning signals, alarm conditions, and the ability to transmit CBRN reports using CBRN-IS at each applicable OL. **(T-3).** Commanders will test and evaluate the CSC2 capability under a simulated communication-denied environment during the CBRN defense exercise. **(T-3)**

4.8.2.4. AEW commanders OCONUS tasked to operate at FOSs and/or CSL/CL will plan for and exercise providing CSC2 capabilities in a communication-degraded environment. **(T-3)** The emphasis must be on providing CSC2 based on mission command and tasking orders thoroughly planned and exercised beforehand.

Chapter 5

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE ORGANIZATION AND GOVERNANCE

5.1. CBRN Defense Staff and Unit Organization.

5.1.1. CBRN defense staffs and units are organized into scalable, tailorable, and multifunctional configurations that can best support joint and DAF operations. The tailorable force increases the mission command and sustainment capability for AFFORGEN FEs and is responsive to and aligned with Wings, C-NAF, and C-MAJCOMs. **Note:** Other DAF organizations may also have a requirement for a CBRN defense staff.

5.1.1.1. The primary CBRN defense staff includes the following AFSCs:

5.1.1.1.1. AFSC 1N0X1, *All Source Intelligence Analyst*.

5.1.1.1.2. AFSC 1P0X1, *AFE*.

5.1.1.1.3. AFSC 2G0X1, *Logistics Plans*.

5.1.1.1.4. AFSC 3E8X1, *EOD*.

5.1.1.1.5. AFSC 3E9X1, *EM (*DAF CBRN defense specialists).

5.1.1.1.6. AFSC 4B0X1, *Bioenvironmental Engineering*.

5.1.1.1.7. AFSC 4E0X1, *Public Health*.

5.1.1.1.8. AFSC 4N0X1, *Aerospace Medical Service*.

5.1.1.2. The expanded CBRN defense staff includes the following AFSCs:

5.1.1.2.1. AFSC 3E7X1, *Fire Protection*.

5.1.1.2.2. AFSC 3P0X1, *Security Forces*.

5.1.1.2.3. AFSC 3F1X1, *Services*.

5.1.1.2.4. Other AFSCs may be required to support CBRN defense planning and response activities.

5.1.2. CBRN defense staffs are limited in size and capacity across all echelons. CBRN defense operations are not the sole responsibility of the CBRN defense staff, but they must be integrated and executed across staff sections. When CBRN incidents occur, logistics, medical support, maintenance support, and every staff section is impacted and quickly overwhelmed if they are not prepared collectively to execute combat operations under CBRN conditions.

5.1.3. CBRN defense specialists (AFSC 3E9X1) are primarily tasked with CBRN hazard detection, identification, and quantification responsibilities. However, it is every DAF commander, command team, and supervisor’s responsibility to ensure that all assigned AFFORGEN FEs are trained and can execute functional tasks in a CBRN-contested environment.

5.1.3.1. CBRN defense specialists assigned to and/or postured for AFFORGEN must be able to provide the CBRN defense capabilities listed in **Table 5.1**.

Table 5.1. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Specialist Capabilities Matrix.

Advise on CBRN hazards.
Detect and provide field confirmatory identification of known CBRN hazards.
Provide dismounted assessments.
Provide early warning of contamination (contamination avoidance).
Report, mark, and identify bypass routes around contamination.
Collect and transfer CBRN samples for theater validation where applicable.
Assess hazards in support of site exploitation and CBRN response.
Detect biological warfare agent employment as a measure to provide medical treatment.
Perform CBRN sample collection and management.
Perform sensitive-site assessment and characterization.
Perform munitions assessment and disablement.
Perform specialized sampling support to forensics.
Conduct CBRN survey to determine the nature, scope, and extent of the CBRN hazard.
Conduct applicable decontamination tasks.
Conduct aircraft decontamination, where operationally feasible.
Conduct fixed site decontamination, where operationally feasible.
Perform technical escort of CBRN material.
Conduct laboratory analysis to provide up to theater level identification.
Ability to provide assess, train, advise, assist, and equip CBRN OAIs with ally and partner forces during security cooperation/SFA across the competition continuum.

5.1.3.2. CBRN defense specialists must have lightweight, agile, and expeditionary transportation capabilities certified for airworthiness to enable CBRN defense activities in support of ACE. **(T-2)**

5.1.3.3. Where practical, AEW commanders OCONUS must consider integrating unmanned robotic platforms and unmanned aerial vehicles into CBRN defense units to reduce the amount of time specialists are exposed to CBRN hazards. **(T-2)**

5.1.3.4. CBRN defense specialists must consider the role of ally and partner surface and air transportation capabilities during security cooperation and SFA OAIs to optimize resource availability during crisis and conflict. **(T-2)** Refer to AFPD 10-43, *Air Advising/Security Force Assistance*, and AFI 10-4301, Volume 3, *Air Advising Operations*, for additional information.

5.2. The CBRN defense staff must conduct CBRN defense planning as part of the integrated risk management process IAW DAFI 10-2501 and JP 3-11. CBRN defense requirements, capabilities, vulnerabilities, shortfalls, gaps, and/or weaknesses must be processed through the installation Emergency Management Working Group (EMWG) and elevated to the C-MAJCOM/FLDCOM EMWG or AFIMSC EMWG (for non-C-MAJCOMs) for intermediate command visibility, validation, and coordination. **(T-2)**

5.3. DAF CBRN defense staff process CBRN defense requirements, capabilities, vulnerabilities, shortfalls, gaps, and/or weaknesses through the DAF CBRN MWG, chaired

by AF/A4C, and/or the DAF CWMD Operations Integration Group (unofficially referred to as the CIG), chaired by AF/A10S. (T-1)

Chapter 6

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE TRAINING

6.1. Overview. DAF commanders have the responsibility to ensure the forces under their command are capable of surviving and operating in a CBRN-contested environment. Successful CBRN defense depends on a strong, up-to-date education, training, and exercise program for individuals (basic capability), additionally trained non-specialists with mission essential tasks (enhanced capability), and trained CBRN defense specialists (AFSC 3E9X1) allowing for a full detailed assessment of CBRN defense readiness.

6.1.1. JP 3-11, DoDI 3020.52, DAFI 10-2602, AFTTP 3-2.46 and ATP 3.8.1, Volume III provide guidance on establishing CBRN defense education, training, and exercise standards to effectively prepare the force to survive and operate in a CBRN-contested environment. DAF commanders will oversee the integration, synchronization, and coordination of CBRN defense training within the EM all-hazards approach. **(T-1)** Refer to DAFI 10-2501 for additional details.

6.1.2. CBRN defense training is command driven based on an evaluation of threats and risks during the integrated risk management process. Refer to AFMAN 10-2503 and the integrated risks management process IAW DAFI 10-2501 to assess and evaluate the CBRN threat and associated risks to determine the level of training required.

6.1.3. The CBRN defense education, training, and exercise construct in support of AFFORGEN is depicted in **Figure 6.1** and **Figure 6.2**.

Figure 6.1. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Education and Training Construct in support of Air Force Forces Generation (AFFORGEN).

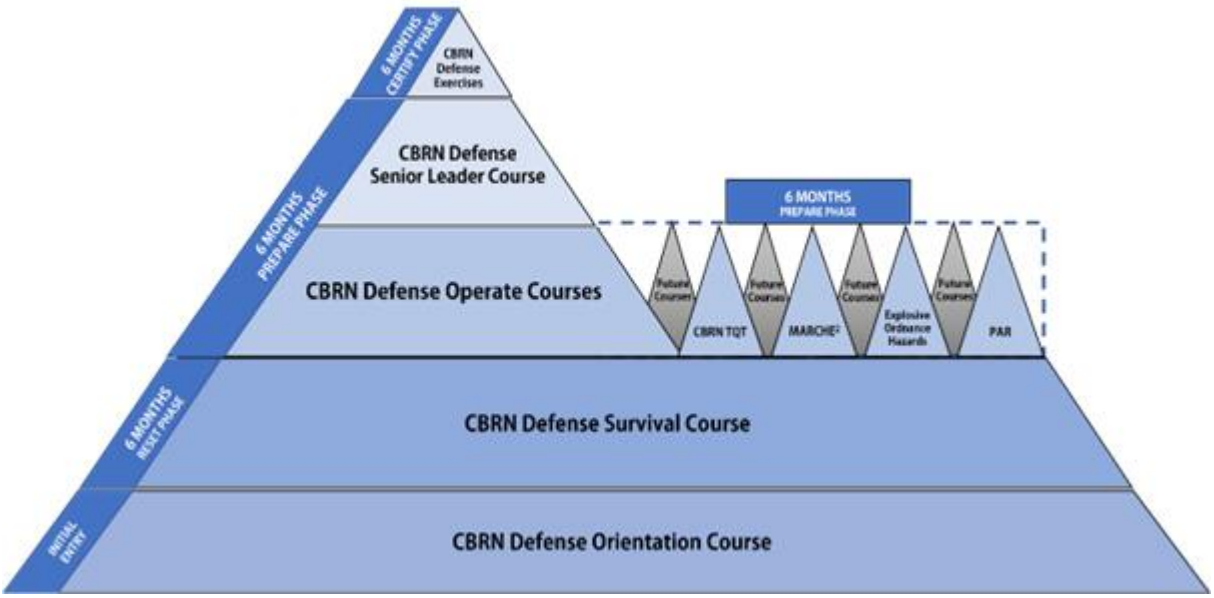
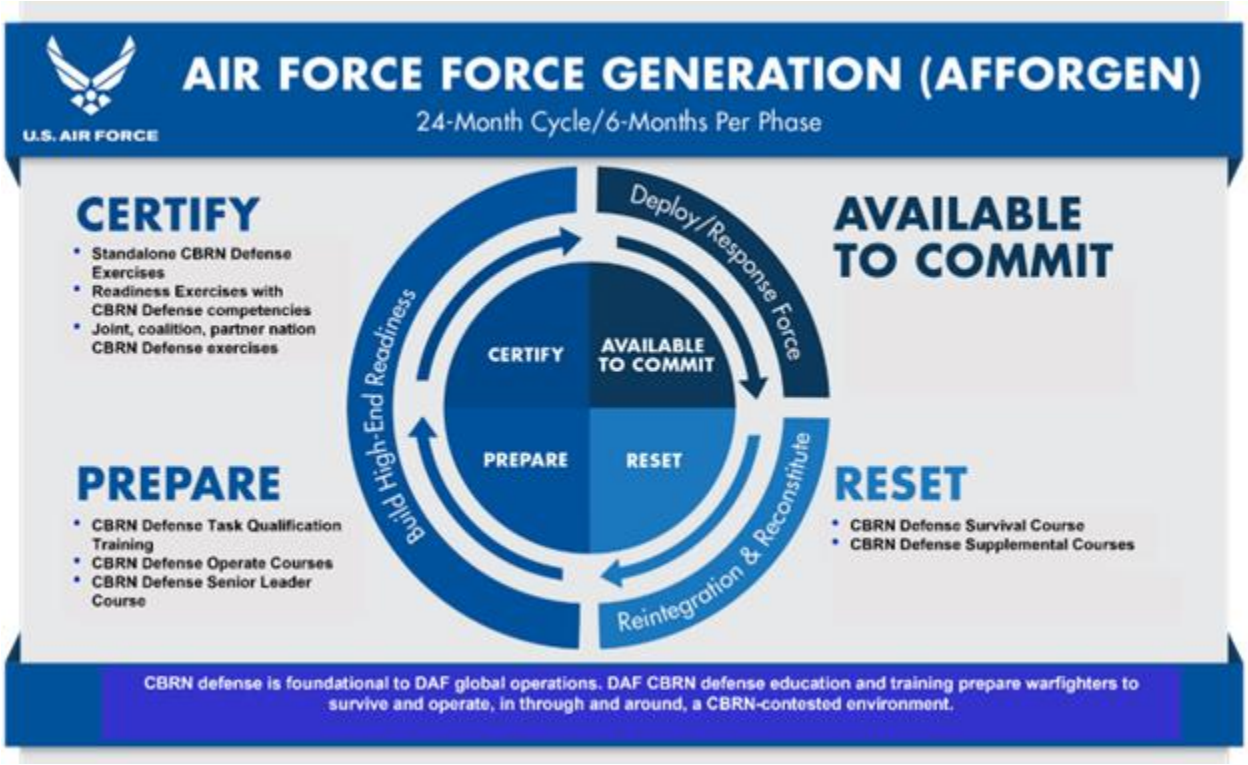


