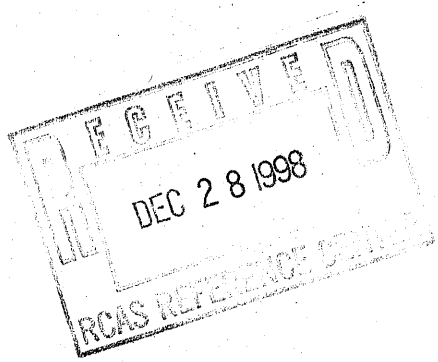
AR 420-90

Army Regulation 420–90



Facilities Engineering

Fire and Emergency Services

Headquarters
Department of the Army
Washington, DC
10 September 1997

UNCLASSIFIED

SUMMARY of CHANGE

AR 420-90
Fire and Emergency Services

This revision--

- Implements the revised Department of Defense Instruction 6055.6, DOD Fire and Emergency Services (F&ES) Program, as appendix B to this regulation (chap 1).
- Adds statutory authority paragraph per Executive Order 12866, September 30, 1993 (chap 1).
- Changes F&ES proponency from the Chief of Engineers to the Assistant Chief of Staff for Installation Management (chap 1).
- Defines technical F&ES responsibilities for the new U.S. Army Corps of Engineers Field Operating Agency, U.S. Army Center for Public Works(chap 1).
- Requires installation commanders to conduct a F&ES risk analysis prior to any downsizing actions (chap 1).
- Authorizes F&ES organizations under Directorates other than DPW. (chap 1).
- Decreases frequency of F&ES Operational Readiness Inspections to no less than once every three years (triennial)(chap 1).
- Requires use of Manpower Staffing Standards System (MS-3) Final Report (FIN-REP)/Application, Fire Protection (Army Common) CONUS, dated January 1989, and cross staffing of F&ES apparatus (chap 2).
- Requires MACOM Resource Management Offices to approve any staffing increases above current installation's TDA (chap 2).
- Authorizes fire brigades when full time fire departments are not justified and external help is not available (chap 2).
- Requires all F&ES organizations to subscribe to Army's Fire Information Resource Management System (FIRMS) or an equivalently justified MIS (Management Information System)(chap 2).
- Requires participation in DOD's Fire Fighter Certification System and Physical Fitness Programs (chap 3).
- Recommends regional, live-fire, training areas supplemented by fire fighter interactive multimedia computer simulation systems (chap 3).

- Establishes a fire protection classification system to determine installation structural fire company requirements based on strategic importance and mission criticality (chap 4).

- Establishes new Aircraft Rescue Fire Fighting (ARFF) criteria for airfields (chap 5).

- Designates the building manager as evacuation coordinator per AR 420-17 (chap 6).

- Renames fire inspections as fire risk management surveys and reiterates DOD component's (Army, Navy, Air Force, Marine Corps and DLA) authority to increase or decrease the number of fire prevention positions based on risk assessment and amount of fire fighter crew-type inspections (chap 6).

- Requires all UPH, hotels and transient quarters used for federal employees on official travel to comply with the Hotel and Motel Fire Safety Act of 1990 (PL 101-391) (chap 7).

- Requires installation commanders, in coordination with their MACOMs, to develop and implement an Ozone Depletion Chemical (ODC) management plan to program funding thru FY 2003 for the phaseout of existing Halon 1301 fire suppression systems in facilities and to replace Halon 1211 in portable and wheeled extinguishers and ARFF vehicles as soon as practicable or by attrition (chap 7).

- Requires microcomputer automation of all DOD Fire and No-Loss Reports (Fires, HAZMAT, Aerospace, Deaths, and Injuries) (chap 8).

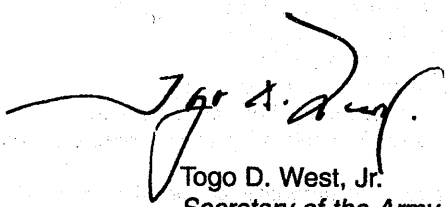
Headquarters
Department of the Army
Washington, DC
10 September 1997

*Army Regulation 420–90

Effective 10 October 1997

Facilities Engineering

Fire and Emergency Services



Togo D. West, Jr.
Secretary of the Army

History. This issue publishes a revision of this publication. This publication was originally printed on 25 September 1992.

Summary. This regulation implements Department of Defense Instruction 6055.6, DOD Fire and Emergency Services (F&ES) Program, by establishing Fire and Emergency Services policies at installations under Department of the Army jurisdiction.

Applicability.
a. This regulation applies to the Active Army, the Army National Guard, the U.S. Army Reserve, and to all installations and activities under the control of the Department of Army by ownership, leases, support agreements, or similar arrangements as follows:
(1) Installations in active use by the Regular Army, those held in an inactive or standby condition for future active use by the Reserve Army, and those in an excess category.
(2) Federally operated installations used full time or intermittently by the Army National Guard, or held by DA for use by the Army National Guard.
(3) Facilities used full time or intermittently by the US Army Reserve or the Reserve Officers' Training Corps. However, more stringent local codes will apply.
(4) All government-owned, contractor-operated and contractor-owned, contractor-operated installations.
b. This regulation does not apply to—
(1) Installations or parts thereof that have been licensed to the States, the Commonwealth of Puerto Rico, District of Columbia, Territory of the Virgin Islands, and Guam for Army National Guard use.
(2) Civil works functions of U.S. Army Corps of Engineers, except when the U.S. Army Corps of Engineers is operating on or using appropriated funds of military installations and activities.
(3) Tenant Army activities where another military department or Government agency, such as the General Services Administration maintains real property accountability and control.
c. In areas outside the United States, Status of Forces Agreements or other country-to-country agreements take precedence over this regulation.

Proponent and exception authority. The proponent of this regulation is the Assistant Chief of Staff for Installation Management. The proponent has the authority to approve exceptions to this publication that are consistent with controlling law and regulation. Proponents may delegate this approval authority, in writing, to a division chief within the proponent agency in the grade of colonel or the civilian equivalent.

Army management control process. This regulation contains management control provisions and identifies key management control that must be evaluated.

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from ATTN DAIM-FDF-B, ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT, ALEXANDRIA, VA 22315-3800.

Suggested Improvements. Users of this regulation are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Director of Facilities and Housing, ATTN: DAIM-FDF-B, Alexandria, VA 22315-3800.

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Glossary

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Chapter 1
Introduction

Section I
General

1–1. Purpose
This regulation implements statutes and DODI 6055.6, DOD Fire & Emergency Services (F&ES) Program, requirements. It prescribes Army policies and responsibilities covering all fire fighting (structural, aircraft, and wildland) by civilians or military, fire prevention (technical services), hazardous materials (HAZMAT) response, emergency medical services (EMS), confined space rescue, disaster preparedness, and ancillary services.

1–2. References
Appendix A lists required and related publications and prescribed and referenced forms.

1–3. Explanation of abbreviations and terms
The glossary explains abbreviations and special terms used in this regulation.

1–4. Statutory and other authority
Statutory authority is: Public Law 91-596, Occupational Safety and Health Act (OSHA) of 1970 and Titles 29 CFR Parts 1910 and 1960 (and other Code of Federal Regulations applicable to Fire & Emergency Services); Title 10, U.S.C., Uniform Code of Military Justice, Chapter 47; and issuances from the Office of Management and Budget(OMB) and the General Services Administration (GSA).

1–5. Fire and emergency services (F&ES) program
a. Program. Every Army activity will have a F&ES program whose objective is to protect life and property. This includes passive and active fire protection systems.

b. Commander's role. Commanders will execute comprehensive F&ES Programs.

Section II
Responsibilities

1–6. The Assistant Secretary of the Army for Installations, Logistics, and Environment (ASA(I,L,&E))
The ASA (I,L,&E) provides policy and program direction for F&ES.

1–7. The Assistant Chief of Staff for Installation Management (ACSIM)
The ACSIM is ARSTAF proponent for the promulgation of policy and integration of doctrine pertaining to the planning, programming, execution, and operation of Army installation management. The Facilities Policy Directorate develops Army F&ES policy.

1–8. Fire Protection Engineer/Functional Manager
Fire Protection Engineer/Functional Manager. The fire protection engineer/functional manager will—

a. Implement Congressional mandates and Department of Defense (DOD) Instruction (DODI 6055.6) through AR 420-90, Fire & Emergency Services. Serve as rotating Chairperson of DOD's Quality Working Group (proponent of DODI) under the auspices of the Defense Environmental Security Council.

b. Establish and monitor policies, programs and provide input to the POM, TAP and PPBERS.

c. Provide MACOMs annual review and analysis of DOD Fire Incident Reporting System data and ensure investigation of all major fires.

d. Determine F&ES requirements during base closing actions, and at inactive, laidaway, and caretaker operations.

e. Rotate coordination of DOD Worldwide F&ES Training Session held with International Association of Fire Chiefs (IAFC) Conference, with the other military services, coordinate Army session and workshops, and sponsor the "Army Firefighter of the Year" award program.

f. Make special assistance visits to MACOMs and installations to explain and implement policies.

g. Coordinate policies with other DOD, DA, federal and civilian groups through membership and participation in professional working committees, boards, seminars, forums and fire protection organizations.

h. Recommend, negotiate, and monitor policies affecting DOD, Army and U.S. Army Corps of Engineers (USACE) program areas.

1–9. Director, Center for Public Works
The Director, U.S. Army Center for Public Works (USACPW), as a Field Operating Agency (FOA) for the U.S. Army Corps of Engineers (USACE), provides technical support for F&ES by-

a. Implementing surveillance and enforcement programs. Provide technical support to installations/MACOMs in F&ES. CPW assists in policy development.

b. Assisting ACSIM in development and execution of F&ES policy.

c. Providing HQDA centralized technical support, performs F&ES ORIs, and prepares reports.

d. Preparing program status reports and participates in staff assistance visits.

e. Participating in industry and government technical committees.

f. Developing and preparing technical publications.

g. Making staff visits to ensure MACOMs and installations implement DOD and Army policies and programs.

h. Performing requested F&ES Operational Readiness Inspections (F&ES ORIs).

1–10. MACOM commanders
MACOM commanders will—

a. Provide information to their installations necessary to perform F&ES per this regulation.

b. Ensure a Management Information System (MIS), i.e., "FIRMS (Fire Information Resource Management System)" is implemented at their installations. All figures, samples, formats, and forms contained in this regulation will eventually be part of FIRMS and eliminated in subsequent publications. Locally developed forms conforming to the needs of the MACOM are permissible.

c. Within their approval authority, ensure both Army and current fire protection consensus standards are applied for design, construction, location, and use of facilities.

d. Provide direction for the execution of technical investigation of major fires (over $200,000 in damage and/or loss of life), and forward a formal report of findings to the ACSIM.

e. Promote regional live-fire training facilities meeting DOD Fire Fighters Certification standards and for cooperative agreements with civil sector fire departments.

1–11. Installation commanders
Installation commanders will—

a. Execute, maintain, and enforce an effective F&ES program as outlined in this regulation, to include local and remote service activities.

b. Implement an information management system (IMS), such as "FIRMS", for use as a management tool for data maintenance and record keeping.

c. Conduct and approve an installation wide F&ES Risk Analysis prior to any down-sizing actions.

d. Ensure that serviced tenant activities reimburse installations for F&ES as defined by inter service support agreements (ISSAs).

1–12. Chiefs, Fire and Emergency Services
a. F&ES may be organized under directorates other than DPW.

b. Fire chiefs will ensure an efficient operation of the F&ES by recommending that we capture the responsibilities of the fire chief listed throughout this document.

Section III
Fire and Emergency Services Management

1–13. F&ES operational readiness inspections (ORIs)

a. MACOMs will conduct triennial F&ES ORIs using figures in appendix E, or locally developed formats and checklists when considered more appropriate.

b. The fire chief will make annual self inspections that constitute management control evaluations, as defined by AR 11-2, Management Control. (See app E.)

c. Contact Director, U.S. Army Center for Public Works, ATTN: CECPW-EB, Alexandria, VA 22315-3862, for assistance when MACOMs do not have fire protection engineers and/or specialists.

1–14. Fire and emergency services operations

a. The fire chief or senior fire officer (SFO) at the scene is responsible for the conduct of all F&ES operations. The fire chief or SFO may request additional available military vehicles, aircraft, equipment, materials, and personnel from the installation commander or delegee to promptly control fires, preserve life, and protect property.

b. Installation F&ES organizations are authorized to obtain meals (at prevailing costs through a F&ES contingency fund) from appropriated fund dining facilities per AR 30-1, The Army Food Program. When meals are required during extended F&ES operations, the installation fire chief must coordinate meal delivery with the installation food advisor.

