AIR FORCE HANDBOOK 32-2005
15 July 2009

FIREFIGHTING GUIDE FOR CONTINGENCY OPERATIONS

DEPARTMENT OF THE AIR FORCE

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BY ORDER OF THE SECRETARY OF THE AIR FORCE

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Operations

FIREFIGHTING GUIDE FOR CONTINGENCY OPERATIONS

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RELEASIBILITY: There are no releasability restrictions on this publication.

OPR: HQ AFCESA/CC

Certified by: HQ AF/A7C
(MGen Del Eulberg)

Pages: 110

This publication implements Air Force Policy Directive (AFPD) 10-2, *Readiness*. It establishes guidance for the operations of the Fire Emergency Services (FES) flight during contingency operations. It outlines the basic procedures and guidelines to ensure the survivability of all firefighting resources during conflict. It applies to Air Force firefighters at all levels, including Air National Guard (ANG) and Air Force Reserve Command (AFRC) units. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Information Management Tool (IMT) 847, *Recommendation for Change of Publication*; route AF IMT 847s from the field through Major Command (MAJCOM) publications/forms managers. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at **https://www.my.af.mil/gcss-af61a/afrims/afrims/**. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

Chapter 1

SCOPE

1.1. General. This handbook explains doctrine and procedures to guide commanders and FES personnel at all levels in protecting mission resources during contingencies. These contingencies may include but are not limited too; major combat operations, humanitarian relief operations, responses to man-made or natural disasters, etc. These operations may occur at bare bases, forward operating locations, co-located bases, or aerial ports.

1.2. Mission. The Air Force FES mission is to prevent fires, minimize injuries and loss of life and property, and alleviate negative impact to the environment occurring in periods of peace, war, and humanitarian support operations. Included are both man-made and natural incidents; fire suppression and hazard mitigation, rescue, mitigation or containment of releases of hazardous materials (HAZMAT), such as chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) agents, resulting from industrial accidents, terrorism, or weapons of mass destruction (WMD); and emergency medical support.

1.3. Contingency Firefighting. During contingency operations, firefighting forces are the primary installation emergency response team and are responsible for supporting the commander's primary requirement to launch and recover sorties. To meet this requirement, FES operations may differ from normal peacetime operations. The information contained herein will assist commanders and firefighters in understanding the risks and calculated assessments required to sustain the contingency FES mission. Typical contingency manpower and resources are based on the War Mobilization Plan, Volume 1 (WMP-1), CE Supplement, Appendix 5 (for wartime planning), or AFPAM 32-2004, *Aircraft Fire Protection for Military Operations Other Than War (MOOTW),* (short duration operations generally less than 120 days). **Note:** The primary contingency FES mission is to support sortie generation; protecting critical, high priority components supporting the flying mission is secondary. Decision-makers at all levels must be informed when FES resources or capabilities are below standard requirements, including reduced manning, vehicle, equipment, and agent levels. Since home station FES resources are shared to sup-

port contingency operations, risk management must be employed more aggressively due to the reduced FES resources at both home stations and contingency locations. Additional risk is expected at both locations.

1.4. LIMFACS. Firefighters may have limited capabilities or resources during contingency operations (especially during initial stages of a deployment). The amount of resources common to peacetime operations, such as manpower, vehicles, agents and equipment, may not be available.

1.4.1. UTCs do not exist separately for training, logistics, Fire Alarm Communications Center (FACC), or extinguisher maintenance. These functions may be performed by shift personnel as additional duties during contingencies. Additionally, unique contingency tasks such as security, shelter management and Contamination Control Area (CCA) operations will also be the responsibility of shift personnel until follow-on forces arrive. Fire chiefs must prioritize the functions of the flight during risk assessment so sortie support is not compromised during the initial stages of a deployment.

1.4.2. Emergency response capability is greatly reduced when operating in the Joint Firefighter Integrated Response Ensemble (JFIRE) due to the ensemble placing additional physical burdens on the firefighter. Physical challenges related to JFIRE include increased weight, thermal burden, increased difficulty breathing through the C-2 canister, the need for increased work-rest cycles (WRC) and rehabilitation difficulties after an emergency response. These LIMFACS must be considered during emergency operations. Expectations from firefighters must be reduced and a focus on protecting only the highest priority resources.

1.4.3. Lack of adequate water supply will limit FES capability.

1.4.4. Fire vehicles carry required fire fighting agents and firefighters to the scene of the fire. Reductions in vehicles diminish response capability.

1.4.5. FES resources will be vulnerable to attack until splinter protection, hardening and contamination avoidance measures are in place. This includes resources such as fire facilities, vehicles, communications equipment, personnel, rescue equipment, extinguishing agents and personal protective equipment (PPE).

1.4.6. Limited supplies of extinguishing agents (Aqueous Film Forming Foam (AFFF), dry chemical, and water) will hinder or prevent operations to extinguish fires involving petroleum, oil, and lubricant (POL) tanks or aircraft.

1.4.7. Enemy attack may include CBRNE or ground attack by enemy forces. Consequently, unexploded ordnance (UXO) can delay fire response. The senior fire officer (SFO) must ensure UXOs blocking access to mission essential assets are cleared by explosive ordnance disposal (EOD) personnel as soon as possible. In this environment, firefighters must perform explosive ordnance reconnaissance (EOR) after an attack and during responses that will cause delays. These delays may allow fires to progress prior to FES arrival, increasing the need for larger amounts of firefighting agents. If appropriate, the SFO may allow some fires to burn to save resources for higher priorities or to avoid unreasonable risk to firefighters.

1.4.8. The absence of armored firefighting vehicles limits responses to areas inside the fence in hostile environments where attacks "outside the wire" are expected. Responses outside the wire will only occur with approval of the installation commander and follow guidelines established for such responses. Procedures for outside the wire operations must be prepared and approved at the beginning of operations.

Chapter 2

RESPONSIBILITIES AND SUPPORT

2.1. Installation Commander. Installation commanders will establish and execute comprehensive installation FES programs. These programs execute Department of Defense Instructions (DODI) 6055.06, *DoD Fire and Emergency Services (FES) Program,* DODI 6055.6-M, *DoD Fire and Emergency Services Certification Program*, AFPD 32-20, *Fire Emergency Services,* and AFI 32-2001, *Fire Emergency Services Program*.

2.2. Transportation. The SFO will submit requests to:

2.2.1. Provide fire vehicle mechanics.

2.2.2. Accomplish fire vehicle repairs in fire station or dispersal locations.

2.2.3. Provide replacement fire vehicles and parts as required. Replacement parts receive the highest force activity designator (FAD) assigned to the mission being supported if the part renders a fire vehicle out of service or in a limited service status.

2.3. Supply, Contracting and Finance Functions. All supplies and firefighting equipment may be provided through local vendor services and contracts. Firefighting equipment must be National Fire Protection Association (NFPA) compliant. All requisitions for critical FES equipment must be equal to the highest FAD assigned to the mission being supported. Submit requests to:

2.3.1. Provide firefighter rescue, PPE and other supplies.

2.3.2. Provide JFIRE component replacements in sufficient quantities to accommodate existing or inbound firefighters.

2.3.3. Maintain and protect firefighting agent special levels.

2.3.4. Provide firefighting agents as required.

2.4. Services. The SFO submits requests to:

2.4.1. Provide billeting for firefighters. Firefighters may be dispersed to minimize the impact of enemy attacks. Response capability impacts must be considered when making this determination.

2.4.2. Provide food services to firefighters.

2.4.3. Assist in posting fire reporting, prevention and safety information in life support areas (LSAs) and work areas.

2.5. Personnel Support for Contingency Operations (PERSCO). The SFO submits requests to:

2.5.1. Make emergency manpower requests through the AOR FES functional manager.

2.5.2. Brief fire prevention, emergency reporting and other safety procedures during in processing.

2.6. Communications. The SFO submits requests to the communications function to install and maintain the FACC communications network.

2.7. Security Forces (SF). The SFO submits requests to SF to provide physical and emergency services as necessary.

2.8. Civil Engineers (CE). The SFO submits requests to CE to:

2.8.1. Provide EOD services on a priority basis when UXOs hinder FES response.

2.8.2. Provide power production and barrier maintenance expertise for generator support and barrier reset operations.

2.8.3. Assist with large-scale decontamination of FES assets.

2.8.4. Provide required emergency management support elements.

2.8.5. Provide a high priority for splinter protection and hardening, and contamination avoidance measures of FES assets.

2.8.6. Provide, maintain and improve firefighting water supplies.

2.9. Fuels. The SFO submits requests to the fuels function to:

2.9.1. Service FES vehicles and equipment.

2.9.2. Provide POL storage area familiarization training to firefighters.

2.9.3. Assist in fuel transfer operations and provide expertise in the event of a POL storage area incident.

2.10. Unit Control Centers (UCC). UCCs ensure that:

2.10.1. All personnel are trained in fire prevention, reporting, and safety procedures and responsibilities (see **Attachments 4** and **7**).

2.10.2. All HAZMAT storage facilities are limited to only those necessary to accomplish the mission.

2.11. Contingency Response Group Element (CRGE). The SFO submits requests to the CRGE (formerly known as Tanker Airlift Control Element [TALCE]) to:

2.11.1. Provide information/support on air flow movement.

2.11.2. Provide information on aircraft parking.

2.12. Base Operations (Airfield Management). The SFO submits requests to:

2.12.1. Obtain flightline licensing.

2.12.2. Obtain airfield layout maps.

2.12.3. Obtain daily flying schedule.

Chapter 3

PLANNING GUIDANCE

3.1. Introduction. The focus of fire resources in wartime or during contingencies is fire prevention and fire fighting. Fire prevention focuses on preparing occupants and operators to operate safely to prevent fires and detect and intervene early at fires that occur. The fire fighting element protects weapons systems and facilities needed to accomplish the mission. A critical first step is to develop a list of priorities at the site. This is a corporative effort with the Emergency Management element. At some locations, aircraft may be the highest priority for protection while at others, facilities may be more critical than aircraft. Wartime staffing assumes operating from a central fire station where all resources are based. It also assumes that only one major emergency event will occur at a time. Risk assessment and management procedures, response time standards and operational procedures are similar to home station operations. FES response strategies may be complicated by the presence of chemical agents, antipersonnel devices, and munitions. FES capability must be included in appropriate base recovery plans.

3.2. Force Packages. Firefighters are postured into force packages identified by unit type codes (UTC).

3.2.1. The 6-person Fire Operations team (4FPFP) is the basic building block. It provides the manpower to manage emergency operations, including staffing fire trucks and communications centers.

3.2.2. The 2-person Incident Command team (4FPFJ) provides mid-level supervision and incident command for firefighting operations.

3.2.3. Fire Management teams (4FPFN/4FPFA) serve as the fire chief/ flight chief and provides overall FES flight management. The teams establish and maintain FES capability and serve as the principle fire risk manager and advisor to senior leaders minimizing loss of life and property.

3.2.4. The 2-person Fire Inspection Prevention team (4FPFG) provides fire inspection and prevention capability.

3.2.5. The 3-person 4FPS4 team provides command and control (C2)-level staff assistance at a Numbered Air Force, MAJCOM Headquarters, or forward operating location (FOL).

3.2.6. **Attachment 10** lists the FES UTC MISCAPS for quick reference; however, when MAJCOM planners source contingency manpower and vehicle requirements use the most current UTCs found on the CE UTC Management Community of Practice (CoP) website at: **https://afkm.wpafb.af.mil/ASPs/CoP/EntryCoP.asp?Filter=OO-EN-CE-23**.

3.3. Vehicles and Equipment. Fire vehicles and equipment may be in-place or pre-positioned. SFOs identify shortfalls in firefighting vehicles and equipment through an analysis of operations at the site. Where shortages exist, vehicles may be leased with adequate lead time; when lead time is not available, vehicles may be tasked from home station fleets and backfilled with leased vehicles as soon as possible. Additional vehicles and support equipment may be needed at any stage of a conflict. **Note:** Functional expertise is available from the Headquarters Air Force Civil Engineer Support Agency (HQ AFCESA) Readiness Operations Center at: DSN: 523-6229; Commercial: (850) 283-6229, Duty Officer: (850) 624-7446, and Tyndall AFB Command Post: DSN: 523-2155.

3.3.1. **Table 3.1** lists the required core set of vehicles to provide FES flights the capability to protect Air Force people, property and missions:

Table 3.1. FES Core Vehicles

Vehicle Type	Vehicle
ARFF - Provides combinations needed to deliver the required quantity of agent from Table 5.2.	P-19 (1,000 gallons) Striker (1,500 gallons) P-23 (3,300 gallons) TI-3000 (3,000 gallons)
Rescue	P-10 P-28 P-30

Structural Pumper	P-22
	P-24
Water Tender	P-18
	P-26
C2	4x4 Carry All
Support	1 Ton W/Lift

3.3.2. During wartime the number of aircraft rescue and fire fighting (ARFF) vehicles required varies according to the size of aircraft assigned to the installation or the size of aircraft at the installation more than 50 percent of the time. **Table 3.2** indicates the ideal core set of vehicles and personnel UTCs required for fire ground operations. Note: Table 3.2 applies to wartime operations only. For determining manpower and equipment requirements for all other contingencies, refer to AFPAM 32-2004.

Table 3.2. Aircraft Category Matrix

Wartime Category	**Agent Required (DODI 6055.06)**	**Vehicles to deliver the Agent**	**Manpower UTCs**
Category 4 (C-5A/B)	12,626	4 P-23 (3K), 1 P-19 (1.5K), 1 P-22/P-24 (PUMPER), 1 P-30 (RESCUE), 1 P-26 (TANKER), 1 C2	1 4FPFA, 1 4FPFN, 2 4FPFJ, 11 4FPFP, Total: 72
Category 3 (E-4, B-2, KC-10)	9,570	3 P-23 (3K), 1 P-19 (1.5K), 1 P-22/P-24 (PUMPER), 1 P-30 (RESCUE), 1 P-26 (TANKER), 1 C2	1 4FPFA, 1 4FPFN, 2 4FPFJ 10 4FPFP, Total: 66
Category 2 (B-1, B-52, C-17)	7,780	2 P-23 (3K), 2 P-19 (1.5K), 1 P-22/P-24 (PUMPER), 1 P-30 (RESCUE), 1 P-26 (TANKER), 1 C2	1 4FPFA, 1 4FPFN, 2 4FPFJ, 9 4FPFP, Total: 60

Category 1 (F-16 to C-130)	4,880	1 P-23 (3K), 2 P-19 (1.5K), 1 P-22/P-24 (PUMPER), 1 P-30 (RESCUE), 1 P-26 (TANKER), 1 C2	1 4FPFA, 1 4FPFN, 2 4FPFJ, 8 4FPFP, Total: 54

Notes:
1. Use **Table 3.1** to determine substitute vehicles when the ideal vehicles are not available.
2. Availability of P-23s is limited. P-19s, available in large numbers, may be used to fill the requirement but will require more vehicles and additional personnel UTCs. Add a 4FPFP for every two ARFF vehicles above the number required for P-23s. For example, at a Category 2 installation using P-19s instead of P-23s, 6 vehicles would be required, 2 more than required for P-23s. One additional 4FPFP UTCs would also be required.

3.3.3. For unique situations such as AF installations without assigned aircraft, installations where only rotary wing or unmanned aircraft are assigned, or large installations that require more than one fire station to meet emergency response time standards, consult the appropriate command/theater fire chief for assistance.

3.4. Operational Risk Management (ORM).

3.4.1. Risk requires a subjective assessment of the probability that an FES emergency event will occur, and the expected severity of such an event. The probability factor relies heavily on historic emergency response data to predict future events. But for contingency operations, historical data is not available and assumptions must be made on which to estimate risk.

3.4.1.1. Probability. Anecdotal information indicates that fire emergency events are more probable during contingencies due to the intensity of aircraft operations, temporary construction and the potential for enemy actions (such as aircraft battle damage).

3.4.1.2. Severity. The severity of fire emergency events is expected to greater than for home stations due to the use of combustible materials in temporary construction and temporary wiring.

3.4.2. Risk management primarily involves allocating resources according to the risk. Normally, resources are allocated according to the most probable time of day and day of the week that a fire emergency event will occur, from historic fire response data. This data may not be available at contingency locations. Consequently, the assumption during initial operations is that the risk is static and the same level of capability is maintained continuously. This assumption is for the first 120 days of operation then response data is assessed to determine if existing capability is still appropriate. For more information regarding risk management see AFI 32-2001, chapter 6.

Chapter 4

INSTALLATION FIREFIGHTING PLAN

4.1. Introduction. This chapter outlines tactics, techniques, procedures (TTPs), and generic guidelines to enhance the survivability of firefighters, vehicles, equipment and resources during contingencies. Provided is an overview of the FES functions and responsibilities in the contingency environment. In the absence of formal training and lesson plans, this section can be used to present training.