Figure 6.2. Air Force Forces Generation (AFFORGEN) and Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Education, Training, and Exercises.



6.2. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Education and Training Standards.

6.2.1. CBRN defense training is required to ensure Airmen, Guardians, mission-essential civilians, and contractors (as specified in the performance work statement) currently assigned to any OCONUS OL or tasked for OPLAN/Contingency Plan (CONPLAN) support at an OCONUS OL to obtain the proficiency required to survive and operate in a CBRN-contested environment.

6.2.2. CBRN defense capability levels correspond with the training proficiency standards required to adequately prepare the force.

6.2.2.1. Proficiency at the basic capability level (attending CBRN defense training) ensures individual survivability.

6.2.2.2. Proficiency at the enhanced capability level (i.e., completing CBRN TQT) ensures individuals and teams ability to operate in a CBRN-contested environment.

6.2.2.3. Proficiency at the specialized capability level ensures CBRN defense specialists and medical personnel are qualified to accomplish assigned missions.

6.2.3. DAF commanders and staff must be knowledgeable on and able to evaluate the effects CBRN weapons will have on operational efficiency. **(T-2)** DAF commanders and staff must complete the required CBRN defense training to obtain the knowledge and competence in CBRN defense beyond the scope of that demonstrated by individual personnel but not to the degree required by CBRN defense specialists. **(T-2)** DAF commanders, with the assistance of

CBRN defense specialists, must be aware of hazards arising from CBRN incidents to plan and conduct operations under the influence of such hazards. **(T-2)**

6.2.4. All individuals postured for AFFORGEN are expected to become proficient in two basic types of CBRN defense skills: basic CBRN survival skills and basic CBRN operating skills. On becoming aware of a CBRN hazard, every individual should be capable of taking those actions essential for immediate survival. In contrast, basic CBRN operating skills are those which the individual should master to contribute towards the continued operations of the unit under any CBRN threat conditions. Attending the CBRN defense education and training courses listed in **paragraph 6.3** ensures DAF Airmen and Guardians obtain and maintain proficiency in both CBRN survival and operating skills.

6.2.5. C2 and mission generation FEs, including aircrew, must be trained to continue to execute their METs in a CBRN-contested environment. **(T-2)**

6.3. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Education and Training Requirements. DAF commanders must establish and facilitate education and training for CBRN defense preparedness activities to enable DAF personnel (military, civilians, and contractors) to obtain and maintain the competencies required to survive and operate in a CBRN-contested environment. **(T-0)** The following paragraphs list the minimum CBRN defense related education and training requirements. **Note:** CBRN defense education and training courses fall under the Ready Airman Training (RAT) Program. Refer to AFI 10-405, *Ready Airman Training* for additional details.

6.3.1. BEPO. Emergency managers will provide localized CBRN defense preparedness information to all newly assigned personnel, including civilians, contractors, and dependents during newcomers' orientation IAW DAFI 10-2501.

6.3.1.1. Intelligence analysts at OCONUS OLs will incorporate an unclassified CBRN threat briefing into the BEPO. **(T-3)**

6.3.1.2. CBRN defense specialists at OCONUS OLs will incorporate an overview of localized attack warning signals, alarm conditions, MOPP levels, OL zones/sectors, and any shelter management procedures into the BEPO. **(T-3)**

6.3.1.3. Medical SMEs at OCONUS OLs will incorporate an overview of medical countermeasures and OEG into the BEPO. **(T-3)**

6.3.2. CBRN Defense Orientation Course. When developed, this training is for enlisted and officer accessions (i.e., Basic Military Training, U.S. Air Force Academy, Officer Training School, and Reserve Officer Training Corps) and establishes the minimum training proficiency standards new accessions must meet to survive in a CBRN-contested environment.

6.3.3. CBRN Defense Survival Course. This training is for all DAF military members to include non-deployable members, members assigned on a CONUS AFFORGEN FE, USAF/USSF military members currently assigned to any OCONUS OL, USSF military members tasked for OPLAN/CONPLAN support located OCONUS, and DAF mission essential civilians and contractors assigned to any OCONUS OL. This course establishes the minimum training proficiency standards DAF personnel must meet to survive in a CBRN-contested environment. Only AFSC 3E9X1 and EM civilians and contractors will instruct this

course. **(T-1)** Reference DAFI 10-405 and the Ready Airman Training Implementation Message for more information.

6.3.3.1. This instructor-led course with individual/team performance-based objectives is targeted for global and localized evolving threats. It prepares DAF personnel to survive in a CBRN-contested environment and mitigate the effects of a CBRN incident through localized threat information, preparedness actions, groundcrew chemical ensemble donning and doffing demonstration performance, and basic response actions. **(T-1)**

6.3.3.2. USAF military personnel (RegAF and Air Reserve Component [ARC]) postured on a CONUS AFFORGEN FE complete this training during the reset phase and are considered current for the duration of the AFFORGEN cycle (24 months RegAF, 48 months ARC). **(T-2)**

6.3.3.3. DAF military members assigned to a non-deployable position (CONUS and OCONUS) will complete this training once every 24 months (48 months ARC). **(T-2)**

6.3.3.4. DAF military members currently assigned to any OCONUS OL complete this training once every 24 months. **(T-2)**

6.3.3.5. USSF military members currently in the CONUS but tasked for OPLAN/CONPLAN support at an OL OCONUS complete this training prior to departure and are considered current for 24 months. **(T-2)**

6.3.3.6. DAF mission essential civilians and contractors receiving an assignment to any OCONUS OL complete this course prior to departure and are considered current for 24 months. **(T-2)** DAF mission essential civilians and contractors already assigned to any OCONUS OL will complete this training once every 24 months. **(T-2)**

6.3.3.7. **Table 6.1** lists the student requirements for attending the CBRN Defense Survival Course. DAF commanders must ensure students comply with these requirements due to health and safety issues. **(T-2)**

Table 6.1. Student Requirements for the Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Survival Course.

Student Actions - Required Before Attending Training
1. Students will provide a copy of their approved gas mask fit test to their unit deployment manager, unit training manager or course scheduler prior to being scheduled for any CBRN defense training course. **(T-1)** When needed, students will contact Bioenvironmental Engineering for instructions on how to obtain a quantitative fit test.
2. Student will remove contact lenses and earrings (as applicable).
3. Students will remove elaborate hairpieces or hairstyles that interfere with the proper sizing, fit, and wear of the protective mask. Additionally, remove pins, combs, headbands, elastic bands, and barrettes to allow hair to hang freely and naturally.
4. Military members will wear an approved duty uniform.
5. Civilian and contract personnel will wear attire appropriate for field training.
6. Students will be assessed during class on their ability to obtain a protective seal.
Equipment Required by Each Student Attending Training
1. Students will request a training C-bag from the local Logistics Readiness Squadron (LRS) or equivalent organization and ensure they receive the complete training BOI listed

in **Table 8.4**. The training C-bag BOI is the minimum equipment requirements students must bring to any CBRN defense training course.
2. Student will ensure all equipment within the training C-bag is marked "TRAINING USE ONLY." **(T-3)** Students should notify the local LRS or equivalent organization if any items are not marked correctly.
3. Students should have with them the improved outer tactical vest and a helmet.
4. The training C-bag will contain fully serviceable equipment despite being intended for training use. LRS or equivalent organization will ensure this serviceability, and students will inspect the equipment prior to receipt and attending CBRN defense courses.

6.3.3.8. DAF military members serving in units aligned to and/or geographically located with a sister-service (i.e., Tactical Air Control Party, Combat Weather, EOD, etc.) are exempt from the DAF CBRN Defense Program and will comply with their partnered services' operational or mission area relevant CBRN defense training to satisfy readiness requirements.

6.3.4. CBRN Defense Operate Courses. When developed, these courses are for DAF members assigned on a CONUS AFFORGEN FE, USAF/USSF military members currently assigned to any OCONUS OL, USSF military members tasked for OPLAN/CONPLAN support located OCONUS, and DAF mission essential civilians and contractors assigned to any OCONUS OL. These courses establish the minimum training proficiency standards DAF personnel must meet to operate in a CBRN-contested environment. **(T-1)**

6.3.4.1. These courses are facilitated locally at installations or through regional training sites. They prepare DAF military members to operate in a CBRN-contested environment and mitigate the effects of a CBRN attack utilizing mission-specific response and recovery actions, CBRN-related TTPs, and unit/AFSC TQT drills and CBRN exercises IAW DAFI 10-405.

6.3.4.2. DAF personnel listed in **paragraph 6.3.4** complete the applicable course after completing the CBRN Defense Survival Course IAW **paragraph 6.3.3**.. **(T-2)** DAF personnel on active duty are considered current for 24 months while personnel in the equivalent Guard or Reserve component are considered current for 48 months. **(T-2)**

6.3.4.3. AFIMSC, as the DAF EM/CBRN SMEs, will coordinate with AFSC and unique mission area functional managers to develop this course to assist in executing their METs in a CBRN-contested environment. **(T-2)**

6.3.5. CBRN Defense Supplemental Courses. When developed, these courses (i.e., Explosive Ordnance Hazards [EOH], Post Attack Reconnaissance [PAR], Shelter Management Team [SMT], CCT, etc.) are designed to supplement the competencies and proficiencies received during the CBRN Defense Survival Course. These courses are delivered via distance learning on an accessible learning management system and are required within 45 days upon assignment to the specified position/team. **(T-3)**

6.3.5.1. EOH Course. This distance learning course provides DAF personnel with training on explosive ordnance reconnaissance, improvised explosive device recognition, EOHs, response actions, and protective measures. **Note:** DAF commanders at all levels may develop localized SMT training products to compliment the distance learning course.