1–15. Radioactive materials, nuclear and chemical weapons

a. At installations with radiation hazards, the fire department will obtain radiation monitoring equipment and appropriate training or establish an agreement with the local radiation protection officer to provide assistance as necessary.

b. AR 50-6, DA Pam 50-6, AR 385-64 and TM 3-250 contains chemical materials and weapons firefighting procedures.

c. Ammunition and explosive standards are contained in AR 385-64.

1–16. Contracted F&ES

Contracting for F&ES requires performance oriented statements of work (SOWs)(See DOD 4100.33). Installations shall not obligate or expend funds for entering into a contract for fire fighting functions at any military installation or facility, except for the following contracts:

a. To be carried out at a location oustide the United States (including its commonwealths, territories, and possessions) at which members of the Armed Forces would have to be used for the performance of a F&ES function at the expense of unit readiness.

b. To be carried out on a Government-owned but privately operated installation;

c. Or renewal of a contract for the performance of the function under contract on September 24, 1983 (10 USC 2465).

d. For BRAC actions, Army activities may contract with local governments for the provision of fire and emergency services at military installations to be closed (no earlier than 180 days before installation closes) according to the provisions of the Defense Base Closure and Realignment Act of 1990, PL 101-510, as amended, Section 2905 (b)(8)(A)—(D). Installations will forward requests for contracts under this section through the MACOMS to the ACSIM (DAIM-FDF-B) for approval by the Secretary of the Army.

1–17. Technical standards, public law, and deviations

a. The Chief, National Guard Bureau (NGB), Chief, Army Reserve (OCAR), and MACOM commanders may authorize specific deviations from the technical standards prescribed in this regulation if local conditions warrant deviation. However, MACOMs must furnish specific deviations in writing to the ACSIM and will not delegate this authority. Waiver authority to DODI 6055.6, appendix B, enclosure 1, is delegated to the Secretariat level of the Military Departments and the Director of DLA. This waiver authority does not apply to Public Laws.

b. Statutory authority is contained in Public Law 104-113, National Technology Transfer and Advancement Act of 1995; Public Law 91-596, Occupational Safety and Health Act (OSHA) of 1970; and Titles 29 CFR Parts 1910 and 1960 (and other Code of Federal Regulations applicable to Fire & Emergency Services); Title 10, U.S.C., Uniform Code of Military Justice, Chapter 47; and issuances from the Office of Management and Budget(OMB) and the General Services Administration (GSA).

c. Facilities subject to the requirements of the Uniform Federal Accessibility Standards (UFAS) per 42 USC 4151-4157 and 29 USC 794 will meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG) whenever ADAAG provides equal or greater accessibility than UFAS.

d. Army has adopted the most current National Fire Protection Association (NFPA) codes and standards. PL 104-113 mandates all Federal agencies and departments use technical standards that are developed or adopted by voluntary consensus bodies, such as NFPA. If an agency elects not to use these consensus standards, the head of the agency must give the Office of Management and Budget an explanation why it elected to use different standards.

e. Design, construction, and maintenance and repair of projects for USARC facilities (including tri-service Armed Forces Reserve Centers (AFRCs)) will comply with AR 140-483.

f. Installations will subscribe to the NFPA National Fire Code renewal service (or equivalent electronic media service) whereby NFPA sends changes to subscribers. Subscribers insert these changes into the basic loose leaf binder codes. This Army regulation takes precedence over all technical and field manuals. The publications listed in appendix A give more guidance on various aspects of fire and emergency services. (Also, appendix A tells how to order these publications.)

1–18. Tenant units and concessionaires

Tenants, concessionaires, and contractors will comply with this regulation and installation fire regulations.

Chapter 2
Fire and Emergency Services Management

2–1. Management of resources

a. Commanders will ensure that the following standards are used to meet staffing requirements:

(1) Appendix B, Enclosures 5-7, Manpower Staffing Standards System (MS-3) Final Report (FIN-REP)/Application Fire Protection (Army Common) CONUS, dated January 1989, and the following contain staffing guidance.

(2) HAZMAT: OSHA 29 CFR 1910.120.

(3) Confined Space: OSHA 29 CFR 1910.146.

(4) EMS: DODI 6000.10, and applicable local regulations.

(5) Biological Defense Safety Program: 32 CFR Part 626

b. Installations must justify staffing increases above current TDA in writing to responsible MACOM Resource Management Office.

c. Cross staffing of F&ES apparatus is authorized.

d. Additional duties. Firefighters will not perform duties or details that interfere with F&ES unless authorized by the Fire Chief.

e. Physical and medical requirements. Per appendix B, enclosure 2, paragraph 9.

f. Fire Brigades. Per appendix B, enclosure 2, paragraph 16.

g. Installations will integrate MTOE deployable fire fighters with TDA fire departments, but these MTOE fire fighters will not offset TDA requirements. Use the MS-3 to determine TDA requirements.

h. Fire stations. Firefighters must have an environment suited to their needs. SB 700-20, CTA 50-909, and CTA 50-970 contain authorized furnishings and equipment for fire stations. New and existing fire stations (when practical) will comply with USACE, DA Standard Definitive Designs for Fire Stations.

i. All DA fire departments will implement an information management system (IMS), such as FIRMS(described in technical guidance), or an equivalently justified IMS. Use the Prescribed DA Forms listed in Section III, unless automated under FIRMS.

2–2. Installation fire chief

This person manages the F&ES organization and may be the "Base/ Installation Emergency Preparedness Officer" with duties per appendix B, enclosure 2, paragraph 4d.

2–3. No cost F&ES from public agencies.

a. Whenever possible, installations located within the limits of a municipality, fire protection district, or other governmental subdivision will rely on that public agency for cost free protection.

b. If the public agency demands payment for fire fighting services, send the following records to HQDA (ACSIM), ATTN: DAIM-FDF-B, 7701 Telegraph & Leaf Roads, Alexandria, VA 22315-3800 for review (RCS is exempt under AR 335-15, para 5-2g).

(1) A drawing or map showing the boundaries of the public agency and the installation.

(2) Concurrent, exclusive or partial legislative jurisdiction summary of the installation property.

(3) Excerpts of pertinent local law and ordinances regarding F&ES responsibilities.

2–4. Mutual aid

a. Mutual aid agreements will comply with the requirements of appendix B. Sample Mutual Aid Agreements are at figure 2-1 (United States/CONUS) and figure 2-2 (Foreign/OCONUS).

b. Mutual aid firefighting forces will not be used for biological, chemical, radioactive, or explosives responses but may be used for support functions.

c. Only the installation commander acting on behalf of the Secretary of the Army and an authorized representative of the fire organization may execute the agreement. The installation commander may delegate this authority to the Garrison Commander, without further delegation. Installations will review and update all mutual aid agreements biennially (every other year). The fire chief will maintain copies of all agreements.

2–5. F&ES identification

Installations will issue; badges, collar brass, patches, baseball caps, and name tag for all fire and emergency services personnel (military and civilian) to wear while performing their official duties. Fire departments will furnish physical fitness clothing per CTA-50-900.

DEPARTMENT OF THE ARMY
MUTUAL AID AGREEMENT (US)

This agreement, entered into this. . .day of. . .19. . ., between the Secretary of the Army acting according to the authority of section 1856a, title 42, United States Code and *(name of fire department)* is to secure for each the benefits of mutual aid in fire prevention, the protection of life and property from fire, and firefighting. It is agreed that—

a. On request to a representative of the *(installation)* Fire Department by a representative of the *(name of fire department)*, firefighting equipment and personnel of the *(installation)* Fire Department will be dispatched when available to any point within the area for which the *(name of fire department)* normally provides fire protection as designated by the representative of the *(name of fire department).*

b. On request to a representative of the *(name of fire department)* by a representative of the *(installation)* Fire Department, firefighting equipment and personnel of the *(name of fire department)* will be dispatched when available to any point within the firefighting jurisdiction of the *(installation)* Fire Department.

c. The rendering of assistance under the terms of this agreement shall not be mandatory, but the party receiving the request for assistance should immediately inform the requesting department if, for any reason, assistance cannot be rendered.

d. Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(1) Any request for aid under this agreement will specify the location to which the equipment and personnel are to be dispatched; however, the amount and type of equipment and number of personnel to be furnished will be determined by a representative of the responding organization.

(2) The responding organization will report to the officer in charge of the requesting organization at the location to which the equipment is dispatched, and will be subject to the orders of the official.

(3) A responding organization will be released by the requesting organization when the services of the responding organization are no longer required, or when the responding organization is needed within the area for which it normally provides fire protection.

(4) If a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation occurs within the area for which the *(name of fire department)* normally provides fire protection, the Chief of the *(installation)* Fire Department or his or her representative may assume full command on arrival at the scene of the crash.

e. Each party hereby waives all claims against every other party for compensation for any loss, damage, injury or death occurring as a consequence of the performance of this agreement except those claims authorized under 15 U.S.C. 2210.

f. The chief fire officers and personnel of the fire departments of both parties to this agreement are invited and encouraged, on a reciprocal basis, to frequently visit each other's activities for guided familiarization tours consistent with local security requirements and, as feasible, to jointly conduct prefire planning inspections and drills.

g. The technical heads of the fire departments of the parties to this agreement are authorized and directed to meet and draft any detailed plans and procedures of operation necessary to effectively implement this agreement. Such plans and procedures of operations shall become effective upon ratification by the signatory parties.

Figure 2-1. Sample mutual aid fire and emergency services agreement to be used in the United States—Continued

h. All equipment used by *(name of fire department)* in carrying out this agreement will be owned by the *(name of fire department);* and all personnel acting for *(name of fire department)* under this agreement will be an employee or volunteer member of *(name of fire department).*

i. This agreement shall become effective upon the date hereof and remain in full force and effect until cancelled by mutual agreement of the parties hereto or by written notice by one party to the other party, giving thirty (30) days notice of said cancellation.

For *(fire organization)*

(Title)

For the Secretary of the Army

(Commander)

Figure 2-1. Sample mutual aid fire and emergency services agreement to be used in the United States

DEPARTMENT OF THE ARMY
MUTUAL AID AGREEMENT (FOREIGN)

This agreement, entered into this. . .day of. . .19. . ., between the Secretary of the Army acting according to the authority of section 1856a, title 42, United States Code and *(name of fire department)* is to secure for each the benefits of mutual aid in fire prevention, the protection of life and property from fire, and firefighting. It is agreed that—

a. On request to a representative of the *(installation)* Fire Department by a representative of the *(name of fire department)*, firefighting equipment and personnel of the *(installation)* Fire Department will be dispatched, when available, to any point within the area for which the *(name of fire department)* normally provides fire protection as designated by the representative of the *(name of fire department)*.

b. On request to a representative of the *(name of fire department)* by a representative of the *(installation)* Fire Department, firefighting equipment and personnel of the *(name of fire department)* will be dispatched, when available, to any point within the firefighting jurisdiction of the *(installation)* Fire Department.

c. The rendering of assistance under the terms of this agreement shall not be mandatory, but the party receiving the request for assistance should immediately inform the requesting department if, for any reason, assistance cannot be rendered.

d. Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(1) Any request for aid under this agreement will specify the location to which the equipment and personnel are to be dispatched; however, the amount and type of equipment and number of personnel to be furnished will be determined by a representative of the responding organization.

(2) The responding organization will report to the officer in charge of the requesting organization when the services of the responding organization are needed within the area for which it normally provides fire protection.

(3) A responding organization will be released by the requesting organization when the services of the responding organization are no longer required, or when the responding organization is needed within the area for which it normally provides fire protection.