4.2. Planning Period. Upon arrival, the installation fire chief will create or review plans and execute training and actions required to implement those plans. Deployed firefighters take the following actions immediately upon arrival:

4.2.1. Establish fire emergency response posture.

4.2.2. Establish fire prevention, force protection and firefighter safety programs.

4.2.3. Work with emergency managers to determine response priorities.

4.2.4. Communicate risk and capability issues to the installation commander. For more information regarding reporting level of service capability see AFI 32-2001, chapter 6.5.

4.2.5. Determine and coordinate response capability available in the Emergency Management (EM) flight. EM personnel may have HAZMAT response capability (training and equipment) that can help during these types of response.

4.3. Chain of Command. The fire chief must establish the internal chain of command, determine the installation's chain of command and disseminate the information to all firefighters.

4.3.1 Functional Chain of Command. The fire chief's geographic AOR dictates functional area reporting to the appropriate MAJCOM. For Joint Task Force (JTF) operations, operational control (OPCON) will be assumed by the

JTF Commander. Administrative Control (ADCON) will be retained by the designated USAF functional manager.

4.4. Intelligence. Obtain current intelligence threat assessments of potential adversary's ability and intent to attack the installation, including the use of WMD. Accurate information enables fire chiefs to tailor defensive pre-planning and TTPs to mitigate the consequences of an attack.

4.5. Firefighter Safety and Health. To the maximum extent possible, NFPA 1500 shall apply during wartime and contingency operations. When compliance is not possible, ORM processes must be used to deviate from NFPA requirements. Everything possible must be done to protect firefighters but mission comes first, which may require doing operations during war that would not be done when at peace. However, operations or tasks that cannot be performed safely will not be undertaken.

4.6. Long Term Planning. When intelligence indicates the deployment may become "steady state," the fire chief must begin long term planning after initial establishment of the installation. This requires the fire chief to evaluate the resources in place to determine if they meet established standards. If additional resources are required, plans to fix shortfalls must be communicated to leadership. Plan to improve facilities and obtain proper manpower, vehicles, and equipment for the fire station. Consider water distribution systems, utilities, systems, command and control facilities, etc.

4.7. Plans. Plans include, but are not limited to, installation support, mobilization, contingency response, fire prevention, training, and pre-fire plans.

4.7.1. Conducting local training is critical. Existing lesson plans may be utilized and new lesson plans developed as necessary.

4.7.2. To the greatest extent possible, establish dispersal locations and obtain shelter assets. Place assets indoors and utilize natural covering (ditches, trees, hillsides, trenches, etc.) as much as possible. All dispersal sites will be splinter protected and hardened if the threat dictates. Use contamination control procedures and provide appropriate levels of contamination avoidance measures on these locations (see **Attachment 2**).

4.7.3. If the treat dictates, harden and splinter-protect all non-dispersed fire assets, including the FACC and communication network as required. Do not overlook supplies, station generators, and fuel containment dikes.

4.7.4. Conduct pre-fire planning and train on mission assigned aircraft and priority facilities as soon as possible.

4.7.5. Establish fire prevention, reporting, education and safety programs.

4.7.6. Train facility occupants in first aid firefighting to enable them to extinguish fires in the initial stages.

4.7.7. Survey water supplies for emergency use. Include both on and off installation locations to include swimming pools, lakes, rivers, towers, tankers, pumps, wells, and basic expeditionary airfield resources (BEAR) mobile water distribution systems. Construct expedient access routes made of dirt or gravel and install dry hydrants and pumps as necessary to expedite re-supply operations.

4.7.8. Coordinate with POL personnel to ensure drainage, dikes and holding areas are in place. Dikes should hold 1.5 times the container's capacity. Survey possible fuel holding or tank drainage diversion areas where spilled fuel can be burned off. Identify fuel transfer possibilities and determine if AFFF inventories are adequate for the amount of fuel stored.

4.7.9. Inventory all firefighting agents and equipment; request high priority fills for shortfalls through local supply channels and the contracting officer.

4.8. Attack Preparation Period. The following action will be taken:

4.8.1. Maintain accountability of all personnel.

4.8.2. Establish a recall roster and system to accomplish the recall.

4.8.3. The SFO initiates appropriate checklists (see **Attachments 2** thru **9**).

4.8.4. Establish the FACC.

4.8.5. Define what assets are available and determine what resources are needed to support the mission while meeting appropriate Air Force standards. Initiate shortfall requests through appropriate channels. Additional firefighting

agents, clothing, equipment and supplies may be procured through supply channels (establish good working relationships with Contracting and Finance).

4.8.6. When the treat dictates, firefighters will be issued chemical warfare ensemble and nerve agent antidote based on the associated threat conditions. Firefighters must be prepared to utilize the JFIRE ensemble.

4.8.7. Issue weapons as threat conditions dictate. Use selective arming as necessary.

4.8.8. Initiate dispersal plan as threat conditions warrant.

4.8.8.1. Disperse support assets (tools/equipment, emergency water storage [EWS], mobile air compressor, etc.) and implement physical/chemical contamination avoidance actions to maximize survivability.

4.8.8.2. Disperse vehicles and agents (see **Attachment 2**). Correct deficiencies on vehicles/agent status.

4.8.8.3. Vehicles will remain sheltered as much as possible. Vehicles may relocate with the approval of the SFO.

4.8.9. Implement survivability measures to include contamination control for vehicles and equipment. Black out/tone-down/splinter and chemical contamination avoidance measures will be implemented for the following resources:

4.8.9.1. Fire Station (FACC communications network is a very important priority). Include radio antenna and repeater as applicable.

4.8.9.2. Dispersal sites and personnel bunkers.

4.8.9.3. EWS sites supplementing existing emergency water sources.

4.8.9.4. Agent/equipment dispersal.

4.8.10. Determine availability of installed fire suppression systems.

4.8.11. Identify communication services for major work centers (i.e. building location, and telephone numbers) (see **Table A9.4**).

4.8.12. Establish the FACC and Alternate FACC.

4.8.12.1. Establish FACC work shifts.

4.8.12.2. The SFO will:

4.8.12.2.1. Confirm and account for all firefighting resources prior to actual response.

4.8.12.2.2. Maintain overall firefighting, fire vehicle, and equipment status.

4.8.12.2.3. Receive installation control center directives and disseminate to firefighters.

4.8.12.2.4. Take necessary actions to reverse or limit any degradation to the FES mission.

4.8.12.2.5. Ensure incident response reporting procedures are in place.

4.8.12.3. The FACC will maintain up to date information on the following:

4.8.12.3.1. Fire vehicles by call sign, type, registration number, and status.

4.8.12.3.2. Dispersal points of all resources and crew accountability.

4.8.12.3.3. Quantities and location of firefighting agents.

4.8.12.3.4. Installation map to chart blocked roads, craters, UXO's, CBRNE zones, air base defense (ABD) sectors, and utility status.

4.8.12.3.5. List of static water locations and approximate amounts available.

4.8.12.3.6. Logbook will be used to document significant events.

4.8.12.3.7. Installation priority listing.

4.8.12.4. The FACC communications network is critical to the success of the FES mission and recovery operations. Every attempt should be made to obtain the following communications devices:

4.8.12.4.1. Primary and Secondary Crash line.

4.8.12.4.2. Fire reporting lines.

4.8.12.4.3. Direct Line or dedicated line to appropriate work centers (e.g., UCC).

4.8.12.4.4. Administrative line (two or more is preferred).

4.8.12.4.5. Portable radios/batteries/charger(s).

4.8.12.4.6. Back-up generator with auto-start and transfer capability.

4.8.12.5. The alternate FACC may be activated at any time. Checklists, reference material, supplies, and communications equipment should be maintained for this purpose.

4.8.12.6. Communication disruption/outages.

4.8.12.6.1. If communication systems fail, the following may be implemented:

4.8.12.6.1.1. Portables/mobile radios.

4.8.12.6.1.2. Alternate frequency.

4.8.12.6.1.3. Direct lines and runners.

4.8.12.6.1.4. Cellular telephones.

4.8.12.6.2. A complete list of telephone numbers will be maintained in the FACC and command vehicles.

4.8.12.6.3. If an authentication matrix is used, see **Attachment 3**.

4.8.13. Operations.

4.8.13.1. Shift schedules will be determined by the SFO. Manpower authorizations are predicated on firefighters working 84 hours per week (12 or 24 hour shifts continuously). However SFOs are not bound by this concept and may vary the work schedule as the risk dictates. Some considerations are: Ops TEMPO, manning levels, weather conditions, wear of PPE in chemical environment, variations in risk, etc. It should be noted that the mission may require periods when firefighters will work for extended shifts. However, extended shifts should only be considered for limited periods when needed due to reduced manning levels and mission requirements. Working extended shifts significantly increases risk to firefighter safety. For deployments over 90 days, work schedules should be adjusted to 72 hours per week where possible. **Note:** Crews will be rotated in a manner as to reduce their vulnerability to enemy attack.

4.8.13.2. The SFO should establish response priorities based on the installation's emergency management plans, manning/ equipment status and mission requirements. Consider things such as aircraft, structural, fuel spill, and munitions incidents.

4.8.13.3. As the threat escalates, firefighters may operate from dispersed locations.

4.8.13.4. JFIRE may be required.

4.8.13.5. Shift change will be as prescribed by the SFO and IAW local directives/operating instructions (OI).

4.8.13.5.1. Assistant Chiefs (A/C) will manage shift change.

4.8.13.5.2. All firefighters must be informed of mission-oriented protective posture (MOPP) level, threat condition and intelligence updates at shift change.

4.8.13.6. Crew Rotation.

4.8.13.6.1. Each firefighter will be assigned to a specific vehicle. At the beginning of each shift, firefighters will report to their assigned vehicle at the A/Cs direction.

4.8.13.6.2. Normally, shift change will occur in the fire station; however, during dispersed operations the SFO will rotate crews when safely possible.

4.8.13.6.3. Accountability for all crews and vehicle status will be accomplished by the SFO immediately following shift change.

4.8.13.7. If firefighters are unable to report to their pre-designated location due to hostile activity, they will assemble in an area designated by the SFO. Transportation to their assigned vehicle will be arranged by the SFO as situation permits.

4.8.13.8. Off duty personnel will report to their assigned billets for rest and recuperation. The senior member must maintain accountability of all off-duty firefighters.

4.8.14. Responses and Standbys.

4.8.14.1. At heightened threat conditions, the SFO may need to coordinate all responses with the EOC.

4.8.14.2. Under SFO direction, the FACC will dispatch incidents using selective response procedures based on priority of asset.

4.8.15. Other Requirements.

4.8.15.1. Be prepared to selectively arm personnel as threat dictates.

4.8.15.2. Issue authentication matrix to each crew.

4.8.15.3. Secure personnel and departmental records and documentation in a protected shelter or area.

4.8.15.4. Arriving firefighters will receive necessary briefings and billeting during in-processing. A FES supervisor will be dispatched to the receiving area to ensure a smooth transition.

4.9. Attack Response Period. This is the time period during an attack or hostile activities that firefighting and rescue activities will be limited. Survivability is the main priority while mission sustainment is the primary objective.

4.9.1. Upon notification that an airfield attack is imminent, the FACC will alert dispersed fire crews. Crews must be attentive to indications of a change in alarm condition and report pertinent information to the FACC (e.g., observing personnel taking cover, changes in displayed flags, giant voice announcements, gunfire, bomb bursts, etc). If differences in alarm conditions exist, take cover until the difference is resolved.

4.9.2. Personnel actions.

4.9.2.1. Firefighters must be protected with the appropriate individual protective ensemble (IPE) according to current alarm conditions. They must be able to instantly cease any operation and take immediate cover in the event of an attack. Be alert to surprise and re-attack possibilities. Always be aware of the nearest personnel bunker.

4.9.2.1.1. Unless specifically directed by the SFO, do not perform any rescue/ firefighting operations except immediate area self-aid and buddy care (SABC) while attack is occurring.

4.9.2.1.2. If away from dispersal site when an attack occurs, DO NOT attempt to return to the dispersal location. Stop and take appropriate cover where you are.

4.9.2.2. Personnel in vehicles not in splinter protected facilities will seek the best available protection in their area.

4.9.3. Communications will be kept to an absolute minimum during and immediately after attacks. During the attack, firefighters should provide size, activity, location, uniform, time, and equipment (SALUTE) reports to the SFO.

4.10. Attack Recovery Period.

4.10.1. Dispersed crew actions.

4.10.1.1. Upon notification that an attack is over, fire crews will immediately account for crew members, perform SABC as required, perform a thorough UXO sweep, check for damage/contamination, and verify status/condition of assigned assets. Report status to the FACC once completed.

4.10.1.2. Note UXO locations.

4.10.1.2.1. Remain at least 300 feet from UXOs; do not transmit hand-held radios within 25 feet of UXOs or 100 feet for mobile radios.

4.10.1.2.2. Identify, mark, and report all UXOs to the FACC IAW AFMAN 10-100, *Airman's Manual*.

4.10.1.2.3. Make note of other UXO reports as this may alter pending response routes to future emergencies/incidents.

4.10.1.3. Note improvised explosive device (IED) locations.

4.10.1.3.1. Withdraw all non-essential personnel IAW AFMAN 10-100. Personnel will be behind or under cover.

4.10.1.4. IAW AFMAN 91-201, *Explosives Safety Standards*, minimum withdrawal distances for IEDs are:

4.10.1.4.1. 500 feet if IED is a small item or box (up to 2 cubic feet).

4.10.1.4.2. 1,000 feet if IED is a barrel or car (up to 15 cubic feet).

4.10.1.4.3. 1,500 feet if IED is a van or truck.

4.10.1.4.4. 2,000 feet if IED is larger than already described.

4.10.1.4.5. Responding command authorities and EOD personnel will evaluate and adjust distances if needed. Withdrawal distances are for initial evacuation until command authorities and EOD personnel evaluate the incident.

4.10.1.5. Report facility/asset damage.

4.10.1.6. Report personnel injuries.

4.10.1.7. Inspect/report M-8 and M-9 readings on vehicles and dispersed assets.

4.10.1.8. Conduct operational decontamination as required.

4.10.2. Firefighting Actions.

4.10.2.1. When directed, fire crews will proceed to the incident site.

4.10.2.2. All responses by firefighting vehicles will be made IAW local guidance. Pre-fire plans will be utilized at the scene of facility and aircraft fires.

4.10.2.3. Responding crews will report their observations to the FACC.

4.10.3. SFO actions.

4.10.3.1. The SFO/FACC will immediately announce alarm condition changes and initiate an after attack vehicle/equipment/personnel status check.

4.10.3.2. Mission sustainment and firefighter safety is the SFO's primary concern. It may not be possible to extinguish every fire and perform every rescue, prudent judgment on when and how to engage firefighting forces is paramount to the success of our mission. The SFO directs the allocations of firefighting resources in concert with command priorities and current mission sustainment and installation recovery operations. In the event of multiple responses, the commander and the SFO must coordinate on which fires to let burn and which to engage; which rescues to perform and which to leave to SABC. Decisions

are usually made in relation to sortie generation and aircraft recovery, depending on current response capabilities/commitments.

4.10.3.3. The FACC will establish an effective flow of communications between the SFO, appropriate work centers, and firefighting crews.

4.10.3.4. The SFO exercises primary control of responding vehicles. Normally, the A/C will command the fire ground; however, crew chiefs may perform this function on multiple incidents. The following considerations govern what vehicles, if any, are dispatched to incidents:

4.10.3.4.1. Equipment/agent availability.

4.10.3.4.2. Alarm condition.

4.10.3.4.3. Access to incident.

4.10.3.4.4. Firefighting crew status.

4.10.3.4.5. Priority.

4.10.3.4.6. Physical security.

4.10.4. Responses.

4.10.4.1. The EOC director, through the SFO, approves responses before dispatch. Responding crews will not deviate from their assignment to render assistance at other incidents. They will however, report their observations to the FACC. Resource priorities are listed in the facility priority list; this must be maintained in the FACC and as required by the SFO.

4.10.4.2. When necessary, use the authentication matrix prior to responding to validate all responses or orders (see **Attachment 3**).

4.10.4.3. If damages exceed firefighting capability, the SFO will request “Let Burn” approval from the EOC director.

4.10.4.4. Interior fire operations should only be attempted if there is high probability for successful fire stop to a mission essential asset or rescue.

4.10.4.5. Debris, UXOs and other hazards may hinder response. Make every attempt to stay on the hard surface. If possible, do not drive or walk through

contaminated areas, puddles or vapors; find an alternate route. If leaving the hard surface becomes necessary, use spotters in front of the vehicle to sweep for UXOs.