6.3.5.1.1. DAF personnel listed in **paragraph 6.3.4** complete this training before attending the CBRN Defense Survival Course and are considered current IAW the frequency listed in **paragraph 6.3.4.2**. **(T-2)**

6.3.5.1.2. DAF military personnel should review AFTTP 3-4 for UXO guidance prior to accomplishing EOH training.

6.3.5.2. PAR Course. This distance learning course provides DAF personnel currently assigned or notionally tasked to an OCONUS OL PAR team with the basic fundamentals to accomplish PAR in a CBRN-contested environment. Members complete this training upon assignment to a PAR team and are considered current for the duration of assignment. **(T-2) Note:** DAF commanders at all levels may develop localized PAR training products to compliment the distance learning course.

6.3.5.3. SMT Course. This distance learning course provides DAF personnel assigned or notionally tasked to an OCONUS OL with the basic fundamentals to accomplish SMT activities in a CBRN-contested environment. Members complete this training upon assignment to a SMT for fixed-site COLPRO facilities, expeditionary COLPRO systems, and/or radiological/nuclear fallout shelters and are considered current for the duration of the assignment. **(T-2) Note:** DAF commanders at all levels may develop localized SMT training products to compliment the distance learning course.

6.3.5.4. CCT Course. This distance learning course provides DAF personnel assigned or notionally tasked to an OCONUS OL CCT with the basic fundamentals to accomplish CCT activities in a CBRN-contested environment. Members complete this training upon assignment to a CCT and are considered current for the duration of the assignment. **(T-2) Note:** DAF commanders at all levels may develop localized CCT training products to compliment the distance learning course.

6.3.5.5. The medical community oversees and manages training courses for tactical combat casualty care and treating CBRN injuries in a CBRN-contested environment. The training integrates the tactical combat casualty care MARCH with the CBRN treatment priorities of MARCHE^2. Refer to the applicable medical representative and/or medical guidance for completing this course.

6.3.6. CBRN Defense Senior Leader Course. When developed, this instructor-led course is for DAF commanders and senior enlisted leaders (SEL) currently assigned or notionally tasked to an OCONUS OL and who will oversee and lead USAF/USSF FEs. The course establishes the additional training proficiency standards that DAF commanders and SELs must meet to preserve force survivability and mission continuation in a CBRN-contested environment.

6.3.6.1. DAF commanders and SELs assigned or notionally tasked to an OCONUS OL and who oversee and lead USAF/USSF FEs complete this training after attending the CBRN Defense Survival Course and are considered current IAW the frequency listed in **paragraph 6.3.4.2**. **(T-2)**

6.3.6.2. Only CBRN-qualified CE Officers, AFSC 3E9X1 Senior Noncommissioned Officers, and/or EM civilians (GS-13/12) will instruct this course. **(T-1)**

6.4. Scheduling and Documenting Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Education and Training. DAF commanders must schedule and document CBRN defense education and training completion for the required individuals. **(T-1)**

6.4.1. Unit schedulers will schedule individuals requiring any CBRN defense training course using the Automated Readiness Information System (ARIS). **(T-1)**

6.4.1.1. Once the required CBRN defense training is accomplished, units will ensure a training completion date is loaded for the individual(s) in the ARIS. **(T-1)**

6.4.1.2. Individuals requiring proof of CBRN defense training completion for out-processing will coordinate with their respective unit scheduler to obtain the necessary information. **(T-1) Note:** The IOEM does not provide CBRN defense training completion certificates since proof of completion is accessible by the unit through the ARIS.

6.4.2. AFSC 3E9X1 and EM civilians and contractors (when assigned to the IOEM) will document student completion using ARIS.

6.4.3. Measured unit commanders will report number of personnel that have completed the required training in the CBDRT Resource Assessment in DRRS IAW AFI 10-201. At a minimum, DRRS will allow reporting of CBRN Defense Survival Course, CBRN Defense Operate Course, CBRN Defense Senior Leader Course, EOH Course, and CBRN Defense TQT. **(T-2)**

6.4.4. Unit schedulers will quarterly evaluate that the assigned personnel roster listed in the ARIS is current to ensure accurate readiness reporting in DRRS. **(T-2)**

6.5. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Task Qualification Training (TQT). CBRN defense TQT prepares individuals and teams currently assigned to any OCONUS OL or tasked for OPLAN/CONPLAN support at an OCONUS OL to perform functional tasks while wearing CBRN defense IPE for extended periods.

6.5.1. Career field managers (CFM) will identify AFSC-specific tasks requiring CBRN defense TQT in the Career Field Education and Training Plan. **(T-1)** Once identified, AFSC functional area managers will publish execution guidance for their respective AFSC to conduct CBRN Defense TQT. **(T-1)**

6.5.1.1. CBRN Defense TQT is defined as a hands-on event with a minimum of two hours in MOPP gear performing regular duties. At a minimum, individuals will be evaluated on their ability to accomplish AFSC-specific tasks while wearing CBRN defense IPE in MOPP 4 for a minimum of two hours per identified task. **(T-1)**

6.5.1.2. In addition to AFSC-specific tasks, individuals must be evaluated on their ability to hydrate while wearing CBRN defense IPE in MOPP 4 at the beginning and completion of each identified task. **(T-1)**

6.5.1.3. CFMs and AFSC functional area managers will coordinate with AFIMSC (as the DAF EM/CBRN SMEs) to shape the development of AFSC-specific CBRN defense TQT tasks for military and mission-essential civilians currently assigned to any OCONUS OL or tasked for OPLAN/CONPLAN support at an OCONUS OL to perform functional tasks while wearing CBRN defense IPE for extended periods. **(T-1)** Contracting officers will coordinate with AFIMSC to shape the development of appropriate CBRN defense TQT tasks for contractors currently assigned to any OCONUS OL or tasked for

OPLAN/CONPLAN support at an OCONUS OL to perform functional tasks while wearing CBRN defense IPE for extended periods. **(T-1)**

6.5.2. DAF personnel postured for AFFORGEN complete CBRN defense TQT during the prepare phase and are considered task certified for the duration of the AFFORGEN cycle. **(T-2)**

6.5.2.1. Supervisors will document CBRN defense TQT completion on DAF Form 797, *Job Qualification Standard Continuation/Command Job Qualification Standard*, IAW DAFMAN 36-2689, *Training Program*. **Note:** An electronic version of DAF Form 797 may also be used.

6.5.2.2. Measured unit commanders will report number of personnel that have completed the required training in the CBDRT Resource Assessment in DRRS IAW AFI 10-201. At a minimum, DRRS will allow reporting on CBRN defense TQT. **(T-2)**

6.6. Air Force Specialty Code (AFSC) Specific and Functional Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Training.

6.6.1. CE officers and CBRN defense staff personnel (military and civilians) assigned to the CCMDs, DAF headquarters, C-MAJCOM/A4C, C-NAF/A4C, and the Air Force Installation and Mission Support Center Installation Support (AFIMSC/IZ) performing duties and responsibilities inherent to CBRN defense can coordinate with their respective unit training manager to:

6.6.1.1. Attend the Joint Senior Leader Course offered by the U.S. Army Chemical School within one year of assignment.

6.6.1.2. Enroll in the CWMD Graduate Certificate offered by Air University within one year of assignment.

6.6.2. CBRN defense specialists postured as CETs will participate in bi-annual CBRN defense validation exercises sponsored by AFIMSC to validate and certify AFSC competency. **(T-1)**

6.6.2.1. AFIMSC will oversee, manage, coordinate, and execute CBRN defense validation exercise events on-behalf of the 3E9X1 CFM. Standards and materials will be published for MAJCOM/FLDCOM level execution and validation to meet capacity requirements but will not be used as a primary method of accomplishment. **(T-1)**

6.6.2.2. At a minimum, the 4FPWC, 4FPWD, 4FPWE, and 4FPWH UTCs entering the AFFORGEN prepare phase will be validated on their ability to perform the tasks associated with their respective mission capability statements as CETs. **(T-1)**

Chapter 7

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE EXERCISES

7.1. Overview. DoDI 3020.52, DAFI 10-2501, and AFMAN 10-2503 provide guidance on planning, conducting, and evaluating CBRN defense exercises. DAF, commanders will plan, conduct, and evaluate CBRN defense exercises in conjunction with readiness exercises using the CBRN defense exercise standards listed in **Table 7.1**. **(T-2)** CBRN defense exercises must focus on executing FE and/or AEW primary mission operations in a CBRN environment, not simply executing CBRN defense actions. **(T-2)**

7.2. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Exercise Requirements for Air Force Forces Generation (AFFORGEN) and Outside the Continental United States (OCONUS). DAF commanders must ensure DAF personnel postured for AFFORGEN and individuals assigned to OCONUS OLs participate in CBRN defense exercises. **(T-2)**

7.2.1. DAF personnel in the CONUS postured for AFFORGEN, at a minimum, participate in a CBRN defense exercise during the AFFORGEN Certify Phase as part of the FE validation. **(T-2)** Ideally, this CBRN defense exercise would normally occur at a regional training site location where all cross-functional FEs obtain certification before entering the AFFORGEN commit phase. Additional CBRN defense exercises, when required IAW DAFI 10-2501 and DAFI 90-302, will be conducted at the local installation and based on the CBRN Risk Index. **(T-2)**

7.2.2. DAF personnel, including civilians, contractors, and command sponsored dependents, assigned to OCONUS OLs participate in a CBRN defense exercise during the readiness exercises IAW DAFI 90-302 and/or during the AFFORGEN prepare phase validation/certification event (if applicable in the OCONUS) prior to entering the AFFORGEN Certify Phase. DAF commanders must maintain CBRN defense exercise frequencies based on the CBRN Risk Index. **(T-2)**

7.2.3. C-MAJCOM and C-NAF command staffs will coordinate CBRN defense exercises with other joint and combined exercise programs IAW CCMD campaign plan operations and activities. **(T-2)** C-MAJCOMs and C-NAFs will supplement theater guidance for planning and conducting joint, combined and/or host nation CBRN defense exercises and/or engagements. **(T-2)** In the absence of theater guidance, C-MAJCOMs and C-NAFs will establish guidance to enable commanders to plan and conduct CBRN defense exercises and/or engagements. **(T-2)**

7.2.4. AEW commanders at OCONUS OLs must coordinate CBRN defense exercises with joint, combined and/or host nation when collocated. **(T-3)**

7.3. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Exercise Standards. Exercise planners and evaluators will apply the CBRN defense exercise standards listed in **Table 7.1** to design, develop, execute, and evaluate corresponding CBRN defense exercises. **(T-2)**

Table 7.1. Minimum Individual Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Exercise Standards.