(4) If a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation occurs within the area for which the *(name of fire department)* normally provides fire protection, the chief of the *(installation)* Fire Department or his or her representative may assume full command on arrival at the scene of the crash.

e. Each party hereby waives all claims against every other party for compensation for any loss, damage, injury or death occurring as a consequence of the performance of this agreement except those claims authorized under 15 U.S.C. 2210.

f. The chief fire officers and personnel of the fire departments of both parties to this agreement are invited and encouraged, on a reciprocal basis, to frequently visit each other's activities for guided familiarization tours consistent with local security requirements and, as feasible, to jointly conduct prefire planning inspections and drills.

g. The technical heads of the fire departments of the parties to this agreement are authorized and directed to meet and draft any detailed plans and procedures of operation necessary to effectively implement this agreement. Such plans and procedures of operations shall become effective upon ratification by the signatory parties.

h. All equipment used by *(name of fire department)* in carrying out this agreement will, at the time of action hereunder , be owned by it; and all personnel acting for *(name of fire department)* under this agreement will, at the time of such action, be an employee or volunteer member of *(name of fire department)*.

i. This agreement shall become effective upon the date hereof and remain in full force and effect until cancelled by mutual agreement of the parties hereto or by written notice by one party to the other party, giving thirty (30) days notice of said cancellation.

j. The foregoing does not affect, and will not be interpreted as affecting in any way, relevant provisions of the Status of Forces Agreement (SOFA).

For *(fire organization)*

(Title)

For the Secretary of the Army

(Commander)

Figure 2-2. Sample mutual aid fire and emergency services agreement to be used in foreign countries

Chapter 3
Fire and Emergency Services Training

3–1. F&ES training program

a. Administration. The fire chief, training officer and other fire department supervisors will actively participate in administration and execution of the training program.

b. General requirements. Training personnel will—

(1) Conduct a recurring proficiency training program per appendix C. Each fire department member will receive a minimum of 3 hours proficiency training per week as specified in this chapter. Fire departments may substitute state accredited Fire Fighter I & II certification training programs for appendix C program but will use appendix C to maintain proficiency.

(2) Secure specialized training through recognized and certified professional training sources for fire and emergency services personnel. Do this per Army directives and coordinate with local civilian personnel office.

3–2. Fire chief

The fire chief is responsible for the training program and will attend the annual Department of Defense Worldwide Fire & Emergency Services Training Session held concurrently with the International Association of Fire Chiefs (IAFC) conference. They will expand the program as necessary to maintain proficiency throughout all functional areas of the department and appoint appropriate training officer(s).

3–3. Training Officer

They will develop and implement a comprehensive F&ES training program and assign department instructors as required. Annual work plan will include funding for training requirements.

3–4. Training requirements

Minimum training requirements are as follows:

a. Training facilities. Per appendix B, enclosure 2, paragraph 10.

b. Training program elements.

(1) Proficiency training. Per DOD Fire Fighter Certification System and applicable NFPA Standards.

(2) Driver Training. AR 600-55 (chap 1) establishes policy and standard procedures for selecting, testing, and licensing of personnel to become Army motor vehicle and emergency response vehicle drivers. NFPA standards and local requirements may also apply.

(3) Emergency medical services training. Per appendix B, Encl 2, paragraph 4.e. All F&ES personnel assigned Emergency Medical Services duties will be EMT certified commensurate with the level of their duties.

(4) Physical fitness. All F&ES organizations will implement the Department of Defense Fire & Emergency Services Physical Conditioning (cardiovascular and muscular strength) Program. This program outlines a systematic approach to plan, carry out, and evaluate the results of a physical fitness program. An effective exercise program includes at least three workouts (separate days) per week during normal work hours.

(5) Hazardous Materials. Per appendix B, enclosure 2, paragraph 4.b. and 29 CFR 1910.120 (q), Hazardous Waste Operations and Emergency Response Training and 29 CFR 1910.1200, Hazard Communication.

(6) Infectious Control. Per 29 CFR 1910.1030, Bloodborne Pathogens.

(7) Confined Space Rescue. Per 29 CFR 1910.146, Permit Required Confined Spaces.

(8) Lock-out and Tag-out. Per 29 CFR 1910.147, The Control of Hazardous Energy (lockout/tagout).

(9) Respiratory Protection. Per 29 CFR 1910.134, Respiratory Protection.

(10) Biological Defense Safety Program. Per 32 CFR Part 626.

(11) Fire Prevention. Per 29 CFR 1960.26, Conduct of Inspections.

(12) Personal Protective Equipment. Per 29 CFR 1910.132, General requirements; 29 CFR 1910.133, Eye and Face Protection; 29 CFR 1910.135, Head Protection; 29 CFR 1910.136, Foot Protection; 29 CFR 1910.138, Hand Protection; 29 CFR 1910.139, Sources of Standards; and 29 CFR 1910.140, Standards Organization.

(13) Other Training. Sexual harassment, EEO, and so forth.

3–5. Training Guidance

The training officer will-

a. Develop monthly training schedules, approved by the fire chief, and post them in each operational fire station one week before their effective date. Schedules will include the; date, subject, name of instructor, reference material, and training aids required.

b. Use lesson plans contained in the DOD Fire Fighter Certification System and/or International Fire Service Training Association (IFSTA) standards.

3–6. Training exercises

a. The fire chief will ensure that the following training is performed:

(1) Quarterly. Aircraft Rescue Fire Fighting (ARFF) exercises on a mission-assigned aircraft designated by the fire chief.

(2) Semiannually. At least one structural exercise by each shift during darkness hours.

(3) Annually. Live ARFF fire fighting exercise to include all participants listed in the installation crash plan and at least one crew extraction exercise during darkness hours by each shift.

b. Only the fire chief or subordinate officers may authorize unannounced exercises. During responses to training exercises, fire departments cannot use warning devices and must strictly observe all traffic rules. Upon arrival at the training site, fire departments will use visual warning devices and conduct critiques following each exercise.

c. Interactive multimedia training systems will supplement above exercises.

3–7. Training records

a. Individual training evaluation record. Use the DA Form 5376-R (Individual Training Evaluation Record) located at the back of this regulation to document all training received by each individual in the fire department. This is a locally reproduced form on 8 1/2 x 11-inch paper and printed head-to-foot. Fire departments will retain these forms until the individual leaves the fire department.

b. Fire and emergency services training record. Use DA Form 5377-R (Fire and Emergency Services Training Record) located at back of this regulation to document each training session. The training officer will insert the DOD/NFPA certification level under the column labeled "Eval Gr." This is also a locally reproduced form on 8 1/2 x 11 inch paper and printed head to foot. The training office will use these reports to complete individual training records and the fire department training record chart. The training officer will compile these records on a fiscal year basis and retain these files 1 year after the cutoff date.

c. F&ES organizations will use the above two forms until automated under FIRMS.

Chapter 4
Fire and Emergency Services Operations

4–1. Fire department requirements

Appendix B, enclosure 2, paragraph 4, outlines F&ES response requirements.

a. Structural fire department requirements. The fire protection classification system identified in appendixes B and D will be used to determine primary (required) structural fire companies, based on the facilities strategic importance and mission criticality. Fire flow to "mission critical" facilities per appendix D, response times per

appendix B, and the following travel distances determine the number of primary (required) fire companies. The standard requirement for pumpers is based on two-thirds of the estimated fire flow requirement. The fire chief will establish this requirement; the MACOM's designated fire protection engineer or specialist will use appendix D to verify the requirement.

(1) Shops, industrial buildings, hangars, warehouses, child development centers, technical and research facilities, hospitals, and ship berthing. Half of the required pumpers will respond within 2 miles and 5 minutes from the fire station; the other half will be within 10 minutes.

(2) Administrative, exchange and commissary, recreation and assembly, dining halls, bachelor officer's quarters, bachelor enlisted quarters, and dormitories. Half of the required pumpers will respond within 3 miles and 7 minutes from the fire station; the other half within 14 minutes.

(3) Multifamily, single and duplex dwellings. Half of the required pumpers will respond within 5 miles or 9 minutes from the station; the other half within 18 minutes.

(4) Isolated or scattered buildings. Half of the required pumpers will respond within 7 miles or 15 minutes from the fire station; the other half within 20 minutes.

b. Aircraft rescue fire fighting (ARFF) companies. Per appendix B, enclosure 2 and chapter 5 of this regulation.

c. Hazardous materials (HAZMAT) response. Per appendix B, enclosure 2 and—

(1) OSHA 29 CFR 1910.120, 1910.1200 and NFPA 472 training and certification requirements for HAZMAT "1st Responders."

(2) Executive Order (EO) 12856, Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and the Pollution Prevention Act (PPA) of 1990.

d. Emergency medical services (EMS). Per appendix B, enclosure 2.

e. Facility response card. DA Form 5378-R (Facility Response Card), located at the back of this regulation, is a 5 x 8 inch locally reproducible card on 5 x 8 inch card stock. It contains specific facility information on one side and space for a single-line graphic drawing with the proper symbols on the reverse side. Similar facilities require only one graphic drawing. Fire department will prepare response cards for all mission-critical facilities and review them at least every other year.

f. Mutual aid allowances. Per appendix B, enclosure 2, paragraph 14.

g. Fire departments at active, inactive, laidaway, standby, and caretaker installations.

(1) Active installations. Civilian personnel normally perform F&ES functions. Installations may assign MOS 51-M military fire fighters to fire departments because of geographical, legal, training, rotation, combat readiness, or security reasons. Military personnel selected must meet the criteria contained in AR 611-1, paragraph 2-161.51M-Firefighter, CMF 51 and should be selected based on long-term availability (minimum 2 years on station).

(2) Inactive, laidaway, standby, and caretaker installations. A F&ES risk assessment will determine level of service for these types of installations. Commander will consider use of combined firefighter/guard forces and trained security and maintenance personnel as auxiliary fire fighters.

(3) Base realignment and closure (BRAC) fire protection. Army has responsibility to maintain F&ES as long as the Army owns or maintains the property. 10 U.S.C. 2465 prohibits entering into a contract for the performance of firefighting or security guard functions at any military installation or facility unless the requirements of P.L. 101-510, section 2905(b)(8)(A)-(D) are met concerning bases that are closing. (See also para 1-16). The following guidance should also be considered in determining the level of F&ES required at bases that are closing:

(a) Chapter 41 CFR Subpart 101-47.4 provides guidance on the level of fire protection for GSA surplus or excess property.

(b) Installation commanders should determine whether existing municipal (or other) fire departments will agree to include the closed installation within their service territory at no cost to the Army.

(c) Maintenance of grounds and facilities to prevent fires such as plowing fire lanes.

4–2. Firefighting equipment

Per AR 420-18 and appendix B, enclosure 2 of this regulation. Use DA Form 4119 to record fire hose tests.

4–3. Fire alarm communications center requirements

See appendix B, enclosure 2 and local requirements. Installations are authorized 911 systems with the following capabilities:

(1) Caller ID.

(2) Name and address of caller.

(3) Dictaphone and taping.

(4) Interface with radio net.

(5) Interface with fire alarm systems. AR 415-15, Army Military Construction Program Development and Execution and AR 25-3, Information Systems Supporting Military Construction Projects, govern the purchase, procurement and installation of fire detection and transmission equipment. Normal requirements are as follows:

a. Two-way radio communication net. Each installation requires an effective two-way radio net. Only fire stations, firefighting vehicles, provost marshal or law enforcement agencies, explosive ordnance disposal, control tower, and ambulances will use transceivers with this frequency. Aircraft and ARFF vehicles require a separate two-way radio communication frequency. Refer to NFPA 1221, Communication Systems, Public Fire Service

b. Primary and secondary fixed wire operational crash alarm. Installations will provide a primary telephone crash alarm with two way capabilities only between the tower, base operations, fire and medical authorities unless authorized by the installation commander. Installations will not overload or modify systems beyond their original design. Only those emergency agencies directly involved in first response to an airfield incident will be on the primary alarm system.

c. Direct communications line. Installations require; a direct telephone two-way circuit with the air traffic control tower, aircraft maintenance control, ambulance, MPs, or any other agency designated by the fire chief.

d. Installed systems central alarm receiver. All installed facility fire detection and suppression systems will transmit an alarm to the fire communication center per NFPA 72 except for small or remote locations approved by the MACOM. Installations will tag terminal blocks for telephone-type circuits to the alarm center to prevent inadvertent interruption during maintenance. Installations may authorize wireless (radio) fire alarm systems.

e. Voice recorder. Fire departments will have a voice recorder, interconnected to all emergency communication equipment. This equipment includes all fire reporting telephone circuits, direct lines, and the intrabase radio master control. Fire departments will keep all tapes at least 15 days or until fire or accident investigation boards complete their investigations.

f. Audible devices and public address systems. The fire communications center will include adequate sounding devices, controlled and coupled with local combined public address or intercom systems.

g. Systems outage. Fire stations will have a visual display that records the status of fire alarm systems, hydrants, and blocked roadways.

4–4. Vehicle inspection, maintenance, testing, and record keeping.

