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Operations

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

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This publication implements Department of the Air Force Policy Directive (DAFPD) 10-25, *Emergency Management Program*, and is consistent with aspects of DAFPD 10-26, *Countering Weapons of Mass Destruction*. This publication specifically addresses those aspects of chemical, biological, radiological, nuclear (CBRN) defense required to effectively organize, train, equip, (OT&E), and resource the Department of the Air Force's (DAF) preparedness to support CBRN response during combat and/or contingency operations both within the continental United States (CONUS) and outside the continental United States (OCONUS). This publication applies to all DAF civilian employees and uniformed members of the Regular Air Force (RegAF), Air Reserve Component (ARC) (Air Force Reserve [AFR] and Air National Guard [ANG]), 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) (i.e., enduring locations [EL]: installations, main operating bases [MOB], forward operating sites [FOS], cooperative security locations [CSL]; or contingency locations [CL]). OCONUS locations that are states (e.g., Alaska or Hawaii) or United States (U.S.) territories (e.g., Guam, Puerto Rico, or U.S. Virgin Islands) should operate under CONUS requirements for this publication. 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

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SUMMARY OF CHANGES

This interim change captures requested changes to roles and responsibilities, changes language to reflect enduring and contingency locations to broaden the scope updates Air Force Force Generation and includes Space Force Generation training requirements, incorporates the change of the "CBRN Risk Index" to the "CBRN Threat Index", updates the Basis of Issue, and clears up other language and grammatical errors. All changes are marked with an (|) IAW DAFMAN 90-161.

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Chapter 1

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR 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 for both CONUS and OCONUS. Additionally, this publication establishes cross-functional concepts, policy, standards, and actions to organize, train, and equip 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 with guidance in Joint Publication (JP) 3-11, *Operations in Chemical, Biological, Radiological, or Nuclear Environments* under the joint CBRN defense planning standards/mission areas.

1.1.3. Support operational imperatives by optimizing 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 Force Generation (AFFORGEN) and Space Force Generation (SPAFORGEN) process and incorporating CBRN defense into agile combat employment (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. The U.S. is competing with states armed with a suite of CBRN capabilities , the Peoples Republic of China (PRC) and Russia, while the Democratic People's Republic of Korea (DPRK), Iran, and violent extremist organizations remain persistent threats. This, coupled with the changed international security environment, increases the risk that a peer military armed with weapons of mass destruction (WMD) could confront the U.S. and its allies and partners. Global CBRN effects to DAF personnel 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 minimize the impact of adversary use of CBRN on air, space, and cyberspace operations.

1.4. Operating 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 DAF 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, or Nuclear (CBRN) Threat Overview. The PRC is the overall pacing challenge for the DAF across all domains and is making significant investments in its WMD capabilities. The DAF must continue to address the acute and persistent near-term nuclear, chemical, and biological threats posed by Russia and the DPRK. Iran, violent extremist organizations, and potential risks emanating from South Asia, remain persistent though less dynamic challenges demanding continuous action. The PRC and Russia have also proven adept at manipulating the information space to inhibit attribution of its activities, to reduce trust and confidence in the effectiveness of countermeasures, and to potentially slow decision-making following use of WMD. Additionally, state and non-state actors are capable of employing CBRN materials, including, but not limited to, toxic industrial materials (TIM) (including toxic industrial chemicals [TIC], toxic industrial biologicals, and toxic industrial radiological materials), and Pharmaceutical Based Agents (PBA) to disrupt DAF, joint, and coalition operations and cause casualties. The loss of control or theft of CBRN materials, TIM, and other WMD materials constitutes a significant threat to the joint force, as can naturally occurring phenomena such as pandemic influenza and other infectious disease. The deadly, destructive, and disruptive effects of these weapons, materials, and phenomena merit continuous consideration by commanders at all levels.

1.5.1. The DAF utilizes the joint intelligence preparation of the operating environment (JIPOE) process to assess CBRN threats. A byproduct of the JIPOE process is a comprehensive CBRN threat assessment developed at the CCMD echelon. Major commands (MAJCOM), component-major command (C-MAJCOM) Air Force Forces (AFFOR), Air Operations Center (AOC) staff, FLDCOM, component-field commands (C-FLDCOM), and Space Force Operations Center (SOC) staff, must gain access to and review their respective CBRN Threat Index 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, C-FLDCOM, AOC, and SOC staffs must ensure subordinate and supporting commanders obtain shared situational awareness regarding the WMD threat. **(T-2)**

1.5.2. According to the *2023 DoD Strategy for CWMD* and unclassified threat reports from the Defense Intelligence Agency, the People's Republic of China, Russia, North Korea, and Iran either have or are pursuing WMD programs including CBRN weapons/materials. Recommend review of Defense Intelligence Agency assessment on SIPR and JWICs for additional information.

1.5.2.1. Potential U.S. adversaries are acquiring and improving CBRN delivery systems that make OLs increasingly vulnerable to physical attack. 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 by various delivery systems (e.g., ballistic missiles, rockets, artillery, aircraft, mines, unmanned aircraft system [UAS], cruise missiles, drones, and torpedoes). CBRN weapons use could be integrated into conventional adversary military operations or used covertly against U.S. forces and/or Allies to deny/limit attribution, impact theater preparation, and create confusion and terror. Additionally, adversary counter-space operations, cyber-attacks, and electromagnetic warfare may greatly reduce attack warning times.

1.5.2.3. Adversary 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. Air and Space Force bases are vital to U.S. power projection which makes them an attractive target for CBRN weapons.

1.6. Chemical, Biological, Radiological, or Nuclear (CBRN) Hazards. CBRN hazards are CBRN materials that regardless of origin (e.g., naturally occurring or engineered) represent an actual or potential danger to humans, animals, plants, or the environment. They include TIMs, chemical and biological agents, biological pathogens that result in disease, radioactive materials, PBAs, and nuclear hazards.

1.7. Chemical, Biological, Radiological, or Nuclear (CBRN) Incident. A CBRN incident involves the release or potential release of CBRN hazards. This can occur through the deliberate use of CBRN weapons, as a secondary effect of military action, or through accidents involving TIMs.

1.8. Chemical, Biological, Radiological, or 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 will employ CBRN defense capabilities in support of Joint Force Commander objectives to reduce or negate vulnerabilities and minimize the effects of CBRN contamination.

1.9. Chemical, Biological, Radiological, or Nuclear (CBRN) Response. CBRN response refers to the activities to attribute responsibility for a CBRN event, minimize CBRN effects, sustain operations, and support follow on actions. DAF commanders will employ personnel that perform inherently CBRN responsibilities to respond to and recover from CBRN incidents/hazards.

1.10. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Policy.

1.10.1. The *2023 DoD Countering Weapons of Mass Destruction (CWMD) Strategy* outlines the Department's guidance and approach to addressing adversary pursuit, development, and use of weapons of mass destruction (WMD). The DoD, along with other U.S. departments, agencies, Allies, and partners, will account for WMD threats holistically to prevent, mitigate, withstand, operate through, and recover from WMD attacks to achieve U.S. and coalition objectives.

1.10.2. 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 Program IAW DoDI 6055.17, *DoD Emergency Management (EM) Program*. **(T-0) Note:** Refer to DAFI 10-2501, *Emergency Management Program* for detailed information on the DAF EM Program.

1.10.3. 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.

1.10.4. This publication 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.

1.10.4.1. DAF commanders will use this publication to effectively OT&E and resource DAF personnel to obtain and maintain preparedness for adversary CBRN use. **(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.

1.10.4.2. DELETED

1.10.4.3. 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 Working Group (refer to **Chapter 5** for CBRN Defense Working Group 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)**

1.10.5. 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)**

1.10.6. DAFPD 10-25 provides the DAF policy requirements 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.

1.10.6.1. DAF Emergency Managers (EM), Air Force Specialty Code [AFSC] 3E9X1, are the DAF CBRN specialists responsible for consequence management, non-medical, non-aircrew 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)**

1.10.6.2. DAF CBRN Officers, AFSC 32E3B, act as advisors and communicate CBRN warning and reporting to commanders/senior leaders. They will oversee CBRN reconnaissance and response, build joint and/or combined partner CBRN defense interoperability, establish/exercise plans and training to respond to non-state and state use of CBRN weapons and materials.

1.10.7. 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.

1.10.8. DAFPD 48-1, *Aerospace and 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. The medical community provides health risk communication to commanders and oversees, manages and delivers treatment of CBRN injuries in a CBRN-contested environment. Refer to JP 4-02, *Joint Health Services*, DoDD 6200.04, *Force Health Protection,* DoDD 6420.02, *Biosurveillance*, DoDI 1322.24, *Medical Readiness Training*, DoDI 6040.47, *Joint Trauma System*, DoDI 6490.03, *Deployment Health,* and DAFI 10-2519, *Public Health Emergencies and Incidents of Public Health Concern*, for additional information.

1.11. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Doctrine.

1.11.1. JP 3-11 states the Joint Force Commander, and supporting commanders, train for and remain prepared to conduct the range of military operations through an operating environment (OE) impacted by CBRN weapons or materials. It describes the CBRN environment in a strategic context; provides necessary strategic and operational considerations; and describes CBRN defense activities and tasks applicable to joint operations.

1.11.2. 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.

1.11.2.1. DELETED

1.11.2.2. DELETED

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1.11.3. DELETED

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1.12. Chemical, Biological, Radiological, or Nuclear (CBRN) Contested Operating Environment (OE). CBRN-contested OE include CBRN threats/hazards present and their potential effects on operations at OLs. 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.

1.13. Assumptions. The following assumptions will guide strategic, operational, and tactical DAF CBRN Defense Program to include tactics, techniques, and procedures (TTPs), OT&E requirements, and shape planning and risk management activities.

1.13.1. 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 susceptible to degrading CBRN effects. CBRN threat information guides DAF-wide preparation of forces necessary for operations under CBRN conditions.

1.13.2. 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 and Space Force forces to generate and employ in and through a CBRN-contested environment.

1.13.3. Tactical. No DAF OL is a sanctuary from CBRN effects. Few OLs have sufficient resources, capabilities, and/or capacity to prevent, protect, prepare, mitigate, respond to, and recover on its own from 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.

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 recovering, handling, storing, and returning human remains (to include remains contaminated by CBRN materials) and any associated personal items IAW the Support Program Office and/or AF A3/4/SG responsibilities listed in **paragraph 2.8**.

2.1.3. Develop guidance for conducting noncombatant evacuation operations under CBRN conditions IAW Support Program Office and/or AF A3/4/SG.