Recognize indicators of a possible CBRN attack and take appropriate action.
Recognize alarm conditions and MOPP levels and take appropriate action.
Recognize indications of a CBRN hazard and take appropriate action.
Recognize UXOs and properly mark/cordon while wearing CBRN defense IPE.
Properly don, seat, clear, and check a protective mask within 9 seconds following an alarm condition change or in recognition of a CBRN attack.
Properly don protective clothing and properly perform assigned CBRN defense tasks.
Demonstrate appropriate protective measures against thermal radiation (light, flash, and heat), blast wave, and nuclear radiation effects of a nuclear explosion.
Demonstrate individual decontamination procedures.
Recognize contaminated casualties and perform first aid.
Demonstrate the ability to hydrate while wearing the protective mask.
Demonstrate the ability to properly maintain CBRN defense IPE in an operational status.
Recognize and demonstrate proper CBRN marking procedures.
Demonstrate the ability to employ M-8 paper, M-9 tape, and M-256A2 kits.
Demonstrate the ability to communicate (i.e., handheld radio, hand gestures, passwords, callsigns, duress signals, etc.) while wearing CBRN defense IPE.
Demonstrate the ability to effectively shelter following a CBRN attack.
Demonstrate the ability to enforce health, hygiene, and sanitation procedures to minimize the spread of disease.
Minimize exercise simulations as much as possible. Strive to train and exercise the way you plan to fight.

7.3.1. Assess the applicable CBRN defense exercise standards and develop exercise evaluation objectives for each selected competency. **(T-3)** Units should use ATP 3-8.1 as an additional guide to evaluate CBRN defense exercises. **(T-3)**

7.3.2. Integrate each exercise evaluation objective into the exercise master scenario event list (MSEL). Exercise planners must coordinate the MSEL with a AFSC 3E9X1 senior noncommissioned officer and/or the IOEM. **(T-3)**

7.3.3. A CBRN defense exercise MSEL must include at least one (based on the CBRN threat assessment and CBRN Risk Index) of the following minimum asymmetric components:

7.3.3.1. Overt persistent CWA effects at MOBs (evaluated simultaneously with mass conventional fires/effects). **(T-2)**

7.3.3.2. Covert biological warfare pathogen effects at aerial ports of embarkation and debarkation. **(T-2)**

7.3.3.3. Covert biological warfare toxin effects during FE maneuver regardless of OL. **(T-2)**

7.3.3.4. Overt persistent or non-persistent CWA effects a FOS and/or CSL/CL. **(T-2)**

7.3.3.5. Overt low yield tactical nuclear effects at a MOB downwind of detonation site. **(T-2)**

7.3.3.6. Overt EMP effects on critical C2 systems at a MOB. **(T-2)**

7.3.4. CBRN defense exercise evaluation observations (e.g., deficiencies, recommended improvement areas) will be documented in the appropriate IG system of record at the appropriate level of classification IAW DAFI 90-302 and the applicable SCG.

7.3.5. AEW commanders with assigned CBRN defense staff will exercise the capability of the CBRN defense specialists to collect and evacuate suspect CBRN environmental samples for theater laboratory analysis. **(T-3)** The evaluation will include, at a minimum, collecting a simulated sample, preserving the sample, using standard evidence collection, packing procedures, and proper chain-of-custody handling. **(T-3)**

7.4. Outside the Continental United States (OCONUS) Main Operating Base (MOB) Senior Leader Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Wargame Requirement. Senior leaders and command teams assigned to OCONUS MOBs will conduct a CBRN defense wargame using a tabletop exercise (TTX) design every 24 months. **(T-3)**

7.4.1. The IEM and CBRN defense staff will host and facilitate the TTX using the CBRN defense wargame template available through AFIMSC. **(T-3)** At a minimum, the CBRN defense wargame will include facilitated discussion on the following items:

7.4.1.1. Current CBRN threat briefing provided by the A2/6 function. **(T-3)**

7.4.1.2. Overview of the CBRN defense measures identified in the CBRN defense annex to the IEMP 10-2 **(T-3)**

7.4.1.3. Notional chemical warfare attack scenario with effects on the MOB. **(T-3)**

7.4.1.4. Notional biological warfare attack scenario with effects on the MOB. **(T-3)**

7.4.1.5. Notional tactical nuclear warfare attack scenario with effects on the MOB. **(T-3)**

7.4.1.6. Notional intentional and/or unintentional industrial complex TIC/TIM release scenario with downwind effects on the MOB or OL. **(T-3)**

7.4.1.7. Facilitated discussion on how the AEW commanders will preserve force survivability and mission continuation for each attack scenario. **(T-3)**

7.4.2. Document the CBRN defense wargame TTX using the exercise reporting guidelines listed in DAFI 90-302. **(T-1)**

Chapter 8

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE BUDGET AND EQUIPMENT

8.1. Overview. DAF commanders require adequate CBRN defense equipment to detect, identify, quantify, avoid, control, protect against, and mitigate the effects of CBRN threats and hazards at OLs. DAF commanders will plan and program CBRN defense capability requirements, including equipment, using the PECs listed in **Table 8.1**. **(T-2)**

8.1.1. DAF commanders will only use the PECs listed in **Table 8.1** to fund approved CBRN defense manpower, training, equipment, and materials. **(T-1)**

8.1.2. DAF commanders will submit their CBRN defense requirements through the installation EMWG IAW DAFI 10-2501.

Table 8.1. Chemical, Biological, Radiological, and Nuclear (CBRN) Program Element Codes (PEC).

Item	Title	Force	Type of Support	PEC
1	CBRN Defense	RegAF	Wartime mobility (non-medical) CBRN Defense equipment	27593F
2	CBRN Defense	AFR	Wartime mobility (non-medical) CBRN Defense equipment	55166F
3	Nuclear, Biological and Chemical Defense	ANG	Wartime mobility (non-medical) CBRN defense equipment	55165F
4	Medical Counter (MC) CBRN	RegAF	Wartime MC CBRN	28036F
5	MC CBRN	ANG	Wartime MC CBRN	58036F
6	MC CBRN	AFR	Wartime MC CBRN	58036F

8.2. Title 50 United States Code (USC) Chapter 32, Section 1522, *Conduct of Chemical and Biological Defense Program*. Title 50 USC, Chapter 32, Section 1522 requires a coordinated and integrated CBDP and that related funding requests for the program be set forth in the budget each fiscal year as a separate account with a single PEC.

8.2.1. Comptrollers will ensure PEC integrity by disbursing received funds for validated and approved CBRN defense equipment requirements. **(T-2)** Comptrollers must coordinate with the Air Force Air Force Installation and Mission Support Center Protective Services (AFIMSC/IZP) for approval before disbursing CBRN defense funds listed in **Table 8.1** for unrelated program requirements. **(T-1)**

8.2.2. DAF commanders must budget to repair and replace CBRN defense equipment and consumables based on service-life expiration and condition. **(T-2)**

8.3. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Platform Standards (PS). Table 8.2 lists the primary PSs for CBRN defense equipment items authorized to support the DAF CBRN Defense Program.

Table 8.2. Primary Platform Standards (PS) for Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment Items.

PS	Title
PS 016C	Chemical Warfare Defense Equipment Returnable
PS 010	USAF Owned Vehicles
PS 459	CBRN Defense Equipment
PS 660	Ground Communications
PS 902	Expeditionary Medical
PS 450	ACBRN Test Equipment

8.3.1. Non-medical CBRN defense specialists will refer to the applicable PS and CBRN response UTC equipment and supplies list (ESL) for expeditionary equipment authorizations. **(T-1)**

8.3.2. Medical SMEs will refer to the applicable PS and medical CBRN defense UTC ESL for expeditionary equipment authorizations. **(T-1)**

8.3.3. AFE support will refer to the applicable PS and ACBRN defense UTC ESL for expeditionary equipment authorizations. **(T-1)**

8.4. Unit Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment. Units must identify CBRN defense requirements and budget for, obtain, store, and maintain material added to accomplish their DRRS reporting requirements to include MET measures and CBDRT resource levels. **(T-2)** Examples include, but are not limited to, CBRN PAR team, CBRN CCT, and COLPRO SMT. Unit equipment does not include CBRN defense IPE, and assets maintained by the Logistics Readiness Squadron, Materiel Management Activity (LRS/MMA).

8.4.1. AEW commanders OCONUS will use **Table 8.3** to identify unit CBRN defense equipment requirements. **(T-3)**

Table 8.3. Standard Unit and Functional Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment Listing.

Team	Equipment Description
CBRN PAR Team	C-bag, unexploded ordnance reference chart, flashlight, light sticks, OL section/grid map, communication device, CBRN defense marking kit, medical (first aid) kit, etc.
CBRN CCT	C-bag, flashlight, light sticks, OL section/grid map, communication device, CBRN defense marking kit, trash bags (44–55-gallon capacity), chemical resistant tape, etc.
COLPRO SMT Kit	C-bag, chemical/biological warfare agents, detector/sensor, flashlight, light sticks, OL section/grid map, communication device, medical (first aid) kit, etc.

Nuclear SMT Kit	C-bag, radiological isotope detector/sensor (e.g., Radiation Detection System, flashlight, light sticks, OL section/grid map, communication device, medical (first aid) kit, etc.

8.4.2. AEW commanders OCONUS must ensure unit CBRN defense materiel, including that in bulk storage, is properly maintained and inventoried. **(T-2)**

8.4.3. AEW commanders OCONUS must conduct inventories annually and/or after deployment or exercises comparing the on-hand assets to the ESLs and document completion in ARIS to align with force readiness reporting requirements IAW AFI 10-201.

8.4.4. AEW commanders tasked with storing CBRN defense IPE must ensure CBRN defense training IPE is identified and marked IAW applicable T.O. and this publication. **(T-2)** Mark CBRN defense training IPE "TRAINING USE ONLY." **(T-2)**

8.5. Aircrew Chemical, Biological, Radiological, and Nuclear (ACBRN) Defense Equipment. DAF commanders will follow AFMAN 11-301, Volume 2, *Management and Configuration Requirements for Aircrew Flight Equipment (AFE)*. **(T-1)**

8.6. Ground-crew Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment. LRS will stock, store, and issue operational and training CBRN defense equipment IAW AFI 23-101, AFI 10-403, *Deployment Planning and Execution*, T.O., and guidance in this publication. **Table 8.4** lists the standard BOI for each authorized operational and training asset in the C-bag.