See appendix B, enclosure 2, NFPA standards, and the following:

a. General. Care of vehicles at the fire department includes-

(1) Organizational maintenance.

(2) Preventive maintenance.

(3) Intermediate maintenance.

(4) Capability testing.

(5) Vehicle status recordkeeping.

b. Maintenance.

(1) F&ES personnel will—

(a) Ensure that requisitions for fire fighting equipment parts have the appropriate issue priority designator (IPD). This IPD will equal the highest force activity designator (FAD) unit supported by the fire department. For example, spare parts' requirements for firefighting equipment that supports an installation FAD III unit will equal the IPD authorized for the FAD III unit. (See AR 725-50, chap 2, for further guidance on FADs and IPDs).

(b) Fire trucks require Operator's Preventive Maintenance Checks and Services (PMCS) to keep them in reliable working order. The applicable technical manual outlines PMCS' procedures. Annotate discrepancies on the locally reproducible DA Form 5379-R (Apparatus Maintenance Checklist) located at back of this regulation and report them to unit maintenance for correction.

(c) Take immediate action to return to service any firefighting or rescue vehicle that is out of service. Maintain a separate logbook to record vehicle-out-of-commission time based on a 24 hour per day requirement.

(2) The fire chief will ensure maintenance programs are in place for F&ES apparatus.

c. Vehicle capability tests per NFPA 1901 and other applicable standards.

(1) Record tests on the locally reproducible DA Form 5380-R (Fire Apparatus Test Record) located at the back of this regulation. This form is on 8 1/2 x 11-inch paper.

(2) Aerial ladder tests. Use NFPA 1904, Aerial Ladder and Elevating Platform Fire Apparatus for the annual testing and certification by a reputable organization and maintain testing records for three years.

4–5. Personal protective equipment

Per appendix B, enclosure 2, paragraph 11, and the following standards:

a. Self contained breathing apparatus (SCBA), per NFPA 1404 and 29 CFR 1910.134.

b. NFPA 1931, Design of and Design Verification Tests for Fire Department Ground Ladders for ladder maintenance.

c. Portable radios for supervisors, lead firefighters, fire inspectors and other fire protection personnel as justified by an operational concept plan for non-tactical radios.

d. Personal Alert Safety Systems (PASS) for all firefighters per NFPA 1982.

e. Personal Protective Equipment. Per 29 CFR 132, General requirements; 133, Eye and Face Protection; 135, Head Protection; 136, Foot Protection; 138, Hand Protection; 139, Sources of Standards; and 140, Standards Organization.

4–6. Fire department equipment.

a. Vehicle mounted and personal equipment will conform to applicable NFPA, OSHA, and CTA directives. Fire departments may use decals and safety striping on all administrative, command, and support vehicles.

b. Each structural and aerial apparatus will have on-board intercom communications system with radio interface to enhance command and control and also provide superior hearing protection. Use on other vehicles is optional.

4–7. Confined space rescue requirements.

See 29 CFR 1910.146.

4–8. Shipboard fire fighting.

Land based firefighters who are required to respond to marine vessel fires will attend formal shipboard firefighting training that meets U.S. Navy (NAVFACENGCOM) training standards and the NFPA 1405 Standard.

Chapter 5
Aircraft Rescue Fire Fighting (ARFF)

5–1. Introduction

a. Each Army airfield must implement a fully coordinated ARFF program.

b. AR 385-95, Air Force TO 00-105E-9 and IFSTA, contain suggested pre-accident plans and give detailed information on ARFF techniques.

5–2. Coordination and support

Fire departments will consider outside resources and coordinate their program with local airports, municipal ARFF organizations, medical activities, and other federal agencies as required.

5–3. Ambulance service

The appropriate medical authority is responsible to the installation commander for properly equipped and manned ambulances. At non-Army airfields, the host installation commander will provide ambulance services.

5–4. Training requirements

ARFF personnel training will comply with the DoD Fire Fighter Certification System Standards and chapter 3 of this regulation.

5–5. Aircraft accident emergency teams

Aircraft accident emergency teams consist of the following three personnel groups:

a. Group I. Personnel required to immediately participate in operations, for example, fire fighters, medical personnel.

b. Group II. Personnel required to perform related supporting services as circumstances may develop, for example, law enforcement, personnel, aviation safety officer.

c. Group III. Personnel whose attendance is part of their official duties and/or requested by the SFO in charge. Examples are; installation or airfield commander and fire marshall, accident investigation personnel, chaplains, public affairs office or explosive ordnance disposal.

5–6. Aircraft rescue fire fighting (ARFF) apparatus requirements

Per appendix B, enclosures 2 and 3. All Army helicopter landing sites fall under Category A airfields as defined in enclosure 3 of appendix B. The average number of military aircraft movements (arrivals and/or departures) per day determines the number and type of ARFF apparatus. The total number of aircraft movements during the previous 12-month period divided by 365 (366 if leap year) determines this average number.

a. Category A Airfields with or without permanently assigned rotary winged aircraft and fixed wing aircraft less than 60 feet in overall fuselage length requires the following ARFF protection.

(1) Less than 25 movements (average) per day. Portable fire extinguishers used by airfield personnel and trained as auxiliary firefighters.

(2) From 25 to 40 movements (average) per day. Installation may assign standard or nonstandard firefighting equipment (with or without firefighter personnel).

(3) More than 40 movements (average) per day.

(a) The multipurpose Military Adaptation of Commercial Item (MACI), is the standard ARFF vehicle for these rotary and small fixed winged aircraft (less than 60 feet). It has a 1000 gpm pump, 660 gallon water tank, 60 gallon AFFF concentrate tank, and cab operated (not considered manual) bumper and overhead turrets.

(b) CH-47 and larger helicopters averaging 6 or more movements above the 40 movements per day (for example 46 per day average at airfield) require a second MACI. This requirement based on live MACI fire tests conducted at the Air Force's research facility.

(c) An Air Force P-19 (or an equivalent 1000 gallon commercial ARFF vehicle) may substitute for two MACIs. This requirement has been validated at the Air Force fire test site using empirical calculations adapted from the DOT Federal Aviation Administration (FAA)

Advisory Circular 150/5210-6C and the NFPA formula on Page 418-9, Appendix A of NFPA 418. MACOMs will determine ARFF rescue staffing for single P-19 operations.

b. MACOMs may approve larger ARFF apparatus (not covered in paragraph a above) for—

(1) large fixed wing aircraft (C-130, C-123 or similar aircraft) normally require one P-19 or equivalent.

(2) other aircraft (C-141, KC-135, DC-8, B707, C-5, KC-10, DC-10 or similar aircraft) normally require two P-19's.

c. Cross staffed and ARFF trained structural fire fighting crews may backup primary ARFF vehicles.

Chapter 6
Fire Prevention (Technical Services)

6–1. Installation fire prevention program
The installation commander is responsible for formulating a fire prevention program (to include all tenants) per appendix B, Encl 2 and NFPA Standard 1, Fire Prevention Code.

6–2. Building manager or evacuation coordinator
The building manager will serve as the evacuation coordinator per AR 420-17. This individual will execute fire prevention measures in the assigned building or facility and provide written reports to the fire chief including inspections and emergency evacuation plans. The building manager will issue the self-adhesive, DA Label 179 (Fire/Police/Ambulance Telephone Number Decal), to the residents for each telephone.

6–3. Military family housing
a. Family housing residents will comply with this regulation and AR 210-50 (chap 7), Housing Management.

b. Portable gas or liquid fuel space heaters are prohibited in family quarters or where personnel sleep (including tents). When certified by an independent testing agency, installations may use these heaters in remote, small, well-ventilated locations where people do not sleep (such as guard houses, ranges, or training areas) or when approved by the installation commander as interim emergency heating.

c. Kitchen range fire extinguishing systems will be provided in transient and family quarters when economically justified.

6–4. Monitoring and controlling contractor operations
The installation fire chief (or designated representative) will monitor contractor operations on all maintenance and repair, construction, and self-help projects. The contracting officer representative (COR) will notify the contractor and request prompt corrective action when they find fire hazards, unsafe practices, or noncompliance with specifications. The fire chief, if delegated this authority by the Commander, may stop any operation or activity when there is imminent danger to life and property.

6–5. Fire risk management surveys
Appendix B, enclosure 2, gives guidance for conducting these surveys. Use the following reproducible forms until automated under FIRMS:

a. Building fire risk management surveys. The reproducible DA Form 5381-R (Building Fire Risk Management Survey), located at back of this regulation, provides a checklist and recording document. The inspector will complete this form every time she/he surveys the building or facility. Each building will have a separate file folder containing past survey records, hazard/deficiency survey records, fire extinguisher inventory and maintenance information, a copy of the pre-fire plan, and other pertinent data. Fire departments will establish a record keeping system (may be computerized) to monitor the building survey program. It should identify by frequency, scheduled and completed inspections, and those overdue or needing re-inspection.

b. Hazard/deficiency survey record. The reproducible DA Form 5382-R (Hazard/Deficiency Survey Record), located at back of this regulation, informs the building manager of fire hazards or deficiencies noted during surveys.

c. Hot—work permit. The reproducible DA Form 5383-R (Hot—Work Permit), located at back of this regulation, authorizes open flame operations, welding operations, or other hazardous potential fire actions. Permanent shops, approved by the fire chief, do not require this form.

Chapter 7
Fire Protection Engineering

7–1. General requirements
Per Military Handbook (MIL-HDBK) 1008, Fire Protection for Facilities, Engineering, Design and Construction, and this regulation. New construction, renovations and modernization projects will comply with MIL-HDBK 1008. For repair projects, only the new work is required to comply with the requirements for new construction. As a minimum, existing buildings will comply with the requirements of NFPA 101, Life Safety Code, for existing buildings.

7–2. Cost effectiveness
Appropriate fire protection in facility and system designs guarantees the most economical and least interruption of essential missions. Installations will not omit fire protection from construction designs and plans for the sake of economy or expediencies, since add-ons are expensive and often less effective.

7–3. Standards and criteria
Public Law 91-596, Occupational Safety and Health Act (OSHA) of 1970, Title 29, United States Code, 651 et. seq., applies to Army facilities. In situations not covered under para 7-1, installations will use the nationally recognized publications listed in appendix A.

7–4. Review of projects
Per appendix B, enclosure 2, paragraph 1a, and the following is required—

a. Installation and/or MACOM F&ES personnel will review all maintenance and repair and construction real property facility projects (for example, alteration, construction, conversion, expansion, maintenance and repair) including DD Forms 1391 (FY Military Construction Project Data) to ensure fire safety standards and criteria are met. This includes nonappropriated funds (NAF), Army and Air Force Exchange Services (AAFES), and self-help projects.

b. The F&ES office will keep all fire risk management surveys in separate facility folders until satisfactory completion of the project.

7–5. Fire protection deficiency correction program
F&ES organizations will use the risk management model employed in AR 385-16, System Safety Engineering and Management.

7–6. Fire protection systems
a. Provide fire protection systems (suppression and detection) per MIL-HDBK 1008 and the following.

(1) Install. hard-wired smoke detectors and, where required, automatic sprinkler systems in Army-controlled family housing units in the United States and its territories per PL 102-522 (15 U.S.C. 2201), as implemented by the following Army policy. These housing units include military family housing, government owned mobile homes, and government leased housing.

(a) Smoke detectors, hardwired to the building electrical system and meeting the requirements of NFPA 72 will be provided in all housing units. When smoke detectors are installed and where more than one smoke detector is required, they will be so arranged that operation of any smoke detector will cause the alarm sounding device in all smoke detectors within the unit to sound. Privately owned mobile homes will have smoke detectors as a prerequisite for assignment to mobile home space.

(b) Automatic sprinkler protection per the applicable NFPA 13,

13R or 13D standards, will be provided for new multi-family housing and for renovated multi-family housing whose renovation cost is 70 percent or more of the dwelling unit costs, excluding the land. When replacement cost is less than 70 percent, family housing will meet the requirements of MIL-HDBK 1008. For purpose of this regulation, multi-family housing is defined as a residential building with more than two residential units under one roof. Townhouses with two-hour, fire-rated unit separation walls which extend from ground to the roof deck are not considered multi-family housing and will be protected the same as single-family housing.

(2) Army UPH, hotels, and transient quarters used for federal employees on official travel will comply with the Hotel & Motel Fire Safety Act of 1990, PL 101-391(15 U.S.C. 2224). It requires single station hard wired smoke detectors in each guest room per NFPA 72 and automatic sprinkler systems in buildings four or more stories. For new facilities, compliance with MIL-HDBK 1008 is required.

b. The maintenance, inspection, and testing of fire protection systems, and water distribution systems will comply with applicable NFPA Codes and Technical Manual 5-695, Maintenance of Fire Protection Systems.

c. Installations will assign the highest repair priority for fire protection systems.