2.1.4. Coordinate with the Deputy Chief of Staff for Logistics, Engineering, and Force Protection (AF/A4) to develop standards to posture and distribute noncombatant individual protective equipment (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.

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

2.1.8. Ensure resources and CBRN training courses mandated in **Chapter 6** are established and regularly available for CBRN specialists to meet the DAF CBRN Defense Program certifications.

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 the Director of Civil Engineers (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 Countering Weapons of Mass Destruction (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 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-recover 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 Wing Operations Center (WOC) or battle staff equivalent, has standard processes and procedures for uninterrupted operations in a CBRN-contested environment.

2.3.7. Coordinate CBRN defense training, exercise, and task qualification training (TQT) readiness requirements with the Ready Airman Training Council and Emergency Management Branch (AF/A4CXE).

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

2.3.9. The AF/A3 will designate the following:

2.3.9.1. Air Combat Command, Director of Operations, Aircrew Training and Operations Division (ACC/A3T) serves as lead for aircrew chemical, biological, radiological, nuclear (ACBRN) materiel acquisition and new requirements in support of the DAF ACBRN Defense Program. Following Joint Capabilities Integration and Development System (JCIDS) process, ACC/A3TO coordinates with Air Force Materiel Command (AFMC) and respective centers on the development of science and technology (S&T), and Research Development Test and Evaluation. Requirements are coordinated through the Air Force Deputy Chief of Staff, Operations, Director of Training and Readiness, Aircrew Performance Division (AF/A3TH) prior to formal submission.

2.3.9.2. Air Force Global Strike Command Bomber Support Division (AFGSC/A5B): serves as the lead for developing aircrew radiological/nuclear requirements, adhering to the JCIDS process.

2.3.9.3. Air Force Global Strick Command, Director of Operations, Aircrew Performance Branch (AFGSC/A3OL): serves as lead combat integrator for contamination control capability when detection and decontamination capacities are operationally relevant for aircrew contamination control area (ACCA) and aircrew contamination control station (ACCS) operations.

2.3.10. In coordination with AF/A4C, develop guidance and training for ACBRN decontamination.

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 DAFPD 10-26, 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 purchasing, 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 non-medical/non-aircrew CBRN Defense Program. The AF/A4C will provide strategy, guidance, and oversight for the DAF non-medical/non-aircrew CBRN Defense Program IAW 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 subsequent manuals, as necessary.

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 non-medical/non-aircrew 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 the Deputy Chief of Staff for Strategic Deterrence and Nuclear Integration (AF/A10) in DAFPD 10-26.

2.4.3.4.1. Coordinate with the Force Structure, Resources, and Assessment Directorate (J-8), 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 to include but not limited to detection, decontamination, IPE, automated warning and reporting capabilities, and non-medical/non-aircrew CBRN defense modernization in coordination with the Director of Logistics (AF/A4L).

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

2.4.3.5. Ensure changes to JPs 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, 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 current AF Mission Essential Task List templates to ensure alignment and synchronization with CBRN defense requirements.

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

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

2.4.3.10. Incorporate AFSC 3E9X1 and 32E3B in Joint Operation Planning and Execution System under CBRN unit type code (UTC) posturing.

2.4.3.11. Serve as the DAF representative to DoD governance processes with radiological/nuclear defense equities, as delegated by AF/A10 in DAFPD 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.

2.4.3.12. 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.

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

2.4.3.14. 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 J-8 Joint Requirements Office.

2.4.3.15. Coordinate DAF CBRN Defense Program policy and guidance with USSF equities with the SF/S4O and SF COO/S10.

2.4.3.16. Serve as the OPR for 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.

2.4.3.18. In coordination with AF/A1, secure training and resources necessary for CBRN specialists and DAF commanders to obtain certifications listed in **Chapter 6** to meet CBRN Defense Program requirements.

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, in accordance with DAFI 51-403, *Internation Agreements*, with host nations to determine their requirements to stock, store, and issue 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 (e.g., 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 AF/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 should be considered.

2.5. Deputy Chief of Staff for Air Force Futures (AF/A5/7). The AF/A5/7 will represent Air and Space Force chemical and biological defense interests in the Joint Requirements Oversight Council and the Protection Functional Capabilities Board. 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 DAFPD 10-26. AF/A10 will:

2.7.1. Serve as the DAF operations lead for CBRN defense and the CBRN Defense Program IAW DAFPD 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/A5/7 operational plans (OPLAN), Time-Phased Force Development Document, and Air Tasking Order for CBRN impacts to DAF air operations.

2.7.4. Serve as the Air Force lead for Biodefense. Through the DAF CWMD Council, provide operational oversight for the DAF Biodefense Integration Group in accordance with DAFPD 10-26. Represent Headquarters Air Force at the DoD Biodefense Council Executive Committee.

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 DoDD 6420.02, DoDI 1322.24, DoDI 3020.52, DoDI 6040.47, and this publication. AF/SG will:

2.8.1. Serve as the DAF medical lead for the CBRN Defense Program IAW DAFPD 10-26. Advise the AF Council, SecAF, CSAF, and joint staff on medical aspects of the DAF CBRN Defense Program.

2.8.2. OT&E the Air Force Medical Service to provide patient care in anticipation of, response to, and recovery from a suspected CBRN threat in support of DAF operations. Identify and codify levels of detection for treatment of contaminated personnel/patients for treatment.

2.8.3. OT&E the Air Force Medical Service to provide force health protection measures and recommendations in anticipation of, response to, and recovery from a suspected CBRN threat in support of DAF operations.

2.8.4. Oversee medical response programs. Ensure equipment and capability requirements for medical CBRN defense are within 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 to include procurement and storage requirements for medical supplies to support 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 (TCCC) requirements are incorporated IAW DoDI 1322.24 and integrated with delivering care on personnel contaminated by CBRN hazards. TCCC should be delivered in conjunction with regular care in a CBRN-contested environment to include Antidote Treatment Nerve Agent Auto-Injector (ATNAA) and Convulsant Antidote for Nerve Agent (CANA) procedures. Consult MAJCOM TCCC advisors and AFMEDCOM/A3T for additional guidance.

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. Refer to DAFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*, for more information.

2.8.13. Provides the following actions with respect to contaminated human remains: 1) ensures appropriate medical professional signs the death certificate, and 2) provides force health protection advice to AF/A1 regarding 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.

2.8.15. Develop and implement a DAF-wide radiological exposure control and dosimetry tracking system (e.g., software, forms, calculator, methods, and hardware for downloading dose records).

2.8.16. 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.

2.8.17. Ensures coordination with the National Center for Medical Intelligence is sufficient to meet the medical intel requirements for the JIPOE, the comprehensive CBRN threat assessment, and comprehensive biosurveillance efforts to support force health protection.

2.9. Secretary of the Air Force Inspector General (SAF/IG). The SAF/IG will issue guidance within DAFI 90-302, *The Inspection System of the Department of the Air Force*, to ensure execution of inspection policy pertaining to IG assessments of CBRN defense program management. The installation IG and IOEM, in partnership with WIT/DIT and installation XP (where applicable), will plan, execute, and conduct mission area and common core capability evaluation and validation for CBRN exercises IAW **Chapter 7** of this publication and DAFI 90-302. **(T-1)**

Section 2B—Space Staff

2.10. Deputy Chief of Space Operations for Operations, (SF/COO).

2.10.1. Space Force Chief Operations Officer (COO) Staff for Strategic Deterrence and Nuclear Integration (SF COO/S10). The SF COO/S10 will provide support and oversight for CBRN defense aspects within the CWMD portfolio IAW DAFPD 10-26. SF COO/S10 will:

2.10.1.1. Serve as the USSF operations lead to support AF/A4C as the DAF CBRN Defense and modernization lead for IAW DAFPD 10-25 to ensure USSF forces maintain the ability to survive and operate in a CBRN-contested environment.

2.10.1.2. Advise USSF staff and combat developers on CBRN defense capability requirements based on operational and technical analysis.

2.10.1.3. Coordinate USSF CBRN requirements with AF/A4C and AF/A10 as the DAF lead for CBRN Defense and modernization.

2.10.2. **Space Force Chief Operations Officer (COO) Staff for Mission Sustainment Division (SF/COO/S4O).** The SF/S4O in coordination with the Headquarters Space Force Strategic Deterrence and NC3 Integration Directorate (SF/S10), 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.

2.10.2.1. 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.

2.10.2.2. 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) and through coordination with NGB/A4O, 55165F (ANG NBC Defense).

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, identify 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. In conjunction with IGs at all echelons, 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) in support of the Integrated Risk Management process.

2.12.2.9. In coordination with the Airman Development Command (ADC) 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 wartime task standard (WTS) curriculum and CBRN defense training and exercise standards for Combat Support Training Range and ANG Regional Training Sites (where applicable).

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

2.12.2.13. Validate and manage non-medical/non-ACBRN defense capability requirements requiring resourcing in program element codes (PECs) 27593F and/or 28028F.

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

2.12.2.15. Provide SMEs 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. Provide augmentee support to MAJCOM/FLDCOM IGs for DAF CBRN Defense Program exercises and inspections.

2.12.2.18. Assist the CE enterprise and 3E9 career field with obtaining decision-relevant information regarding the nature and extent of CBRN threats, hazards, and effects. **Note:** AFIMSC will facilitate the distribution of threat/hazard updates to DAF, MAJCOMs/FLDCOMs, and the IOEM when requested or changes occur.

2.12.2.19. Conduct trend analysis on 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 and primary advisor to AF/A4C for non-aircrew/non-medical CBRN defense capabilities and 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 (SOP) and TTPs, and replacement strategies.

2.12.2.25. Conduct annual non-aircrew/non-medical CBRN modernization requirements review (MRR) to assist the DAF CBRN Defense Program governance process. The annual MRR is designed to conduct a comprehensive review of DAF non-aircrew/non-medical CBRN defense requirements with all MAJCOMs/Air Staff-affected agencies and build the MRR Report using the DAF CBRN modernization process and Defense Planning Guidance.

2.12.2.26. Publish CBRN defense related information obtained from open source and publicly available information in a read book format for command teams semi-annually, at a minimum.

2.12.2.27. In coordination with the National Guard Bureau, Air National Guard Civil Engineer Readiness and Emergency Services Division (NGB/A4O) and the Air Force Reserve Command Civil Engineer Readiness Division (AFRC/A4O), PPBE for Validation Exercise (VALEX) and Specialized Personnel and Equipment Austere Reconnaissance and Surveillance (SPEARS).