8.6.1. LRS activities will determine AFFORGEN FE requirements for CBRN defense IPE and CBRN defense equipment based on the standard BOI listed in **Table 8.4** and submit to the Air Force Material Command, Logistics Readiness Division (AFMC/A4R) annually IAW AFI 23-101. AFMC/A4R will update AFFORGEN FE CBRN defense IPE and CBRN defense equipment authorizations in Integrated Logistics Systems-Supply mobility annually IAW AFI 23-101. Use PEC 27593F to plan, program, budget and execute CBRN defense IPE and CBRN defense equipment requirements.

8.6.2. AFIMSC will validate all CBRN defense IPE and CBRN defense equipment requirements submitted for funding by PEC 27593F. **(T-1)**

8.6.3. C-MAJCOMs will authorize additional CBRN defense equipment authorizations IAW AFI 23-101, to support the military base populace, emergency essential civilians and contractors, command sponsored dependents, and host nation personnel identified for DAF support host nation agreements. **Note:** The minimum CBRN defense equipment authorization for command-sponsored dependents is one respirator (i.e., M-50, infant/child mask, etc.).

Table 8.4. Standard Chemical, Biological, Radiological, and Nuclear (CBRN) Defense C-Bag Operational and Training Asset Basis of Issue (BOI).

Item #	Item Description	Operational BOI (each)		Training BOI (each)
		CBRN Risk Index 1	CBRN Risk Index 2-4	CBRN Risk Index 1-4
1	Protective Mask (M-50)[1,3,4]	2	1	0[1]

2	M-61 Filter[5, 6]	4	2	2
3	Joint Service Lightweight Integrated Suit Technology /Uniform Integrated Protective Ensemble (UIPE) Coat[2, 6, 7]	4	2	1
4	Joint Service Lightweight Integrated Suit Technology (JSLIST)/UIPE Trouser [2, 6, 7]	4	2	1
5	Joint Block 2 Glove Upgrade Glove Set (with cotton inserts)[2, 6, 7, 8]	4	2	1
6	Alternate Footwear Solution Overboots or Moulded AirBoss Lightweight Overboot [2, 6, 7]	4	2	1
7	M-8 Chemical Agent Paper[2]	1	1	1
8	M-9 Detection Tape[2]	1	1	1
9	M295 Equipment Decontamination Kit[2]	1	1	1
11	Reactive Skin Decontamination Lotion (RSDL)[9]	1	1	0
12	Antidote Treatment Nerve Agent Autoinjector (ATNAA) and Convulsant ATNAA[9]	1	1	1
13	Water Canteen Cap with Mask Drinking Adapter or CBRN Hydration System (includes water bladder with adapter)	1	1	0

Notes:
1. Use the M-50 Mask (Protective Mask) for both operational and training requirements.
2. Expired CBRN assets, to include, but not limited to, M-8 paper, M-9 tape, M-295 kits, M-256 kits, and JSLIST/UIPE ensembles can be used for training and exercises.
3. Special inserts for the M-50 masks are issued by the medical organization.

4. Issue two (each) M-50 masks for operational requirements in locations categorized with a high CBRN defense risk index. All other areas, issue one (each) M-50 mask for both operational and training requirements.
5. Issue four (each) M-61 canisters for operational requirements in locations categorized with a high CBRN defense risk index. All other areas, issue two (each) M-61 canisters for operational requirements.
6. Use operational assets that have exceeded their service-life or shelf-life for training.
7. Maintain four (each) JSLIST/UIPE ensembles for operational requirements in locations categorized as CBRN Defense Risk Index 1. All other areas, maintain two (each) JSLIST/UIPE ensembles for operational requirements.
8. 14 mm gloves are a suitable substitute.
9. Issued by an authorized medical representative.

8.6.4. AFFORGEN FEs in the CONUS will be issued and maintain the standard CBRN defense C-bag training asset BOI listed in **Table 8.4** during the reset phase. **(T-2)** AFFORGEN FEs will turn-in the training C-bag when certified to enter the Available to commit phase. **(T-2)** AFSOC mission sustainment teams will also be issued and maintain the standard CBRN defense C-bag training asset BOI listed in **Table 8.4**. **(T-2) Note:** Individuals are responsible for cleaning, maintaining, and accountability of the issued assets. Individuals will inspect and clear gear to comply with the applicable T.O.s prior to turn-in.

8.6.5. AFFORGEN FEs in the CONUS will be issued and maintain the standard CBRN defense C-bag operational asset BOI listed in **Table 8.4** during the Available to commit phase. **(T-2)** AFFORGEN FEs will turn-in the operational C-bag when removed from the commit phase. **(T-2)** AFSOC mission sustainment teams will also be issued and maintain the standard CBRN defense C-bag operational asset BOI listed in **Table 8.4**. **(T-2) Note:** Individuals are responsible for cleaning, maintaining, and accountability of the issued assets. Individuals will inspect and clear gear to comply with the applicable T.O.s prior to turn-in.

8.6.6. DAF military and emergency essential personnel (RegAF and ARC) assigned to any OCONUS OL will be issued and maintain the standard CBRN defense C-bag operational asset BOI listed in **Table 8.4**. **(T-2)** DAF military and mission critical personnel (RegAF and ARC) assigned to any OCONUS OL and issued the standard CBRN defense C-bag will inspect the C-bag contents quarterly and document the inspection on DD Form 1348-1A, *Issue Release/Receipt Document*. **(T-3) Note:** Individuals are responsible for cleaning, maintaining, and accountability of the issued assets. Individuals will inspect and clear gear to comply with the applicable T.O.s prior to turn-in.

8.6.7. DAF contractors assigned to any OCONUS OL will be issued and maintain the standard CBRN defense C-bag operational asset BOI listed in **Table 8.4**. IAW contract agreements and performance work statements. **(T-2)** DAF contractors assigned to any OCONUS OL and issued the standard CBRN defense C-bag will inspect the C-bag contents quarterly and document the inspection on DD Form 1348-1A. **(T-3) Note:** Individuals are responsible for cleaning, maintaining, and accountability of the issued assets. Individuals will inspect and clear gear to comply with the applicable T.O.s prior to turn-in.

8.7. Special Tactics Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment. The special tactics community will:

8.7.1. Posture and sustain CBRN defense IPE for special tactics members using the BOI listed in **Table 8.5**. **(T-2)**

8.7.2. AFSOC/A4IX will submit CBRN defense IPE requirements for special tactics members to AFIMSC/IZP IAW AFIMSC fiscal year budget processes if requesting resources from PEC 27593F. **(T-2)**

Table 8.5. Special Tactics Standard Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Operational and Training Asset Basis of Issue (BOI).

Item	Description	Operational BOI Quantity	Training BOI Quantity
1	M53/M53A1 Mask	1	1
2	All Purpose PPE	2	1
3	Joint Block 2 Glove Upgrade Glove Set	2	1
4	Alternate Footwear Solutions	2	1
5	UIPE Increment 1 Multi Cam Top	2	1
6	UIPE Increment 1 Type AA Trouser	2	1
7	Neck Dam (collared)	2	1
8	Protective Hood (collared)	2	1
9	Canisters	7	1
10	Hydration Kit	2	0
11	Microphone Cable	2	0
12	CR123 Batteries	38	0
13	Audio Cables	1	0
14	Voice Amplifier with CR123	1	0
15	Drinking Tubes	2	0
16	Powered Air Purifying Respirators	1	0
17	Hydration System Carrier	2	0
18	RSDL	1	0
19	M334 Equipment Decontamination Kit	1	0
20	Chin Strap Extender	1	0
21	M295 Equipment Decontamination Kit	1	0
22	M-8 Detection Paper	1	0
23	M-9 Detection Tape	1	0
24	Chem Tape	1	0

8.8. Medical Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Equipment. The medical community will:

8.8.1. Posture and sustain the Expeditionary Medical Support System to provide a deployable medical response package that can operate in a CBRN-contested environment. **(T-1)**

8.8.2. Procure, stock, store, and issue the RSDL IAW the BOI identified in **Table 8.4**. **(T-2)**

8.8.3. Procure, stock, store, and issue the Convulsant ATNAA IAW the BOI identified in **Table 8.4**. **(T-2)**

8.8.4. Maintain the equipment capabilities required to conduct medical surveillance in support of force health risks analysis at OCONUS OLs. **(T-2)**

8.8.5. Maintain the equipment capabilities required to posture a laboratory biological detection, triage, and patient decontamination team at OCONUS OLs. **(T-2)**

8.8.6. Procure, stock, store, and issue necessary radioactive countermeasures. **(T-2)**

8.8.7. Procure, stock, store, and issue upon need, prophylaxis for biological warfare treatment. **(T-2)**

8.9. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Specialist (AFSC 3E9X1) Equipment. DAF **c**ommanders with assigned CBRN defense specialists (AFSC 3E9X1) will ensure they are equipped for immediate deployment as a CET by requesting equipment through the USAF Battlefield Airmen Rapid Refresh and Replenishment System or equivalent system centrally managed by AFIMSC. **(T-3)**

8.10. Chemical and Biological Collective Protection (COLPRO) Systems. AEW commanders OCONUS will identify, plan, and program chemical and biological COLPRO requirements for enduring and contingency locations based on the CBRN threat assessments derived from the JIPOE process. **(T-2)** Refer to AFMAN 10-2503 for the types of chemical and biological COLPRO systems.

8.10.1. Chemical and biological COLPRO planning must analyze CBRN threat effects, CONOPS and schemes of maneuver, and the specific and alternative protection factors required to preserve force survivability and mission continuation. **(T-2)**

8.10.2. Based on an operational analysis and integrated risk management strategies, chemical and biological COLPRO capabilities may be required to open the airbase, establish the airbase, operate the airbase, and/or robust the airbase regardless of OL. AEW commanders will assess the requirement for chemical and biological COLPRO systems for all assigned missions. **(T-2)**

8.10.3. CEO will use PEC 27593F to program/execute operating and support funding for expeditionary chemical and biological COLPRO requirements. **(T-1)** CEO will use PEC 27479F and PEC 22187F to reprogram/sustain fixed-site chemical and biological COLPRO systems. **(T-1)**

8.10.4. The 209 SOCES/CEX (AFSOC gained unit) will maintain and sustain an expeditionary chemical and biological COLPRO capability to support Tier 2 units. **(T-2)** Use PEC 27593F to program/execute operating and support funding for the chemical and biological COLPRO capability. **(T-1)**

8.10.5. New fixed-site COLPRO system requirements must be submitted through the CE governance process for new military construction. **(T-1)**

Chapter 9

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE FORCE READINESS REPORTING

9.1. Overview. The UJTL is a menu of common tasks in a common language, which serves as the foundation for joint operations planning across the range of military and interagency operations. The UJTL supports DoD to conduct joint force development, readiness reporting, experimentation, joint training and education, and lessons learned. It is the basic language in developing Joint MET Lists and Agency MET Lists.