4.10.5. Re-attack actions.

4.10.5.1. The SFO must consider ceasing all operations that are not mission essential.

4.10.5.2. Crews should evaluate the location/status of available cover at every incident site.

4.10.5.3. At the conclusion of the re-attack, revert to attack recovery actions.

4.10.6. Communications.

4.10.6.1. Plans should be in place in the event the FACC is destroyed.

4.10.6.2. In the event the primary FACC is inoperable, the FACC operator will re-locate to the alternate FACC.

4.10.6.3. If all communication channels are jammed or inoperative for any reason, communications between firefighting units will be by any means available (i.e., portables/mobile radios, alternate frequency, direct lines and runners, cellular telephones, public address systems, etc).

4.10.6.4. A verification matrix will be distributed to each vehicle to verify information passed over the radio net. This matrix will be changed if compromise is suspected.

4.11. Administration and Logistics.

4.11.1. Vehicle and manpower calculations can be made utilizing the appropriate Air Force publications. Shortfalls must be up channeled through the appropriate authority.

4.11.2. Manpower replacements must be made through PERSCO and coordinated through the commander.

4.11.3. Firefighting equipment and agents may be obtained locally. Quickly identify shortfalls and request through local established procedures.

4.11.4. Make sure Supply maintains a sufficient amount of special level stock items (e.g., bunkers, AFFF, dry chemical, JFIRE, etc).

4.11.5. Consider using local vendors to fill equipment or agent (resources) shortfalls. Contracting and/or Finance liaison officers may be available for assistance when using vendor services.

4.11.6. When appropriate add critical contractors to the entry access list i.e., HAZMAT clean up companies, fire truck maintenance, etc.

4.11.7. Consider mutual aid agreements when feasible.

Chapter 5

JFIRE CONCEPT OF OPERATIONS (CONOPS)

5.1. General. The purpose of this chapter is to establish procedures for utilizing the JFIRE in CBRN environments.

5.1.1. JFIRE is designed specifically for a wartime mission that allows firefighters to operate in CBRN environments, engage fires, effect rescue and transition between filtered air and supplied air.

5.1.2. LIMFACS. The firefighter is using two complete protective ensembles when using the JFIRE, a proximity firefighting suit and a battle dress overgarment (BDO). This causes increased physical stress for the firefighter. Rehabilitation after engaging in emergency response is necessary.

5.2. Concepts.

5.2.1. Exterior.

5.2.1.1. The main firefighting objective is to minimize the spread of fire to exposures, especially those that have a direct impact on the mission. Firefighting is normally accomplished using vehicle turrets or master streams.

5.2.1.2. Firefighters may assume MOPP 4 non-firefighting posture or MOPP 4 firefighting posture as determined by the SFO.

5.2.2. Interior (Immediately Dangerous to Life and Health [IDLH] area).

5.2.2.1. Offensive interior operations will only be conducted when necessary to save mission critical assets or to rescue personnel and will only occur when directed by the SFO.

5.2.2.2. Prior to entry, the attack crew or incident commander (IC) will announce that entry is being made. At this time the FACC will acknowledge the entry and announce “Start the 5-Minute Tick.” The 5-Minute Tick guidelines are as follows:

5.2.2.2.1. As soon as the attack crew makes entry, a 5-minute countdown will begin and the FACC will maintain the count. At the 5-minute mark, the FACC will inform the IC that the 5-Minute Tick has expired. The IC will ensure the

interior crews are informed. At this time, communications between the attack crew and IC become critical. The IC requires a status report that can help him/her make a tactical decision as to whether or not to continue interior fire attack.

5.2.2.2.2. At the 10-minute mark, the FACC will again inform the IC and, in turn, the attack crew. The IC will also advise the interior crew to complete their task or withdraw at the 15-minute mark.

5.2.2.2.3. At the 15-minute mark, the attack crew may be ordered to withdraw from the facility for rehabilitation. If there is a delay in withdrawal, the IC will employ the rapid intervention team (RIT). The RIT can perform other fire ground duties as long as they do not hinder their primary objective of providing rescue for the attack team if required.

5.3. Procedures. Complete procedures for employing the JFIRE are contained in T.O. 14P3-1-181, *Joint-Firefighter Integrated Response Ensemble (J-FIRE)*.

5.4. Work/Rest Cycles (WRC). WRCs will be enforced for firefighters. WRC will be at the direction of the IC. As rest cycles do not exclude firefighting activities, priority responses are still likely to be mounting. However, the IC must consider the WRC when deciding attack modes and fire ground tasks. **Note:** Refer to **Chapter 8** for further guidance.

Chapter 6

CONTAMINATION AVOIDANCE AND DECONTAMINATION

6.1. General. This chapter establishes procedures for detecting contamination and subsequent decontamination.

6.2. Detection.

6.2.1. All personnel, vehicles, facilities, shelters and equipment will have M-8 paper/M-9 tape appropriately applied.

6.2.2. All personnel will carry M-8 paper for random sampling of specific items when necessary.

6.2.3. Notify the FACC when contamination is evident.

6.3. Operational Decontamination.

6.3.1. All dispersal sites should have the materials listed in **Table 6.1** on hand for decontamination.

Table 6.1. Suggested Decontamination Materials for Dispersal Sites.

Bucket	Bleach
Scrubbing brushes	Rags/sponges and/or wiping clothes
Plastic trash bags	M291/M295 kit
Bug sprayer	Decontamination mitt
Plastic bags	Rubber bands to seal self-contained breathing apparatus (SCBA) bottle connections

6.3.2. When contamination is suspected:

6.3.2.1. Report M-8 paper/M-9 tape readings to the FACC. Decontamination efforts should be limited to those actions necessary to meet mission requirements. Always minimize the risk of exposure and contact hazard to personnel and equipment.

6.3.2.2. When directed, contaminated personnel should report to a CCA for decontamination. All dispersal sites should be located so that the topography channels contaminated water away from the immediate area.

6.3.2.3. For minor contamination, spot decontamination procedures should be accomplished. Contaminated material should be placed in plastic bags for appropriate disposal.

6.3.2.4. For gross contamination, use bleach and water solution to decontaminate.

6.3.3. CCA Procedures. Follow applicable checklist in **Attachment 9**, A.9.1.

6.4. Barrier Material.

6.4.1. Calculate how much barrier material will be required to protect critical assets from chemical deposition.

6.4.2. Cover critical assets when directed by leadership IAW procedures listed in AFMAN 10-100 and follow local procedures after a chemical attack.

Chapter 7

DISPERSAL SITE PROCEDURES

7.1. General. Dispersal management is a means of physically tracking and protecting assets at dispersal sites.

7.2. Dispersal Site Procedures.

7.2.1. The oncoming shift crew will ensure items are inventoried at shift change. Annotate results and pass the information to the FACC.

7.2.2. Arrange resources to enhance their accessibility in shelters.

7.2.3. Dispersal sites should not be within 300 feet of a priority facility.

7.2.4. Terrain and prevailing winds should be considered when hardening/splinter protecting dispersal sites.

7.3. General Considerations.

7.3.1. Only one ARFF or structural vehicle should be dispersed to the same location. Tone down and properly mark all vehicles for chemical detection and avoidance.

7.3.2. Separate vehicles housed in the station as much as possible.

7.3.3. Arrange dispersal points so that not more than two sites are in a straight target line.

7.3.4. Disperse one ARFF vehicle so that it has a view of the active runway.

7.3.5. Firefighters will ensure vehicles and equipment are protected from direct attack. Each vehicle will be equipped with a first aid kit, UXO/contamination marking kit and an operational decontamination kit.

7.3.6. Contamination avoidance techniques will be utilized. All assets will be splinter protected, covered in plastic and marked with chemical detection material.

Chapter 8

HEAT EXHAUSTION AND WORK/REST CYCLES

8.1. Introduction. This section establishes guidance for making decisions on firefighter WRCs while operating in JFIRE ensembles. Successfully functioning in a contingency environment depends on understanding the factors contributing to heat stress, knowing and implementing the preventive measures, and maintaining constant observation of personnel for risk factors and signs of heat illness.

8.2. Responsibilities. All personnel will become familiar with the provisions of this section. All personnel should drink as much as possible and stay hydrated, during all MOPP conditions. Beware of existing climatic conditions and prepare and react accordingly. The SFO can alter these procedures if necessary.

8.2.1. SFO. The SFO will consider the circumstances of each incident and make adequate provisions early in the incident for a WRC, or rest and rehabilitation, for all personnel operating at the scene.

8.2.2. Crew Chiefs. All crew chiefs will maintain awareness of the condition of each member operating within their span of control and ensure adequate steps are taken to provide for each member's safety and health.

8.2.3. Firefighters. All firefighters should remain aware of the health and safety of other crew members.

8.3. Terms.

8.3.1. Dehydration. Following the loss of sweat, water must be consumed to replace the body's loss of fluids. If the body fluid lost through sweating is not replaced, dehydration will follow. Whenever consumption of water fails to keep up with output of sweat, the body will become progressively dehydrated. Thirst is a poor indicator of dehydration. Dehydration is possible without any signs of thirst; mental and physical performance can degrade so slowly that individuals may not recognize the problem in themselves or others.

8.3.2. Heat Exhaustion. This condition appears as marked fatigue and weakness, nausea, dizziness, fainting, vomiting, elevated body temperature, and disorientation. Factors that compound heat exhaustion are lack of acclimatization and failure to replace water lost in sweat.

8.3.3. Heat Stroke. This is a medical emergency that is caused when the body stops sweating, leading to loss of evaporative cooling and a dangerous rise in core temperature. It can include all of the signs and symptoms of heat exhaustion, but is more severe and can be fatal. One heat casualty is usually followed by others.

8.3.4. IPE. Insulating effects of IPE occur even when ambient temperature and humidity are relatively low. Variations to MOPP levels, such as opening or removing the jacket, or removing some or all of the firefighter proximity clothing, will reduce barriers to body cooling. Therefore, the SFO must conduct risk analyses to balance performing mission critical tasks, casualties due to actual CBRN threat, and degraded performance due to heat stress, dehydration, and bulkiness of the protective equipment.

8.3.5. Acclimatization. Un-acclimated personnel are those who have not built up a tolerance for working in a hot environment. They will experience degraded mental and physical performance and be highly susceptible to heat illness.

8.3.6. Physical Condition. Persons who are overweight or are poorly conditioned become fatigued more easily and do not adjust to working in excessive climatic conditions as quickly as those in good physical condition. Overweight and fatigue also impair the body's heat exchanging mechanisms.

8.4. Heat Illness Prevention.

8.4.1. The key to preventing heat illness and sustaining performance is knowledge of preventive measures. Utilize the heat stress index tables in **Table 8.1** for general guidance. Be aware these tables require temperature/humidity level input from a competent authority such as the weather flight for complete accuracy.

Table 8.1. Heat Stress Index.

TEMPERATURE DEGREES F.	RELATIVE HUMIDITY									
		10%	20%	30%	40%	50%	60%	70%	80%	90%
	104	98	104	110	120	132				
	102	97	101	108	117	125				
	100	95	99	105	110	120	132			
	98	93	97	101	106	110	125			
	96	91	95	98	104	108	120	128		
	94	89	93	95	100	105	111	122		
	92	87	90	92	96	100	106	115	122	
	90	85	88	90	92	96	100	106	114	122
	88	82	86	87	89	93	95	100	106	115
	86	80	84	85	87	90	92	96	100	109
	84	78	81	83	85	86	89	91	95	99
	82	77	79	80	81	84	86	89	91	95
	80	75	77	78	79	81	83	85	86	89
	78	72	75	77	78	79	80	81	83	85
	76	70	72	75	76	77	77	77	78	79
	74	68	70	73	74	75	75	75	76	77

Note: Add 10º F. when protective clothing is worn & 10 º F. when in direct sunlight

HUMITURE DEG F	DANGER CATEGORY	INJURY THREAT
BELOW 60	NONE	Little or no danger under normal circumstances
80 – 90	CAUTION	Fatigue possible if exposure is prolonged and there is physical activity
90 – 105	EXTREME CAUTION	Heat cramps and heat exhaustion possible if exposure is prolonged and there is physical activity
105 – 130	DANGER	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity
ABOVE 130	EXTREME DANGER	Heat stroke imminent!

8.4.2. Water is critical for maintaining health and individual performance, since the human body is highly dependent on water to cool itself in a hot environment. All water consumed must be from a medically approved source to prevent waterborne illnesses. All personnel should ensure there is an adequate supply of drinking water protected from biological and chemical fallout at each dispersal site. Canteens must be kept full; ensure individuals are trained on the proper techniques to fill canteens in a contaminated environment.

8.4.3. Increased sweating requires additional water consumption. As mentioned earlier, thirst alone is not a good indicator of adequate fluid intake. Personnel always need to drink before they feel thirsty. They must drink small amounts of water frequently rather than drink large amounts occasionally. When IPE is worn in an extreme heat environment, water requirements are more than 20 quarts per day.

8.5. WRC. To prevent a dangerous increase in body temperature, heat production must be minimized by reducing work pace and increasing rest periods. In very hot and humid conditions, reducing the duration of physical activity may be the only way to prevent dangerous increases in body temperature. WRC recommendations, as advised by AFMAN 10-100, are provided in **Table 8.2**. This table is to be used by the SFO when determining fire crew WRCs.

8.5.1. Allow personnel to seek relief periodically from potentially dangerous heat stress situations by resting in shaded or air conditioned areas (vehicle cabs), and by removing IPE and firefighter PPE. Rotating dispersed crews to the station for rest/rehabilitation will assist in affecting this means.

8.5.2. Even moderate exertion in MOPP gear can cause heat illness at lower Wet Bulb Globe Temperature (WBGT) indices. When IPE is worn, add 10˚ F to the measured WBGT index.

8.5.3. Avoid resting directly on the hot ground. The ground heated by the sun can be 30-45 degrees hotter than the air.

Table 8.2. WRC Guidelines.

WBGT Index	*Water Intake (qts per hour)*	*Work/Rest Cycle*
78 – 82	At least ½	Continuous
82 – 85	At least ½ - 1	50/10
86 – 88	At least 1	45/15
89 – 90	At least 1 ½	30\30
Above 90	At least 2	20\40

Notes:
1. WRC recommendations are based on personnel who are fully acclimatized, optimally conditioned, hydrated and rested.
2. If IPE/firefighter PPE is worn, add 10 deg F to the WBGT index.
3. Water intake shown supports WRCs. When WRCs cannot be applied due to mission critical requirements such as firefighting in support of sortie generation, add 1/2 to 1 more quarts per hour to values shown in table.
4. This guidance is not a substitute for common sense and experience; the appearance of heat casualties is a sure sign that the safe limit of work time has been exceeded and/or water consumption is inadequate.

Chapter 9

FIRE RESPONSE DURING ALARM CONDITIONS

9.1. General. This section establishes procedures for actions to be taken under alarm conditions of yellow, black and red/blue. FES actions when under attack require determining, within certain guidelines, the amount of firefighters and apparatus to respond to incidents. This section should be used to supplement locally developed checklists.

9.2. Alarm Yellow.

9.2.1. Implement MOPP as directed by the installation commander.

9.2.2. Conduct fire response as directed by the SFO.

9.3. Alarm Red/Blue.

9.3.1. Implement MOPP 4 or as directed by the installation commander.

9.3.2. If Alarm Red or Blue is declared, it is imperative that firefighters know what type of attack is occurring (e.g., tactical ballistic missile, aircraft, or special operations forces). The FACC or SFO must notify fire crews by radio of the type of attack. Firefighter actions based on the type of attack are as follows:

9.3.2.1. Tactical Ballistic Missile (TBM). Firefighters dispersed around the base will remain in their fire vehicles and assume directed MOPP. This action is based upon the concept that a TBM is not guided and has no predetermined target prior to launch. If a hardened facility or overhead shelter for the vehicle is nearby, it should be utilized. Personnel outside their fire vehicle during attack and unable to expeditiously return to their vehicle should seek shelter in the nearest hardened facility or overhead cover. Avoid the following locations:

9.3.2.1.1. Within 500 feet of aircraft.

9.3.2.1.2. Within 1,000 feet of POL or munitions storage facilities.

9.3.2.2. Aircraft Attack. Firefighters dispersed around the base will immediately exit their fire vehicle, seek shelter in a pre-constructed personnel bunker or hardened facility, and assume the directed MOPP. This action is

based upon the concept that attack aircraft have the ability to see targets on the ground. Avoid the following locations:

9.3.2.2.1. Inside/beneath fire trucks or any other vehicle.

9.3.2.2.2. Within 300 feet of a priority facility.

9.3.2.2.3. Within 500 feet of aircraft.

9.3.2.2.4. Within 1000 feet of POL or munitions storage facilities.

9.3.2.3. Special Operations Forces (SOF). Firefighters dispersed around the base will first determine where the SOF attack is occurring in relation to their location. Firefighters in close proximity to attack will either establish defensive fighting positions or leave the immediate area as soon as possible if it is safe to do so. Firefighters not in the SOF attack sector will monitor radio transmissions and be prepared to react if their sector becomes involved. Fire fighting activities should not be conducted in the attack area until it is declared secure by security forces.