2.12.2.28. Oversee DAF CBRN Defense Program assessments in the Management Internal Control Toolset (MICT), monitor program and capability health indicators, and develop and coordinate assessment products to inform PPBE activities.

2.12.2.29. Develop and maintain the CBRN Wargame Template.

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 CBRN acquisition and sustainment documents to ensure consistency with DAF Annexes.

2.12.3.4. Provide recommendations to AF/A4 accept or reject submitted CBRN defense equipment and procedures based on acquisition expertise and a thorough understanding of achievable DAF warfighter needs and requirements.

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 DAF TTPs in coordination with AF/A4C, AF/A10S, ACC/A3, AFIMSC, AFMEDCOM, 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, Medical CBRN Branch (AFMEDCOM A4/10C), Capability Development and Integration Division (AFMEDCOM A5), Strategy and Capabilities Division (SGMED SG5), 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. Refer to the MAF CWMD CONOPS for additional information.

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 Threat 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 AFSOC units. Postured CBRN defense capabilities supporting AFSOC 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 AFSOC 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 Air Force Operations Group (AF/A3OO) 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. Air Force Materiel Command (AFMC), as the servicing MAJCOM for USSF, will provide the necessary support as outlined below to all USSF installations. 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 headquarters staff to confirm reporting is not required. **Note:** All measured units, as defined in AFI 10-201, are expected to conduct some level of CBRN defense MET reporting.

2.17.5. Evaluate CBRN defense resource and capability 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 CBRN Threat Index as the baseline for operational planning. If a CBRN Threat Index 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.

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 force health protection (FHP) requirements IAW JP 3-11, JP 4-02, *Joint Health Services*, DoDI 6200.03, *Public Health Emergency Management (PHEM) within the DoD*, and DAFI 10-2519. FHP requirements include but are not limited to health protection condition frameworks, 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. Refer to 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 into supplemental guidance to this publication, where applicable. International CBRN response TTPs must be known, exercised, and deconflicted to preserve force survivability and mission continuation. **Note:** AFFOR A-staff should coordinate with host nation partners to develop an accessible repository of TTPs.

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 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.

2.17.13. C-MAJCOM/C-NAF CBRN specialists (AFSC 3E9X1 and 32E3B), in collaboration with the A2/6 and SG, 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 CBRN specialists (AFSC 3E9X1 and 32E3B), will provide a CBRN warning and reporting and hazard prediction capability. CBRN Specialists must be familiar with and use CBRN support to command and control (CSC2) capability IAW **Chapter 4** and **Attachment 3** of this publication.

2.17.14.1. At a minimum the 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 C-MAJCOM/C-NAF CBRN specialists (AFSC 3E9X1 and 32E3B) should be physically collocated with the AOC to enable real-time decisive information advantage between the EL/OL CBRN 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.

2.17.14.4. The C-MAJCOM/C-NAF CBRN specialists (AFSC 3E9X1 and 32E3B) must be able to perform automated warning and reporting functions and cross communicate with allied partners, when compatible technologies are available. When compatible systems are not available, the C-MAJCOM will coordinate with the CCMD to identify warning and reporting procedures.

2.17.15. C-MAJCOM/C-NAF CBRN specialists (AFSC 3E9X1 and 32E3B), will 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.

2.17.16. C-MAJCOM/C-NAF CBRN specialists (AFSC 3E9X1 and 32E3B), will coordinate with the CCMD to identify 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 CBRN specialists (AFSC 3E9X1 and 32E3B), 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. CBRN specialists (AFSC 3E991 and 32E3B) and A-staff personnel assigned to positions with inherent CBRN defense roles and responsibilities will be scheduled to attend the U.S. Army CBRN School, *Joint Senior Leader Course* (Course Number: 4K-74A/494-F18), upon assignment.

Section 2F—Units of Action

2.18. Enduring Location (EL) Commander. ELs are geographic sites designated by the DoD for strategic access and use to support U.S. security interests. These locations, which include MOB, FOS, and CSLs are identified on the Enduring Locations Master List (ELML) and maintain missions for more than 60 months. ELs where DAF is designated the lead, the EL commanders will support the CBRN Defense Program:

2.18.1. Through the IOEM, establish and maintain a CBRN Defense Plan 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 Plan IAW the current Security Classification Guide (SCG).

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2.18.2. The DAF CBRN specialists (AFSC 3E9X1 and 32E3B), in collaboration with intelligence planners and all-source analysts, will develop a CBRN threat assessment. **(T-3)** EL commanders must use the assessment during the operational planning process by assessing the most dangerous and most likely enemy CBRN employment COAs. EL commanders will use the CBRN threat assessment to:

2.18.2.1. Through CE Operations (CEO) and CE Engineering (CEN), develop a CE Contingency Response Plan outlining the capabilities and procedures for conducting integrated base response and recovery.

2.18.2.2. Through the Medical Emergency Manager and the Public Health Emergency Officer (PHEO), 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; medical evacuations involving contaminated casualties; and/or CBRN exposure data capture.

2.18.2.3. Through Bioenvironmental Engineering (BE), develop a site and population-based health risk assessment to characterize exposure pathways to inform of signs, symptoms, health risks, and prophylaxis. BE will coordinate with EM to retrieve environmental sampling data per **paragraphs 2.17.16** and use the information to inform the health risk assessment. BE 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 Operational Exposure Guidance (OEG) based on EL commander's risk acceptance.

2.18.2.4. Through Logistics Readiness, 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.

2.18.2.5. Through Maintenance and Munitions, 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.

2.18.2.6. Through Mortuary Affairs, conduct planning to develop procedures for processing contaminated remains through Mortuary Affairs.

2.18.2.7. Through Security Forces, conduct planning for EL integrated defense/force protection for defense personnel, MWDs, and equipment from the effects of CBRN contamination through Security Forces.

2.18.2.8. Through Force Support, plan for the provision, dispersal, and distribution of food and water. Ensure enough food and water is available/can be made available to support any tasked endurability periods of operation. Food and water sources must be procured by approved sources. Contact Public Health and BE for consultation.

2.18.3. 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.

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2.18.4. Establish cooperative policies, procedures, and networks to enable joint forces, host nation, and other friendly forces to operate cohesively in a CBRN environment, to the greatest extent possible. Cooperative policies and procedures are used during CBRN defense exercises to evaluate unity of effort and unified action.

2.18.5. Through CE (CEX), establish an Emergency Operations Center (EOC) capability IAW DAFI 10-2501 or a CBRN operational risk management capability nested within the installation's C2 structure to oversee and manage CBRN defense activities before, during, and after CBRN response operations IAW **Chapter 4**. **Note:** EOCs will only be required for ELs. CLs will establish a CBRN Control Center or become subordinate to the MOB utilizing their EOC to support CBRN operations as identified in their SOPs.

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. EL commanders should leverage mission command and task orders to the greatest extent possible for EOC C2.

2.18.6. Through CE (CEO, CEN, CEX), assess the requirement for fixed site and/or expeditionary COLPRO and determine installation ability to identify and sustain toxic free areas (TFA). Refer to Unified Facilities Criteria (UFC) 4-024-01, *Security Engineering: Procedures for Designing Airborne Chemical, Biological, and Radiological Protection for Buildings*, and AFTTP 3-2.46, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Passive Defense*, for additional guidance on COLRPO requirements.

2.18.6.1. Identify, plan, and program COLPRO requirements for ELs 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.

2.18.6.2. Refer to AFTTP 3-2.46 for COLPRO planning including the development of a shelter management plan. Include localized COLPRO planning factors in the CBRN Defense Plan.

2.18.6.2.1. Plan for fixed-site COLPRO systems to sustain uninterrupted C2 and medical force elements (FE) and associated operations at ELs for 30 continuous days without resupply.

2.18.6.2.2. Plan for expeditionary or expedient COLPRO systems to provide rest and relief for C2 and/or mission generation FEs at ELs 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.

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

2.18.6.4. Through Force Support, and in coordination with CE (CEO), establish a shelter management program, including a shelter management plan, for COLPRO systems IAW AFTTP 3-2.46.

2.18.7. 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.

2.18.8. Through the CBRN Defense Working Group, consider dividing the EL into CBRN defense zones on base grid maps and/or within the digital common operating environment. Consider aligning the CBRN defense zones to any force protection sectors already established. Zoning the EL provides flexibility, through mission command, in CBRN defense preparations, response and recovery. **Note:** Not all ELs or CLs may be large enough to establish CBRN defense zones and may not be able to provide flexibility in respect to split mission-oriented protective posture (MOPP) and other response and recovery missions. The decision to implement split-MOPP could incur significant risk to force survivability and mission continuation depending on the CBRN hazard effects.

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2.18.9. Ensure DAF CBRN specialists (AFSC 3E9X1) assigned as a team leader or higher 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.

2.18.10. Ensure assigned CBRN 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 CBRN Defense Plan. Security and movement of environmental samples in a CBRN environment directly supports strategic national objectives. Refer to AFTTP 3-2.70 for additional information.

2.18.11. Establish procedures for non-medical/non-aircrew decontamination. At a minimum, develop procedures for the:

2.18.11.1. Providing security during decontamination operations.

2.18.11.2. Quantity and types of vehicles decontaminated.

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

2.18.11.4. Number of personnel decontaminated.

2.18.11.5. Number of CBRN casualties.

2.18.11.6. Time decontamination operations started and ended.

2.18.11.7. Quantity of facilities contaminated.

2.18.11.8. Number of critical personnel displaced.

2.18.12. When electromagnetic pulse (EMP) hardening 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 hardening maintenance/hardening surveillance programs are established and periodically reviewed for acceptability.

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2.19. Contingency Location (CL) Commander. CLs are temporary sites established to support operational or contingency requirements, typically with a defined end-state or operational timeline. CLs may include FOS, CSL, or other expeditionary locations identified to meet mission demands. CLs are managed with the intent of short- to mid-term operational objects, usually not exceeding 60 months unless reclassified. On CLs where DAF is designated the lead, the CL Commander will support the CBRN Defense Program through:

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

2.19.2. For CLs without DAF CBRN Specialist and where the DAF will have Base Operating Support-Integrator (BOS-I) and/or Senior Airfield Authority responsibilities, coordinate with the EL or HHQ CBRN specialists to develop and document CBRN defense measures for each supported CL.

2.19.3. Conduct the CBRN threat assessment IAW **paragraph 2.18.2**.

2.19.4. Establish a CBRN Control Center capability to oversee and manage CBRN defense activities before, during, and after CBRN response operations IAW **Chapter 4**. **Note:** CLs may outsource to the EL or HHQ utilizing their EOC to support CBRN operations as identified in their SOPs.