9.2. Measuring Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Capabilities. DAF commanders may consider the following minimum operational tasks to inform how they measure CBRN defense capabilities required to conduct layered integrated CWMD defense. Although these specific measures are aligned to Joint MET Lists, they provide invaluable information on the type of measurable tasks all joint forces assess regarding CBRN defense capabilities:

9.2.1. Hours required to establish a CBRN Warning and Reporting System.

9.2.2. Percent of forces trained and equipped to operate in a CBRN environment.

9.2.3. Hours to position operational detectors for optimum protection of forces.

9.2.4. Percent of enemy attacks detected.

9.2.5. Number of instances when operational forces and facilities were affected by an attack without warning.

9.2.6. Percent of operational forces and facilities with CBRN casualties.

9.2.7. Percent of friendly or neutral forces or noncombatants influenced by collateral effects from friendly attacks on CBRN weapon targets.

9.2.8. Hours to coordinate for additional assets for the OL.

9.2.9. Number of false positive alarms.

9.2.10. Instances of undetected use of CBRN.

9.2.11. Instances of decontamination capability being insufficient for the situation.

9.2.12. Hours to operationally decontaminate a base area attacked with CBRN weapons.

9.2.13. Days to inoculate personnel under a biological threat.

9.2.14. Percent of base areas with dedicated CBRN monitoring teams.

9.2.15. Hours to establish C2 at an incident location.

9.2.16. Instances of medical facilities not able to treat contaminated casualties.

9.2.17. Hours to provide an initial assessment after arrival of C2 at an incident location.

9.2.18. Hours to complete food, water, and vector vulnerability assessments.

9.2.19. Hours to provide a CBRN health risk assessment.

9.2.20. Hours to recognize, identify, and diagnose CBRN agents and casualties.

9.2.21. Hours to perform medical sector detection, marking, and reporting.

9.2.22. Hours to set up tracking and follow-up procedures of contaminated personnel.

9.2.23. Hours to coordinate with mortuary affairs on handling, decontaminating, and transporting human remains.

9.2.24. Percent of operational forces trained to operate in a CBRN environment.

9.2.25. Percent of operational forces equipped to operate in a CBRN environment.

9.2.26. Percent of operational forces with CBRN casualties.

9.2.27. Days to identify medical threats and to develop countermeasures.

9.2.28. Days to conduct pre- and post-deployment screening procedures.

9.2.29. Days to deploy assets to conduct medical surveillance.

9.2.30. Percent of immunizations and medical countermeasures on hand.

9.2.31. Percent of medical personnel trained in management of CBRN casualties.

9.2.32. Number of medical treatment facilities beds available.

9.2.33. Hours of JWARN 100 percent integration and interoperability with OL communication systems and alert/warning systems.

9.2.34. Hours to establish protection for all U.S., allied, and partner personnel in the OL and to coordinate medical support.

9.2.35. Days to identify terrorist organizations acting alone or with state sponsorship that possess or are attempting to acquire WMD.

9.2.36. Number of joint CBRN consequence management exercises/rehearsals conducted per fiscal year.

9.2.37. Number of joint senior leader CBRN training classes conducted per fiscal year.

9.2.38. Number of CBRN joint force training events: command post exercises conducted per fiscal year; TTXs per fiscal year, and field training exercises conducted per fiscal year.

9.3. Developing and Managing Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Mission Essential Tasks (MET). AF/A4C develops and AF/A3TR manages DAF CBRN defense METs to support readiness reporting IAW AFI 10-201.

9.4. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Mission Essential Task (MET) Reporting. DAF commanders assigned CBRN defense METs are required to measure their ability to execute each MET during monthly force readiness reporting. **(T-1)**

9.5. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Assessment Report. DAF commanders will use the CBDRT Report in the DRRS during force readiness reporting to measure CBRN defense capabilities IAW AFI 10-201 and applicable DDRS-S AF tables.

Chapter 10

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE CAPABILITY REQUIREMENTS DEVELOPMENT

10.1. Overview. DAF commanders will use a CBRN threat assessment developed during the JIPOE process to identify potential CBRN defense capability requirements necessary to generate and sustain mission operations in a CBRN-contested environment based on the DAF standards listed in **Chapter 3**. **(T-2)**

10.2. Identifying, Prioritizing, and Submitting Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Capability Gaps. DAF commanders will identify, prioritize, and submit CBRN defense capability requirements IAW **paragraph 10.2.1**., **paragraph 10.2.2**, and **paragraph 10.2.3**. **(T-1)** CBRN defense capability gaps will be submitted for inclusion in the MAJCOM/FLDCOM Capability Gaps Listing. **(T-2)**

10.2.1. CBRN defense capability requirements needed to support ongoing contingencies will be submitted as an urgent operational need IAW DoDI 5000.81_DAFI63-147, *Urgent Capability Acquisition*. **(T-0)**

10.2.2. CBRN defense capability requirements needed to support an anticipated contingency will be submitted as an emergent operational need IAW DoDI 5000.81_DAFI63-147. **(T-0)**

10.2.3. CBRN defense operational needs or capability gaps for non-medical/non-aircrew CBRN defense that do not meet the requirements for urgent operational need or emergent operational need will be submitted through the operational command to AF/A4C. **(T-2)**

10.2.4. CBRN defense capability requirements involving ally and partner force training and/or equipping will be planned and programmed through security cooperation/SFA planning and programming processes. Refer to DAFPD 16-1, *Security Cooperation*, and AFPD 10-43, for guidance on how to integrate DAF programs that assist ally and partner forces access to training and equipment supplied by the U.S. **(T-2)**

10.3. Major Command (MAJCOM)/Field Command (FLDCOM) Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Capability Based Assessments. MAJCOM/FLDCOM commanders will identify and report operational needs and required capabilities through the chain of command to the appropriate capability developers IAW the *Manual for the Operation of the Joint Capabilities Integration and Development System* (JCIDS Manual). MAJCOM/FLDCOMs will provide the following information:

10.3.1. Description of the operational need and/or capability gap.

10.3.2. Assessment of the operational risk and/or impact of the need or gap.

10.3.3. Any specific requirements or system attributes for potential solutions.

10.3.4. Describe who needs the capability.

10.3.5. Identify any known potential solutions.

10.4. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Capability Concept of Operations (CONOPS). After the solution to the capability gap is determined, the combat developers will work with the MAJCOM/FLDCOM commanders to develop a fully integrated

CONOPS that describes the employment of individual CBRN defense capabilities and their interdependence to reestablish operations and operate through CBRN attacks. **(T-2)** An individual CONOPS will address the following minimum areas:

10.4.1. Capability gap being addressed.

10.4.2. Capability effect to be delivered.

10.4.3. Commander's intent.

10.4.4. Operational overview over the full range of military operations.

10.4.5. Tasks, conditions, and standards of the capability (executed to deliver the effect).

10.4.6. Roles and responsibilities of all relevant organizations involved in utilizing/delivering the capability over its life cycle.

10.4.7. Employment strategy as it pertains to and interfaces with all other CBRN defense capabilities IAW the fully integrated CBRN defense CONOPS.

10.5. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Requirements Support Documents. MAJCOM/FLDCOM commanders will coordinate reports from all CBRN defense capabilities-based assessments or equivalent employment driven operational assessment, as well as threat assessments and risk-to-mission and risk-to-force analysis reports with the respective MAJCOM/A4 and A5 and FLDCOM/S4 and S5/8. **(T-2)**

10.5.1. Submit analysis reports and documents for non-medical and non-aircrew CBRN defense requirements to AFIMSC for validation. **(T-1)**

10.5.2. Submit analysis reports and documents for aircrew CBRN defense to ACC/A3T. **(T-1)**

10.5.3. Submit analysis reports and documents for medical CBRN defense to AFMRA/SGX. **(T-1)**

10.6. Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Science and Technology (S&T) Responsibilities.

10.6.1. AFIMSC will serve as the focal point for representing DAF non-medical CBRN defense equities during advanced technology demonstrations, the Chemical and Biological Operational Analysis (CBOA), and other S&T events. **(T-1)**

10.6.2. AF/SG will serve as the focal point for representing medical CBRN defense equities during advanced technology demonstration, CBOA, and other S&T events with medical CBRN defense equities. **(T-1)**

10.6.3. AF/A3 and ACC/A3T will serve as the focal point for representing aircrew CBRN defense equities during advanced technology demonstration, CBOA, and other S&T events with aircrew CBRN defense equities. **(T-1)**

10.6.4. S&T identified as potential capabilities to fill urgent, emergent, or future needs will be formally submitted to the CBRN defense MWG for review and validation. **(T-1)**

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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Abbreviations and Acronyms

ACBRN—Aircrew Chemical, Biological, Radiological, and Nuclear

ACE—Agile Combat Employment

AETC—Air Education and Training Command

AEW—Air Expeditionary Wing

AF—Air Force

AFDN—Air Force Doctrine Note

AFDP—Air Force Doctrine Publication

AFE—Aircrew Flight Equipment

AFFOR—Air Force Forces

AFFORGEN—Air Force Forces Generation

AFH—Air Force Handbook

AFI—Air Force Instruction

AFIMSC—Air Force Installation and Mission Support Center

AFLCMC—Air Force Life Cycle Management Center

AFMAN—Air Force Manual

AFMC—Air Force Material Command

AFPD—Air Force Policy Directive

AFR—Air Force Reserve

AFSC—Air Force Specialty Code

AFSOC—Air Force Special Operations Command

AFTTP—Air Force Tactics, Techniques, and Procedures

AMC—Air Mobility Command

ANG—Air National Guard

AOC—Air Operations Center

AOME—Aerospace and Operational Medicine Enterprise

ARC—Air Reserve Component

ARIS—Automated Readiness Information System

ATNAA—Antidote Treatment Nerve Agent Autoinjector

ATP—Allied Tactical Publication

BEPO—Base Emergency Preparedness Orientation

BOI—Basis of Issue

BOS-I—Base Operating Support-Integrator

CAT—Crisis Action Team

CBD—Chemical and Biological Defense

CBDP—Chemical and Biological Defense Program

CBDRT—Chemical Biological Defense Readiness Training

CBOA—Chemical and Biological Operational Analysis

CBR—Chemical, Biological, and Radiological

CBRN—Chemical, Biological, Radiological, and Nuclear

CBRNE—Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives

CBRN-IS—Chemical, Biological, Radiological, and Nuclear Defense Information System