7–7. Halon fire fighting agents phaseout

a. Army Ozone Depleting Chemicals (ODC) Strategic Plan prohibits new Halon 1301 fire suppression systems and procurement of Halon 1211 extinguishers. It also prohibits training or acceptance testing using these halons.

b. Halon fire fighting agents for facilities are not mission critical because there are acceptable (non ozone depleting) alternatives, such as water, carbon dioxide, foam, and dry chemical. The basis of this policy is a 1992 Army study, "Assessment of Halon Fire Protection Systems and Alternative Fire Protection Methods for U.S. Army Fixed Facilities.". (This study available from proponent of this regulation on request).

c. Halon 1211 is a streaming agent (higher boiling temperature than Halon 1301) used in portable hand extinguishers for electronic equipment areas and in large wheeled extinguishers at airfields and POL sites. Some Aircraft, Rescue, Fire Fighting (ARRF) vehicles use Halon 1211 as a secondary fire fighting agent. Halon 1301 is a gaseous agent primarily used in command, control, communications and computer facilities.

d. Installation commanders, in coordination with their MACOMs, must develop and implement an ODC management plan. This plan should program funding thru FY03 to phaseout existing Halon 1301 fire suppression systems in facilities; replace Halon 1211 in portable/wheeled extinguishers by attrition; and replace the secondary Halon 1211 firefighting agent on their Aircraft Rescue Fire Fighting (ARFF) vehicles with BC dry chemical agent. This plan will include:

(1) A Risk Assessment (RA) for every installed Halon 1301 total flooding fire suppression system on the installation. If there are redundant fire suppression systems, such as water sprinklers in addition to the halon suppression system, remove the halon system. Installations may place Halon 1301 systems discharging at less than 10% concentration on manual operation per recent OSHA ruling. Installations will not refill discharged Halon 1301 systems until a RA validates the continued necessity of the system. RA should also determine whether an Equivalent Level of Protection (ELP) exists. If the RA validates a Halon 1301 system requirement, the installation may refill the cylinders, provided the installation's ODC plan identifies a replacement through the Planning, Programming, Budgeting Execution and Review System (PPBERS). The Environmental Pollution Prevention, Control, and Abatement at DOD Facilities Report (RCS DD-P&L(SA) 1383) policy and guidance, authorizes MACOMs to develop projects and program resources to replace Halon 1301 fire suppression systems.

(2) Substitute Halon 1211 extinguishers with dry chemical, water, carbon dioxide or foam extinguishers NFPA 10, Portable Fire Extinguishers. Army fire departments may replace the secondary Halon 1211 firefighting agent on their Aircraft Rescue Fire Fighting (ARFF) vehicles with BC dry chemical agent. Installations may recover Halon 1211 agent from extinguishers, handlines, or other pressure vessels per UL 2006, Halon 1211 Recovery/Recharge Equipment standard.

e. Alternative/substitute halon fire suppression agents published in EPA's Significant New Alternatives Policy (SNAP) list to replace or retrofit existing halon systems must be UL listed or FM approved. The SNAP list includes water mist systems as Halon 1211 and 1301 replacements.

f. The intentional release of halon. during service, maintenance, repair, and disposal of any fire fighting equipment is prohibited.

g. Installations will ship all excess and recovered halons to DLA Reserve, Defense General Supply Center (DGSC), Richmond, Virginia for deposit in the Army's Reserve for critical uses. Refer to MILSTRIP Regulation DoD 4000.25-1-M, chapter 9 and AR 755-1, chapter 4, for instructions to return halons using DD Form 1348.

7–8. Fire extinguishers

a. Facilities. The facilities engineering supply account may furnish support for the initial installation of fire extinguishers in newly constructed facilities and their replacement in existing facilities. The fire department will determine the type, size, and location of extinguishers per NFPA Standard 10. Installations will not furnish portable fire extinguishers in family housing areas.

b. Flightlines. Installations will issue (on hand receipt). alkaline base (sodium and potassium bicarbonate), BC, dry chemical, 50-pound and 125-pound or equivalents, wheeled extinguishers for the following aircraft. (They will replace existing 1211 extinguishers through attrition).

(1) Every three parked, small, or "medium helicopters" (UH-60/AH-64 and below) and small "fixed-wing" aircraft (C-12 or equivalent) requires a 50-pound BC, dry chemical or equivalent, wheeled fire extinguisher.

(2) Every three parked "large helicopters" (CH-47 or equivalent), requires a 125-pound BC, wheeled, dry chemical or equivalent, fire extinguisher.

(3) Every three parked, "medium fixed-wing aircraft" (for example, C-12J, C-20, C-23 A&B, C-26 or similar aircraft) requires a 125-pound BC, wheeled, dry chemical or equivalent fire extinguisher.

(4) Every parked, "large-frame" aircraft (for example, C-130, C-5, C-141, KC-135, DC-8, B707, KC-10, DC-10 or similar aircraft) requires a 125-pound BC, wheeled, dry chemical or equivalent, extinguisher.

(5) Every landing strip and helipad without regularly assigned ARFF vehicles requires a 125-pound BC, dry chemical or equivalent extinguisher.

c. Aircraft. The user will provide fire extinguishers and extinguishing systems according to the specifications for specific type and model aircraft.

d. Petroleum, Oils, Lubricant (POL) areas. The user will provide BC, dry chemical extinguishers at POL tanker truck dispensing points, tanker truck parking areas, and outside tracked vehicle maintenance areas.

e. Off-the-road mobile equipment. Provide per applicable TBs.

f. Troop units. Issue per TB 5-4200-200-10.

g. Watercraft. Provide per Coast Guard regulations (available from the Commandant, U.S. Coast Guard (G-M/A2), WASH DC 20590).

7–9. Water distribution systems

See TM 5-813-1, TM 5-813-2, TM 5-813-4, TM 5-813-5, TM 5-813-7, and MIL-HDBK-1008.

a. Conduct Fire flow testing per AR 420-46 and IFSTA, chapter 4, Fourth Edition, Water Supplies for Fire Protection. Enter results

on reproducible, 8 1/2 by 11-inch, DA Form 5384-R (Water Flow Test) located at back of this regulation.

b. Paint fire hydrants per NFPA 291, Fire Flow Testing and Marking of Hydrants and title 29, CFR 1910.144(a)(1)(i). Install protective barriers when hydrants are subject to vehicular traffic damage and paint similarly to traffic barriers. Conduct hydrant maintenance inspections per IFSTA, chapter 1, Fourth Edition, Water Supplies for Fire Protection.

7–10. Fire loading and building materials

NFPA Fire Protection Handbook, Underwriter's Laboratories "Fire-Resistance Directory," Factory Mutual (FM) Approval Directory, and MIL-HDBK 1008 specify acceptable construction materials.

Chapter 8
DOD Fire Incident Report (DD-ACQ&T(AR)-1765)

8–1. Reporting fires and emergency services

This chapter establishes procedures for completing DOD Fire Incident Reporting System (DFIRS) report per DOD 6055.7, "Accident Investigation Reporting and Recordkeeping" and DODI 6055.6, DOD Fire and Emergency Services Program.

8–2. Report format

The new reengineered "Paperless" DFIRS uses personal computer software and the electronic transfer of reports to the central DOD repository at the Naval Safety Center, Norfolk, Virginia. DFIRS Version I covers all "Fire and non-fire" emergency services.

8–3. Approval and submission procedures

a. MACOM commanders will establish procedures for processing microcomputer discs or the electronic transfer of reports within 14 calendar days to the Department of the Navy, Naval Safety Center, 375 "A" Street, ATTN: Code 44, Norfolk, VA 23511-4399. If transmitting DFIRS files electronically via modem through Naval Safety Bulletin Board System (BBS), make up load file and transmit file to (757) 444-6164. Call (757) 444-3520, Ext. 7048 for BBS assistance. Note: Until you can confirm successful transfer of DFIRS electronic files, copy the file to diskette and mail.

b. Installations will immediately report a fatality or material damage over $200,000 to HQDA(ACSIM). Installations may: e-mail: PARKBR@PENTAGON-ACSIM3.ARMY.MIL; or FAX, (703) 428-6197 these reports to HQDA.

8–4. Investigation of fire incidents

The installation commander will ensure thorough investigations of all fire incidents.

a. MACOM fire officials will conduct a supplemental technical investigation when a fire causes a death or more than $200,000 damage. AR 15-6, Procedure for Investigating Officers and Boards of Officers, investigations may substitute for these supplemental technical investigations. Reports of survey or authorized substitutes for survey actions (AR 735-5), mainly concerned with financial responsibility and property accountability, are not acceptable. MACOM commanders will send one copy of the supplemental technical or substitute investigation report to HQDA (ACSIM), ATTN: DAIM-FDF-B, 7701 Telegraph and Leaf Roads, Alexandria, VA 22315-3800, within 30 workdays or 45 calendar days of the fire incident. This is separate from investigation of accidental fires per AR 385-40.

b. The United States Army Criminal Investigation Command (USACIC) has primary investigative jurisdiction over fire incidents when caused by criminal acts or intent. Additionally, USACIC has responsibility for investigation of all unattended deaths.

c. Family housing.

(1) Per AR 735-5, paragraph 14-12, a member is financially responsible (one month's pay for simple negligence and total liability for gross negligence) to the United States for damage to any assigned quarters and related equipment or furnishings, if the member's, dependent's or guest's willful misconduct or negligence caused the damage. The term "assigned quarters" means both family and unaccompanied personnel housing.

(2) Residential personal property or liability insurance is not provided by the government but is encouraged per AR 210-50, Housing Management.

8–5. Release of Fire Investigation Reports

AR 25-5 governs the release of fire investigative reports requested under the Freedom of Information Act (FOIA). AR 385-40 in conjunction with AR 25-55 governs the processing of FOIA requests for information from fire investigative records.

Appendix A
References

Section I
Required Publications

AR 11–2
Management Control. (Cited in para 1-13b.)

AR 15–6
Procedure for Investigating Officers and Boards of Officers. (Cited in para 8-4.)

AR 25–3
Information Systems Supporting Military Construction Projects. (Cited in para 4-3.)

AR 30–1
The Army Food Program. (Cited in para 1-14b.)

AR 50–6
Chemical Surety Program. (Cited in para 1-15b.)

AR 140–483
Army Reserve Land and Facilities Management. (Cited in para 1-17e.)

AR 210–50
Housing Management. (Cited in paras 6-3a and 8-4c(2).)

AR 385–16
System Safety Engineering and Management. (Cited in para 7-5.)

AR 385–64
Ammunition and Explosives Safety Standards. (Cited in para 1-15b.)

AR 385–95
Army Aviation Accident Prevention. (Cited in para 5-1b.)

AR 415–15
Army Military Construction Program Development and Execution. (Cited in para 4-3.)

AR 420–17
Real Property and Resource Management. (Cited in para 6-2.)

AR 420–18
Facilities Engineering Materials, Equipment, and Relocatable Building Management. (Cited in para 4-2.)

AR 420–46
Water and Sewage. (Cited in para 7-9a.)

AR 600–55
Motor Vehicle Driver and Equipment Operator Selection, Testing, and Licensing. (Cited in para 3-4b(2).)

AR 725–50
Requisitioning, Receipt, and Issue System. (Cited in para 4-4b(1).)

AR 735–5
Policies and Procedures for Property Accountability. (Cited in para 8-4a & b.)

CTA 50–900
Clothing and Individual Equipment. (Cited in para 2-5.)

CTA 50–909
Field and Garrison Furnishings and Equipment. (Cited in para 2-1h.)

CTA 50–970
Expendable Items (Except: Medical, Class V, Repair Parts and Heraldic Items). (Cited in para 2-1h.)

DA Pam 50–6
Chemical Accident or Incident Response and Assistance (CAIRA) Operations. (Cited in para 1-15b.)

DA Standard Definitive Design Pamphlet, Fire Stations (June 1994)
Definitive Designs for One and Two Company Headquarters and Satellite Stations. (Cited in para 2-1h.)

Air Force TO 00–105E–9
Aircraft Emergency Rescue Information Fire Protection. (Cited in para 5-1b.) (Obtain this TO by writing to: HQ AFCESA/DF, 139 Barnes Drive, Tyndall AFB, FL 32403-5319.)

