



## APPENDIX C: SPECIALIZED CONSIDERATIONS

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### MOBILITY CONSIDERATIONS

Air mobility forces play a crucial role in supporting Air Force counter [weapons of mass destruction](#) (CWMD) efforts. In spite of adversary use of chemical, biological, radiological, and nuclear (CBRN) weapons, air mobility must continue to provide the Air Force with the global reach necessary to achieve its objectives.

#### Strategic Airlift in a CBRN Contaminated Environment

To allow sustained and effective use of airlift resources, theater planners may identify alternate aerial ports of embarkation and debarkation to protect and continue the [time-phased force and deployment data](#) (TPFDD) airflow and other resupply efforts.

While air mobility forces are trained and equipped to operate in a CBRN-contaminated environment, the limitations imposed on air mobility assets in those environments may significantly degrade the rate of force deployment. Until large-frame aircraft decontamination is technically feasible, contaminated aircraft should be segregated from the airlift flow. If operations into a contaminated airfield are deemed mission-critical and are specifically authorized, the [commander, Air Force forces](#) (COMAFFOR) should establish a geographically-separated transload site that can be used to transfer personnel and cargo between clean and contaminated aircraft. This transload process will likely delay TPFDD deliveries and may only be feasible for emergency or isolated cases. Research concerning policies and procedures should be conducted to develop the capability to operate contaminated and previously contaminated mobility assets without restriction.

Retrograde cargo from contaminated areas may be severely restricted. Until internationally recognized standards and legal requirements for acceptable decontamination levels are established, nations may deny transit and overflight rights to contaminated aircraft or cargo.

#### Specialized Air Mobility in a CBRN Contaminated Environment

Conventional and [special operations forces](#) (SOF) regularly conduct operations and activities that contribute to CWMD efforts, either directly or indirectly. SOF are uniquely qualified to conduct SOF core activities such as special reconnaissance, direct action, and counterterrorism operations that support small-scale counter [weapons of mass destruction](#) efforts. Mission objectives may include operations into and out of, contaminated battlespaces, and avoidance is not an option.

The [Joint Force Commander](#) may use SOF independently or integrated with conventional forces, to perform tasks to control, defeat, or disable actors of concern with WMD capabilities. The [Joint Special Operations Air Component Commander](#), as the joint air component commander to special operations, conducts operations which support these SOF core activities. To accomplish these missions, AFSOC has identified the following core mission areas: specialized air mobility; precision strike; special tactics; intelligence, surveillance, and reconnaissance; aviation foreign internal defense; command and control; information operations; and agile combat support.

## **Aeromedical Evacuation (AE)**

The Air Force's AE capability to move contaminated patients should only be used in extreme circumstances. Potential aircraft contamination, threats to aircrew safety, and limited availability of protective resources significantly restrict the ability to move large number of patients, contaminated or otherwise. In fact, treatment-in-place using contagious casualty management (CCM) capabilities is preferred. This is normally accomplished via deployed expeditionary medical support CCM specialty set or can be done expeditiously using existing theater assets redeployed by the [COMAFFOR](#) to assist with the management of contagious casualties.

[Air Mobility Command \(AMC\)](#) can move a limited number of biologically-contaminated patients to CONUS via litter-based isolation units after the patients have been stabilized. This will facilitate "hands-on" disease analysis by Department of Defense (DOD) and other US infectious disease experts to determine optimum management of biological casualties. Patients exposed to non-contagious biological agents can also be decontaminated and transported on aircraft. Basic infection control guidelines should apply when biological warfare casualties are evacuated. Casualties who have been contaminated with chemical or radiological agents are decontaminated before entering the AE system unless the theater and [US Transportation Command](#) (USTRANSCOM) commanders direct otherwise. When directed, the AMC commander is the formal policy waiver authority for movement of contaminated casualties. Once the theater combatant commander and USTRANSCOM identify the requirements for AE of contaminated patients, AMC will authorize their transportation.

Evacuating potentially contaminated patients, human remains, and non-contaminated patients requires the approval of the destination country, overflight privileges, and approval of any country where the aircraft will land for servicing. Close coordination between the [supporting and supported commanders](#) and the Departments of Defense and State will be required for such movements.

## **Commercial Aviation**

Commercial aviation plays an important role in the deployment, sustainment, and redeployment of Air Force forces. Upon full activation of the [Civil Reserve Air Fleet](#) (CRAF), the civilian sector provides almost all of AMC's passenger-lift capability and a significant portion of its cargo airlift.