2.19.4.1. Through the DAF CBRN specialists, establish and maintain automated and manual CBRN warning and reporting and hazard prediction to communicate with the WOC, or equivalent OL C2 node. **Note:** CLs may outsource to the EL or HHQ utilizing their EOC to support CBRN operations as identified in their SOPs.

2.19.4.2. At a minimum, these capabilities must include the ability to send and receive missile intercept reports, strike warning, CBRN hazard warning, counter small unmanned aerial system reports, and meteorological messages to HHQ, Joint, host-nation, and mission partners using cross-domain solutions. Refer to AFTTP 3-2.56 for additional information.

2.19.4.3. Once established, CL commanders must periodically evaluate both the automated and manual CBRN warning, reporting and hazard prediction capabilities between the CLs, HHQ, Joint, host-nation, and mission partners to ensure that CBRN warning systems are fully integrated with ally and partner force systems as required of the OL.

2.19.4.4. Through the Defense Working Group, review the alarm signals listed in AFTTP 3-2.46 and obtain the DAF attack warning/notification signals and MOPP visual aids from AFIMSC. Once obtained, tailor the attack warning to the most dangerous enemy COAs then implement, integrate, and periodically evaluate the use of attack warning signals and MOPP levels.

2.19.5. 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 for additional guidance.

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

2.19.5.1.1. Resupply during hostilities and under CBRN conditions.

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

2.19.5.1.3. Resupply to support distributed/dispersed force elements at a CL.

2.19.5.1.4. Resupply of decontamination materials.

2.19.5.1.5. 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.*

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

2.19.5.3. Establish procedures for protecting U.S. government mission-essential civilians and contractors, including the distribution of CBRN defense IPE where appropriate.

2.19.6. Through CE, BE, SG, and/or FSS, establish procedures for resupply of potable water and ensure individuals hydrate regularly before, during, and after each MOPP level adjustment. Execute the Sampling, Analysis, and Monitoring Plan IAW threat level.

2.19.7. After consultation with appropriate medical personnel, and when personnel operate in MOPP levels, all commanders, supervisors, and the C2 functions will observe fluid replacement guidelines and work/rest cycles IAW DAFI 48-151, *Thermal Stress Program,* and the Medical Technical Bulletin 507, *Heat Stress Control and Heat Casualty Management*.

2.19.8. Bioenvironmental Engineering, in close coordination with DAF CBRN specialists and the C2 focal points, are responsible for associating and communicating work/rest cycles and heat categorization into localized planning during elevated MOPP levels.

2.19.9. Through the SG or medical representatives, develop procedures for collecting and documenting individual chemical, biological, and radiological exposure and conducting health risk assessment.

2.19.10. Establish procedures for non-medical and non-aircrew decontamination to include security at CLs, tracking decontaminated vehicles, equipment, and personnel, documenting contaminated equipment, recording CBRN casualties, logging operation times, quantifying contaminated facilities, and accounting for displaced critical personnel.

2.19.11. Through the CBRN Control Center/logistics representatives, develop procedures for marking contaminated areas (zones), equipment, vehicles, and systems. Refer to AFTTP 3-4.

2.19.12. Coordinate with applicable authorities and issue guidance on contaminated aircraft movement only after obtaining approval from the President of the United States and the 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*.

2.19.13. Coordinate patient movement requirements with the medical SMEs and U.S. Transportation Command (USTRANSCOM) IAW DoDI 6000.11, *Patient Movement (PM).*

2.19.14. 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.

2.19.15. Establish procedures for non-medical/non-aircrew decontamination IAW **paragraph 2.18.11**.

Chapter 3

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

3.1. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Planning Standards for Air Force Force and Space Force Generation (AFFORGEN/SPAFORGEN) Mission Sustainment. Commanders must be prepared to conduct prompt and sustained air, space, and cyber operations in CBRN-contested environments. To maintain mission effectiveness despite potential disruptions caused by CBRN weapons, commanders and their CBRN specialists will adhere to the following DAF standards for AFFORGEN/SPAFORGEN mission sustainment, referencing relevant TTPs for additional CBRN threat planning information. **(T-2)**

3.1.1. DELETED

3.1.2. DELETED

3.1.3. DELETED

3.1.4. Commanders at all OCONUS OLs should assume that apportioned forces tasked to establish the airbase, operate the airbase, and/or robust the airbase responsibilities will be contaminated while executing their METs. **Note:** Contamination and hazards caused by CBRN could last for days to months.

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

3.2.1. OCONUS commanders will conduct deliberate and adaptive planning against a current CBRN threat assessment to inform COA development to account for CBRN attacks at ELs and CLs. **(T-2)** Ensure that CBRN planning and COA development factor in ally and partner force requirements and roles at ELs and CLs. **(T-2)**

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

3.3. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Force Protection Planning. Commanders will plan to provide force protection using the guidance in this publication, 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*, U.S. Army Medical Research of Infectious Diseases Medical Management of Biological Casualties Handbook, and U.S. Army Medical Research Institute of Infectious Diseases, *Medical Management of Chemical Casualties Handbook*, and Office of the Surgeon General Department of the Army's Medical Consequences of Radiological and Nuclear Weapons. **(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. **(T-2)**

3.3.2. Chemical and biological warfare exposure guidance in coordination with AF/A4CX, AF/A10, and AFMEDCOM. **(T-2)**

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

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, biological, and radiological decontamination processes and procedures. **(T-2)**

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

3.3.6. 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. MOPP exchange/MOPP drop procedure as well as re-use of vapor exposed ensemble procedure. Particularly prior to entering any COLPRO facility or toxic free area. **(T-2)**

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

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

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

3.3.12. Casualty care in CBRN contaminated areas using the massive hemorrhage, airway, respirations, circulation, hypothermia, and extraction (MARCHE) and mask, antidotes, rapid spot decontamination, countermeasures, head wound, and evacuation (MARCHE2). Combining these two approaches gives the acronym MARCHE2 or "MARCHE-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)**

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, contact 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 personnel. **(T-2)**

3.3.21. Shelter management requirements including developing a shelter management plan IAW the planning guidance in **paragraph 2.18.6.2**. **Note:** Commanders will coordinate with the DAF CBRN specialists (AFSC 3E9X1 and 32E3B) for an immersion briefing on specific unit roles and responsibilities for shelter management operations. **(T-2)**

3.3.21.1. For radiological fallout shelter operations, BEs will establish procedures for distribution of radiological monitoring equipment (e.g., electronic personal dosimeters) to shelters and mission critical operations working outside of shelters. **(T-2)** BEs will establish procedures for managing radiation dose logs and will outline procedures within the IEMP 10-2 or installation's CBRN Defense Plan. **(T-2)**

3.3.21.2. Utilizing established protection factors, BE will review and validate radiation fallout protection adequacy for shelters and operational facilities. **(T-2)**

3.3.21.2.1. BE will establish a method to rapidly evaluate shelters and facilities during a nuclear event. **(T-2)**

3.3.21.2.2. BE will ensure this capability is available and codified in the IEMP 10-2 or installation's CBRN Defense Plan in the event communications and/or power is impacted by EMP. **(T-2)**

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

3.4.1. The DAF supports CBRN preparedness by ensuring BOS-I responsibilities identified in program action directives, mission directives, and/or support agreements are adequately OT&E'd to prevent, protect against, prepare for, mitigate, respond to, and recover from CBRN incidents.

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

3.4.3. OCONUS EL and CL commanders and CONUS installations tasked to support OPLANs with mission-critical systems must ensure emergency essential personnel are adequately protected to enable execution of mission essential functions in a CBRN-contested environment. CBRN survivability TTPs will be documented in a site-specific plan developed for each mission-critical system. OCONUS EL and CL commanders and CONUS installations tasked to support OPLANs will:

3.4.3.1. Plan to provide individual CBRN protection for emergency essential personnel. **(T-2)**

3.4.3.2. Provide a CBRN emergency response capability in support of CBRN mission-critical systems. **(T-2)**

3.4.3.3. 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/A10S and the Air Force Research Laboratory to guide CBRN defense capability requirements. These challenge levels, listed in **Table 3.1** and **Table 3.2** will be used by DAF CBRN capability developers. **(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	2.2 g/m^2	500 mg/m^2	500 mg/m^2
Groundcrew CBRN – High Exposure Risk	3 g/m^2	500 mg/m^2	500 mg/m^2
Notes: Minimal exposure risk is used for functional communities most likely to be inside during a CWA attack. 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, or Nuclear (CBRN) Threat Planning Assumptions. This section establishes planning assumptions to characterize the CBRN threat and associated OL from a tactical 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 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 likely include both conventional and asymmetric capabilities delivered by a wide variety of platforms/systems. As a result, the amount of warning time may vary.

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 could occur hours to several days after use. This could delay detection and identification of the agent for operational planning as symptoms may be non-specific. High index of suspicion should be employed based on threat level.

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 SOPs 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. Refer to AFH 10-2603-O for more information.

3.6.7. Decontamination capabilities may be limited to only individual, operational, and patient decontamination due to limited on-hand resources (e.g., solutions, M295, RSDL, etc.).

3.7. Air Component Chemical, Biological, Radiological, or Nuclear (CBRN) Threat Overview. C-MAJCOM and subordinate commanders will review any guidance provided by their respective CCMD (e.g., OPLAN WMD Threat Assessment(s)) to inform command CBRN defense OT&E decisions. **(T-1)** In the absence of clear and/or complete CCMD guidance on WMD threats to DAF operations, C-MAJCOM commanders will assess WMD risks as necessary to inform OT&E activities. **(T-1)**

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 the CBRN Threat Index.

3.7.2. DAF commanders will reference the CBRN Threat Index tool and apply the installation TEMPER to inform how ELs and CLs are OT&E to execute distributed operations in a CBRN-contested environment.

Table 3.3. (DELETED)

Chapter 4

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

4.1. Overview. CSC2 provides DAF commanders with the capability 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. Inform friendly force capabilities and an integrated warning capability for inbound threats.

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

4.1.6. Enable the interchange of CBRN reports with mission command partners.

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) System. CSC2 system (e.g., Command and Control Incident Management and Emergency Response Application [C2IMERA], CBRN-Information System [CBRN-IS], etc.) 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. CSC2 information will be passed and posted to the DAF and Joint Service C2 common operating pictures (e.g., C2IMERA, 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 and Joint All-Domain Command and Control (JADC2) objectives are accomplished for CBRN defense reporting and warning requirements. **(T-2)**

4.2.3. OCONUS commanders at MOBs will enhance force survivability and mission continuation by planning to disperse C2 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)**

4.2.4. OCONUS commanders with CBRN Collection and Sub-Collection Centers at OLs will:

4.2.4.1. Conduct a biannual test, or more frequently IAW command policy, of the C2 capabilities **(T-3).** To include attack warning signals, alarm conditions, and the transmission of CBRN reports using CBRN-IS at each applicable OL.