CCA—Contamination Control Area

CCMD—Combatant Command

CCT—Contamination Control Team

CE—Civil Engineer

CEO—Civil Engineer Operations

CET—Capability Enhancement Team

CFM—Career Field Manager

CJCS—Chairman of the Joint Chiefs of Staff

CL—Contingency Location

C-MAJCOM—Component-Major Command

C-NAF—Component Numbered Air Force

COA—Course of Action

COLPRO—Collective Protection

CONOPS—Concept of Operations

CONPLAN—Contingency Plan

CONUS—Continental United States

COOP—Continuity of Operations

CRAF—Civil Reserve Air Fleet

CSAF—Chief of Staff of the Air Force

CSC2—CBRN Support to Command and Control

CSL—Cooperative Security Location

CWA—Chemical Warfare Agent

CWMD—Countering Weapons of Mass Destruction

C2—Command and Control

DAF—Department of the Air Force

DAFI—Department of the Air Force Instruction

DAFMAN—Department of the Air Force Manual

DAFPD—Department of the Air Force Policy Directive

DoD—Department of Defense

DoDD—Department of Defense Directive

DoDI—Department of Defense Instruction

DoDM—Department of Defense Manual

DOTMLPF-P—Doctrine, Organization, Training, Materiel, Leadership and Education Personnel, Facilities, and Policy

DRRS—Defense Readiness Reporting System

EM—Emergency Management

EMP—Electromagnetic Pulse

EMWG—Emergency Management Working Group

EOC—Emergency Operations Center

EOD—Explosive Ordnance Disposal

EOH—Explosive Ordnance Hazards

ESL—Equipment and Supplies List

FE—Force Element

FHP—Force Health Protection

FLDCOM—Field Command

FOS—Forward Operating Site

HAF—Headquarters Air Force

HAFMD—Headquarters Air Force Mission Directive

HEMP—High-altitude Electromagnetic Pulse

GCCS—Global Command and Control System

HHQ—Higher Headquarters

HQ—Headquarters

HQ CCC—Headquarters Cyberspace Capabilities Center

IAW—In Accordance With

IEM—Installation Emergency Management

IEMP—Installation Emergency Management Plan

IG—Inspector General

IOEM—Installation Office of Emergency Management

IPE—Individual Protective Equipment

JCIDS—Joint Capabilities Integration and Development System

JEM—Joint Effects Module

JIPOE—Joint Intelligence Preparation of the Operating Environment

JP—Joint Publication

JPEO-CBD—Joint Program Executive Office for Chemical and Biological Defense

JRO—Joint Requirements Office

JSLIST—Joint Service Lightweight Integrated Suit Technology

JWARN—Joint Warning and Reporting Network

LRS—Logistics Readiness Squadron

MA—Mission Assurance

MAF—Mobility Air Forces

MAJCOM—Major Command

MARCH—Massive Hemorrhage, Airway, Respirations, Circulation, Hypothermia

MARCHE2—Mask, Antidotes, Rapid Spot Decontamination, Countermeasures, Extraction, and Evacuation

MEF—Mission Essential Function

MET—Mission Essential Task

MOB—Main Operating Base

MOPP—Mission-Oriented Protective Posture

MRR—Modernization Requirements Review

MSEL—Master Scenario Event List

MTTP—Multi-Service Tactics, Techniques, and Procedures

MWD—Military Working Dog

MWG—Modernization Working Group

NATO—North Atlantic Treaty Organization

OAI—Operations, Activities, and Investments

OCONUS—Outside the Continental United States

OE—Operational Environment

OEG—Operational Exposure Guidance

OL—Operating Location

OPLAN—Operational Plan

OPR—Office of Primary Responsibility

OPREP—Operational Report

OT&E—Organize, Train, and Equip

PAD—Program Action Directive

PAR—Post Attack Reconnaissance

PEC—Program Element Code

PHEO—Public Health Emergency Officer

POM—Program Objective Memorandum

PPBE—Planning, Programming, Budgeting, and Execution

PPE—Personal Protective Equipment

PS—Platform Standard

RAT—Ready Airman Training

RegAF—Regular Air Force

RSDL—Reactive Skin Decontamination Lotion

SBD—Space Base Delta

SCG—Security Classification Guide

SecAF—Secretary of the Air Force

SEL—Senior Enlisted Leader

SFA—Security Force Assistance

SG—Surgeon General

SIP—Shelter-in-Place

SLD—Space Launch Delta

SME—Subject Matter Expert

SMT—Shelter Management Team

SOCES—Special Operations Civil Engineer Squadron

S&T—Science and Technology

TEMPER—Tactical Emergency Management Program Execution Requirements

TIC—Toxic Industrial Chemical

TIM—Toxic Industrial Material

T.O.—Technical Orders

TQT—Task Qualification Training

TTP—Tactics, Techniques, and Procedures

TTX—Table-Top Exercise

UFC—Unified Facilities Criteria

UIPE—Uniform Integrated Protective Ensemble

UJTL—Universal Joint Task Library

U.S.—United States

USAF—United States Air Forces

USC—United States Code

USSF—United States Space Force

USTRANSCOM—United States Transportation Command

UTC—Unit Type Code

UXO—Unexploded Ordnance

WMD—Weapons of Mass Destruction

WOC—Wing Operations Center

WRM—War Reserve Materiel

Office Symbols

AF/A1—Deputy Chief of Staff for Manpower, Personnel, and Services

AF/A2/6—Deputy Chief of Staff, Air Force Intelligence, Surveillance and Reconnaissance, and Cyber Effects Operations

AF/A3—Deputy Chief of Staff, Operations

AF/A3OG—Air Force Operations Group

AF/A3TH—Air Force Deputy Chief of Staff, Operations, Director of Training and Readiness, Aircrew Performance Division

AF/A4—Deputy Chief of Staff, Logistics, Engineering and Force Protection

AF/A4C—Director of Civil Engineers

AF/A4CX—Air Force Civil Engineers, Readiness Division

AF/A4L—Director of Logistics

AF/A4S—Director of Security Forces

AF/A5/7—Deputy Chief of Staff for Air Force Futures

AF/A8—Deputy Chief of Staff for Plans and Programs

AF/A10—Deputy Chief of Staff for Strategic Deterrence and Nuclear Integration

AF/A10S—Countering Weapons of Mass Destruction Division

AF/SG—Air Force Surgeon General

AFIMSC/IZ—Air Force Installation and Mission Support Center Installation Support

AFIMSC/IZP—Air Force Air Force Installation and Mission Support Center Protective Services

ACC/A3T—Air Combat Flight Operations Division

AFGSC/A5B—Air Force Global Strike Command Bomber Support Division

AFLCMC/WNU—Air Force Lifecycle Management Center, Human Systems Division

AFMC/A4R—Air Force Material Command, Logistics Readiness Division

LRS/MMA—Logistics Readiness Squadron, Materiel Management Activity

SAF/CN—Secretary of the Air Force Chief Information Security Officer

SAF/IG—Secretary of the Air Force Inspector General

SF/S2—Deputy Chief of Space Operation for Intelligence

SF/S4O—Headquarters Space Force, Mission Sustainment Division

209 SOCES/CEX—Special Operations Civil Engineer Squadron, Office of Emergency Management

Terms

Aircrew Chemical, Biological, Radiological, and Nuclear (ACBRN) Defense Equipment—Individually fitted aircrew unique CBRN protective equipment for the sole purpose of protecting operators who fly into and out of a CBRN hazard/contaminated environment.

Aircrew Contamination Control Area (CCA)—A self-sustaining aircrew only mitigation control area that minimizes cross contamination to aircrew and is staffed by certified AFE

technicians.

Aircrew Flight Equipment (AFE)—AFE encompasses all equipment and personnel formerly known as aircrew life support, survival equipment, and is part of the 412A System.

Allied Tactical Publication (ATP)-45—NATO document that prescribes joint CBRN procedures regarding prediction and warning of hazard areas, reporting of all CBRN attacks and the resulting contamination, and the interchange of reports between NATO, and national military and civilian personnel and agencies.

Apportioned Forces—Those forces and resources assumed to be available for planning as averaged over the fiscal year. Apportioned forces are what a CCMD can reasonably expect to be made available, but not necessarily an identification of the actual forces that will be allocated for use when a contingency plan transitions to execution. They may include those assigned, those expected through mobilization, and those programmed. This estimate informs and shapes CCDR resource-informed planning but does not identify the actual forces that may be allocated for use if a plan transitions to execution. The apportionment of a force does not establish a command relationship.

Biological Agent—A microorganism that causes disease in personnel, plants, or animals, or causes the deterioration of materiel.

Chemical, Biological, Radiological, and Nuclear (CBRN) Collective Protection (COLPRO)—Protection provided to a group of individuals in a CBRN environment that permits relaxation of individual CBRN protection. Also referred to as COLPRO.

Chemical, Biological, Radiological, and Nuclear (CBRN) Response—CBRN response efforts minimize the effect of CBRN use to the joint force and other mission critical personnel. Actions to manage consequences support US and foreign civil authorities and their populations by responding to a CBRN incident and mitigating the hazards and effects of WMD use. The method of tactics, techniques, and procedures to save and sustain lives, stabilize the situation, protect property and the environment, and meet basic human needs during an intentional, naturally occurring, or accidental CBRN incident on DAF and host nation territories that support forces and/or supplies in which the DAF is located on, operates in, or transits through.

Chemical, Biological, Radiological, and Nuclear (CBRN) Specialist—Tactical response team staffed by expert CBRN specialists (AFSC 3E9X1, EM) assigned to CBRN response UTCs

(4FPW-series); detects, identifies, quantifies, and collects CBRN material ensuring mission continuation and force survivability.

Chemical Agent—Any toxic chemical intended for use in military operations.

Combat Support—The foundational and crosscutting capability to field, base, protect, support, and sustain AF forces during military operations across the competition continuum.

Contingency—An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.

Contamination—1. The deposit and/or absorption of radioactive material or biological or chemical agents on and by structures, areas, personnel, or objects. 2. Food and/or water made unfit for consumption by humans or animals because of the presence of environmental chemicals, radioactive elements, bacteria, or organisms. 3. The by-product of the growth of bacteria or organisms in decomposing material (including food substances) or waste in food or water.

Continuity of Operations (COOP)—The capability to preserve DAF functions, missions, and capabilities in support of DoD Primary MEFs and DAF MEFs.

Cooperative Security Location (CSL)—A facility located outside the U.S. and its territories with little or no permanent U.S. presence that is maintained by periodic Service, contractor, or

host nation support.

Course of Action (COA)—1. Any sequence of activities that an individual or unit may follow. 2. A possible plan open to an individual or commander that would accomplish or is related to the accomplishment of the mission. 3. The scheme adopted to accomplish a job or mission. 4. A line of conduct in an engagement. 5. A product of the Joint Operation Planning and Execution System concept development phase. Also called COA.

Decontamination—The process of making any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it.

Dispersal—Relocation of forces for the purpose of increasing survivability.

Electromagnetic Pulse (EMP)—The electromagnetic radiation from a strong electronic pulse, most caused by a nuclear explosion that may couple with electrical or electronic systems to produce damaging current and voltage surges.

Evacuation—1. The process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities. 2. The clearance of personnel, animals, or materiel from a given locality. 3. The controlled process of collecting, classifying, and shipping unserviceable or abandoned materiel, U.S. and foreign, to appropriate reclamation, maintenance, technical intelligence, or disposal facilities.