9.3.3. Movement of FES vehicles during Alarm Red/Blue conditions will only be accomplished with direct authority of the SFO and EOC director. Unless directed, fire crews will remain in place during Alarm Red/Blue until told to proceed. Firefighters must remain vigilant for any attack related threat or damage to themselves and the installation. Any such threat noted will be radioed to the SFO for broadcast to other firefighters (use the SALUTE method of reporting as outlined in the Airman's Manual).

9.4. Alarm Black.

9.4.1. Implement MOPP 4 or as directed by the installation commander.

9.4.2. Following the declaration of Alarm Black by the EOC, firefighters are required to take an array of actions. First and foremost is to ensure the crew is not injured or otherwise affected by the attack. After determining the status of the crew, firefighters will report their status to the FACC. A thorough sweep of the immediate dispersal site is imperative. Crews should concentrate on those areas that could jeopardize their response to emergencies or their safety. All vehicles moving during Alarm Black must be coordinated and approved

by the EOC director. Crews will not move their vehicle unless directed by the SFO.

9.4.3. When performing standby duty, firefighters must be prepared to react to any given wartime scenario in case an Alarm Black is declared. Concerns such as condition of response routes to the standby, existing UXO and hostilities in the standby area must be addressed. Once on scene, full attention to the standby is paramount. Fire crews must be ready to react to any possible situations requiring their assistance. The following are two standby scenarios and actions to be taken during wartime standby situations.

9.4.3.1. There may be times when fire crews will have to perform standby while remaining at their dispersal location. Two examples of this situation are when there might be simultaneous standby requirements or when crews have been directed to remain in their dispersal location by the SFO. Fire crews will confirm the standby location and select the best possible response route based on current base situational reports of UXO, bomb craters and other response route factors. Crews must be prepared to respond in the appropriate MOPP condition and firefighting posture. Visual confirmation of standby from the dispersal site is most desired if possible. If this is not possible, crews will coordinate with maintenance control through the FACC.

9.4.3.2. The most desirable location for firefighters to perform standby operations is as close to the area as possible with an unobstructed view of the area. Crews must be prepared to respond should anything happen during the standby. Firefighters must locate an appropriate area to seek cover (e.g., hardened aircraft shelters [HAS] or other appropriate “safe areas”) should re-attack occur during the standby. If no adequate cover is available, firefighters will remain in their vehicle during a TBM attack and will exit the vehicle for protection during an aircraft attack. SOF attacks will be dealt with in one of two ways: firefighters will either return fire to combat SOF or leave the immediate area as soon as possible.

9.4.3.3. Ops-tempo may increase to the point where fire resources may not be available to meet established fire protection standards. When this occurs, implement ORM; consider optimum positioning of fire equipment, limiting aircraft maintenance or changing hours, etc.

9.4.3.4. SFO should utilize T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, for fire protection standby operation requirements.

9.5. Observing MOPP.

9.5.1. Firefighters will not reduce MOPP level until validated and directed by the SFO.

9.5.2. M-9 tape or simulated tape will not be applied to firefighter proximity gear.

Chapter 10

VEHICLE OPERATIONS

10.1. General. This chapter establishes procedures for FES vehicle operations.

10.2. Daily Maintenance.

10.2.1. Daily maintenance will be accomplished on each FES vehicle and recorded on the appropriate form immediately following shift change or as directed by the SFO.

10.2.2. Inspection completion and vehicle status will be provided to the FACC.

10.3. Agent Resupply.

10.3.1. If AFFF or dry chemical is used, notify the FACC for agent tracking.

10.3.2. Agent tanks will be topped off daily or as necessary.

10.4. Water Resupply.

10.4.1. If EWS tanks are used, notify the FACC for agent tracking.

10.4.2. Top off all EWS tanks when situation permits.

10.5. Safety.

10.5.1. Safe vehicle operation is of the utmost importance.

10.5.2. Observe posted speed limits and speed restrictions for runways, taxiways, and while operating around aircraft.

10.5.3. Only licensed and task qualified drivers will be allowed to drive while wearing the protective mask.

10.5.4. Local policy must be established for operating lights and sirens on emergency vehicles.

10.5.5. Extra caution and safety applies to driver operators while maneuvering in cantonment areas. These areas are massed with personnel and many times are poorly lit during nighttime hours.

10.6. Efficiency. Conservation of fuel and agent must be strictly observed.

10.7. Vehicle Maintenance, Repair and Refueling.

10.7.1. Major discrepancies that effect the vehicle operation will be reported to the FACC immediately.

10.7.2. Where possible, fire truck maintenance will be dispatched to the vehicle's location. If FES mechanics are not available, submit a request for maintenance support. Firefighters must have knowledge of minor repairs.

10.7.3. Refueling will be accomplished at dispersal points when possible.

10.8. Vehicle Kits. All vehicles will maintain the following kits:

10.8.1. First Aid Kit.

10.8.2. SABC Kit.

10.8.3. UXO/Contamination Marking Kit.

10.8.4. Decontamination Kit.

Chapter 11

FIRE ALARM CONTROL CENTER OPERATIONS

11.1. General. This chapter establishes procedures for operating the FACC.

11.2. Personnel. Manpower for the FACC may not be available; this section may be manned by shift personnel.

11.3. Status Boards. A status board will be maintained with the following information as a minimum:

11.3.1. Personnel by name, rank, AFSC, and position.

11.3.2. Vehicle by registration number, call sign, assigned crew, and dispersed grid coordinates.

11.3.3. Available resources by location, type, quantity, (i.e., gallon/pound, etc.) and grid coordinates.

11.3.4. EWS systems by location and capacity.

11.4. Visual Aid Board. A visual aid board will be maintained with the following information as a minimum:

11.4.1. Current alarm condition and MOPP level.

11.4.2. Building priority listings.

11.4.3. Pertinent phone numbers.

11.4.4. Pertinent information (i.e., duress words, sign/countersign, and installation control center directives).

11.4.5. Munitions locations if applicable.

11.5. Maps. The following maps should be maintained and updated as required and the alternate FACC should be similarly equipped.

11.5.1. Installation grid map with CBRN zones and split MOPP sectors/zones.

11.5.2. Vehicle, personnel, and resource dispersal sites.

11.5.3. Buildings and airfield.

11.5.4. Roadways and bridges.

11.5.5. EWS systems.

11.5.6. Munitions/weapons storage locations.

11.6. Communication Equipment. The FACC, and if possible the alternate FACC, should be equipped with the following:

11.6.1. Land mobile radio with multi-channel capability is preferred.

11.6.2. Hard-line (i.e., field phone, etc.) with air traffic control tower, EOC, UCC, SFS, maintenance control, and other agencies deemed appropriate by the SFO.

11.6.3. Fire reporting phone lines (from key locations).

11.6.4. Public Address system that broadcasts to the fire station.

11.7. Log Book. The FACC operator should keep a daily logbook current with all pertinent information. The daily logbook in conjunction with checklists should be able to serve as a backup for status boards, visual aids, and charts in the event of FACC relocation.

Chapter 12

RADIO COMMUNICATIONS, PROCEDURES, AND DISCIPLINE

12.1. General. This chapter establishes procedures when utilizing radios as a means of communication. Radio communication procedures and discipline may be defined as the process of maintaining clear, decisive, open channels of communication with as little confusion and repetition as possible.

12.2. Transmissions.

12.2.1. Speak in plain language saying what you mean, i.e., unit responding, on location, in service, etc.

12.2.2. Vehicles may be assigned letter designation IAW their real world vehicle radio call sign (e.g., Crash 10 will become Charlie 10). Also, designators for A and B shift may be employed (e.g., Alpha or Bravo 10). Vehicles will use these letter designations as call signs. Personnel may be assigned letter designations also (e.g., Bravo-10; 1, 2, and 3). An alternative to this is to code name the vehicle (e.g., Jackpot) and designate the personnel as 1, 2, and 3 (CC, DO, back-seater).

12.3. Authentication Matrix. Authentication matrix should be used to verify radio transmissions. All personnel should update their matrix as codes are used.

12.4. Duress Signal.

12.4.1. Firefighters under duress should communicate the assigned duress words to the FACC followed by as much information as possible (i.e., location, and nature of problem, injuries, etc.). Firefighters will then wait for direction from FACC or SFO.

12.4.2. If a firefighter under duress is unable to orally transmit a duress message, a secondary means should be established.

12.5. Discipline. Radio transmissions are reserved for pertinent communications only. General conversation and chit-chat must be avoided to keep vital channels open and prevent efforts to locate dispersed units through tracking devices.

Chapter 13

SELF CONTAINED BREATHING APPARATUS AIR SUPPLY

13.1. General. This chapter establishes procedures for SCBA air supply operations.

13.2. Refilling.

13.2.1. SCBA cylinders will not be filled while potential CBRN contamination conditions exist.

13.2.2. SCBA cylinders will be filled by qualified personnel only. A bottle fill log will be used with annotations denoting bottle number, date filled and firefighter's printed name and signature.

13.3. Decontamination.

13.3.1. If M-8 or M-9 paper shows contamination, attempt to decontaminate the breathing air equipment cover before removing.

13.3.2. Dispose of the contaminated cover at an appropriate disposal site.

13.4. Breathing Air Re-servicing.

13.4.1. All cylinders requiring servicing are filled during attack preparation. Plastic caps/covers will be put on spare bottles to keep contaminants out.

13.4.2. Disperse as many spare bottles as possible with vehicles. The air filtration system and associated equipment will be stored in a suitable shelter and covered with plastic.

13.4.3. The air compressor intake valves and filters will be covered and taped closed. The air filtration system will be sealed in plastic. M8/M9 chemical detection paper will be affixed to the top and sides of air compressors to aid in identification and contamination avoidance.

13.4.4. Additional filter sets for the purification system will be stored in plastic bags.

13.4.5. SCBA re-servicing will not be conducted during an ALARM condition where there is a potential chemical presence.

Chapter 14

INSTALLATION UTILITY OUTAGES

14.1. General. This chapter establishes procedures in the event of utility outages.

14.2. Water. When water services are interrupted, every effort should be made to conserve water. Out of service hydrants should be annotated on all maps. Crews should re-supply vehicles as necessary utilizing existing EWS systems.

14.3. Sewage. When sewage service is interrupted, all personnel should make efforts to not over tax the waste treatment plant, or drains tied to the plant, by dumping excess water from firefighting operations or decontamination efforts into the system.

14.4. Telephone. When telephone services are interrupted, communication must be made by runner, radio or field phone/cell phone.

14.5. Gas. When gas service is interrupted, all units should be notified. In the event of a fire or gas leak, FES should make efforts to contain or terminate the fire or leak. It may become necessary to shut-off other facility utilities to prevent fire or damage.

14.6. Electrical. When electrical service is interrupted to the FACC, auxiliary power should be utilized. Consideration for finding an alternative electrical source to recharge batteries and portable devices should take immediate priority if the auxiliary power source fails (i.e., generator on vehicles).

14.7. Radio Service. It may become necessary to align vehicles in the field to act as repeaters for long distance transmissions. The FACC or SFO will manage this coordination on the scene.

Chapter 15

CONTINGENCY FIRE PREVENTION

15.1. **General.** This chapter describes unique fire prevention and inspection issues to consider when operating in a contingency environment.

15.2. **Standards compliance.** As with firefighter occupational safety and health and all aspects of fire emergency services, our goal is to meet the same criteria at deployed locations as we do at home. However; this is not practical for example when operating at locations for short durations and using expedient construction methods. On the other hand once a location becomes "enduring; fire chiefs must consider adhering to established criteria as outlined in DoDIs, AFIs, Unified Facility Criteria, Engineering Technical Letters, NFPA codes, and other relevant engineering and prevention documents.

15.3 **Facility Plans Reviews.** FES Flights will conduct plans reviews as required and coordinate with MAJCOM/AOR fire chief and engineering staff when needed

15.4. **Reference Material**. Guidance for FES flights includes the NFPA Code on line found at:

- http://www.nfpa.org/codesonline/
- Contact HQ AFCESA/CEXF at afcesa.cexf@tyndall.af.mil for the username and password

15.4.1. The Unified Facility Criteria, UFC 3-600-01, *Fire Protection Engineering for Facilities.*

15.4.2. Engineering Technical Letter. ETL 09-4, *Fire Protection Engineering Criteria – Expeditionary and Force Projection Operational Theaters*.

Attachment 8, General Fire Prevention and Reporting Procedures.

Chapter 16

INFORMATION COLLECTION, RECORSD, AND FORMS

16.1. Information Collections. No information collections are created by this publication.

16.2. Records. The program records created as a result of the processes prescribed in this publication are maintained IAW AFMAN 33-363 and disposed of IAW AFRIMS RDS located at **https://www.my.af.mil/gcss-af61a/afrims/afrims/**.

16.2.1. Adopted Forms. AF IMT *847, Recommendation for Change of Publication.*

16.2.2. Prescribed Forms. No prescribed forms are implemented in this publication.

LOREN M. RENO, Lt Gen, USAF
DCS/Logistics, Installations and Mission Support

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DODI 6055.06, *DOD Fire and Emergency Services (FES) Program*, 21 December 2006

DODI 6055.06-M. *DOD Fire and Emergency Services Certification Program*, February 2006

AFPD 10-2, *Readiness*, 30 October 2006

AFPD 32-20, *Fire Emergency Services*, 5 August 2003

AFI 10-403, *Deployment Planning and Execution*, 13 January 2008

AFI 32-2001, *Fire Emergency Services Program,* 9 September 2008

AFMAN 33-363, *Management of Records*, 1 March 2008

AFMAN 91-201, *Explosives Safety Standards,* 17 November 2008

AFMAN 10-100, *Airman's Manual*, 1 June 2004

AFPAM 10-219, Volume 3, *Post Attack and Post Disaster Procedures*, 9 June 2008

AFPAM 10-219, Volume 5, *Bare Base Conceptual Planning Guide*, 1 June 1996

AFPAM 32-2004, *Aircraft Fire Protection for Military Operations Other Than War,* 1 September 1999

T.O. 14P3-1-181, *Joint-Firefighter Integrated Response Ensemble (J-FIRE)*, 1 August 2007

T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, 15 July 2002

WMP-1, CE Supplement, May 2008

NFPA Codes On-Line, **http://www.nfpa.org/codesonline/**

FES Community of Practice (CoP)
https://wwwd.my.af.mil/afknprod/ASPs/CoP/EntryCoP.asp?Filter=OO-EN-CE-10

Abbreviations and Acronyms

A/C—Assistant Chief
ABD—Air Base Defense
ABU—Airman Battle Uniform
AFMIA—Air Force Manpower and Innovation Agency
AFSC—Air Force Specialty Code
AOR—Area of Responsibility
ARC—Air Reserve Component
ARFF—Aircraft Rescue and Fire Fighting
BDO—Battle Dress Overgarment
BDU—Battle Dress Uniform
BEAR—Basic Expeditionary Airfield Resources
CAM—Chemical Agent Monitor
CBRNE—Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives
CC—Commander
CCA—Contamination Control Area or Chemical Contamination Avoidance
CE—Civil Engineer
CW—Chemical Warfare
DO—Director of Operations
ECS—Expeditionary Combat Support
EM—Emergency Management
EOC—Emergency Operations Center
EOD—Explosive Ordnance Disposal
EOR—Explosive Ordnance Reconnaissance
EWS—Emergency Water Storage
FACC—Fire Alarm Communications Center
FAD—Force Activity Designator

FES—Fire Emergency Services
FF—Firefighter
FPCON—Force Protection Condition
HAS—Hardened Aircraft Shelter
HAZMAT—Hazardous Material
IAW—In Accordance With
IC—Incident Commander
ICC—Installation Control Center
IDLH—Immediately Dangerous to Life and Health
IPE—Individual Protective Equipment
JFIRE—Joint Firefighter's Integrated Response Ensemble
LIMFACS—Limiting Factors
LSA—Life Support Areas
MCO—Major Combat Operations
MISCAPS—Mission Capabilities
MOC—Mobile Operations Center
MOPP—Mission- Oriented Protective Posture
NCO—Noncommissioned Officer
NFPA—National Fire Protection Association
ORM—Occupational Risk Management
PERSCO—Personnel Support for Contingency Operations
PMF—Position Manning Factor
POL—Petroleum, Oil, and Lubricants
PPE—Personal Protective Equipment
RIT—Rapid Intervention Team
SABC—Self-Aid and Buddy Care
SCBA—Self-Contained Breathing Apparatus
SFO—Senior Fire Official

SOF—Special Operations Forces
SSN—Social Security Number
TALCE—Tanker Airlift Control Element
TBM—Tactical Ballistic Missile
TTP—Tactics, Techniques, and Procedures
UCC—Unit Control Center
UTC—Unit Type Code
UXO—Unexploded Ordnance
VHA—Vapor Hazard Area
WBGT—Water Bulb Globe Temperature
WMD—Weapons of Mass Destruction
WRC—Work/Rest Cycle

Attachment 2

SAMPLE DISPERSAL LOCATION CHECKLISTS

Table A2.1. Fire Dept. Dispersal Location & Manpower Assignments.