DoD 4000.25–1–M
MILSTRIP Regulation. (Cited in para 7-7g.)

DoD 4100.3
Commercial Activities Program Procedures. (Cited in para 1-16.)

DOD 6055.7
Accident Investigation Reporting and Recordkeeping. (Cited in para 8-1.)

DoDI 6000.10
Emergency Medical Services. (Cited in para 2-1a.)

Executive Order 12856
Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and the Pollution Prevention Act (PPA) of 1990. (Cited in para 4-1c(2).) Your legal office or law library has a copy compiled under "U.S. Code Congressional and Administrative News"or purchase from the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325.

FAA Advisory Circular Number 150/5210–6C and FAR
Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers. Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. (Cited in paras 5-6a(3)(c).)

Factory Mutual Approval Directory
Purchase this directory from the following source: Order Processing, Factory Mutual Engineering, 1151 Boston- Providence Highway, Norwood, MA 02062-9102. (Cited in para 7-10a.)

Fire Resistance Directory
Underwriters Laboratories (UL) Fire Resistance Directory (Cited in para 7-10.) Purchase this index from the following commercial source: Underwriter's Laboratories, Inc., Publications Stock, 333 Pfingsten Rd., Northbrook, IL 60062-2096.

International Fire Service Training Association
IFSTA) Manuals (ISBN 0-87939-073-5) (Cited in paras 5-1b and 7-9a.). Purchase these manuals from the following commercial source: Oklahoma State University, Fire Protection Publications, Stillwater, OK 74078-0118. Submit requisitions through the local procurement section.

MS–3
Manpower Staffing Standards System Final Report (FIN-REP)/ Application, Fire Protection (Army Common) CONUS, dated January 1989. (Cited in para 2-1a(1).)

MIL–HDBK–1008 (current edition)
Fire Protection for Facilities Engineering, Design and Construction. (Cited in para 7-10.)

National Fire Protection Association (NFPA) Codes and Standards
(Cited in appendixes E-4, E-6 and paras 1-17d, 4-1c, 4-3a, 4-4, 4-4c(2), 4-5a,b,d, 4-6, 4-8, 5-6a(3)(c), 6-1, 7-6a(1), 7-6b, and 7-8a.) Purchase these codes and standards, published by the National Fire Protection Association, from the following commercial source: NFPA, ATTN: Publication Sales Department, 1 Batterymarch Park, P.O. Box 9146, Quincy, MA 02269-9146.

NFPA Fire Protection Handbook
(Cited in para 7-10.) Purchase this handbook from NFPA, ATTN: Publication Sales Department, 1 Batterymarch Park, P.O. Box 9146, Quincy, MA 02269-9146.

OSHA 29 CFR 1910.120
Hazardous Waste Operations and Emergency Response. (Cited in paras 2-1a, 4-1c.)

OSHA 29 CFR 1910.134
Respiratory Protection. (Cited in para 4-5a.)

OSHA 29 CFR 1910.144(a)(1)(i)
Safety Color Code for Marking Physical Hazards. (Cited in para 7-9b.)

OSHA 29 CFR 1910.146
Permit Required Confined Spaces. (Cited in paras 2-1a, and 4-7.)

OSHA 29 CFR 1910.147
The Control of Hazardous Energy (lockout/tagout) (Cited in para 3-4b.(8))

OSHA 29 CFR 1910.156
Fire Brigades. (Cited in para 2-1f.)

OSHA 29 CFR 1910.1030
Bloodborne Pathogens. (Cited in para 3-4b.(6))

OSHA 29 CFR 1910.1200
Hazard Communication. (Cited in para 3-4b.(5))

OSHA 29 CFR 1960.26
Conduct of Inspections. (Cited in 3-4b.(11))

Public Law 91-596
Occupational Safety and Health Act (OSHA), Title 29 United States Code, 651 et seq. (Cited in paras 1-17b and 7-3.) Your legal office or law library has a copy compiled under "U.S. Code Congressional and Administrative News" or purchase from the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325.

Public Law 101-391
Hotel & Motel Fire Safety Act of 1990. (Cited in para 7-6a(2).)

Public Law 101-510
Defense Base Closure and Realignment Act of 1990, PL 101-510, as amended, Section 2905 (b)(8)(A)--(D). (Cited in para. 1-16.)

Public Law 102-522
Fire Administration Authorization Act of 1992. (Cited in paras 7-6a(1).)

SB 700-20
Army Adopted/Other Items Selected for Authorization/List of Reportable Items. (Cited in para 2-1h.)

TB 5-4200-200-10
Hand Portable Fire Extinguishers Approved for Army Users. (Cited in para 7-8f.)

TM 3-250
Storage, Shipment, Handling, and Disposal of Chemical Agents and Hazardous Chemicals. (Cited in para 1-15b.)

TM 5-695
Maintenance of Fire Protection Systems (NAVFAC MO-117), (AFM 91-37). (Cited in para 7-6b.)

TM 5-813-1
Water Supply: General Considerations. (Cited in para 7-9.)

TM 5-813-2
Water Supply: Water Sources. (Cited in para 7-9.)

TM 5-813-4
Water Supply: Water Storage. (Cited in para 7-9.)

TM 5-813-5
Water Supply: Water-Distribution Systems. (Cited in para 7-9.)

TM 5-813-7
Water Supply for Special Projects. (Cited in para 7-9.)

United States Code (USC), Title 10, Chapter 47
Uniform Code of Military Justice. (Cited in para 1-4.)

United States Code (USC), Title 10, Section 2465
Prohibition on contracts for performance of firefighting or security guard functions. (Cited in para 4-1f(3).)

United States Code (USC), Title 29, Section 794 and Title 42, Sections 4151-4157
Americans with Disabilities Act Guidelines (ADAAG) of 1990 and Uniform Federal Accessibility Standards (UFAS). (Cited in para 1-17c.)

Section II
Related Publications
A related publication is merely a source of additional information. The user does not have to read it to understand this regulation.

AR 5-17
Army Ideas for Excellence Program

AR 11-2
Internal Management Control Review Checklist

AR 25-5
Release of Investigative Reports

AR 25-55
Processing FOIA requests

AR 50-5
Nuclear Surety

AR 58-1
Management, Acquisition and Use of Administrative-Use Motor Vehicles.

AR 95-1
Army Aviation: General Provisions and Flight Regulations

AR 95-2
Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids

AR 335-15
Management Information Control System

AR 385-10
Army Safety Program

AR 385–40
Accident Reporting and Records

AR 385–55
Prevention of Motor Vehicle Accidents

AR 405–45
Inventory of Army Military Real Property

AR 405–90
Disposal of Real Estate

AR 420–70
Buildings and Structures

AR 420–74
Natural Resources: Land, Forest, and Wildlife Management

AR 500–50
Civil Disturbances

AR 500–60
Disaster Relief

AR 700–88
Commercial Design Vehicles

CEGS–15501
Sprinkler Systems, Fire Protection. (Obtain from National Institute of Building Sciences, 1201 L Street, NW., Suite 400, Washington, DC 20005-4024.)

CEGS–16721
Fire Detection and Alarm Systems. (Obtain from same address as above.)

DA Pam 385–40
Army Accident Investigation and Reporting

DA Pam 420–8
Facilities Engineering Management Handbook.

DODD 6055.9 — STD
DOD Ammunition and Explosives Safety Standards.

FM 10–67
Petroleum Supply in Theaters of Operation

FM 10–68
Aircraft Refueling

FM 10–69
Petroleum Supply Point Equipment and Operations

FM 10–71
Petroleum Tank Vehicle Operations

Joint Commission on Accreditation of Healthcare
Organizations (Purchase this manual from the JCAHO, 1 Renaissance Blvd., Oakbrook Terrace, IL 60181.)

NFPA Healthcare Facilities Handbook
Purchase this handbook from: NFPA, ATTN: Publication Sales Department, 1 Batterymarch Park, P.O. Box 9146, Quincy, MA 02269-9146.

NFPA Life Safety Code Handbook
Purchase this handbook from NFPA, ATTN: Publication Sales Department, 1 Batterymarch Park, P.O. Box 9146, Quincy, MA 02269-9146.

Public Law 93–498
Federal Fire Prevention and Control Act of 1974.

Public Law 98–407, Section 801
Liability of Occupants of Military Housing, 10 USC, Section 2775.

Public Law 101–549
The Clean Air Act Amendments of 1990, Title VI: Stratospheric Ozone and Global Climate Protection.

TB 43–0002–38
Maintenance Expenditure Limits for FSC Group 42, FSC Classes 4210 and 4230.

TM 5–848–2
Handling of Aircraft and Automotive Fuels.

TM 9–1300–206
Ammunition and Explosive Standards

TM 38–600
Management of Administrative Use Motor Vehicles.

TM 38–750
The Army Maintenance Management System (TAMMS).

Uniform Building Code
Purchase this code from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, CA 90601-2298.

Section III
Prescribed Forms

DA Form 4119
Fire Hose Record. (Prescribed in para 4-2.)

DA Form 5376–R
Individual Training Evaluation Record. (Prescribed in para 3-7a.)

DA Form 5377–R
Fire Protection Training Record. (Prescribed in para 3-7b.)

DA Form 5378–R
Facility Response Card. (Prescribed in para 4-1e.)

DA Form 5379–R
Apparatus Maintenance Checklist. (Prescribed in para 4-4b(1)(b).)

DA Form 5380–R
Fire Apparatus Test Record. (Prescribed in para 4-4c(1).)

DA Form 5381–R
Building Fire Risk Management Survey. (Prescribed in para 6-5a.)

DA Form 5382–R
Hazard/Deficiency Survey. (Prescribed in para 6-5b.)

DA Form 5383–R
Hot - Work Permit. (Prescribed in para 6-5c.)

DA Form 5384–R
Water Flow Test. (Prescribed in para 7-9a.)

DA Label
Fire/Police/Ambulance Telephone Number Decal. (Prescribed in para 6-2.)

Section IV
Referenced Forms

This section contains no entries.

Appendix B
Department of Defense Instruction 6055.6

Department of Defense
INSTRUCTION

December 15, 1994
NUMBER 6055.6

USD(A&T)

SUBJECT: DoD Fire and Emergency Services Program

References: (a) DoD Instruction 6055.6, "Department of Defense Fire Protection Program," August 1, 1988, (hereby canceled)
(b) DoD Directive 1000.3, "Safety and Health Policy for the Department of Defense," March 29, 1979
(c) DoD Instruction 6055.7, "Mishap Investigation, Reporting and Recordkeeping," April 10, 1989
(d) MIL-HDBK 1008B, "Fire Protection for Facilities Engineering, Design, and Construction," January 15, 1994
(e) through (q), see enclosure 1

A. REISSUANCE AND PURPOSE

This Instruction:

1. Reissues reference (a) to update policy and criteria for the allocation, assignment, operation, and administration of DoD fire departments and related fire prevention functions, including emergency response, under reference (b).

2. Establishes the DoD Fire and Emergency Services Quality Working Group.

3. Authorizes the publication of Guides, Handbooks, and Manuals to provide specific information on DoD fire fighter qualifications, fire and emergency services programs, and fire incident reporting.

B. APPLICABILITY

This Instruction applies to the Office of the Secretary of Defense (OSD), the Military Departments, and those Defense Agencies having responsibility for maintaining organized fire and emergency services (hereafter referred to collectively as "the DoD Components"). The term "Military Services" as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

C. POLICY

It is DoD policy that:

1. The DoD Components shall establish and maintain an installation fire fighting, fire prevention, and emergency services program (hereafter referred to as "the fire and emergency services program") as an element of the overall DoD accident prevention program prescribed in DoD Directive 1000.3 (reference (b)).

2. All DoD Components that occupy General Services Administration (GSA) managed buildings are concurrently responsible with GSA for developing and maintaining sound fire prevention programs.

D. RESPONSIBILITIES

1. The Deputy Under Secretary of Defense (Environmental Security), shall:

a. Oversee the implementation of this Instruction and represent the Secretary of Defense on both internal and interagency matters on the fire and emergency services program.

b. Provide criteria, guidance, and instructions to incorporate fire fighting, fire prevention, and emergency response elements in appropriate DoD program and budget documents.

c. Establish, as an integral element of the Defense Environmental Security Council (DESC) and related Board and Committee structure, the DoD Fire and Emergency Services Quality Working Group (comprised of members from OSD, the Military Services, and the Defense Logistics Agency).