4.2.4.2. Test and evaluate the CSC2 capability under a simulated communication-denied environment during the CBRN defense exercise. **(T-3)**

4.2.5. OCONUS CL commanders will plan for and exercise providing C2 capabilities in a communication-degraded environment. **(T-3)** The emphasis must be on providing C2 based on mission command and tasking orders thoroughly planned and exercised beforehand.

4.3. Support to Command and Control (C2) Enabling Tasks. OCONUS commanders will establish C2 system capabilities that meet the minimum enabling tasks listed in **Table 4.1**.

Table 4.1. Support to Command and Control (C2) 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 specialists and support teams. **(T-2)**

4.4. Support to Command and Control (CSC2) and Mission Command. The philosophy for the C2 of air, cyber, and space 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, *The Air Force*, for operations in a CBRN-contested environment.

4.5. Wing Operations Center (WOC). Formerly known as the Crisis Action Team, the WOC is the top echelon of airbase CBRN defense operations and is led by the installation commander, or delegated authority. The primary focus of the WOC is mission continuation and sustainment. **Note:** Commanders may determine the utilization of WOC and EOC constructs or combining the C2 nodes to alleviate manpower restraints.

4.5.1. The WOC typically includes commanders and senior enlisted leaders from the A-Staff. Members of joint, coalition, and/or partner nation may also be present. The WOC supports the installation 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 installation 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., AOC, EOC, etc.) Refer to **Table 4.2** for WOC CBRN defense enabling tasks.

Table 4.2. Wing Operations Center (WOC) Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Enabling Tasks.

WOC 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.
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). DAF Installation commanders at OCONUS MOBs will establish an EOC capability IAW DAFI 10-2501 to oversee and manage CBRN defense activities before, during, and after CBRN response operations.

4.6.1. Refer to UFC 4-141-04 when designing EOCs as new military construction. **(T-0) Note:** At OCONUS MOBs, 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 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 C2 systems and processes. Commanders should leverage mission command and task orders to the greatest extent possible for C2 capabilities.

4.7. Chemical, Biological, Radiological, or Nuclear (CBRN) Control Center. DAF commanders will establish a CBRN Control Center capability through the WOC, comprised of the CBRN Defense Working Group, to enable CSC2 for each OL. **(T-2)** DAF commanders will establish location-specific SOPs to capture the construct and responsibilities for each C2 node. **(T-2)** IAW North Atlantic Treaty Organization (NATO) standard agreements and AFTTPs listed in **Attachment 3**, 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. At locations where a manning may not be able to support a full CBRN Control Center capability such as a CL, a CBRN Cell will be established comprised of CBRN specialists and collocated with command leadership to support decision making. **(T-2)** The CL may utilize the WOC at a MOB to support C2.

4.7.1. DAF CBRN specialists (AFSC 3E9X1) will manage and execute the CBRN Control Center capabilities to include MOPP level and alarm condition recommendations. **(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 capability is 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 DAF CBRN 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., CBRN-IS) 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. DELETED

4.7.7. The CBRN Control Center may include augmentees, host nation, joint, and/or coalition personnel. **(T-3).** OL commanders OCONUS should consider coordinating localized CBRN Control Center training for host nation, joint, and/or 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. DELETED

4.7.8.2. DELETED

4.7.9. DELETED

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4.8.1. DELETED

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4.8.2.1. DELETED

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4.8.2.4. DELETED

Chapter 5

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

5.1. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Working Group. The CBRN Defense Working Group is a multi-functional, advisory team that convenes on an ad hoc basis to support the WOC during a CBRN incident. It is formed and chaired by the senior CBRN Specialist (AFSC 3E971 or 32E3B) assigned to the CBRN Control Center. It is comprised of members listed in **paragraph 5.1.1.1** to accomplish tasks in **Table 5.1**.

5.1.1. The CBRN Defense Working Group chair may form the CBRN Defense Working Group with any combination of AFSCs in **paragraph 5.1.1.1** in order to align with its supported Wings, C-NAF, and C-MAJCOMs. As directed by the WOC, additional AFSCs may be required to support CBRN defense planning and response activities.

5.1.1.1. The primary CBRN Defense Working Group includes the following AFSCs:

5.1.1.1.1. AFSC 1N0X1, *All Source Intelligence Analyst*, and/or 14N, *Intelligence Officer*.

5.1.1.1.2. AFSC 1P0X1, *AFE*.

5.1.1.1.3. AFSC 2G0X1, *Logistics Plans*, and/or 21R, *Logistics Readiness Officer*

5.1.1.1.4. AFSC 3E7X1, *Fire Protection*.

5.1.1.1.5. AFSC 3E8X1, Explosive Ordnance Disposal (*EOD)*.

5.1.1.1.6. AFSC 3E9X1, *EM* (DAF CBRN specialists), and/or 32E3B, *CBRN Officer*.

5.1.1.1.7. AFSC 3EX91, *Civil Engineer Operations Superintendent*, and/or 32E, *Civil Engineer Officer*.

5.1.1.1.8. AFSC 3F1X1, *Services*, and/or 38F, *Force Support Officer*.

5.1.1.1.9. AFSC 3P0X1, *Security Forces*, and/or 31P, *Security Forces Officer*

5.1.1.1.10. AFSC 4B0X1, *Bioenvironmental Engineering*, and/or 43E, *Bioenvironmental Engineering*

5.1.1.1.11. AFSC 4E0X1, *Public Health*, and/or 43H, *Public Health*

5.1.1.1.12. AFSC 4N0X1, *Aerospace Medical Service*, and/or 48R3, *Resident Trained Flight Surgeon*

5.1.1.2. DELETED

5.1.1.2.1. DELETED

5.1.1.2.2. DELETED

5.1.1.2.3. DELETED

5.1.1.2.4. DELETED

5.1.2. The CBRN Defense Working Group assigned to and/or postured for AFFORGEN/SPAFORGEN must be able to plan and enable the CBRN defense capabilities listed in **Table 5.1**.

5.1.2.1. **(DELTED) .**

Table 5.1. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Working Group Capabilities Matrix.

Advise on CBRN hazards.
Detect and provide presumptive 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.

5.1.2.2. DELETED

5.1.2.3. DELETED

5.1.3. The CBRN Defense Working Group 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.

5.1.4. DAF CBRN specialists (AFSCs 3E9X1 and 32E3B) are primarily tasked with CBRN hazard detection, identification, sample collection, and presumptive quantification responsibilities. However, it is every DAF commander's responsibility to ensure that all assigned AFFORGEN/SPAFORGEN personnel are trained and can execute functional tasks such as PAR and basic M8 detection in a CBRN-contested environment.

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

5.1.6. CBRN capability developers must consider integrating unmanned robotic platforms and unmanned aerial vehicles into CBRN support team UTCs to reduce the amount of time specialists are exposed to CBRN hazards. **(T-2)**

5.2. The CBRN Defense Working Group must conduct CBRN defense planning as part of the integrated risk management process IAW DAFI 10-2501 and JP 3-11. For ELs (i.e., MOBs), 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. The Air Staff processes 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 chaired by AF/A10S. (T-1)

Chapter 6

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR 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 DAF CBRN specialists (AFSCs 3E9X1 and 32E3B) allowing for a full detailed assessment of CBRN defense readiness.

6.1.1. JP 3-11, DoDI 3020.52, DAFI 10-2602, *Countering Weapons of Mass Destruction Enterprise*, AFTTP 3-2.46 and ATP 3.8.1, Volume III, Edition A, Version 1, *CBRN Defence Standards for Education, Training, Exercise and Evaluation*, 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. **(T-1)**

6.1.2. CBRN defense training is enterprise driven based on an evaluation of threats and risks during the integrated risk management process. **(T-1)** Refer to 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/SPAFORGEN is depicted in **Figure 6.1**.

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

Figure 6.2. (DELETED)

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

6.2.1. CBRN defense training is required to ensure Airmen, Guardians, emergency-essential civilians, and contractors (as specified in the performance work statement) to obtain the training 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 TQTs) ensures individuals and teams ability to operate in a CBRN-contested environment.

6.2.2.3. Proficiency at the specialized capability level (i.e., completing supplemental courses) ensures personnel including but not limited to DAF CBRN specialists, EOD, medical, and AFE are qualified to accomplish assigned missions.

6.2.3. DAF commanders and A-staff must be knowledgeable on and able to evaluate the effects CBRN weapons will have on operational efficiency. **(T-2)** DAF commanders and A-staff must complete the required CBRN defense training and/or CBRN Defense Senior Leaders Course 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 DAF CBRN specialists. **(T-2)** DAF commanders, with the assistance of DAF CBRN 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/SPAFORGEN 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 personnel, including aircrew, must be trained to continue to execute their METs in a CBRN-contested environment. **(T-2)**

6.2.6. DAF CBRN specialists will conduct a minimum of 16 hours of in-house training per month (or 16 hours quarterly for ARC) on proficiency training. **(T-1)**

6.3. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Education and Training Requirements. DAF commanders must establish and facilitate education and training for CBRN defense preparedness activities. **(T-1)** This will enable DAF personnel (military, civilians, and contractors) to obtain and maintain the competencies required to survive and operate in a CBRN-contested environment. **(T-1)** The following paragraphs list the minimum CBRN defense related education and training requirements. **Note:** AF CBRN Defense Training and TQT fall under the Ready Airman Training (RAT) Program. Refer to AFI 10-405, *Ready Airman Training* for additional details.

6.3.1. Base Emergency Preparedness Orientation (BEPO). DAF CBRN specialists will provide localized CBRN defense preparedness information to all newly assigned personnel, including civilians, contractors, and dependents during newcomers' orientation IAW DAFI 10-2501. **(T-1)**

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. DAF CBRN 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 will incorporate an overview of medical countermeasures and OEG into the BEPO. **(T-3)**

6.3.2. CBRN Defense Orientation Course. This course is for enlisted and officer indoctrination (i.e., Basic Military Training, U.S. Air Force Academy, and Officer Training School). It establishes the minimum training proficiency standards new Airmen and Guardians must meet

to survive in a CBRN-contested environment through initial familiarization with the CBRN groundcrew chemical ensemble, and M50 mask donning and doffing procedures. Airmen and Guardians will receive more advanced training during the CBRN Defense Survival Course, CBRN Defense Supplemental Courses, and CBRN Defense Task Qualification Training. Only primary AFSCs 3E9X1, 32E3B (assigned to the IOEM), and EM civilians/contractors (assigned to the IOEM) that have received train-the-trainer certification from a 3E971 will instruct this course. **(T-1) Note:** This course does not provide credit for the CBRN Defense Survival Course.