Asset	*Personnel*		*Total*	*Sectors/ Zones*	*Location*	*Grid*
	Day	*Night*				
SFO						
FCC Operator						
A/C						
Station Chief						
MCV # 1						
MCV # 2						
MCV # 3						
Rescue						
Pumper						
Tanker (optional)						
Security/ Shelter Management						
TOTAL						
Note: Manpower assignment; suggested locations: Can be located/manned differently IAW SFO direction.						

Table A2.2. Follow-on Forces or Alternate Vehicle Dispersal Sites.

Asset	*Personnel*		*Total*	*Sectors/ Zones*	*Geographic Location*	*Grid*
	Day	*Night*				
MCV # 4						
MCV # 5						
Pumper						
Command Van						
HAZMAT Trailer						
Flat Bed P/U						
Hose/Foam Cart	N/A	N/A	N/A			
Mobile Air Compressor	N/A	N/A	N/A			
Support Vehicle	N/A	N/A	N/A			

Note:
1. Once vehicles reach their dispersal sites, a crew status check is to be accomplished. When status of crews is reported, the FACC will update the appropriate work centers. Also, dispersal sites (tools and equipment, EWS, etc.) will be inspected/annotated for damage/contamination after every attack. This will be done at the first available opportunity and coordinated by the A/C.
2. Vehicles will be maintained in the station and simulated dispersed for real-world commitments.

Attachment 3

Table A.3.1. Sample Authentication Matrix.

	A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*
1	28	81	1	79	9	92	10	97	96	7	71	40	19
2	53	22	99	13	22	70	80	1	11	21	76	17	57
3	4	87	17	69	38	2	23	27	44	49	12	50	14
4	42	18	32	26	58	93	74	3	78	25	34	24	6
5	29	73	18	46	82	15	26	15	5	66	56	11	13
6	77	95	36	19	91	63	45	55	61	48	27	37	75
7	10	62	59	88	2	6	68	20	5	28	23	29	34
8	65	16	32	98	54	12	39	20	83	9	67	90	30
9	52	16	85	8	94	47	31	35	4	89	30	3	43
10	33	41	25	8	72	7	21	33	60	84	31	XX X	14

	N	*O*	*P*	*Q*	*R*	*S*	*T*	*U*	*V*	*W*	*X*	*Y*	*Z*
1	79	97	92	28	7	40	10	71	1	19	81	96	9
2	13	1	70	53	21	17	80	76	99	57	22	11	22
3	69	27	2	4	49	50	23	12	17	14	87	44	38
4	26	3	93	42	25	24	74	34	32	6	18	78	58
5	46	15	15	29	66	11	26	56	18	13	73	5	82
6	19	55	63	77	48	37	45	27	36	75	95	61	91
7	88	20	6	10	28	29	68	23	59	34	62	5	2
8	98	20	12	65	9	90	39	67	32	30	16	83	54
9	8	35	47	52	89	3	31	30	85	43	16	4	94
10	8	33	7	33	84	XX X	21	31	25	14	41	60	72

When authentication is required, sending members will call out a phonetic letter and a number. Receiving members will cross-reference the matrix to find the correct code to authenticate the communication.
Note: Matrix should be new and generated prior to deployment.
All members must delete codes as they are used.

Attachment 4

SAMPLE TENT CITY FIRE SAFETY PLANNING AND INSPECTION CHECKLIST

Table A4.1. Fire Safety Checklist

Planning Task	*Inspection Item*
1. Tent City Layout	a. Dispersed layout ___ 12 ft between tents in a row (6-7 tents per row) ___ 60 ft between tent rows (4 rows per group) ___ 150 ft between tent groups (25-27 tents per group) b. Non-dispersed layout ___ 12 ft between tents in a row (6-7 tents per row) ___ 30 ft between tent rows (4 rows per group) ___ 60 ft between tent groups (25-27 per group) c. Facility Group Areas. ___ Refer to dispersal distance matrix (AFPAM 10-219V5) d. Marking Tents/Facilities ___ Ensure tents/facilities and rows are named, numbered, and placarded e. Vehicle Parking. ___ Vehicle parking should not be allowed within tent city. Parking should be in designated areas only f. Separation Distances ___ Refer to recommended distanced between functional & individual facilities (AFPAM 10-219V5)
2. Tent City Fire Inspections	___ a. Conduct frequent inspections ___ b. Include flight supervisors ___ c. Invite ground safety personnel
3. General inspection items	___ a. Electrical wiring, serviceability, and installation ___ b. Check for unapproved extension cords or lighting ___ c. Ensure max 60-watt light bulbs in tent lighting to prevent pyrolysis of tent material and possible fire ___ d. Ensure AC/heating units, generators, and similar equipment is positioned far enough away from tents to maximize safety ___ e. Electrical equipment is properly grounded ___ f. Proper aisle space inside tents

Planning Task	*Inspection Item*
	___ g. Ensure 2 means of exit are maintained in all tent facilities; travel distance from any point in a structure to at least one exit shall not exceed 150 ft ___ h. Develop and post a written evacuation plan for tent city occupants; include assembly points, head count procedures, and emergency firefighting and notification procedures ___ i. Enforce "No Smoking" policy in all tents ___ j. Ensure designated smoking areas with proper disposal receptacles are established ___ k. Ensure a fully operational fire extinguisher is provided. Minimum rating 2A:10 B,C in each tent. ___ l. Ensure tent trash receptacles are emptied daily ___ m. Identify/eliminate self-help projects that create life safety/fire hazards ___ n. Ensure vegetation and trash around Tent City area is controlled ___ o. During cold weather operations, when oil/gas fired heaters are used, ensure heaters are properly serviced, fuel lines are not leaking, and combustibles are kept at a safe distance. Safe distances are determined by manufacturers or the appropriate NFPA standard. ___ p. Ensure proper installation of battery-operated smoke detectors for each tent/facility used as sleeping quarters. Detector should be mounted on center beam of tent ___ q. Maintain at least a 10 % bench stock of battery operated smoke detectors ___ r. Open burning (i.e., bonfires, grills, etc.) within Tent City is not allowed ___ s. Open burning waste receptacles (latrines) should be monitored by the Tent City Mayor

Planning Task	*Inspection Item*
4. Special Hazard Areas	a. Field kitchens ___ Burner refueling located 50 ft from tents/facilities and lighting/generator equipment; fire extinguisher is readily available ___ No accumulation of grease on tent surfaces ___ Grease disposal areas at least 8 ft from tents ___ A minimum of 2 fire extinguishers with rating of 2A: 40 BC provided for cooking areas; extinguishers located at entrances to cooking areas ___ Electrical distribution panel located at least 6 ft from kitchen tent and of protected connector type ___ Electrical generators positioned at least 15 ft from tent walls; fuel tanks positioned remote as possible from generators & diked with fuel lines protected ___ Portable water heaters at least 20 ft from serving area ___ Adequate aisles and exits are maintained b. Generators ___ Fuel bladders located as far as practical from other facilities ___ Fuel bladders earth bermed to contain any spillage/leak; earthen berms capable of containing 125% of tank capacity ___ All generators properly grounded ___ An extinguisher with minimum rating of 2A:10 B, C is available in the area ___ "No Smoking" signs posted around fuel storage areas ___ Vegetation control in generator and fuel storage areas c. Medical Facilities ___ In addition to general inspection areas, ensure at least one 150-LB halon flightline fire extinguisher available for air evacuation/helipad operations

Planning Task	*Inspection Item*
5. Fire Reporting	___ a. At least 1 local signaling device in/near each tent grouping to warn personnel of fire (warning triangle, blow horn with a unique sound, or other distinct signaling devices) ___ b. A bullhorn or public address system available at Mayor's tent/office to use in event of a fire ___ c. Telephone/radio link to Fire Communication Center from Mayor's tent/office if designated fire reporting phone lines not available (i.e., 911 or 117) ___ d. See general fire prevention and reporting procedures attachment for additional details
Notes: 1. Post this checklist in a readily accessible, highly visible area. 2. Senior member must ensure all assigned personnel are familiar with the contents and their responsibilities in these checklists. 3. Suggest submitting this attachment for installation control center directive (ICCD) or faxing to appropriate agencies.	

Attachment 5

SAMPLE MUNITIONS STORAGE AREAS SAFETY PLANNING AND INSPECTION CHECKLIST

Table A5.1. Storage Area Checklists

Planning Task	*Inspection Item*
1. General Layout	___ a. Minimum distance from other facilities (AFPAM 10-219V5 and AFMAN 91-201). ___ b. Minimum separation distances based upon storage.
2. General Storage Requirements	a. Open storage ___ Without any type of barricades, munitions storage should be temporary only. ___ Separation distances between stacks are maintained (AFPAM 10-219V5). b. Covered storage ___ Normally accomplished by using igloo ammunition storage facilities or combat zone type steel arch or culvert igloos/covered igloos. ___ Net Explosive Weight (NEW) in nonstandard earth covered igloos is 250,000 pounds (quantity-distance criteria outlined in AFPAM 10-219V5).
3. Fire Prevention Practices	___ a. Ensure flame and spark-producing devices are kept out of the area. ___ b. Maintain proper separation distances and vegetation control. ___ c. Ensure refuse and packing material is not allowed to accumulate. ___ d. Ensure firebreaks provided around each storage area. ___ e. Intentional/controlled burning will not be permitted without Fire Chiefs approval. ___ f. No flammable liquids for cleaning. ___ g. Flammable storage will be located at least 50 ft

Planning Task	*Inspection Item*
	from explosive storage locations. ___ h. Vehicles, other than those loading or unloading, not parked closer than 25 ft to any storage facility.
Notes: 1. Post this checklist in a readily accessible, highly visible area. 2. Senior member must ensure all assigned personnel are familiar with the contents and their responsibilities in these checklists. 3. Suggest submitting this attachment for ICCD or faxing to appropriate agency.	

Attachment 6

SAMPLE FUELS STORAGE AREAS SAFETY PLANNING AND INSPECTION CHECKLIST

Table A6.1. Fuels Storage Area Checklist

Planning Task	*Inspection Item*
1. General Layout	___ a. Minimum distance from other facilities (AFPAM 10-219V5). ___ b. Minimum separation distances based upon storage vessel. ___ c. Adequate drainage available to prevent spilled fuel from endangering other tanks. ___ d. All fuel-holding and tank drainage diversion areas clearly identified. Fuels personnel ensured FES understands location & operation of all diversion valves. ___ e. Fuels personnel, in conjunction with fire personnel, identify all suitable fuel-holding tanks & receivers to receive transferred fuel from burning tanks. Plan is cooperative operation between agencies. ___ f. Bulk fuel storage areas situated so that a rupture or failure of a bladder/dike will not allow fuel to flow into adjacent tent city areas. ___ g. Dikes and earthen berms capable of holding at least 125% of the vessel's capacity. ___ h. Access for FES apparatus paved or improved.
2. Fire Pre-vention	___ a. NO SMOKING in or around fuel storage/dispensing areas. ___ b. Flame and spark-producing devices are kept out of the area. ___ c. Refuse not allowed to accumulate. ___ d. All fuel dispensing equipment properly grounded. ___ e. All fuel drums properly bonded and grounded.

Planning Task	*Inspection Item*
	___ f. Installed fire protection systems inspected daily to ensure high state of readiness. ___ g. Vegetation control strictly enforced in and around bulk fuel storage sites. ___ h. Intentional/controlled burning not permitted within 200 ft of storage areas or without prior approval of Fire Chief. ___ i. At least one fire extinguisher with a 2A60BC rating located at each fuel storage & dispensing area. ___ j. Vehicles, other than those loading or unloading, not parked closer than 25 ft to any storage facility.
Notes: 1. Post this checklist in a readily accessible, highly visible area. 2. Senior member must ensure all assigned personnel are familiar with the contents and their responsibilities in this checklist. 3. Suggest submitting this attachment for ICCD or faxing to appropriate agency.	

Attachment 7

FIRE EMERGENCY SERVICES GUIDE FOR AUXILIARY FIREFIGHTING TEAMS

A7.1. At contingency locations, it is likely that firefighters will be engaged in mission essential FES tasks involving aircraft and weapon systems. In such situations, firefighters may be unable to respond to incidents involving lesser priorities as listed in base emergency management plans. Therefore, fire prevention training becomes crucial so non-firefighting personnel can intervene early to extinguish small fires.

A7.2. Chapter 5 in AFPAM 10-219, Volume 3, provides additional information for auxiliary firefighting tactics and training. The following checklist provides a brief overview of fire fighting actions.

Table A7.1. Auxiliary Firefighting.

GENERAL FIREFIGHTING AND REPORTING PROCEDURES	
❑ Know location & operation of fire extinguishers prior to needing them. ❑ Fight small fires within limitations of extinguisher & personal training. ❑ Always operate using buddy system; work in teams. ❑ Maintain fire escape route to your back and never allow fire to get between you & your way out. ❑ For auxiliary firefighters trained to utilize fire hoses/nozzles and fire pumps, always perform within the realms of your training. ❑ Always remember, if fire gets out of control, evacuate & try to contain fire to building from outside. Limit spread of fire to adjacent structures.	
BASIC FIREFIGHTING METHODS	
Type	**Methods**
Fire Prevention	❑ Preventing fires is always the best line of defense.
Structural Fire	❑ Do not enter a burning building to fight a fire. ❑ If fire is found in early stages of development, the appropriate fire extinguisher can extinguish the fire.

BASIC FIREFIGHTING METHODS	
Type	**Methods**
Structural Fire (cont.)	❑ Auxiliary firefighters with proper training can utilize hose streams from exterior in order to control the spread of fire.
Vehicle Fire	❑ A fuel fire can be put out with a portable fire extinguisher. ❑ Do not allow flowing fuel to flow towards you. ❑ Do not stand in puddles of fuel. ❑ If fuel tank has ruptured, do not attempt to fight the fire. ❑ Remove exposures if this can be done safely.
Electrical Fire	❑ Never use water on an electrical fire. ❑ Attempt to de-energize at main breaker or pulling fuses. ❑ Only use type C fire extinguishers.
Gas Fire (Natural/ Propane)	❑ Turn gas off at shut-off valve and fight fire as a structural or tent fire. ❑ Do extinguish the fire prior to removing the fuel source.
Tent Fire	❑ Fire spreads with alarming speed in a tent fire and can be very dangerous. ❑ Drop all tents in the immediate area and wet all tents down if water is available.
Ground Cover Fire	❑ Utilize shovels, rakes, fire brooms, etc.
Note: Suggest submitting this attachment for ICCD or faxing to appropriate agencies.	

Attachment 8

GENERAL FIRE PREVENTION AND REPORTING PROCEDURES

A8.1. Tent Chief. Senior member assigned to each tent has the following responsibilities:

A8.1.1. Ensure personnel assigned to your tent are familiar with this checklist and their fire prevention and reporting responsibilities.

A8.1.2. Ensure this checklist is posted in each tent, readily available and visible for use in the event of an emergency.

A8.2. Fire Reporting and Evacuation.

A8.2.1. SOUND THE ALARM: Yell FIRE, FIRE, FIRE.

A8.2.1.1. Evacuate the tent area immediately.

A8.2.1.2. Get far enough away to ensure safety.

A8.2.1.3. Take a head count to ensure everyone evacuated safely.

A8.2.1.4. Do not re-enter a burning structure for any reason.

A8.2.2. Report the fire.

A8.2.2.1. Use designated fire phone number ___ or locally established fire reporting procedures.

A8.2.2.1.1. Your name and telephone number/radio call sign where you can be reached.

A8.2.2.1.2. Size and location of the fire.

A8.2.2.1.3. Type of fire.

A8.2.2.1.4. Other pertinent information, i.e. number of victims.