2. The Heads of the DoD Components having responsibility for maintaining organized fire and emergency services shall establish and maintain programs that conform to the requirements and procedures specified in this Instruction. Particular emphasis shall be placed on fire prevention education as a means to enhance the total fire and emergency services effort and other fire prevention techniques to eliminate the causes of fires and to prevent death, injuries, and property damage if fire occurs.

3. The Secretary of the Navy shall maintain the DoD Fire Incident Reporting System as prescribed in DoD Instruction 6055.7 (reference c), in an automated management information system format, for collecting and analyzing fire incident data and fire department response information.

4. The Secretary of the Air Force shall administer a DoD Fire Fighter Certification System for all DoD Components, and shall provide basic structural fire fighting, aircraft rescue fire fighting, and technical training for all DoD Components (except for specialized and local training as provided herein).

Additionally, a DoD Physical Fitness Program shall be developed and provided to all DoD Components.

E. PROCEDURES

1. The DoD Fire and Emergency Services Quality Working Group shall:

a. Meet at the call of the Chair to share information, discuss issues, and recommend policies to the DESC related to fire prevention, fire suppression, training, fire apparatus, fire equipment, fire administration, emergency medical response, and hazardous materials emergency response. The Chair of the Quality Working Group will rotate annually among the Military Services and the DLA members.

b. Serve as the technical advisor to the DESC for the DoD Fire and Emergency Services Program , the Fire Incident Reporting System, the Fire Fighter Certification System, and the Fire Fighter Physical Fitness Program.

c. Draft and revise, as required, the DoD Strategic Plan for Fire and Emergency Services.

d. Develop meaningful metrics to evaluate the success of the DoD fire and emergency services program.

2. The DoD Components' fire and emergency services programs shall include the elements described in Enclosure 2.

F. INFORMATION REQUIREMENTS

The fire incident reporting requirements prescribed herein, including the establishment of the Department of the Navy as the central DoD report file, are assigned Report Control Symbol DD-ACQ(AR)1765.

G. EFFECTIVE DATE AND IMPLEMENTATION

1. This Instruction is effective immediately. Detailed implementing instructions are only necessary to provide for any DoD Component-unique fire and emergency services situations. If used, they shall provide for inter-DoD Component fire department consolidation actions and staffing adjustments.

2. DoD Components must satisfy their bargaining obligations with unions under U.S.C. Chapter 71 prior to implementing any changes generated by this Instruction. The Instruction does not supersede any existing collective bargaining agreement until the agreement expires and the bargaining obligation is fulfilled.

3. Forward one copy of implementing documents to the Under Secretary of Defense Acquisition and Technology within 120 days.

Paul G. Kaminski

Enclosures - 7

1. References
2. Program Elements
3. DoD Minimum Airfield Rescue Fire Fighting Vehicle Allowances
4. Maximum Response Times for Structural Fire Pumpers
5. Staffing Requirements for Management and Administrative Fire Service Positions
6. Staffing Requirements for Fire Prevention Positions
7. Staffing Requirements for Positions Required to Staff Fire Apparatus

REFERENCES, continue

(e) National Fire Protection Association (NFPA), "National Fire Codes"
(f) DoD Instruction 6055.1, "DoD Occupational Safety and Health Programs," October 26, 1984
(g) Fire Administration Authorization Act of 1992, Public Law 102-522
(h) Title 29 Code of Federal Regulations, Part (120), "Hazardous Waste Operations and Emergency Response," March 6, 1989
(i) DoD Directive 1402.4, "Entry Age For Selected Firefighter and Law Enforcement Officer Positions," December 29, 1988
(j) DoD Instruction 1010.13, "Smoke-Free Workplace," March 7, 1994
(k) DoD Instruction 4000.19, "Interservice, Interdepartmental, and Interagency Support," April 15, 1992
(l) Part 1856 of Title 42, United States Code
(m) Section 2210 of Title 15, United States Code
(n) DoD Instruction 7230.7, "User Charges," January 29, 1985
(o) DoD Instruction 4100.33, "Commercial Activities Program Procedures," September 9, 1985
(p) Section 2465 of Title 10, United States Code
(q) Section 2907 of Title 10, United States Code

[1]Available from the National Fire Protection Association, 1 Batterymarch Park, Box 1901, Quincy, Massachusetts 02269-9101

DoD FIRE AND EMERGENCY PROGRAM ELEMENTS

1. Fire Prevention

a. Engineering and Plans. The plans for all military construction projects, facility modernization, rehabilitation programs, or self-help projects shall be reviewed for concurrence with MIL-HDBK-1008B (reference (d)), by qualified personnel to ensure that they meet the life safety and fire prevention criteria promulgated by the DoD Components and the National Fire Codes, reference (e).

b. Fire Risk Management Surveys. Qualified personnel shall conduct fire risk management surveys of facilities. Hazardous conditions shall be reported as specified in DoD Instruction 6055.1 (reference (f)) and promptly corrected or incorporated into the DoD installation's hazard abatement plan.

c. Survey Frequency. The frequency of local fire risk surveys shall be determined according to the building or area occupancy hazard, known fire loading, and mission criticality.

d. Smoke Detectors. Smoke detection systems shall be installed in buildings where safety to life is of principal concern, in accordance with MIL-HDBK-1008B (reference (d)). This includes all buildings used for sleeping purposes. Additionally, programs shall be established to:

(1) Require the installation of smoke detectors as a prerequisite for assignment to mobile home space on DoD property.

(2) Include mobile homes on DoD installations in the smoke detector inspection schedule for family housing units.

(3) Require the installation and maintenance of smoke detectors in all Government-leased housing.

e. Residential Sprinkler Systems. Provide residential sprinkler systems in accordance with Fire Administration Authorization Act of 1992, Pub. L. 102-522, reference (g).

f. Public Fire Education Promotion. Public Fire Education Programs shall be developed to inform and motivate DoD personnel, and dependents of DoD personnel, who reside or work on DoD installations or in Government-leased facilities, as to their individual responsibilities in fire prevention. Fire prevention and/or safety materials, including nominal value incentive and educational items, are an authorized expenditure of funds in promoting fire prevention and safety as an integral part of the Public Fire Education Program.

2. Fire Incident Investigation and Reporting. Investigations and reporting shall be in accordance with the requirements of DoD Instruction 6055.7 (reference (c)).

3. Fire Protection Standards. DoD fire protection standards consist of the relevant standards promulgated by the Department of Labor - Occupational Safety and Health Administration (OSHA), the National Fire Protection Association (National Fire Codes), national building codes, and other fire safety criteria published by the Department of Defense and other Federal Agencies.

4. Emergency Response. Fire departments shall be prepared, by virtue of appropriate training, to respond (both on-and-off the installation) to emergencies involving DoD facilities, structures, aircraft, transportation equipment, hazardous materials, and both natural and man-made disasters. Procedures shall be implemented in accordance with nationally recognized standards and integrated emergency management systems to prevent loss of life, injury, and property damage; to maintain security; and to minimize public inconvenience.

a. Structural Fire Response. Ensure that fire flow requirements are met on the initial response of primary fire apparatus to an announced structural fire. Use a fire protection classification system for determining the structural fire protection requirements that distinguishes between individual activities, based on their strategic importance and mission criticality .

b. Hazardous Materials Response. Establish integrated regional hazardous materials emergency response policies to avoid duplication of resources. Hazardous materials emergency response shall meet the requirements of OSHA 29 CFR 1910.120 (reference (h)).

c. Aircraft Rescue Fire Fighting (ARFF) Response. Ensure that fire flow requirements are met on the initial response of ARFF apparatus to an announced aircraft emergency. Response to aircraft emergencies shall also include structural fire suppression forces to provide additional rescue and fire suppression personnel to establish agent resupply.

d. Disaster Preparedness Plans. Establish and maintain Disaster Planning Programs for response to natural and man-made disasters, and ensure that operational procedures are developed for sustained emergency operations. All DoD installations having fire departments, and other DoD installations having either 10 or more persons as residential occupants or a constructed facility value of more than $1,000,000, shall have a designated "Base/Installation Emergency Preparedness Officer," who, in addition to any other duties, shall maintain the Disaster Preparedness Plan. Such plans shall be coordinated with disaster preparedness plans of all local jurisdictions of civil government; e.g., city, county, fire district, that adjoin the

installation and such plans shall be tested or exercised at least once in each fiscal year. The format of such disaster plans, and scope of their testing or exercises, shall be determined by the Head of each DoD Component. Fire department disaster plans shall be integrated and coordinated with installation Disaster Preparedness Plans.

e. Emergency Medical Response. Where fire departments provide emergency medical response, establish and maintain emergency medical response programs that are staffed with appropriately certified emergency medical personnel and equipment.

5. Fire Suppression, Hazardous Material, and Rescue Vehicles. The DoD Components with fire departments shall plan, program, and budget for fire and rescue vehicles, based on the standard criteria in paragraphs 5.a. through f., below:

a. Pumpers. The standard requirement for pumpers is based on response time criteria (enclosure 4) and the estimated fire flow requirement established for each installation in accordance with MIL-HDBK-1008B (reference (d)).

(1) Installations (including multiple activities serviced by a consolidated fire department) should be divided into fire demand zones (FDZ) (small areas that represent a single demand for fire services). Demand within any given FDZ is based on required fire flow and response time criteria.

(2) The number of full-time fire fighter personnel and units of mobile equipment needed at any single installation to meet the standards in this Instruction shall depend on the extent to which equivalent fire fighting forces are available from outside sources. Installations shall include outside fire companies in determining compliance with these standards when those companies compare favorably with DoD standards in staffing and equipment and can meet the prescribed response-time criteria.

(3) The number of staffed pumpers required is determined on the basis of 750 gallons per minute (GPM), regardless of the actual pump capacity of the pumpers on hand, and is calculated by dividing two-thirds of the estimated fire flow by 750.

b. Aerial Ladders, Brush Trucks, Hazardous Materials, Emergency Response Vehicles, and Other Specialized Apparatus. The DoD Components shall determine the requirements for such specialized apparatus for each applicable installation.

c. Aircraft Rescue Fire Fighting (ARFF) Vehicles. The criteria for aircraft rescue fire fighting apparatus are in enclosure 3.

d. Administrative Command and Support Vehicles. Criteria for administrative, command, and support vehicles shall be established by the DoD Components.

e. Structural and ARFF Vehicle Availability. The DoD Components shall establish mandatory maintenance programs to ensure availability of structural and ARFF vehicles. Such programs shall include a priority maintenance and repair system, stocks of required spare parts, scheduled inspections, and discrepancy reporting systems.

f. Reserve Apparatus. When there is an operational and training need, the DoD Components shall equip and maintain reserve apparatus. During emergencies, reserve apparatus may be placed in service and staffed by recalled off-duty fire fighters. Reserve apparatus are obtained by retaining apparatus that becomes excess through normal replacement programs. New equipment shall not be acquired to meet authorized reserve apparatus needs. The DoD Components shall not operate or staff reserve apparatus as in-service units, except when used as a replacement for a vehicle that is out of service, or during major disasters. The maximum allowances for reserve structural and/or aircraft rescue fire fighting apparatus are as follows:

(1) For 1-4 in service and staffed engine and/or ARFF companies, one reserve pumper and/or ARFF unit is authorized.

(2) For 5-9 in service and staffed engine and/or ARFF companies, two reserve pumper/ARFF units are authorized.

(3) For 10 or more in service and staffed engine and/or ARFF companies, three reserve units are authorized.

(4) Reserve units are allowed for aerial ladders, resupply vehicles, or other special category units as approved by the DoD Components.

(5) Additional consideration shall be given to large consolidated fire departments having unique reserve vehicle requirements.

6. Standardization of Apparatus

a. Structural fire apparatus shall be constructed to comply with the provisions of NFPA 1901, Standard for Automotive Fire Apparatus (reference (e)). Structural fire pumpers shall be standardized at a minimum 750 GPM pumping capacity.

b. ARFF vehicles shall be constructed to comply with the provisions of NFPA 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (reference (e)). ARFF vehicles shall be standardized in the following water capacities in gallons: 1,000, 1,500, 2,500, and 3,000. The 1,000-gallon ARFF vehicles assigned

to rapid deployment forces shall be transportable by military airlift (C-130, C-17, and C-141).

c. Where required, rescue vehicles shall have off-pavement performance capability and shall be capable of carrying all required personnel and equipment.

d. Aircraft rescue fire fighting twin agent units shall be capable of carrying two of the following agents: AFFF, dry chemical, or halon.