6.3.2.1. All Basic Military Training trainees and U.S. Air Force Academy cadets will attend this course prior to graduation. **(T-1)**

6.3.2.2. Officer Training School candidates not currently in the operational Air Force or Space Force (i.e., commissioned through Reserve Officer Training Course) will attend this course prior to graduation. **(T-1) Note:** DAF enlisted to officer personnel may be exempt from attending this course if they received the CBRN Defense Survival Course within 12 months of Officer Training School graduation.

6.3.2.3. All Basic Military Training, U.S. Air Force Academy, and Officer Training School graduates will complete the CBRN Defense Survival Course IAW **paragraph 6.3.3.** upon arrival at their operational assignment and placed into an AFFORGEN/SPAFORGEN cycle. **(T-1)**

6.3.3. CBRN Defense Survival Course. This course establishes the minimum training proficiency standards DAF personnel must meet to survive in a CBRN-contested environment. **(T-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. Only primary AFSCs 3E9X1, 32E3B (assigned to the IOEM), and EM civilians/contractors (assigned to the IOEM or the reserve/guard EM office) that have graduated from the AF EM Apprentice Course or received train-the-trainer certification from a 3E971 will instruct this course. **(T-1)**

6.3.3.1. AF military members are required to complete this training every 24 months (48 months for ARC) IAW AFI 10-405. **(T-1) Note:** USSF members tasked to deploy must still comply with all applicable reporting instructions and supported component commander guidance. If the applicable guidance direct accomplishment of RAT, Guardians will complete it at the Category 1 level.

6.3.3.2. DAF emergency essential civilians and contractors assigned to any OCONUS OL complete this training every 24 months. **(T-1)**

6.3.3.3. DAF military members undergoing a permanent change of station must also comply with CBRN defense training requirements listed in the AFPC theater-specific personnel processing codes (PPCs). **(T-1) Note:** Members tasked to deploy must be current before departure and remain current throughout the duration of their deployment.

6.3.3.4. DAF military members considered excepted forces, employed in-place, or institutional forces will complete this training when tasked for deployment, as directed by the COCOM reporting requirements, and are considered current for 24 months (or 48 months for ARC). **(T-1)**

6.3.3.5. DELETED

6.3.3.6. DAF military members directly supporting units and/or geographically located with a sister-service (e.g., Tactical Air Control Party, Combat Weather, etc.) may satisfy CBRN Defense Program requirements either through the DAF or sister service and will comply with their partnered services' operational or mission area relevant CBRN defense training to satisfy readiness requirements.

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)**

6.3.3.8. Instructor ratio will be a maximum of 20 students to one instructor. **(T-3)**

6.3.3.9. AFSCs 3E7X1, 3E8X1, 3E9X1, and 32E3Bs (currently assigned to a coded position) are exempt from CBRN Defense Training.

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

Student Actions - Required Before Attending Training
1. Complete the EOH course as a pre-requisite.
2. Students will provide a copy of their approved protective mask fit test to their unit deployment manager, unit training manager, or course scheduler prior to being scheduled for the CBRN Defense Survival instructor-led course. **(T-1)** When needed, students will contact Bioenvironmental Engineering for instructions on how to obtain a quantitative fit test.
3. Student will remove contact lenses and earrings.
4. Students will remove 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, or in a low ponytail/braid.
5. Military members will wear an approved duty uniform.
6. Civilian and contract personnel will wear attire appropriate for field training.
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 Survival course.
2. Student will ensure all equipment within the training C-bag is marked "TRAINING USE ONLY" or "TRNG ONLY". **(T-3)** Students should notify the local LRS or equivalent organization if any items are not marked correctly.
3. Students will have with them the improved outer tactical vest and a helmet, unless local LRS does not have the capability to distribute these items.
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 the CBRN Defense Survival Course.

6.3.4. DELETED

6.3.4.1. DELETED

6.3.4.2. DELETED

6.3.4.3. DELETED

6.3.4.4. DELETED

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 Course. These courses are delivered in-person or 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 EOH training products to complement the distance learning course.

6.3.5.1.1. DAF personnel listed in **paragraph 6.3.3.1** complete this training before attending the CBRN Defense Survival Course and are considered current IAW the frequency listed in paragraphs **6.3.3.1 – 6.3.3.4**. **(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 with the basic fundamentals to accomplish PAR in a CBRN-contested/conventional environment and are considered current for the duration of their AFFORGEN/SPAFORGEN cycle. **(T-2) Note:** DAF commanders at all levels may develop localized PAR training products to complement the distance learning course.

6.3.5.3. SMT Course. This distance learning course provides DAF personnel with the basic fundamentals to accomplish SMT activities in a CBRN-contested environment and are considered current for the duration of their AFFORGEN/SPAFORGEN cycle. **(T-2) Note:** DAF commanders at all levels may develop localized SMT training products to complement the distance learning course.

6.3.5.4. CCT Course. This distance learning course provides DAF personnel with the basic fundamentals to accomplish CCT activities in a CBRN-contested environment and are considered current for the duration of their AFFORGEN/SPAFORGEN cycle. **(T-2) Note:** DAF commanders at all levels may develop localized CCT training products to complement the distance learning course.

6.3.5.5. The medical community oversees and manages training courses for TCCC and treating CBRN injuries in a CBRN-contested environment. The training integrates the TCCC MARCHE with the CBRN treatment priorities of MARCHE2. Refer to DoDI 1322.24, and the MAJCOM TCCC advisor for completing this course.

6.3.6. CBRN Defense Senior Leader Course. When developed, this instructor-led course is for DAF commanders 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 must meet to preserve force survivability and mission continuation in a CBRN-contested environment.

6.3.6.1. DAF commanders assigned or notionally tasked to an OCONUS OL and who oversee, and lead USAF/USSF FEs will complete this training within their AFFORGEN/SPAFORGEN RESET phase cycle and are considered current throughout the duration of their AFFORGEN/SPAFORGEN cycle. **(T-0)**

6.3.6.2. Only AFSCs 3E9X1 (Non-Commissioned Officer and Senior Non-Commissioned Officer), 32E3B (assigned to the IOEM), and EM civilians/contractors that graduated from the EM Apprentice School will instruct this course **(T-1)**

6.3.6.3. Personnel who attend this course are exempt from the CBRN Defense Survival Course. **Note:** Senior enlisted leaders are encouraged to attend this course but will still be required to attend CBRN Defense Survival Course.

6.4. Scheduling and Documenting Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Education and Training.

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. DELETED

6.4.1.2. Individuals requiring proof of CBRN Defense Survival Course completion will coordinate with their respective unit scheduler to obtain the necessary information. **(T-1) Note:** The IOEM does not provide CBRN Defense Survival Course 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 assess personnel required to complete the CBRN Defense Survival Course and report number of personnel that have completed training in the CBDRT Resource Assessment in DRRS IAW AFI 10-201. **(T-1)**

6.4.4. Unit schedulers/unit deployment managers 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, or Nuclear (CBRN) Defense Task Qualification Training (TQT). CBRN defense TQT prepares individuals and teams postured for AFFORGEN/SPAFORGEN to perform functional tasks while wearing CBRN defense IPE for extended periods.

6.5.1. Career field managers (CFM) will identify AFSC-specific tasks/competencies requiring CBRN defense TQT in the Career Field Education and Training Plan (CFETP). **(T-1)** For AFSCs without a CFETP, CFMs will identify the AFSC-specific tasks via memorandum. **(T-1)** CFMs will validate tasks annually or within 6 months of assumption of position. **(T-1)**

6.5.1.1. CBRN Defense TQT is defined as a hands-on event in which individuals will be evaluated on their ability to accomplish AFSC-specific tasks while operating in MOPP 4. **(T-1) Note:** Aircrew personnel will use the Aircrew Chemical, Biological, Radiological, Nuclear Defense Equipment (ACBRNE) to accomplish their TQTs.

6.5.1.2. CFMs will include the ability to operate a vehicle while wearing MOPP 4 IAW Qualification Training Package (QTP) 24-3-500, *Government Vehicle Operations in Mission Oriented Protective Posture (MOPP) Level 4.* **(T-1)**

6.5.1.3. In addition to AFSC-specific tasks, individuals should be evaluated on their ability to hydrate while wearing MOPP 4 at the beginning and completion of each identified task.

6.5.1.4. CFMs and functional area managers will coordinate with AFIMSC/A258G, In-Garrison Support, to shape the development of AFSC-specific CBRN defense TQT for military and emergency essential civilians currently postured for AFFORGEN/SPAFORGEN to perform functional tasks while wearing CBRN defense IPE. **(T-1)** Contracting officer representatives will coordinate with AFIMSC to shape the development of appropriate CBRN defense TQT for contractors postured for AFFORGEN/SPAFORGEN to perform functional tasks while wearing CBRN defense IPE for extended periods. **(T-1)**

6.5.2. DAF personnel postured for AFFORGEN/SPAFORGEN will complete CBRN defense TQT throughout their AFFORGEN/SPAFORGEN cycle and are considered task qualified once all tasks are completed and annotated in ARIS. **(T-1)**

6.5.2.1. Unit commanders will designate personnel to schedule, train, and document AFSC-specific TQTs. **(T-1) Note:** DAF CBRN specialists (AFSC 3E9X1) may act as advisors upon request but are not designated to instruct/facilitate CBRN TQTs as identified by CFMs.

6.5.2.2. Measured unit commanders will assess personnel required to complete TQTs and report number of personnel that have completed in the CBDRT Resource Assessment in DRRS IAW AFI 10-201. **(T-1) Note:** Units should not use CBRN defense training numbers to populate TQT in CBDRT.

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

6.6.1. DAF CBRN specialists (AFSC 3E9X1 and 32E3B) assigned to the CCMDs, DAF headquarters, C-MAJCOM/A4C, C-NAF/A4C, and the AFIMSC performing duties and responsibilities inherent to CBRN defense should 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.