A8.2.2.2. Contact your UCC immediately and follow up to ensure it's been reported!

A8.2.2.3. Firefighters may not be able to respond; in the event this occurs, implement auxiliary firefighting procedures (see Auxiliary Firefighting Checklist in **Attachment 7**).

A8.2.3. Fight the fire with the fire extinguisher.

A8.2.3.1. Do not attempt to fight the fire unless you can do so safely.

A8.2.3.2. REMEMBER: While fighting fire in MOPP 4, your protective mask will not protect you from the products of combustion. Stay upwind and always have an escape route at your back.

A8.2.4. Evacuate adjacent tents and facilities.

A8.2.5. Drop adjacent tents if you can do it safely.

Attachment 9

SAMPLE FES OPERATIONAL CHECKLISTS

Table A9.1. Chain of Command and Duty Assignments Chart.

DUTY ASSIGNMENTS							
First	**Last**	**MI**	**RANK**	**Duty Assign**	**DEROS**	**Duty Assign**	**Kill Tag**
			CMSgt				
			SMSgt				
			MSgt				
			TSgt				

Table A9.2. Fire Emergency Services Dispersal Plan.

CALL SIGN/ VEHICLE/ REGISTRATION	*ASSIGNMENTS*		*DISPERSAL LOCATION*	*STATUS*
	Day Shift	*Night Shift*		
Chief 1 C2 REG # Weapon #	KILL NUMBERS	KILL NUMBERS		Personnel Fuel Equipment
Chief 2 C2 REG # Weapon #				P: F: E:
Command Van Step Van REG. # Weapon #				P: F: E:
Rescue P-XX REG. # Weapon #				P: F: E:

CALL SIGN/ VEHICLE/ REGISTRATION	*ASSIGNMENTS*		*DISPERSAL LOCATION*	*STATUS*
	Day Shift	*Night Shift*		
Engine P-XX REG. # Weapon #				P: F: E:
Engine P-XX REG. # Weapon #				P: F: E:
Crash P-XX REG. # Weapon #				P: F: E:
Crash P-XX REG. # Weapon #				P: F: E:
Crash P-XX REG. # Weapon #				P: F: E:
Crash P-XX REG. # Weapon #				P: F: E:
Tanker P-XX REG. # Weapon #				P: F: E:

Table A9.3. Emergency Water Source Locations.

IDENTIFIER.	*GRID COORD*	*CAPACITY*	*STATUS*
EWS SITE # 1			
EWS SITE # 2			
TANK # 1			
TANK # 2			
TANK # 3			
TANK # 4			
TANK # 5			
TANK # 6			
TANK # 7			
TANK # 8			
RAW WATER # 1			
RAW WATER # 2			
RAW WATER # 3			
POOL			
DRAFTING PIT			
RIVER			

Table A9.4. Important Contact Information.

NAME	*PHONE*	*CALL SIGN*	*LOCATION/GRID*
EOC			
Alternate			
UCC – CE Reps.			
Alt. UCC – CE Reps.			
Tertiary UCC – CE Reps.			
BCE			
Alternate			
Tower			
Alternate			
MOC			
Alternate			
MUNS			

Alternate			
Trans			
Alternate			
Fuels			
Alternate			
SFS			
Alternate SFS			
FACC			
Alternate			
Tertiary			
Medical			
Alternate			

Table A9.5. Preparation Checklist.

ALL PURPOSE CHECKLIST				*PAGE 1 OF 2 PAGES*
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA 1. Preparation Checklist		**OPR:** XXX CES/ CEF	**DATE:** Oct 2005	
NO.	**ITEM**	**Go**	**No/ Go**	**N/A**
1	**<u>FACILITY</u>:** **A. Blackout/Tone down/Hardening Actions:** - Turn off all outside lighting. Disable automatic exterior lights. - Install Blackout boards or window covers on all exterior windows. - Cover all bldg numbers & facility use ID markings. - Install camouflage netting over covered access to entry control point (ECP). - Lock all exterior doors & establish single entry point (as required by FPCON levels). Post signs on all doors (except ECP) stating "Door Locked - Use Main Entrance." - Post current FPCON level on entry door and toxic free area (TFA) entry/exit.			

	- Place M-8 chemical detection boards. - Place M-16 clearing procedures sign near weapons clearing barrel outside ECP. - Place M-16 storage rack inside ECP. - Ensure shuffle boxes are in place outside of main ECP & outside of TFA main entrance. Ensure brushes are available; boxes are filled with sand & have covers. - Hang shuffle box instructions - Shelter manager's/security will use UXO marking kit to conduct facility sweeps. **B. Establish CCA Processing Line.** - Set up various stations and instructional signs. - Position additional JS-LIST/J-FIRE items near CCA/TFA processing line. **C. Emergency Generator Procedures** - The emergency generator will be inspected as soon as possible. Check fuel and top off as required. - Harden generator fuel tank. - M-8 placards will be placed on a horizontal surface around the generator facility.			
2	**VEHICLES:** SEE VEHICLE PREPARATION CHECKLIST			
3	**VEHICLE DISPERSAL SITES: Camouflage & Hardening Actions:** - Set-up camouflage splinter protection and contamination avoidance. -- Erect frame to support plastic and camouflage covering at sites. -- Establish vehicle splinter protection, defensive fighting position and bunker. -- Install concertina wire around dispersal site to control access. - Ensure equipment items are secured and protected inside splinter protected areas.			

4	**FIRE ALARM COMMUNICATION CENTER AND ALTERNATE LOCATIONS:** **A. Primary FACC (Bldg. XXX):** - Restrict access. - Inventory FACC Kit and place in the FACC. - Prepare Bug Out Kit **B. Alternate FACC (Bldg. XXX):** - Inventory the Alternate FACC Kit. - Inspect phone and radios.			
5	**INDIVIDUAL PROTECTIVE EQUIPMENT (IPE) FOR MOPP 0 OR HIGHER:** **A. Personnel:** - Inspect members for ID Card, Line Badge, Dog Tags, and other documents as locally required; place in outer pocket - Inspect protective mask and update your inspection card, re-inspect at proper intervals. **B. IPE:** - Mark JS-LIST gear with M-9 tape IAW AFMAN 10-100 - Mark items with Kill Tag numbers, fill canteen and don IPE to current MOPP - Ensure personnel have required equipment to include; helmet, web belt, canteen, body armor, protective mask, flashlight			
6	**Ensure EWS hardening/splinter protection is accomplished.**			

Table A9.6. Vehicle and Equipment Dispersal Sites.

ALL PURPOSE CHECKLIST			*PAGE 1 OF 2 PAGES*
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA 2. Vehicle and Equipment Dispersal Sites		**OPR:** XXX CES/ CEF	**DATE:** Oct 2005
NO.	**ITEM**		
1	**Vehicle/Equipment Dispersal Sites:** **SITE** **GRID** **LOCATION** **VEHICLE** **SECTOR/ZONE** ALPHA BRAVO CHARLIE DELTA ECHO FOXTROT FACC Alt. FACC Mobile Air Trailer AFFF Trailer Agent/Hose SCBA Units AFFF 5-gal CN PKP 50-lbs CN		

Table A9.7. Dispersal Trailer Inventories.

ALL PURPOSE CHECKLIST			*PAGE 1 OF 2 PAGES*	
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA 3. Dispersal Trailer Inventories		**OPR:** XXX CES/ CEF	**DATE:** Oct 2005	
NO.	**ITEM**	**Go**	**No/ Go**	**N/A**
1	**<u>ALPHA</u> Site Trailer (Crash Truck):** - Spare Tire and Rim, Qty (1 EA) - 3% AFFF in 5-gal containers, Qty (36 CN) or 180 gallons total. - 100' of 3" Supply Hose and misc. tools and adapters - 5-gal Diesel Jerry Can, Qty (2 EA) - SCBA Units, Qty (3 EA) - Extra SCBA Cylinders, Qty (3 CY) - 50-lb Cans of PKP, Qty (3 CN) or 150 pounds			
2	**<u>BRAVO</u> Site Trailer (P-23 Crash Truck):** - P-23 Spare Tire and Rim, Qty (1 EA) - 3% AFFF in 5-gal containers, Qty (36 CN) or 180 gallons total. - 100' of 3" Supply Hose and misc. tools and adapters - 5-gal Diesel Jerry Can, Qty (2 EA) - Interspiro SCBA Units, Qty (3 EA) - Extra SCBA Cylinders, Qty (3 CY) - 50-lb Cans of PKP, Qty (3 CN) or 150 pounds			
3	**<u>CHARLIE</u> Site Trailer (Water Tanker):** - Spare Tire and Rim, Qty (1 EA) - 100' of 3" supply hose and misc. tools and adapters - 5-gal Diesel Jerry Can, Qty (1 EA) - SCBA Units, Qty (1 EA) - Extra SCBA Cylinder, Qty (1 CY) - 500' of 5" Supply Hose			

4	**DELTA Site Trailer (Crash Truck):** - Spare Tire and Rim, Qty (1 EA) - 3% AFFF in 5-gal containers, Qty (36 CN) or 180 gallons total. - 100' of 3" supply hose and misc. tools and adapters - 50-lb Cans of PKP, Qty (3 CN) or 150 pounds - 5-gal Diesel Jerry Can, Qty (2 EA) - SCBA Units, Qty (3 EA) - Extra SCBA Cylinders, Qty (3 CY)			
5	**ECHO Site Trailer (Structural Pumper):** - Power Saw Kit and extra blades - Spare Tire and Rim, Qty (1 EA) - 1000' of 5" supply hose & misc. tools & adapters - 5-gal Diesel Jerry Can, Qty (1 EA) - SCBA Units, Qty (4 EA) - Extra SCBA Cylinders, Qty (4 CY) - 3% AFFF in 5-gal containers, Qty (11 CN) or 55 gallons total.			
6	**FOXTROT Site Trailer (Crash Truck):** - Spare Tire and Rim, Qty (1 EA) - 3% AFFF in 5-gal containers, Qty (26 CN) or 130 gallons total. - 100' of 3" supply hose and misc. tools and adapters - 50-lb Cans of PKP, Qty (3 CN) or 150 pounds - 5-gal Diesel Jerry Can, Qty (1 EA) - 200’ of 1-3/4” Fire Attack Hose Lines and spare TFT nozzle, Qty (2 EA) - SCBA Units, Qty (3 EA) - Extra SCBA Cylinders, Qty (3 CY)			
7	**SUPPORT Vehicle Trailer:** - Spare Tire & Rims (1 each per vehicle type) - 5-gal Diesel Jerry Can, Qty (1 EA) and 5-gal MOGAS Jerry Can, Qty (1 EA) - Gross Decon buckets & brushes			

Table A9.8. Vehicle Preparation Checklist.

ALL PURPOSE CHECKLIST			*PAGE 1 OF 2 PAGES*	
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA 4. Vehicle Preparation Checklist		**OPR:** XXX CES/ CEF	**DATE:** Oct 2005	
NO.	**ITEM**	**Go**	**No/ Go**	**N/A**
1	Items required: Vehicle Kits (Decon, UXO, self–aid & buddy care), inventory checklist, M-9 tape, fresh water containers and vehicle books. - Conduct complete vehicle checkout and inventory using vehicle books, appropriate checklists, vehicle Tech Order excerpts, and AF 18XX cards. - Top off vehicle with fuel and oils as required. - Ensure agent is topped off as required. - Inventory and store vehicle kits. - Check first aid kit for seal and current date. - Place spare SCBA air bottles on each vehicle. - Place full fresh water container on each vehicle; attach a piece of M-9 on top of the container.			
2	Complete other passive defense measures. - Camouflage. - Expedient hardening/splinter protection. - Blackout vehicles. ***Remember, if you can be seen, you are a target***			
3	Place M-9 tape on horizontal surfaces. - Mark M-9 tape with date & time placed on vehicle. Replace and re-mark if contaminated or saturated. - Cover vehicle registration numbers or unit ID during FPCON "Charlie" or higher levels.			
4	**DECON, Self Aid Buddy Care (SABC) and Unexploded Ordnance (UXO) Kits:** - Inventory & place a veh. decon kit on each veh. - Inventory & place a SABC kit on each veh. - Inventory & place a UXO Marking kit on each veh. Kits should include:			

	DECON KIT - Bucket - Bug Sprayer - Bleach - Decontamination mitt/paper bag - Brushes; long and short handled - Sponges - Plastic bags and rubber bands to seal SCBA bottle connections - Plastic bags **SABC KIT** - Assorted splints - Triangle bandages - Slings - Assorted bandages **UXO KIT** - Markers for UXO and contamination. - Chemical "Glow Sticks." - Surveyors ribbon and stakes. - Flashlight. **Maintain the following items on each Emergency Response Vehicle:** - AF Form 18xx - Operator's Inspection Guide and Trouble Report - Vehicle's Waiver Card - Vehicle Equipment/Tool Inventory Sheet - Standard Form 91 - Motor Vehicle Accident Report - DD Form XXX8 - Accident Identification Card - SCBA Operator Inspection Checklist (as applicable) - Vehicle Fuel Key - Decontamination Kit - SABC Kit - UXO/Contamination Marking Kit - Hose Card (if applicable) - Hub Inspection Sheet (P-23's only)			

Table A9.9. JFIRE CCA Procedures.

Area of Responsibility	*CCA SUPERVISOR'S ACTIONS*
Contact Hazard Area (CHA):	1. Coordinate with the shelter supervisor for required assistants. a. Brief assistants and provide them with checklists. b. Set work, rest, and replacement cycles for assistants. c. Supervise assistants.
	2. Set up the CHA and post instructions. a. Ensure sufficient number of M295 decon kits are placed at the Arrival and Initial Decon Area. One M295 per individual processing is the minimum required for this procedure. b. Ensure all footwear shuffle boxes are filled with a 5% chlorine solution (household bleach). Boxes should be filled to the point that the solution covers the bottoms and sides of the over boots but not to the point that it rises well up into the OG pant leg area. c. Ensure all glove wash troughs are filled with the 5% chlorine solution and the rinse troughs are filled with water. d. Ensure benches are available to facilitate footwear cover removal e. Ensure barrels/hampers and liners are at each station for discarded clothing and equipment. f. Determine location of areas designated for contaminated waste & trash disposal, OG aeration, & other IPE decon if used. g. Ensure there is space, equipment, and supplies for servicing mission masks. h. Ensure equipment and decontaminants are available to decontaminate the CCA.
	3. Establish a clean egress route and post instructions.
	4. As personnel leave the transportation point, they should be directed (either by signs or attendant) to the contamination control area. Monitor and prompt personnel processing to: a. Follow all instructions carefully. b. Touch only the outside of clothing.
	5. Maintain a steady processing flow.
	6. Coordinate with shelter supervisor to restock the CHA supplies.
	7. Decontaminate and refurbish the CCA items regularly.

Vapor Hazard Area (VHA):	1. Coordinate with the shelter supervisor for required assistants. a. Brief assistants and provide them with checklists. b. Set work, rest, and replacement cycles for assistants. c. Supervise assistants.
	2. Set up the VHA and post instructions.
	a. Ensure workspace, spare mask parts, hoods, cloths, decontamination solutions, sponges, and water are available for cleaning and servicing masks. b. Ensure containers and liners are available for removed items. c. Ensure an over garment and duty uniform aeration area is designated.
	3. Establish a clean egress area and post instructions.
	4. Monitor and prompt personnel processing and maintain a steady processing rate.
	5. Coordinate VHA restocking with the shelter supervisor.
	6. Clean the VHA and remove trash regularly.
	7. Ensure doffed underclothing and masks are removed from the airlock (If available) regularly.
Area of Responsibility	***CCA ASSISTANT'S ACTIONS***
Contact Hazard Area (CHA)	1. Keep decontaminant containers clean and filled.
	2. Collect, bag, and dispose of contaminated rubber IPE, as required.
	3. Collect and transport mission critical equipment to the Refurbishment Area.
	4. Outside the CCA, prepare OG for aeration. a. Inspect OG for serviceability. b. Brush off excess decontaminant. c. Remove M8 or M9 paper. d. Sort Over garments by size & type to ease future ID. e. Tag each Over garments with date & start time of aeration.
	5. Retrieve and store decontaminated IPE when needed (check with M8 or M9 paper and CAM). Only reuse suits that test free of liquid contamination.