Force Health Protection (FHP)—Services that promote, improve, or conserve the behavioral and physical well-being of DoD personnel. These measures enable healthy and fit forces, prevent injury and illness, and protect the force from health hazards.

Force Protection—Preventive measures taken to mitigate hostile actions against DoD personnel (to include family members), resources, facilities, and critical information. **Note:** Force protection is a fundamental principle of all military operations to ensure the survivability of a commander's forces. A comparison of NATO, joint, and single Service definitions is instructive. NATO Doctrine explains that "[t]he operational environment may have no discernable 'front lines' or 'rear area' and an adversary may be expected to target Allied vulnerabilities anywhere with a wide range of capabilities." Consequently, NATO defines force protection as "measures and means to minimize the vulnerability of personnel, facilities, materiel, operations, and activities from threats and hazards to preserve freedom of action and operational effectiveness thereby contributing to mission success.

Forward Operating Site (FOS)—A scalable location outside the U.S. and its territories intended for rotational use by operating forces.

Groundcrew Chemical Ensemble—A whole body protective system that includes a protective mask (M50), filter set, protective suit, protective gloves with cotton inserts, and footwear covers or overboots. It also includes a booklet of M8 Paper, a roll of M9 Paper, a M295 Decontamination Kit, (RSDL, M-256 Chemical Detection Kit, and personal dosimeter.

Host Nation—A nation which receives the forces and/or supplies of allied nations and/or NATO organizations to be located on, to operate in, or to transit through its territory.

Host Nation Support—Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crises, emergencies, or war based on agreements mutually concluded between nations.

Immediate Decontamination—Decontamination carried out by individuals immediately upon becoming contaminated. It is performed to minimize casualties, save lives, and limit the spread of contamination. Also called emergency decontamination.

Intelligence—1. The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding.

Individual Protective Equipment (IPE)—1. In nuclear, biological, and chemical warfare, the personal clothing and equipment required to protect an individual from biological and chemical hazards and some nuclear effects. 2. For AF units, this includes the groundcrew chemical ensemble or specialized equipment and field gear.

Main Operating Base (MOB)—A facility outside the U.S. and its territories with permanently stationed operating forces and robust infrastructure.

Mission-Oriented Protective Posture (MOPP)—A flexible system of protection against nuclear, biological, and chemical contamination. This posture requires personnel to wear only that protective clothing and equipment (mission-oriented protective posture gear) appropriate to the threat level, work rate imposed by the mission, temperature, and humidity. Also called MOPP.

Noncombatant Evacuation Operations—Operations directed by the Department of State, the DoD, or other appropriate authority whereby noncombatants are evacuated from foreign countries when their lives are endangered by war, civil unrest, or natural disaster to safe havens or to the U.S.

Operational Decontamination—Decontamination carried out by an individual and/or a unit, restricted to specific parts of operationally essential equipment, materiel and/or working areas, to minimize contact and transfer hazards and to sustain operations. This may include decontamination of the individual beyond the scope of immediate decontamination as well as decontamination of mission-essential spares and limited terrain decontamination.

Operational Environment (OE)—A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander.

Retrograde Cargo—Cargo evacuated from a theater.

Security Cooperation—All DoD interactions with foreign defense establishments to build defense relationships that promote specific U.S. security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to a host nation. See also security assistance/security assistance organization.

Silver Flag—Training focused on bare base beddown and sustainment operations using basic expeditionary airfield resource assets in a realistic environment. Where possible, combat skills are added to the curriculum to ensure realism and help fortify a warrior mentality and ethos throughout the training. For more information, reference AFI 10-210, *Prime Base Engineer Emergency Force Program.*

Split-Mission-Oriented Protective Posture (MOPP)—A tactic that divides an airbase or OL into two or more sectors or zones to enable a commander to tailor MOPP levels and alarm conditions within each sector to reflect the current hazard and mission priorities within that area.

Tactics, Techniques, and Procedures (TTP)—Applies basic and operational doctrine to military actions by describing the proper use of specific weapons systems or detailed TTPs to accomplish specific military operations.

Thorough Decontamination—Decontamination carried out by a unit, with or without external support, to reduce contamination on personnel, equipment, materiel, and/or working areas equal to natural background or to the lowest possible levels, to permit the partial or total removal of IPE and to maintain operations with minimum degradation. This may include terrain decontamination beyond the scope of operational decontamination.

Toxins—Poisonous substances produced by living organisms. A toxin is a toxic substance that can be produced by an animal, plant, or microbe. Some toxins can also be produced by molecular biologic techniques (protein toxins) or by chemical synthesis (low molecular weight toxins).

Weapons of Mass Destruction (WMD)—Weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. WMD can be high explosives or nuclear, biological, chemical, or radiological weapons, but exclude the means of transporting or propelling the weapons where such means is a separable and divisible part of the weapons.

Attachment 2

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE ANNEX TO THE IEMP 10-2 TEMPLATE

A2.1. Section 1. Define the OE.

A2.1.1. Identify sufficient checkpoints on sectors/routes of entry into and through the operational area and areas of interest.

A2.1.2. Prepare for the impact of geographic features with respect to their impact on CBRN hazards and on hazard predictions.

A2.1.3. Plan for seasonal and time of day climatic effects of CBRN hazards on materials.

A2.2. Section 2. Intelligence Collection and Analysis.

A2.2.1. Assess the CBRN threats.

A2.2.2. Assess the presumed CBRN hazard effects on the OL.

A2.3. Section 3. Situational Awareness.

A2.3.1. Describe roles and responsibilities for the CBRN warning and reporting system including CSC2.

A2.3.2. Describe the assigned and planned CBRN detection capabilities and how each is integrated/networked into the CSC2.

A2.4. Section 4. Common Planning, Training, and Equipment Standards.

A2.4.1. Identify gaps in CBR defense capabilities.

A2.4.2. Describe the CBRN defense training standards.

A2.5. Section 5. Medical CBRN Passive Defense.

A2.5.1. List the medical considerations required to support FHP.

A2.5.2. Describe how individual radiation and chemical exposure will be tracked and documented.

A2.5.3. Describe the processes for CBRN casualty treatment.

A2.5.4. Describe the capabilities for conducting medical surveillance.

A2.5.5. Describe the anticipated medical effects from decontamination operations as opposed to choosing not to perform decontamination.

A2.6. Section 6. Protection of the Joint Rear Area and Theater Sustainment Capabilities.

A2.6.1. Describe the contamination avoidance procedures for essential rear areas, port of debarkations, or other critical logistic nodes.

A2.6.2. Describe and list the procedures for resupply of IPE, equipment, repair parts, medical countermeasures, biological diagnostic or detection reagents, and other resources, especially those required for decontamination.

A2.7. Section 7. In-Theater Active Defense Systems.

A2.7.1. Describe and list the active defense systems and deployment locations.

A2.7.2. Identify the training requirements for individuals to effectively identify and communicate missile or unmanned aerial vehicle intercepts.

A2.7.3. Identify key C2 relationships and communication processes to ensure effective integrated early warning and reporting.

A2.8. CBRN Effects on Communication Systems and Network Operations.

A2.8.1. Identify limitations for communicating and performing network operations should critical and/or supporting equipment become contaminated.

A2.8.2. Identify continuity of operations for communication systems and network systems following an electromagnetic pulse.

A2.8.3. Identify the CSC2 reporting framework between areas, zone, and other CBRN collection centers within the theater of operations.

A2.9. Fixed and Mobile Operations.

A2.9.1. Describe and list the CBRN defense protection and detection requirements for AFFORGEN FEs that may have to ACE to other OLs.

A2.9.2. Describe the fixed site and/or expeditionary COLPRO capabilities for fixed forces and/or FEs that may have to maneuver to other OLs.

A2.9.3. Describe how the OL(s) will be sectored or zoned to avoid spreading contamination.

A2.9.4. Describe localized procedures for establishing and communicating alarm conditions and MOPP levels.

A2.10. CBRN Passive Defense Measures.

A2.10.1. CBRN defense IPE/PPE requirements.

A2.10.2. Fixed site and expeditionary COLPRO requirements, training, and operations.

A2.10.3. OEGs and military exposure guideline criteria.

A2.10.4. Shielding and cover requirements.

A2.10.5. Shelter requirements, training, and operations.

A2.10.6. Process for issuing vaccines and prophylaxis.

A2.10.7. Dispersal requirements, roles, and responsibilities.

A2.10.8. CBRN hazard warning, reporting, and prediction triggers.

A2.10.9. CBRN hazard marking requirements, roles, and responsibilities.

A2.10.10. Process for establishing control zones and toxic free areas.

A2.10.11. Environmental and medical background readings.

A2.10.12. Decontamination requirements, processes, roles, and responsibilities.

A2.10.13. EMP mitigation.

A2.11. Other Planning Factors (as applicable).

A2.11.1. Joint, host nation, ally, and/or partner nation considerations.

A2.11.2. Key locations for field and theater level CBRN sample confirmation.

Attachment 3

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) DEFENSE PLANNING REFERENCES

A3.1. DAF commanders at all levels ensure their assigned forces are prepared to conduct operations in and through a CBRN-contested environment. Adequate preparation requires deliberate and adaptive planning to account for the complexity CBRN weapon effects will have on the OE.

A3.2. The service components provide input to and assist with the development of MTTP for CBRN defense. MTTPs are published by the Maneuver Support Center of Excellence Capabilities Development and Integration Directorate; Concepts, Organizations, and Doctrine Development Division; and Doctrine Branch at the U.S. Army CBRN School.

A3.3. The following MTTPs serve as primary doctrinal references on CBRN capabilities, operational and tactical planning, and principles of employment. They also outline fundamental TTPs for characterizing and managing CBRN threats and hazards, promoting near-real-time CBRN hazard awareness and understanding, and supporting CBRN passive defense operations.

A3.3.1. AFTTP 3-2.37, *MTTPs for CBRN Consequence Management Operations.*

A3.3.2. AFTTP 3-2.44, *MTTPs for CBRN Reconnaissance and Surveillance*.

A3.3.3. AFTTP 3-2.46, *MTTPs for CBRN Passive Defense*.

A3.3.4. AFTTP 3-2.55, *CBRN Threats and Hazards*.

A3.3.5. AFTTP 3-2.55, *Classified Appendix I to MTTP for CBRN Threats and Hazards*.

A3.3.6. AFTTP 3-2.56, *MTTPs for CBRN Warning and Reporting and Hazard Prediction Procedures*.

A3.3.7. AFTTP 3-2.60, *MTTPs for CBRN Contamination Mitigation*.

A3.3.8. AFTTP 3-2.65, *MTTPs for Nuclear Operations*.

A3.3.9. AFTTP 3-2.70, *MTTPs for CBRN Planning*.