Civilian aircraft under DOD contracts and the CRAF may be deployed on a voluntary basis, but will not conduct operations on an air base that is under attack, potentially under attack, and/or contaminated at the time of flight arrival. Although commercial aircrews are issued ground crew chemical defense equipment for personal protection

and trained to use it, they are neither trained nor equipped for flight operations in a contaminated environment. Upon warning of impending CBRN attack, every effort will be made to divert arriving commercial aircraft and launch those currently on the ground. Contaminated CRAF assets and civil aircraft under Department of Defense contract will not be used, even if decontaminated to negligible levels. Currently, no decontamination standards exist for international flights. En route transload of cargo and passengers from civilian carriers to military aircraft or other transportation modes (sealift, rail, trucks, etc.) may be required, involving decontamination procedures. Generally, civil aircraft will not be used to transport equipment or human remains with residual CBRN contamination due to safety and legal concerns.

### **Contractor Supported Aviation**

Civilian contractor personnel provide essential maintenance support for Air Force operational support airlift (OSA) aircraft (C-21, C-37, etc.). If contractor-supported OSA aircraft are deployed to medium and high threat areas, the Air Force installation commander will provide contractor personnel with [individual protective equipment](#) (IPE) and “just in time” training on IPE wear and CBRN response tactics, techniques, and procedures. Commanders at the deployed location will integrate the civilian contractor personnel into the base defense plan and ensure that they are properly trained, equipped, and exercised.

(For more information, reference [Annex 3-17, Air Mobility Operations](#).)

### **CIVIL ENGINEERING CONSIDERATIONS**

The Civil engineer provides critical pre-planning activities to coordinate and organize efforts to manage, prepare for, respond to, and recover from the direct and indirect consequences of WMD attacks using chemical, biological, radiological, and nuclear (CBRN) (as well as conventional weapon attacks, major accidents, and natural disasters). Besides standard engineering skills, the civil engineer has three functions that provide significant support to the CWMD enterprise. These functions are [fire emergency services](#) (FES), [explosive ordnance disposal](#) (EOD), and [emergency management](#) (EM). For homeland defense and support to civil authorities [National Fire Protection Association publication 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents](#), identifies the minimum levels of competence required by responders to emergencies involving hazardous materials/WMD and is used by civil engineer emergency responders as the standard. For operations to support geographic combatant commanders in CWMD operations, standard military procedures are used.

FES provide the capability to minimize loss to lives, property, and the environment occurring throughout all phases of military operations in peacetime, wartime, and in support of homeland operations. Included are both man-made and natural incidents; fire suppression or hazard mitigation; rescue; mitigation or containment of hazardous material releases, terrorism, or WMD; and the appropriate corresponding emergency medical response.

EOD provides the capability to mitigate and defeat hazards presented by the enemy or friendly employment of explosive ordnance. This encompasses IEDs; conventional explosives such as explosive remnants of war, unexploded explosive ordnance, CBRN, WMD, homemade explosives, and incendiary materials.

EM supports WMD hazard analysis and assessments, establishment and operation of the CBRN threat detection grid, active CBRN response, and development of CBRN contamination avoidance measures. Another main component of the EM program is to support [homeland security operations](#) and to [support civil and host-nation authorities](#) through the appropriate Air Force major command or combatant command.

(For more information, reference to [Annex 3-34, Engineer Operations](#))

## **HEALTH SERVICES CONSIDERATIONS**

The [Air Force Medical Service](#) (AFMS) provides critical support in CWMD operations. In addition to attack recovery casualty treatment via fixed [medical treatment facilities](#) (MTFs) and expeditionary medical support facilities, AFMS provides essential expertise in medical intelligence, medical surveillance, detecting and identifying CBRN threats, performing health risk assessments, food and water quality and vulnerability assessments, and decontamination.

These unique capabilities are provided by [Home Station Medical Response Teams](#) located at each of our main operating bases, as well as by various deployable teams (unit type code assets). One such example is the Medical Nuclear, Biological, and Chemical Defense Team. This team provides human health protection, support to medical facility operations, and prevention of acute and chronic health hazards resulting from a CBRN threat environment. The Biological Assessment Team performs rapid, specific pathogen/ infectious disease identification and risk analysis. The Air Force Radiological Assessment Team (AFRAT) provides manpower and equipment for rapid, global response to radiological/nuclear accidents and incidents. The AFRAT provides subject matter experts to support planning, surveillance, analysis, and assessment to mitigate radiation health and operational risks resulting from radiological/nuclear events. Finally, the Expeditionary Medical Patient Decontamination Team removes, neutralizes, or lowers the level of contamination from casualties prior to admission to MTFs.

## **INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR) CONSIDERATIONS**

[ISR](#) is a key enabler for CWMD operations. The ISR process of planning and direction, collection, processing and exploitation, analysis and production, and dissemination provides the ability to detect, identify, characterize, and track the development and deployment of adversary WMD. The unique phenomena and signatures of WMD materials, devices, and effects requires specialized detection and analysis capabilities to complement traditional ISR platforms, such as [remotely piloted aircraft systems](#) and satellites. Vigilant surveillance using a wide range of sensor and analytic capabilities is required to reveal production, testing, and weaponization of large-scale biological, chemical, or nuclear programs. ISR enables decision making at the national and warfighter level across the full [range of military operations](#) to include nonproliferation, strategic deterrence, pathway and WMD defeat, attribution, and consequence management efforts.