6.6.1.3. Attend the U.S. Army Nuclear and CWMD Agency CWMD Advisors Phase I Course.

6.6.2. DELETED

6.6.2.1. DELETED

6.6.2.2. DELETED

6.6.3. DAF CBRN specialists will participate in SPEARS IAW AFI 10-210. **(T-1)** AFIMSC, in coordination with NGB/A4O and AFRC/A4O, will oversee, manage, coordinate, and execute SPEARS on-behalf of the 3E9X1 CFM. **(T-1)**

Chapter 7

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

7.1. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Exercise Requirements. DoDI 3020.52, DAFI 10-2501, and DAFI 90-302 provide guidance on planning, conducting, and evaluating CBRN defense exercises. DAF commanders should plan, conduct, and evaluate CBRN defense exercises in conjunction with Combat Readiness Exercises. CBRN defense exercise will include standards listed in **Table 7.1**. **(T-2)** CBRN defense exercises must focus on executing the OL's primary mission operations in a CBRN environment, not simply executing CBRN defense actions. **(T-2) Note:** If commanders choose not to perform CBRN defense exercises in conjunction with the Combat Readiness Exercises, then they will exercise and evaluate once every two fiscal years based on the OL's highest CBRN threat. Reference DAFI 90-302 for more information regarding Combat Readiness Exercises.

7.1.1. C-MAJCOM/C-FLDCOM and C-NAF command staffs should coordinate CBRN-related exercises with other joint and combined exercise programs IAW CCMD campaign plan operations and activities. **(T-2)** They will supplement existing theater guidance for planning and conducting joint, combined and/or host nation CBRN-related exercises and/or engagements, or establish such guidance if none is available. **(T-2)**

7.1.2. OCONUS commanders must coordinate CBRN-related exercises with joint, combined and/or host nation when collocated. **(T-3)**

7.2. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Exercise Requirements for Air Force Force and Space Force Generation (AFFORGEN/SPAFORGEN). DAF personnel postured for AFFORGEN/SPAFORGEN participate in a CBRN-related exercise, based on the apportioned OL's highest CBRN threat, during the Reset, Prepare, or Certify Phase. **(T-2)** Whenever possible, conduct this CBRN defense exercise at a regional training site, combat readiness training center, or combat support training range where personnel obtain certification before entering the Available to Commit phase. **(T-2)**

7.2.1. DELETED

7.2.2. DELETED

7.2.3. DELETED

7.2.4. DELETED

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

Table 7.1. Minimum Individual Chemical, Biological, Radiological, or Nuclear (CBRN)-Related 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 the ability to identify biological syndrome events and appropriate public health actions.
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 M8 paper, M9 tape, and M256A2 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.
Exercise realism and minimize simulated events.

7.3.1. Assess the applicable CBRN-related exercise standards and develop exercise evaluation objectives for each selected competency. **(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 the DAF CBRN specialists (AFSC 3E9X1). **(T-3)**

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

7.3.3.1. Overt persistent CWA effects at OLs (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 maneuvers regardless of OL. **(T-2)**

7.3.3.4. Overt persistent or non-persistent CWA effects at an OL. **(T-2)**

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

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

7.3.4. CBRN-related 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. Commanders will exercise the capability of DAF CBRN specialists to collect and evaluate suspected 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, or Nuclear (CBRN) Defense Wargame Requirement. Senior leaders and command teams assigned to OCONUS MOBs will conduct a CBRN defense wargame using a seminar, workshop, or tabletop exercise (TTX) design annually. **(T-2)**

7.4.1. DAF CBRN specialists will host and facilitate the wargame using the CBRN defense wargame template available through AFIMSC. **(T-3)** At a minimum, the CBRN defense wargame will include the CBRN Defense Working Group and a 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 Plan. **(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. DELETED

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

7.4.2. CBRN-related 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. **(T-1)**

Chapter 8

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR 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. DELETED

8.1.2. DELETED

Table 8.1. Chemical, Biological, Radiological, or 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	CBRN Defense	RegAF	Wartime CBRN Defense Training	27574F
4	Nuclear, Biological or Chemical Defense	ANG	Wartime mobility (non-medical) CBRN defense equipment	55165F
5	Medical Counter (MC) CBRN	RegAF	Wartime MC CBRN	28036F
6	MC CBRN	ANG	Wartime MC CBRN	58036F

8.2. Title 50 United States Code (USC) Chapter 32, Section 1522, *Conduct of Chemical and Biological Defense Program (CBDP)*. 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. DELETED

8.2.2. DELETED

8.3. Chemical, Biological, Radiological, or 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. DAF CBRN specialists, medical SMEs, and AFE support personnel will refer to the applicable PS and CBRN response UTC equipment and supplies list (ESL) for their respective expeditionary equipment authorizations. **(T-1)**

Table 8.2. Primary Platform Standards (PS) for Chemical, Biological, Radiological, or 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 Equipment

8.3.1. DELETED

8.3.2. DELETED

8.3.3. DELETED

8.4. Unit Chemical, Biological, Radiological, or 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) Note:** Unit equipment does not include CBRN defense IPE or assets maintained by the Logistics Readiness Squadron, Materiel Management Activity (LRS/MMA).

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

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

Team	Equipment Description
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, radio.
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, radio.
COLPRO SMT Kit	C-bag, chemical/biological warfare agents, detector/sensor, flashlight, light sticks, OL section/grid map, communication device, medical (first aid) kit, radio.
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, dosimeter, radio.
Note: Additional equipment may be necessary based on local requirements.	

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

8.4.3. OCONUS commanders must conduct inventories annually and/or after deployment or exercises comparing the on-hand assets to the ESLs. **(T-2)**

8.4.4. DELETED

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

8.6. Ground-crew Chemical, Biological, Radiological, or 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 requirements for CBRN defense IPE and equipment based on the standard BOI listed in **Table 8.4** and submitting these requirements to Air Force Material Command, Logistics Readiness Division (AFMC/A4R) annually for updates to authorizations in Integrated Logistics Systems-Supply mobility IAW AFI 23-101. **(T-1)** 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. NGB/A4 will validate all ANG CBRN defense IPE and CBRN defense equipment requirements submitted for funding by PEC 55165F. **(T-1)**

8.6.4. Total Force personnel assigned to any OL with a CBRN Threat Index of 1 will be issued and maintain the standard CBRN defense C-bag *operational* and *training* asset BOI listed in **Table 8.4**. **(T-2)** All personnel 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 inspecting, cleaning, maintaining, and accountability of the issued assets.

8.6.5. C-MAJCOMs should authorize additional CBRN defense equipment authorizations IAW AFI 23-101, to support the military base populace, emergency essential civilians and contractors, and host nation personnel identified for DAF support in applicable host nation agreements. **Note:** AFMC, as the servicing MAJCOM for USSF, will provide the necessary support to all USSF installations.

8.6.6. Individuals postured for AFFORGEN/SPAFORGEN 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)** 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 inspecting, cleaning, maintaining, and accountability of the issued assets.

8.6.7. Individuals postured for AFFORGEN/SPAFORGEN 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)** 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 inspecting, cleaning, maintaining, and accountability of the issued assets.

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

Item #	Item Description	Operational BOI (each)		Training BOI (each)
		CBRN Threat Index 1	CBRN Threat Index 2-3	CBRN Threat Index 1-3
1	Protective Mask (M50)[1,3,4]	2	1	N/A[1]
2	M61 Filter[5, 6]	4	2	2
3	Joint Service Lightweight Integrated Suit Technology (JSLIST) Coat[2, 6, 7]	4	2	1
4	JSLIST 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	Footwear Solution Overboots or Moulded AirBoss Lightweight Overboot [2, 6, 7]	4	2	1
7	M8 Chemical Agent Paper[2]	1	1	1
8	M9 Detection Paper[2]	1	1	1
9	M295 Equipment Decontamination Kit[2]	1	1	1
10	Water Canteen Cap with Mask Drinking Adapter or CBRN Hydration System (includes water bladder with adapter)	1	1	1
11	M256 Kits	2	1	1

Notes:
1. Use the M50 Mask (Protective Mask) for both operational and training requirements.
2. Expired CBRN assets, to include, but not limited to, M8 paper, M9 paper, M295 kits, M256 kits, and JSLIST/Uniform Integrated Protection Ensemble (UIPE) ensembles can be used for training and exercises.
3. Special inserts for the M50 masks are issued by the medical organization.
4. Issue two (each) M50 masks for operational requirements in locations categorized with a high CBRN defense threat index. All other areas, issue one (each) M50 mask for both operational and training requirements.

5. Issue four (each) M61 canisters for operational requirements in locations categorized with a high CBRN defense threat index. All other areas, issue two (each) M61 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 Threat Index 1. All other areas, maintain two (each) JSLIST/UIPE ensembles for operational requirements.
8. 14 mm gloves are a suitable substitute.

8.7. Special Tactics Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Equipment. The special tactics community will posture and sustain CBRN defense IPE for special tactics members using the BOI listed in **Table 8.5**. **(T-2)**

8.7.1. DELETED

8.7.2. DELETED

Table 8.5. Special Tactics Standard Chemical, Biological, Radiological, or 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	Uniform Integrated Protective Ensemble (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 Respirator Blower	1	0
17	Hydration System Carrier	2	0

18	M334 Equipment Decontamination Kit	1	0
19	Chin Strap Extender	1	0
20	M295 Equipment Decontamination Kit	1	0
21	M8 Detection Paper	1	0
22	M9 Detection Tape	1	0
23	Chem Tape	1	0

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

8.8.1. Posture and sustain medical CBRN equipment on deployable medical response packages that can operate in a CBRN-contested environment based on risk to mission and risk to force. **(T-1)**

8.8.2. Procure, stock, store, and issue the Force Health Protection Prescription Products (e.g., RSDL, ATNAA, CANA). **(T-2)**

8.8.3. DELETED

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

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

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

8.8.7. Conduct regular reviews of medical countermeasures and align procurement efforts with mission-specific risks. **(T-2)**

8.9. Chemical, Biological, Radiological, or Nuclear (CBRN) Specialist Equipment. DAF **c**ommanders with assigned CBRN specialists (AFSC 3E9X1) will ensure they are equipped for immediate deployment as a CET by requesting equipment through ARIS or equivalent system centrally managed by AFIMSC. **(T-3)**

8.10. Collective Protection (COLPRO) Systems. OCONUS Commanders will identify, plan, and program COLPRO requirements for enduring and contingency locations based on the CBRN threat assessments derived from the JIPOE process. **(T-2)**

8.10.1. 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, COLPRO capabilities may be required to open the airbase, establish the airbase, operate the airbase, and/or robust the airbase regardless of OL. EL commanders will assess the requirement for fixed site COLPRO systems for all assigned missions. **(T-2)** CL commanders will assess the requirement for expeditionary 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 COLPRO requirements. **(T-1)** CEO will use PEC 27479F/S and PEC 22187F/S to reprogram/sustain fixed-site COLPRO systems. **(T-1)**

8.10.4. The 209 SOCES/CEX (AFSOC gained unit) will maintain and sustain an expeditionary COLPRO capability to support AFSOC Tier 2 units. **(T-2)** Use PEC 27593F to program/execute operating and support funding for the 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, OR NUCLEAR (CBRN) DEFENSE FORCE READINESS REPORTING

9.1. Overview. The Universal Joint Task Library and Air Force Universal Task List (AFUTL) 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 Universal Joint Task Library and AFUTL supports the DoD to conduct joint force development, readiness reporting, experimentation, joint training and education, and lessons learned. It is the basic language in developing Air Force unit MET Lists.