	6. Refurbish Mission Critical Equipment (MCE) MCE includes the protective mask (MCU-2A/P, M-45), Firefighter equipment (Bunker Boots, Proximity Suit, Helmet and CW protective gloves) **Note**: Fire Dept personnel will refurbish the Interspiro CW Mask.
	7. CW Mask Refurbishment Procedures (see **Figure A9.2** for example of station layout): CCA attendant transports the mask from the mask monitoring/removal area to station 1 of the refurbishment area.
	8. Station 1 - Mask Decontamination – 1 Attendant a. Remove and discard the filter canister. b. Submerged the mask in a 5% chlorine solution for 30 seconds.
	9. Station 2 - Mask Aeration –2 Attendants (recommended). Preparing mask for aeration. a. Remove the head-harness and visor from the mask and submerge in water for approximately two minutes. **Note:** Remove the head-harnesses by cutting the straps immediately below the metal tab and discard the head harness. b. After the two-minute rinse, remove the masks and hang place on the racks for aeration. c. Wipe visors down with a dry disposable-towelette and move the mask to the re-service station.
Vapor Hazard Area (VHA):	**1. Station 3 - Firefighter Proximity Suit – 1 Attendant** a. Separate exterior aluminized shell (silvers) from interior bunker liners. b. Separate bunker suspenders from proximity trousers. c. Hang bunker liners and suspenders for aeration. d. Submerge bunker silvers in 5% chlorine solution for 30 sec's. e. Rinse by submerging in 5% water solution for 30 sec's. f. Hang bunker silvers on aeration rack. g. Monitor bunker silvers with a Chemical Agent Monitor (CAM) prior to removing from aeration rack. h. Monitor bunker liners & suspenders with chemical agent monitor (cam) prior to removing from aeration rack. i. Reassemble bunker liners, silvers, & suspenders before transporting to VHA.

	2. Station 4 – Modified Structural ARFF Helmet – 1 Attendant a. Submerge the ARFF helmet with aluminized dome cover and shroud (attachments) in the 5% chlorine solution for approximately 30 seconds. b. Rinse the helmet with attachments with water in the same manner as step # 1. c. Place the helmet with attachments on the aeration rack. d. Monitor helmet with attachments with a CAM prior to removing them from the aeration rack before transporting to the VHA.
	3. Station 5 – Firefighter/CW Protective Gloves – 1 Attendant a. Submerge the gloves in the 5% chlorine solution for approximately 30 seconds. b. Rinse the gloves by submerging and agitating in water for approximately 30 seconds. c. Place the gloves on the aeration rack. d. Monitor the gloves with a CAM prior to removing them from the aeration rack before transporting to the VHA.
	4. Clean, monitor, and decontaminate the CHA; remove trash and contaminated items as necessary.
	5. Transport aerated and refurbished MCE to the TFA.
	6. Collect, separate, and stow duty uniforms.
	7. Dispose of glove inserts and underwear.

Table A9.10. Risk Matrix Chart.

RISK MATRIX CHART	
CAM SCALE	**CAM BAR READING**
H	3 or more bars: do not remove mask or undergarments
G	1 or more bars: do not remove mask or undergarments
Any liquid contact	Do not remove mask or undergarments

Figure A9.1. Contamination Control Area Layout.

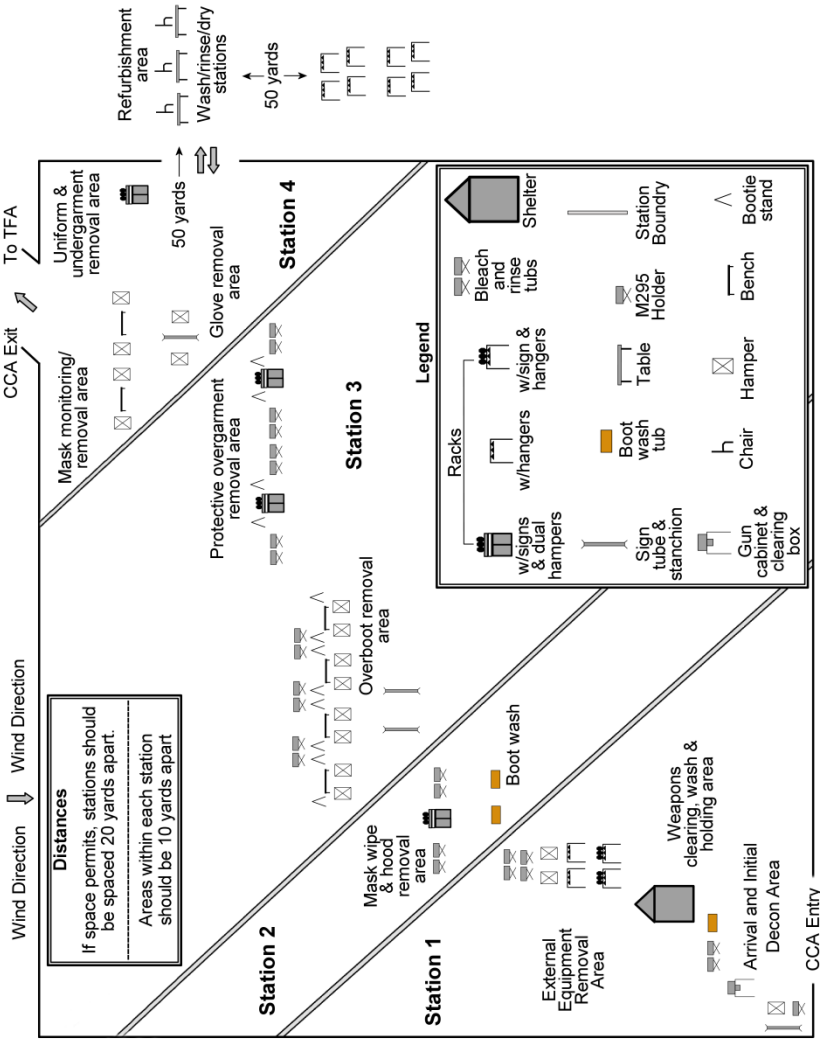

Figure A9.2. CW Mask Refurbishment Area Layout.

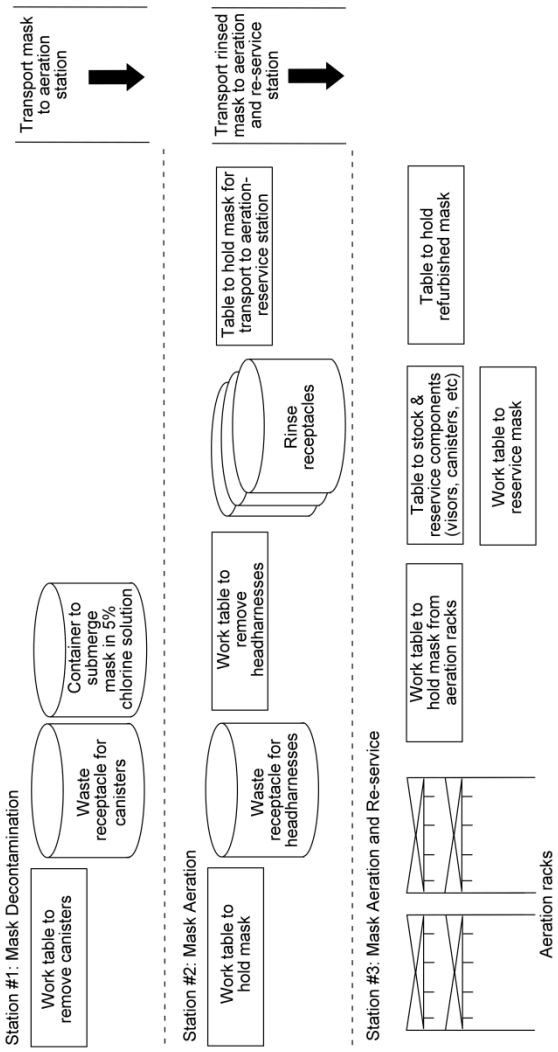

Table A9.11. CCA Processing Procedures.

CCA Processing Steps *STATION 1 – Arrival and Initial Decontamination Area*	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
1. Split into two person "buddy" teams (t**ry to team with an individual wearing same protective overgarment).**	*	*	*	
2. Check each other for visual evidence or signs of contact hazard (liquid, solid or dusty). **Note: Special interest should be given to gloves, hood/mask, and M9 paper.**	*	*	*	
3. Disconnect velcro for hose/canister and allow to hang freely.		*		
!!WARNING!! **Using two fingers apply pressure to the mask front voicemitter and to the beard of the J-FIRE to hold the mask firmly in place and prevent loss of mask seal integrity.**				
4. Thoroughly decontaminate yourself and all exterior equipment, including the M295 decontamination kits provided. Buddies should assist each other in hard to reach areas. Special interest should be given to gloves, hood/mask and filter canisters.	*	*		
5. EOD buddy teams spray 5% chlorine solution using multipurpose sprayer (pump pressurized) to all exposed areas of Level A Suit.				
6. Proceed to the **Weapons Clearing, Wash and Holding Area.**	*	*	*	
Weapons Clearing, Wash and Holding Area				
1. Complete weapons clearing/turn-in (if required) prior to decontaminating gloves and over boots.	*	*		
2. Step into Boot Wash Tray.	*	*	*	
3. Wash Gloves in Decon Tub.	*	*	*	
4. Rinse Gloves in Rinse Tub.	*	*	*	
5. If holding area is not established, proceed directly to **Equipment Removal Area.**	*	*		

CCA Processing Steps *Holding Area*	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
Note: EOD Personnel wearing Level A Suits will proceed directly to Station 3 – Over boot Removal Area. Decontaminate boots in foot trays provided along the way.			*	
The Holding Area is designed to allow shade for personnel waiting to process. Informational signs may be developed for personnel to read while waiting. This is a great location to post installation specific information. The following is general information that could be posted within this area: 1. Carefully read the notices posted on the information boards prior to beginning your processing. 2. Remove your individual protective equipment (IPE) in the order specified by the posted instructions. 3. In the event the CCA/TFA complex comes under attack or is otherwise compromised, immediately take cover; don your protective mask & gloves.				
External Equipment Removal Area				
!!WARNING!! **Take great care when doffing items. Do not remove mask or any protective clothing. Contact hazard transfer to exposed skin and/or respiratory tract can lead to sickness or death.**				
1. Undo Velcro attachments on your hood underarm straps.	*			
2. Re-attach underarm straps over the shoulder.	*			
3. Remove all external items other than protective mask and over garment, place on racks. These items include helmet, vest (aircrew), web gear, mask carrier, flak vest, cold/wet weather gear and other non-essential items.	*	*		
IMPORTANT: **Do not let previously deconned equipment touch ground.**				
4. Empty all pockets and place items in hampers.	*	*		
5. Proceed to **Station 2 – Mask Wipe and Hood Removal Area.** **Note**: Decontaminate boots in foot trays provided along the way.	*	*		

CCA Processing Steps ***STATION 2*** *Mask Wipe and Hood Removal Area*	***BDO***	***J-FIRE***	***el A***	***Attendant***
!!WARNING!! **Using two fingers apply pressure to the mask front voicemitter and to the beard of The J-FIRE to hold the mask firmly in place and prevent loss of mask seal integrity.**				
Individual will face attendant and apply pressure to the front voicemitter. - Firefighters will hold mask in place with 2 fingers on beard/ breathing valve.	*	*		
Attendant: 1. Loosen processee's hood drawstring. 2. Re-attach underarm straps over the shoulder (if not already completed). 3. Wipe down eye lens outserts and around the filter element using the 5% chlorine solution. 4. Wipe all exposed areas of the interspiro CW mask (lens and canister) with the 5% chlorine solution. 5. Repeat wipe down procedure with water. 6. Pull hood over processee's head and unsnap hoop straps with pliers (cut the hood temple straps if necessary). 7. Pull the hood off the mask and drop it in the hamper.	* * * * * *	* *		
Attendant and individual will decontaminate and rinse gloves in tubs provided.	*	*		
Individual will proceed to Station 3 – Over boot Removal Area. **IMPORTANT! J-FIRE personnel proceed directly to Station 3 – Protective Overgarment Removal Area.**	*	* *		

CCA Processing Steps *STATION 3 – Overboot Removal Area*	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
IMPORTANT!! **While waiting in line, read all instructions for this station and watch the other processing teams in front of you.**				
1. Proceed to the first available bench as a buddy team, sit on the bench with boots resting on the "dirty" side of the bench.	*		*	
2. Undo both of your velcro pant leg fasteners and unzip leg zippers.	*		*	
3. Undo all over boot fasteners.	*		*	
4. The outer pant leg of the Level-A suit is pulled up to fully expose the bunker boots.			*	
5. One individual will lift their leg closest to the center of the bench and rests it on the bench as your buddy removes the over boot/bunker boot and drops it into the hamper. Once the over boot/bunker boot is removed, place your foot on the "clean" side of the bench as you now straddle the bench.	*		*	
6. The other individual will complete the same procedures until both processee's are straddling the bench.	*		*	
7. Utilizing the "Buddy" system the remaining boot is processed in the same manner.	*		*	
8. Wipe down bench with 5% chlorine solution.	*		*	
9. Decontaminate and rinse gloves in tubs provided and proceed to the Protective Overgarment Removal Area.	*		*	

CCA Processing Steps *Protective Overgarment Removal Area*	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
Important – Working as a buddy team, remove over garment, bunker pants or Level A Suit. One processee will perform the procedure first and then the buddy will perform it next.				
BDO Trouser Removal				
Buddy will: Unsnap rear snaps, untie waist cord, loosen side pull straps, and unfasten front fly closure.	*			
Individual will: Turn and face away from their buddy.	*			
Buddy will: Lower the individual's pants to their knees. **Do NOT turn pants inside out as you remove them.**	*			
Individual will: Steady self by holding on to the rack and extend their foot back one at a time.	*			
Buddy will: Remove the individual's trousers and place them into the containment hamper.	*			
Individual and buddy will: 1. Decontaminate and rinse gloves in tubs provided. 2. Repeat procedures for doffing buddy.	* *			
Buddy will: 1. Loosen zippers, hook & pile fasteners, and untie drawstring on front of the jacket. 2. Undo hook & pile attachment points on each sleeve cuff.	* *			
Individual will: Turn and face away from your buddy, make a fist with both hands and hold arms behind you.	*			
Buddy will: 1. Pull the jacket down and away from the individual's shoulders helping them remove their arms from the sleeves one at a time. - Elastic sleeve cuffs – Jacket will come off inside out. - Velcro sleeves – Jacket will come off right-side out. 2. Place jacket in the containment hamper.	* *			

CCA Processing Steps	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
J-FIRE				
Bunker pants and trouser removal				
Firefighter 1 will: 1. Push bunker pants down to the top of the bunker boots. 2. Reach through jacket & "pinch" hasp to release suspenders.		* *		
Firefighter 2 will: 1. Unsnap and untie the waist elastic coat retention cord. 2. Unfasten waistband hook & pile fastener tapes & front fly closures.		* *		
Firefighter 1 will: 1. Turn and face away from Firefighter 2. 2. Steady yourself by holding on rack. Extend feet back one at a time.		 * *		
Firefighter 2 will: 1. Remove the bunker trouser, boot and trouser at the same time and place them into the containment hamper. 2. Place an uncontaminated disposable plastic boot or sock on the foot before touching the ground. 3. Repeat the process for the other leg.		* * *		
Firefighter 1 will: Repeat this process for your buddy.		*		
Both Firefighters will: Decontaminate & rinse gloves in tubs provided.		*		
FFs remove jacket IAW removal procedures below.		*		
Trouser Removal				
Individual will: Reach through your jacket and "pinch" hasp to release suspenders.				
Buddy will: 1. Unsnap and untie the waist elastic coat retention cord. 2. Unfasten the waistband hook and pile fastener tapes and front fly closures.				