ISR is a critical component of CWMD operations and plays a vital role in detecting, characterizing, tracking, and warning of chemical, biological, radiological, and nuclear attacks by providing information on the location, type, timing, method, and effects supporting a commander's ability to prevent adversary proliferation and use, contain

and reduce threats, and respond to crises. As with command and control assets, ISR assets remain operational in adverse environments and will be targeted by adversaries.

(For more information, reference [Annex 2-0, Global Integrated Intelligence, Surveillance & Reconnaissance Operations](#))

## **LEGAL SUPPORT CONSIDERATIONS**

CWMD operations involve a complex mix of laws, policies, treaties, and agreements. The staff judge advocate or other appropriate legal advisor should be continuously involved with the planning, oversight, and assessment of these operations. For further guidance on legal support to CWMD operations, refer to [Joint Publication \(JP\) 3-40, Countering Weapons of Mass Destruction](#), and [JP 1-04, Legal Support to Military Operations](#).

## **LOGISTICS CONSIDERATIONS**

Logistical considerations, such as the flow of war materiel, are essential supporting elements of Air Force CWMD operations. Adversary operations using CBRN weapons present challenges to logistics support by introducing the threat of contamination to aircraft, personnel, materiel, and the supply chain. Timely delivery of required CBRN protection and detection assets is critical to force survivability and the ability to sustain mission operations. The [COMAFFOR](#) should ensure critical consumables reach the area of operations in a timely manner and provide needed weapons, supplies, and facilities in such a way as to reduce the “footprint” of deployed forces. In garrison, Air Force [MAJCOM](#) commanders sustain appropriate stock, storage, and maintenance of the required individual protective equipment per base.

## **PERSONNEL SUPPORT FOR CONTINGENCY OPERATIONS (PERSCO) CONSIDERATIONS**

The primary mission of [PERSCO](#) is force accountability and casualty reporting. PERSCO teams must be able to operate in a contaminated environment. Accurate force accounting will inform commanders about the availability of resources. PERSCO teams are normally an integral component of the location’s reception processing center. Base subject matter experts at the employment location work with PERSCO teams to ensure that arriving personnel are briefed on emergency management actions, protective measures, threat conditions (including the CBRN-related actions and measures), and local area health conditions.

## **PUBLIC AFFAIRS CONSIDERATIONS**

Air Force public affairs operations support CWMD operations and missions by releasing information through public communication channels. This information serves to execute prevention and deterrence strategies, reinforce the effects of [information operations](#) on adversary decision-making, mitigate unintended information effects of pathway and WMD defeat operations, and maintain public confidence in local, state, federal and military authorities during [defense support of civil authorities](#) and domestic and foreign consequence management operations. Successful communication on CWMD activities requires a highly coordinated, multi-agency public affairs effort that is fully integrated into operational planning.

(For more information, reference [Annex 3-61, Public Affairs](#))

## **SERVICES CONSIDERATIONS**

Continued operations when countering [WMD](#) threats demand specific planning considerations for service support activities in a CBRN environment. Services personnel providing meals to forces should take all necessary steps to safeguard and protect food and bottled water assets during the attack preparation period.

Commanders may choose to forego hot meal preparation during periods of intense conflict in CBRN threat areas and allow services personnel to protect kitchen facilities from possible contamination. All efforts should be made to disperse and protect food assets from contamination, particularly meals ready-to-eat.

Services personnel should consider the hazards of a CBRN environment when developing shelters, reassignment of living quarters, and evacuation plans, and procuring food service support in the local area. These plans include measures to protect personnel, equipment, materials and food from contamination.

In the deployed environment during extreme situations, it may be necessary to temporarily inter contaminated human remains. Prior to interment, mortuary personnel should be prepared to conduct standard processing procedures for contaminated remains. Temporary burial and decontamination of remains should follow guidelines stated in [JP 4-06, Mortuary Affairs in Joint Operations](#). Geographic combatant commanders are responsible for ensuring the development of policies for the overall supervision of mortuary affairs matters. Upon return to CONUS of contaminated remains, protecting the health of service members and the public typically take precedence over rapid repatriation.

The US Army, as the lead service for [mortuary affairs](#), manages development of and obtains approval from the Chairman, Joint Chiefs of Staff for joint mortuary affairs doctrine, procedures, and training materials for use by all Services.

## **WEATHER OPERATIONS CONSIDERATIONS**

[Weather Operations](#) are key elements (characterization and exploitation) of CWMD operations across the range of military operations. Weather information is critical during planning, execution, assessment, and sustainment during all phases of CWMD operations. These operations provide weather information to support CBRN hazard modeling activities to include [current and forecast weather projections](#). In addition, weather operations [support special operations forces](#) execution of site exploitation and security.

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