9.2. Measuring Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Capabilities. Functional Area Managers may consider the following minimum operational tasks to inform how they measure CBRN defense capabilities required to conduct layered integrated CBRN defense when building Mission Essential Task List templates for their communities. These measures, aligned to Joint MET Lists, offer valuable insights into the type of measurable tasks all joint forces assess regarding CBRN defense capabilities:

9.2.1. Time required to establish a CBRN warning and reporting system and to achieve 100 percent integration and interoperability with CBRN-IS and OL communication systems and alert/warning systems.

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

9.2.3. Time 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/neutral forces or noncombatants influenced by collateral effects from non-adversarial strikes on enemy CBRN weapon targets.

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

9.2.9. Number of false positive incidences (e.g., M-8, M-9, JCAD, HHAs, etc.).

9.2.10. Instances of undetected use of CBRN (e.g., covert use of biological agent, RDD, etc.).

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

9.2.12. Time to operationally decontaminate assets attacked with CBRN weapons.

9.2.13. Time to inoculate personnel under a biological threat.

9.2.14. DELETED

9.2.15. Time to establish C2 at an incident location.

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

9.2.17. Time to provide an initial assessment after arrival at an incident location.

9.2.18. Time to complete food, water, and vector-borne vulnerability assessments.

9.2.19. Time to provide a CBRN health risk assessment.

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

9.2.21. Time to perform sector detection, marking, and reporting.

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

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

9.2.24. DELETED

9.2.25. DELETED

9.2.26. Percent of operational forces with CBRN casualties.

9.2.27. Time to identify medical threats and countermeasures.

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

9.2.29. Time 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. DELETED

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

9.2.35. Time to identify terrorist organizations acting alone or with state sponsorship that possess or are attempting to acquire WMD in the AOR.

9.2.36. DELETED

9.2.37. DELETED

9.2.38. DELETED

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

9.4. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Mission Essential Task (MET) Reporting. Functional Area Managers 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, or Nuclear (CBRN) Defense Assessment Report. DAF commanders will use the CBDRT Report in the DRRS during force readiness reporting to measure CBRN training and equipment IAW AFI 10-201 and applicable CBDRT-S/T AF tables.

Chapter 10

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR 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, or 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) Note:** It is recommended to include identified CBRN defense capability gaps in the unit's capability assessment in DRRS as these gaps will likely impact unit readiness.

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. **(T-2)** 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.

10.3. Major Command (MAJCOM)/Field Command (FLDCOM) Chemical, Biological, Radiological, or 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). **(T-0)**. 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.

10.3.6. Identify CBRN defense needs and requirements.

10.4. Chemical, Biological, Radiological, or Nuclear (CBRN) Defense Capability Concept of Operations (CONOPS). After the solution to the capability gap is determined, the capability 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, or 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-ACBRN defense requirements to AFIMSC for validation. **(T-1)**

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

10.5.3. Submit analysis reports and documents for medical CBRN defense to AFMEDCOM 4/10C. **(T-1)**

10.6. Chemical, Biological, Radiological, or 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)**

TOM D. MILLER, Lieutenant General, USAF
DCS/Logistics, Engineering and Force Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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None

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Abbreviations and Acronyms

ACBRN—Aircrew Chemical, Biological, Radiological, and Nuclear

ACE—Agile Combat Employment

AF—Air Force

AFDN—Air Force Doctrine Note

AFDP—Air Force Doctrine Publication

AFE—Aircrew Flight Equipment

AFFOR—Air Force Forces

AFFORGEN—Air Force Force 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 Materiel 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

BE—Bioenvironmental Engineering

BEPO—Base Emergency Preparedness Orientation

BOI—Basis of Issue

BOS-I—Base Operating Support-Integrator

CBDP—Chemical and Biological Defense Program

CBDRT—Chemical Biological Defense Readiness Training

CBOA—Chemical and Biological Operational Analysis

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

CCA—Contamination Control Area

CCMD—Combatant Command

CCT—Contamination Control Team

CE—Civil Engineer

CEN—Civil Engineer Engineering

CEO—Civil Engineer Operations

CET—Capability Enhancement Team

CEX—Civil Engineer, Installation Office of Emergency Management

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

EL—Enduring Location

ELML—Enduring Location Master List

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

FSS—Force Support Squadron

GCCS—Global Command and Control System

HAF—Headquarters Air Force

HAFMD—Headquarters Air Force Mission Directive

HEMP—High-altitude Electromagnetic Pulse

HHQ—Higher Headquarters

HQ—Headquarters

HQ CCC—Headquarters Cyberspace Capabilities Center

IAW—In Accordance With

IG—Inspector General

IMA—Individual Mobilization Augmentee

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, and Extraction

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

MPA—Military Personnel Appropriation

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—Operating 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

PBA—Pharmaceutical Based Agents

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

QTP—Qualification Training Package

RAT—Ready Airman Training

RATC—Ready Airman Training Council

RegAF—Regular Air Force

RSDL—Reactive Skin Decontamination Lotion

SBD—Space Base Delta

SCG—Security Classification Guide

SecAF—Secretary of the Air Force

SG—Surgeon General

SME—Subject Matter Expert

SMT—Shelter Management Team

SOCES—Special Operations Civil Engineer Squadron

S&T—Science and Technology

TCCC—Tactical Combat Casualty Care

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

UIPE—Uniform Integrated Protective Ensemble

U.S.—United States

USAF—United States Air Force

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/A3OO—Air Force Operations Group

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

AF/A3TR—Air Force Training and Readiness 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/A4CXE—Air Force Civil Engineers, Readiness Division, Emergency Management Branch

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

ACC/A3T—Air Combat Flight Operations Division

AFGSC/A3OL—Air Force Global Strick Command, Director of Operations, Aircrew Performance Branch

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

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

AFIMSC/A258G—In-Garrison Support

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

AFMEDCOM A4/10C—Medical CBRN Branch

AFMEDCOM A5—Capability Development and Integration Division

AFRC/A4O—Civil Engineer Readiness Division

J-8—Force Structure, Resources, and Assessment Directorate

JPEO-CBD—Joint Program Executive Office for CBD

LRS/MMA—Logistics Readiness Squadron, Materiel Management Activity

NGB/A4O—National Guard Bureau, Air National Guard Civil Engineer Readiness and Emergency Services Division

SAF/CN—Department 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

SF/10S—Headquarters Space Force Strategic Deterrence and NC3 Integration Directorate

SGMED AF/SG5—Strategy and Capabilities 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 (ACCA)—A self-sustaining aircrew only chemical mitigation control area that minimizes cross contamination to aircrew and is staffed by certified AFE technicians.

Aircrew Contamination Control Station (ACCS)—A self-sustaining, aircrew only radiological contamination mitigation control area that minimizes cross contamination to aircrew and is staffed by certified AFE technicians.

Aircrew Flight Equipment (AFE)—AFE encompasses a wide range of flight equipment and technicians tasked to ensure serviceability including ACBRN.

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, or 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, or 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) Defense Specialist—Tactical response team staffed by expert CBRN specialists (AFSC 3E9X1 and 32E3B) 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.

Contingency Location—A non-enduring location outside of the United States that supports and sustains operations during contingencies or other operations and is categorized by mission life-cycle requirements as initial, temporary, or semipermanent.

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.

Enduring Location—A MOB, FOS, or CSL location designated by the DoD for strategic access and use to support U.S. security interests for the foreseeable future.

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 operating 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, M256 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. The support may be facilitated by contract, non-binding arrangement, or internation agreement.

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.

Measured Units—Units with a unit descriptor code of combat, combat support, or combat service support within the PAS code table, and that fulfill the AFI 38-101, *Manpower and Organization*, description of a unit, are considered measured units. Measured units report readiness assessments in DRRS and are required to have a current designed operational capability statement on the designed operational capability statement tab within the current unit status page.

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.

Operating 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.

Operating Location (OL)—All apportioned DAF installations including ELs: installations, MOBs; FOS; CSL; or CL.

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.

(DELETED) 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 CBRN 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, OR NUCLEAR (CBRN) DEFENSE PLAN TEMPLATE

A2.1. Section 1. Define the OE.

A2.1.1. Identify sufficient checkpoints on zones/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 CBRN 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.

A2.5.6. Process for issuing vaccines and prophylaxis.

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, zones, sectors, 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 personnel that may utilize ACE to maneuver to other OLs.

A2.9.2. Describe the COLPRO capabilities for forces 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 management requirements, training, and operations.

A2.10.6. DELETED

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 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 theater-level CBRN sample confirmation.

A2.11.3. CBRN Defense Working Group membership, roles, and responsibilities.

Attachment 3

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR 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 MTTPs 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. DELETED

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

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

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 Operations in a Nuclear Environment*.

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

A3.4. The following NATO standard agreements and ATPs provide uniform standards and guidance to NATO forces on matters of CBRN defense to ensure forces are able to survive and operate together in a CBRN environment at all levels of command.

A3.4.1. NATO STANAG 2522, *Specialist CBRN Defence Capabilities*

A3.4.1.1. ATP 3.8.1 Volume 1, *CBRN Defence on Operations.*

A3.4.1.2. ATP 3.8.1 Volume 2, *Specialists CBRN Defense Capabilities.*

A3.4.1.3. ATP 3.8.1 Volume 3, *CBRN Defense Standards on Education, Training, Exercise, and Evaluation.*

A3.4.2. NATO STANAG 2103, *Warning and Reporting and Hazard Prediction of Chemical, Biological, Radiological, and Nuclear Incidents.*

A3.4.2.1. ATP 45, *Warning and Reporting and Hazard Prediction of Chemical, Biological, Radiological, and Nuclear Incidents, Edition F, Version 3.*