CCA Processing Steps	BDO	J-FIRE	EOD Level A	Attendant
Trouser Removal cont.				
Individual will: Turn and face away from their buddy.				
Buddy will: Lower the individual's pants to their knees. **IMPORTANT: Do not turn pants inside out during removal!!**				
Individual will: Steady themselves by holding on to the rack. Extend feet back one at a time.				
Buddy will: Remove individual's trousers & place into containment hamper.				
Individual and buddy will: 1. Decontaminate and rinse gloves in tubs provided. 2. Repeat procedures for doffing buddy.				
Jacket Removal				
Individual and buddy will: 1. Firefighter 2 will disconnect the canister and hose assembly and secure it away from the jacket. 2. Your buddy will loosen zippers, and hook and pile tape on the front of the jacket, the jacket sleeves and the hood. 3. Face buddy; lean slightly forward with chin out & head up. 4. Buddy will stretch out hood & pull away from your head. 5. Turn and face away from your buddy, make a fist with both hands and hold arms behind you. 6. Your buddy will pull the jacket down and away from your shoulders helping the processee remove their arms from the sleeves one at a time. **Note: Your arms should come out of the coat without turning the sleeves inside out.** 7. Place jacket in the containment hamper.		* * * * * * * *		
Individual and buddy will: 1. Decontaminate and rinse gloves in tubs provided. 2. Repeat all above procedures for doffing buddy. 3. Proceed to Station 4 - Glove Removal Area.		* * *		

CCA Processing Steps	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
EOD - HAZMAT Level A Suit				
Important: The following steps require buddy assistance.				
1. Unfasten belt inside suit and don gloves. Gloves are stored inside level A suit.			*	
2. Open hook & pile closure and zipper.			*	
3. Pull suit down to knee level ensuring outside of suit does not contact uniform or skin during process.			* *	
4. Remove suit one leg at a time by lifting leg backward and pulling it free from leg & foot.			*	
5. Place non-contaminated disposable plastic sock or boot on exposed foot before it touches ground.			*	
Note: Once suit is unzipped, you may switch the CW Interspiro mask from bottled air to ambient air.				
6. Place the suit in the hamper.				
7. Processee and buddy will decontaminate and rinse gloves in tubs provided and proceed to Station 4 - Glove Removal Area.			* *	
STATION 4 – GLOVE REMOVAL AREA				
!!WARNING!! **Avoid contacting rubber glove exterior with unprotected hand.**				
1. Work both rubber gloves at same time and drop into hamper.	*	*	*	
2. Work the Fire/CW protective gloves at the same time until they are halfway off and drop into the hamper.		*		
3. Proceed to the Mask Monitoring/Removal Area.	*	*	*	
MASK MONITORING/REMOVAL AREA				
Individual will: Face the attendant, spread legs apart and hold arms out to your side with palms up.	*	*	*	
VHA Attendant Will:				
1. Monitor individual using the CAM (see procedures below).	*	*	*	
2. If cam bar readings are less than CAM monitoring chart, removes mask according to mask removal procedures below.	*	*	*	
3. If cam bar readings are equal to or greater than CAM monitoring chart, don clean gloves & proceed to Uniform/Undergarment Removal Area	*	*	*	

CCA Processing Steps	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
CAM Monitoring Procedures				
1. Monitor the front of the processee outlining the body and across the front using an "X" pattern if desired. 2. Have the processee face away and extend their foot back one at a time and monitor the bottom of each foot. 3. During monitoring pay special attention to the palms, wrists, ankles, neck, and bottom of feet.	* * *	* * *	* * *	
Mask Removal Procedures				
IMPORTANT: Attendant will document individuals last name and last 4 of SSAN on a mask ID tag before individual removes mask.				
Attendant will: 1. Ask individual their last name and last 4 of SSAN & write it on mask tag. 2. Bring nomex hood over processee's head.	* 	 *		
Individual will: 1. Using both hands, grasp lower head harness straps, take three deep breaths 2. Pull mask out & away from face, remove & place on table.	 * *	 * *	 * *	
Attendant will: Attach the mask tag to the head harness buckle and place the mask in the container.	*	*	*	
Individual will: Continue holding breath, eyes open until reaching the Toxic Free Area.	*	*	*	
Uniform/Undergarment Removal Area				
Caution: Bending too far forward in mask may cause mask seal to leak on some individuals. Use boot step (CAPS only) to elevate your foot when untying the combat boot laces.				
1. Place foot on boot step (CAPS only) and untie combat boots. 2. Hold onto rack for balance & remove combat boots or disposable booties. You may use boot remover (CAPS only) if desired. 3. Remove your ABU/BDU shirt and place it into the hamper.	* * *	* * *	* * *	

4. Remove your ABU/BDU pants and place it into the hamper. 5. Return to the Mask Monitoring/Removal Area.	* *	* *	* *	

CCA Processing Steps	*BDO*	*J-FIRE*	*EOD Level A*	*Attendant*
EMERGENCY CCA PROCEDURES				
If CAM bar readings are the same upon remonitoring, take the following emergency steps: 1. Immediately stop CCA operations. 2. Monitor surrounding area within the VHA to verify levels and look for any potential hot spots. 3. If hot spots are found decontaminate by using decontamination kits, washing down area with 5% chlorine solution, sealing, removing, covering etc. 4. Once levels are below the ones listed in the CAM Monitoring Chart, continue CCA operations 5. If levels have not changed - Check serviceability of CAMs. Replace as necessary and remonitor area. - Verify wind direction. Ensure you are still downwind or crosswind. If not, the CCA must be relocated to an upwind or crosswind location.				
CAM Monitoring – Risk Matrix Chart				
CAM SCALE / **CAM BAR READING**				
H — 3 or more bars Do Not Remove Protective Mask				
G — 1 or more bars Do Not Remove Protective Mask				

Attachment 10

FES UTC MISCAPS

A11.1. Force Packages.

A11.1.1. **UTC: 4FPFA, Title: EN Fire Chief Manager.**

Total Personnel: 1; Officers: 0, Enlisted: 1, Civ: 0

MANFOR as of: 20070329, Date Registered: 20070329

Provides essential FES management for wing personnel and firefighters when combined with 4FPFN, 4FPFJ, or 4FPFP in support of a bare base, follow-on or other major combat operations, or missions at contingency operating locations, aerial ports, en route bases, or critical stateside bases. Provides FES management oversight, including training, and provides senior leadership advice on vital information for minimizing loss of life, property damage, and limiting damage from fire that would seriously degrade mission capability. When combined with a 4FPFN, is capable of providing 24-hour Emergency Operations Center coverage. Firefighter deploys with individual protective equipment and clothing, weapons and ammo. Lower skill level substitution is not allowed. Expeditionary Combat Support (ECS) is required from service designated as base operating support integrator.

FAC	*AFSC*	*Description*	*Qty*
44EF	3E700	Fire Protection Manager	1

A11.1.2. **UTC: 4FPFN, Title: EN Deputy Fire Chief Manager.**

Total Personnel: 1; Officers: 0, Enlisted: 1, Civ: 0

MANFOR as of: 20070514, Date Registered: 20070329

Provides essential fire emergency services management for wing personnel and firefighters when combined with 4FPFA, 4FPFJ, or 4FPFP in support of a bare base, forward operating location or other major combat operations or missions at contingency operating locations, aerial ports, en route bases, or critical stateside bases. Provides senior leadership advice on vital information

for minimizing loss of life, property damage, and limiting damage from fire that would seriously degrade mission capability. When combined with 4FPFA is capable of providing 24-hour Emergency Operations Center coverage. Personnel will deploy with individual protective equipment and clothing, weapons and ammo. Lower skill level substitution is not allowed. ECS is required from service designated as base operating support integrator.

FAC	*AFSC*	*AFSC Title*	*Qty*
44EF	3E791	FIRE PROTECTION SUPT	1

A.11.1.3. **UTC: 4FPFJ, Title: EN Firefighter Management 2 PK TM**

Total Personnel: 2; Officers, 0 Enlisted 2, Civ: 0

MANFOR as of: 20050810, Date Registered: 20050726

Provides fire ground/hazardous materials incident command and control for single or multiple 4FPFP UTCs in support of operations at a bare base, co-located operating base, forward operating location or other contingency operating locations, aerial ports, en route bases, or critical stateside bases. Team is capable of providing 24-hour fire ground incident command and control for aircraft, structural, POL, and munitions fire suppression and rescue operations. Team is also capable of providing ECS fire prevention functions and limited fire prevention inspections. UTC must be supported by one 4F9FJ UTC. Personnel will deploy with individual protective equipment and clothing, weapons and ammo. Skill level substitution is not allowed. ECS is required from service designated as base operating support integrator.

FAC	*AFSC*	*AFSC Title*	*Qty*
44EF	3E771	FIRE PROTECTION CFMN	2

A.11.1.4. **UTC: 4FPFP, Title: EN Firefighter Truck Crew.**

Total Personnel: 6; Officers: 0 Enlisted: 6 Civ: 0

MANFOR as of: 20070706, Date Registered: 20070329

Provides 24-hour staffing for a single aircraft rescue fire fighting (ARFF) vehicle operations or provides staffing for one rapid re-supple water tender and fire alarm communications in support of major combat or contingency operations at bare base, forward operating locations, aerial ports, en route base, or critical stateside bases. Type aircraft determines amount of fire suppression agent required (in gallons). One 4FPFP UTC is required for each ARFF vehicle. When combined with additional 4FPFP UTCs, one 4FPFJ and one 4FPFN, the team is capable of providing 24-hour crash rescue/fire suppression services and fire ground command and control. They also provide limited support for structural, POL, and munitions fires. Hazardous material (HAZMAT) response capabilities are limited to hazmat defensive operations only. Personnel will deploy with individual protective equipment and clothing, weapons and ammo. Substitutions authorized for execution, reporting and posturing in accordance with AFI 10-403. ECS is required from service designated as base operating support integrator.

FAC	*Grade*	*AFSC*	*AFSC Title*	*Qty*
44EF		3E731	FIRE PROTECTION APR	2
44EF	E5	3E751	FIRE PROTECTION JNMN	1
44EF		3E751	FIRE PROTECTION JNMN	2
44EF		3E771	FIRE PROTECTION CFMN	1
			Total Personnel:	6

A11.1.5. **UTC: 4FPFG Title: Fire Inspection and Prevention Team.**

Total Personnel: 2 Officers: 0 Enlisted: 2 Civ:0

MANFOR as of: 2008XXXX Date Registered: 2008XXXX
Provides fire inspection and prevention capability in support of operations at a

bare base, co-located operating base, forward operating location or other contingency operating locations, aerial ports, en route bases, or critical stateside bases. Team is capable of provide for ECS fire inspections and limited fire prevention functions to include; hazard assessments, public fire safety education and facility plans reviews. Personnel will deploy with individual protective equipment and clothing, weapons and ammo. Skill level substitution is not allowed. **Special Note:** One 3E771 position requires mandatory DOD Fire Emergency Services certification Fire Inspector II. ECS is required from service designated as base operating support integrator. Reviewed XXX

FAC	*Grade*	*AFSC*	*AFSC Title*	*Qty*
44EF		3E771	FIRE PROTECTION CFMN	2

Total Personnel: 2

A11.1.6. **UTC: 4F9S4 Title: EN FIRE JTF/HQ STAFF MGT TEAM**

Total Personnel: 3; Officers: 0 Enlisted: 3 Civ: 0

MANFOR as of: 7/1/2005 Date Registered: 20020813

Fire protection force to provide staff augmentation in support of regional contingencies or natural disasters during wartime or stability operations. UTC may be augmented by additional fire UTCs to support stability operations. Personnel will deploy with individual protective equipment and clothing, weapons and ammo unless otherwise directed. Substitutions authorized for execution, reporting, and posturing in accordance with AFI 10-403. ECS is required from service designated as base operating support integrator.

FAC	*AFSC*	*AFSC Title*	*Qty*
1700	3E700	FIRE PROTECTION MGR	1
1700	3E771	FIRE PROTECTION CFMN	2
		Total Personnel:	3

A11.2. Equipment Packages.

A11.2.1. **UTC: 4F9FE**. Title: EN Firefighter Comm Package (equipment).

MANFOR as of: 20050701, Date Registered: 20031007

Provides deployed firefighters with essential communications to perform limited fire fighting operations in support of regional conflicts, operations, and natural disaster relief efforts for both crash and/or structural fire fighting operations.

A11.2.2. **UTC: 4F9FF.** Title: EN Firefighter Self Contained Breathing Apparatus (SCBA) Compressor (equipment only).

MANFOR as of: 20050701, Date Registered: 20010226

Provides deployed firefighters with essential breathing air reservicing capability to support limited fire fighting operations in support of regional conflicts, major combat operations, and natural disaster relief efforts for both crash and/or structural fire fighting operations.

A11.2.3 **UTC: 4F9FH.** Title: EN HAZMAT Emergency Response Equipment (equipment only).

MANFOR as of: (Awaiting Pilot Unit Completion) Date Registered: 20070919

Provides deployed firefighters with essential equipment needed to perform hazmat/WMD response in support of major theater of war or contingency operations at bare bases, forward operating locations, aerial ports, en route bases, critical stateside bases, humanitarian relief operations, and to protect the homeland. Equipment is deployed in response to accidents or natural disasters

requiring mitigation or containment of hazardous material releases such as toxic industrial chemicals/materials. Limited capability exists to respond to nuclear, biological, or radiological agent incidents. Must be combined with three 4FPFP and one 4FPFJ UTCs to accomplish the mission.

A11.2.4. **UTC: 4F9FJ.** Title: EN Firefighter Management 2 PK TM EQ (equipment only).

MANFOR as of: 20050726, Date Registered: 20000309.

Provides equipment to support fire ground/hazardous materials incident command and control for one 4FPFJ UTC in support of operations at a bare base, co-located operating base, forward operating location or other contingency operating locations, aerial ports, en route bases, or critical stateside bases. Equipment will support 24-hour fire ground incident command and control for aircraft, structural, POL, and munitions fire suppression and rescue operations.

A11.2.5. **UTC: 4F9FR.** Title: EN Fire Night Vision Goggles (equipment only).

MANFOR as of: 20050701, Date Registered: 20040225

Provides deployed firefighters night vision equipment to perform and sustain aircraft crashes, structural, or incidents requiring FES. Equipment will be sourced to support firefighting operations at regional conflicts, major combat operations, natural disaster relief operations, and conflicts involving long-term mission support.

A.11.2.6. **UTC: 4F9FX. Title:** EN Firefighter Limited Equipment Set (equipment only).

MANFOR as of: 20050701, Date Registered: 20010226

Provides deployed firefighters with essential firefighting equipment to perform limited fire fighting operations in support of regional conflicts, major combat operations, and natural disaster relief efforts for both crash and/or structural fire fighting operations. **Note:** The most current UTC information

and that of their corresponding Equipment and Supply Listings (ESL) can be found on the CE UTC Management CoP secure web site at:

https://afkm.wpafb.af.mil/ASPs/CoP/EntryCoP.asp?Filter=OO-EN-CE-23.

A11.3. Vehicle Packages.

A11.3.1. **UFM32 – L127/P18:** Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 4 (2 per 12 hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 600ft of 3 inch fire hose, 600ft of 1 3/4 inch fire hose, two 1 3/4 inch fire nozzles, one 24 ft ground ladder, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A11.3.2. **UFM33 – L128/P-26:** Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 4 (2 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 600 ft of 3 inch fire hose, 600 ft of 1 3/4 inch fire hose, two 1 3/4 inch fire nozzles, one 24 ft ground ladder, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A11.3.3. **UFM34 – L130/P-24:** Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 8 (4 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 1000 ft of 3 inch fire hose, 800 ft of 1 3/4 inch fire hose, three 1 3/4 inch fire nozzles, one 24 ft ground ladder, one universal adapter, two 2 1/2 inch double male adapters, two 2 1/2 inch female adapters,

applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A.11.3.4. **UFM35 – L133 /P-22:** Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 8 (4 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 1000 ft of 3 inch fire hose, 800 ft of 1 3/4 inch fire hose, three 1 3/4 inch fire nozzles, one 24 ft ground ladder, one universal adapter, two2 1/2 inch double male adapters, two 2 1/2 inch female adapters, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A11.3.5. **UFM36 – L143/P-23**: Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 8 (4 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 1000 ft of 3 inch fire hose, 800 ft of 1 3/4 inch fire hose, three 1 3/4 inch fire nozzles, one 24 ft ground ladder, one universal adapter, two 2 1/2 inch double male adapters, two 2 1/2 inch female adapters, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A11.3.6. **UFM37 – L144/P-27**: Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 4 (2 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 600 ft of 3 inch fire hose, 600 ft of 1 3/4 inch fire hose, two 1 3/4 inch fire nozzles, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.

A11.3.7. **UFM38 – L145/P-19**: Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 6 (3 per 12-hour shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, 600 ft of 3 inch fire hose, 600 ft of 1 3/4 inch fire hose, two 1 3/4 fire nozzles, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle. **Note:** Only the P-19B model has structural interior fire attack and drafting capability.

A11.3.8. **UFM3A – C122/P-30** (replaces P-10 [L149/P-10 suitable sub]): Vehicle Only. Provides FES Flight initial ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 4 (2 per 12-hr shift) qualified fire fighters from UTC 4F9FP, 4F9FN, 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, applicable T.O.(s), operations/ repair manuals and TMSK will accompany vehicle.

A11.3.9. **UFM3B – L152**: Vehicle Only. Provides FES Flight ECS capability for fire protection operations. This UTC must be combined with UTC 4F9FX. This vehicle is staffed in wartime or contingency operations with 4 (2 per 12-hr shift) qualified fire fighters from UTC's 4F9FP, 4F9FN, or 4FPFJ. This UTC requires qualified fire truck vehicle mechanic support. Secured spare tire, applicable T.O.(s), operations/repair manuals and TMSK will accompany vehicle.