7. Response Times

a. Structural Apparatus. Response times for structural fire pumpers are specified in enclosure 4. (Maximum response times do not apply to specialized fire apparatus, aerial ladders, and hazardous materials emergency response vehicles.)

b. ARFF Apparatus. ARFF vehicles shall be capable of responding to any incident on the runways or overruns within 1 minute after pre-positioning for an announced emergency, and to any incident on the runways or overruns within 3 minutes for an unannounced emergency. Response times apply to the first arriving vehicle in either situation.

8. Staffing. Staff installation fire departments at not less than the minimum levels established herein. Airfield fire departments or ARFF shall be staffed to provide flight line protection 24 hours per day, even if the air control tower is closed for flight operations. Maximum positions may be exceeded at remote installations when approved by the DoD Component. Entry age of fire fighter personnel shall be in accordance with DoD Directive 1402.4 (reference (i)).

a. Management and Administrative Fire Service Positions. Required staffing for management and administrative fire service positions is in enclosure 5.

b. Fire Prevention Positions. Required staffing for fire prevention positions is in enclosure 6.

c. Fire Fighter Positions. Structural and aircraft fire suppression and rescue services shall be equipped and personnel assigned shall be cross-trained to be mutually supporting. Required staffing for these positions is in enclosure 7. The DoD Components shall consider both civilian and military fire fighters to fill required positions.

d. Fire Alarm Communications Center Personnel

(1) All installations shall maintain around-the-clock capability to conduct essential fire emergency communications. Communications equipment operators shall be trained in the proper use of communications equipment including telephone, radio, and

other electrical or electronic alarm signal receiving systems. Also, operators shall be trained for dispatching fire apparatus, and requesting medical, police, or other fire department assistance as necessary. Dedicated GS-392 or equivalent communications specialists are required. (Bilingual capability is required at overseas locations.)

(2) The DoD Components may approve exceptions for smaller installations and remote sites where dedicated communications specialists are not economically feasible. The transferring of the fire alarm receiving and communications functions to a non-related function or the requesting of another party, such as military police or engineering personnel, to report to the fire station to operate the alarm and communications equipment is not a viable alternative and will not be considered as an exception. Installations may request exceptions based on one of the following:

(a) Where the installation alarm and communications function can be consolidated with an established continuously manned Emergency Communications Center for all emergency services (fire, police, ARFF, medical, explosive ordnance disposal, etc.), communications personnel employed at the consolidated communications center shall be trained in fire department communications procedures. (Bilingual capability is required at overseas locations.)

(b) Where fire fighters can be assigned on a rotational basis to operate the alarm receiving and communications equipment, fire fighters shall be properly trained in fire alarm communications. Alarm room staffing shall be in addition to the requirement for a fully staffed structural and ARFF response. (Bilingual capability is required at overseas locations.)

(c) Where fire suppression is provided by other than DoD fire departments, fire alarm communications shall be consolidated with other continuously staffed functions such as military police or security. Communications personnel employed at the consolidated facility shall be trained in fire department communications procedures. (Bilingual capability is required at overseas locations.)

(d) Where the fire department can be dispatched and the communications function is managed as part of a municipal automatic aid program.

9. Personnel Physical and Medical Requirements. The DoD Components' medical surveillance programs shall include the pre-employment medical and physical criteria for fire protection personnel of NFPA 1500, "Standard on Fire Department Occupational Safety and Health Program" (reference (e)). DoD Fire protection personnel shall receive an annual physical examination as

specified in NFPA 1582, "Standard on Medical Requirements for Fire Fighters" (reference (e)).

10. Personnel Training and Physical Fitness Programs

a. Training. Training programs shall conform to the DoD Fire Fighter Certification System requirements, patterned after the National Fire Codes (reference (e)).

(1) DoD Fire Protection School. The Department of the Air Force shall accommodate the training requirements of the other DoD Components. The Air Force Fire Protection School is designated as the central DoD Fire Protection School.

(2) National and State Fire Academies. The DoD Components shall use the National Fire Academy and State agencies for specialized, advanced, and executive-level training, including the use of courses handed-off in the Train-the-Trainer Program.

(3) Live-Fire Training. Live-fire training areas that meet local environmental standards shall be developed by each applicable DoD Component at appropriate locations to provide realistic proficiency training at a reasonable cost. Thorough consideration shall be given to creating regional training facilities for closely located DoD installations and for cooperative arrangements with civil sector fire departments and off-base live-fire training.

(4) First Responder. Programs shall be established to train all DoD and contract fire fighters (continental United States only) to, at least, the U.S. Department of Transportation and OSHA 29CFR1910.120q first responder level.

(5) On the Job Training. Training shall be provided and documented for all personnel assigned fire and emergency services duties through an on-the-job training program, in conformance with the objectives outlined in the DoD Fire Fighter Certification System.

b. Physical Fitness. All DoD fire and emergency services personnel shall participate in a physical fitness exercise program designed to maximize job performance. DoD fire protection personnel shall be a special emphasis target group for the DoD Components' anti-smoking education program, required by DoD Instruction 1010.15 (reference (j)).

c. DoD Fire Fighter Certification System (FFCS). All DoD military, GS-081 civilian, and contract fire fighters will participate in the certification system. The FFCS is a condition of employment for GS-081 civilian fire fighters.

11. Personal Protective Equipment. Prohibit the acquisition and use of any personal protective clothing and equipment used for

structural and aircraft fire fighting, rescue, and hazardous materials emergency operations that are not in compliance with appropriate NFPA standards (reference (e)). Develop and enforce standards for firefighters to ensure that hair and beard styles do not interfere with safety or the proper fit of personal protective equipment.

a. Equipment shall be procured and maintained in accordance with the requirements of current National Fire Code standards and DoD Instruction 6055.1 (references (e) and (f)), and other appropriate requirements. Commercial off-the-shelf equipment will be purchased rather than developing a unique military specification.

b. All DoD fire protection personnel shall be issued personal protective equipment commensurate with their assigned tasks.

c. All personnel engaged in confirmed fire fighting and hazardous materials operations shall use self-contained breathing apparatus and all components of a fire fighting and/or hazardous materials protective ensemble.

12. Fire Department Uniforms. All personnel shall avoid wearing any clothing that is unsafe due to poor thermal stability or poor flame resistant characteristics of the fabrics. The DoD Components may establish policies for the use of clothing which consists of 100% natural fibers or blends that are principally natural fibers.

13. Consolidation of Fire Departments. To minimize the impact of personnel costs and to eliminate duplicate fire protection, the DoD Components shall continue the ongoing efforts to consolidate fire departments. (See DoD Instruction 4000.19, reference (k)).

14. Mutual Aid

a. The DoD Components, under Chapter 15A of 42 U.S.C.(reference (l)), are encouraged to enter into reciprocal agreements with local fire protection agencies for mutual fire fighting and emergency response assistance. If practical and agreeable to the local fire protection agency involved, a portion of the required fire protection for the DoD installation may be provided for under the mutual aid agreement. The DoD Components shall not increase staffing or equipment above DoD requirements solely to provide mutual aid to local fire protection agencies.

b. Each agreement entered into under paragraph E.14.a., (above) shall conform to 15 U.S.C. 2210 (reference (m)), which provides for compensation to municipalities for direct costs and losses sustained while fighting fire on Federal property. Each agreement shall provide the terms for reimbursement of each party for all or any part of the costs incurred in furnishing fire

protection or emergency response to the other party. (See DoD Instruction 7230.7, reference (n).)

c. In the absence of any agreement installation commander are authorized to render emergency assistance to preserve life and property in the vicinity of the DoD installation, when, in their opinion, such assistance is in the best interest of the United States. (See reference (n).)

d. In connection with mutual aid fire fighting or emergency response assistance agreements, any service performed by DoD personnel, civilian or military, shall constitute service rendered in the line-of-duty.

e. The performance of such service by any other individual shall not constitute such individual as an officer or employee of the United States.

f. Develop plans and procedures to provide fire suppression and emergency response services for nearby Federal Agency facilities, in the event normal municipal fire suppression and emergency response services are inhibited. (See DoD Instruction 4000.19, reference (k)).

15. Contracting Fire Protection. When contract protection services are required according to the criteria in DoD Instruction 4100.33 (reference (o)), statements of work shall be performance oriented. Funds shall not be obligated or expended for entering into a contract for the performance of fire fighting functions at any military installation or facility (10 U.S.C. 2465, reference (p)). However, the DoD Components may contract with local governments for the provision of fire protection services at military installations to be closed under the Base Closures Act, 10 U.S.C. 2907, reference (q).

16. Fire Brigades. On DoD installations where an organized, dedicated fire department is not justified and external assistance is not readily available, fire brigades shall be organized and provided appropriate equipment and training. The installation commander shall publish a written policy statement that includes the brigade's functions and work place. Personnel expected to do interior structural fire fighting shall be physically capable and trained to perform the required tasks. Fire fighting equipment shall be operationally satisfactory.

17. Program Management and Evaluation

a. Fire and emergency services program operational readiness inspections shall be conducted at intervals established by the DoD Component.

b. The DoD Components shall periodically evaluate the target buildings used for establishing fire flow rates at each installation to determine where annual pumper operating and

salary costs can be economically offset by the one-time expenditure for installing sprinklers.

2-10

DoD MINIMUM AIRCRAFT RESCUE FIRE FIGHTING VEHICLE ALLOWANCES

AIRFIELDS OPERATING DESCRIPTION	VEHICLE ALLOWANCE
A. Permanently assigned aircraft having less than 1,000-gallon fuel capacity and all helicopters.	To be determined by DoD Component
B. Permanently assigned aircraft less than 75 feet in length; or carrying ordnance.	2w/2,000 gallon total capacity
C. Permanently assigned aircraft less than 100 feet in length or carrying ordnance.	3w/3,000-gallon total capacity
D. Permanently assigned aircraft less than 175 feet in length; ordance, high value, on hazardous cargo.	3w/9,000-gallon total capacity
E. Permanently assigned aircraft greater than 175 feet in length; ordnance; hazardous or high-value cargo.	4w/12,000-gallon total capacity

NOTE: These minimum allowances do not include specialized ARFF vehicle requirements for airfields, such as Twin Agent Units, rescue vehicles, rapid intervention vehicles.

MAXIMUM RESPONSE TIMES FOR STRUCTURAL FIRE PUMPERS[2]

DESCRIPTION	RESPONSE TIME (Minutes)[3] 1ST 50%	REMAINING 50%
1. Shops and Industrial Buildings	5	10
2. Hangars	5	10
3. Warehouses	5	10
4. Technical Facilities	5	10
5. Hospitals	5	10
6. Ship Berthing	5	10
7. Administrative	7	14
8. Exchange and Commissary	7	14
9. Recreation and Assembly	7	14
10. Dining Halls	7	14
11. Bachelor Office Quarters, Bachelor Enlisted Quarters, Dormitories	7	14
12. Multifamily Dwellings	9	18
13. Single and Duplex Dwellings	9	18
14. Trailer Courts	9	18
15. Isolated or Scattered Buildings	15	20

[2]Pumpers may be located to serve several or all areas if situated within the response time. Some areas may be served entirely by pumpers from other areas within the prescribed response times.
[3]DoD Components may increase response times when adequate fixed fire protection systems are provided.

STAFFING REQUIREMENTS FOR MANAGEMENT AND ADMINISTRATIVE FIRE SERVICE POSITIONS

POSITIONS	NUMBERS OF FIRE COMPANIES[4]				
	1	2	3	4	5 or more
1. Fire Chief	1	1	1	1	1
2. Deputy Fire Chief				1[5]	1
3. Assistant Fire Chief (Shift Supervisor)		2	2	2	2
4. Assistant Fire Chief (Training)			1[6]	1	1

5. Assistant Fire Chief (Fire Prevention). Where four or more fire prevention personnel are required, an assistant fire chief (fire prevention) is authorized.

6. District/Battalion Chief (Supervisory Fire Fighter). Additional supervisors may be required due to the overall size and large geographic service areas at large or consolidated installations, where the physical dispersion of fire department stations makes it unmanageable for one shift supervisor to provide immediate direction of day-to-day operations.

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[4]Figures reflect only those personnel necessary to meet fire suppression needs (staffed fire apparatus) and do not consider personnel required for fire prevention, fire alarm communications, management and administration, and personnel assigned for maintenance of fixed fire protection systems.
[5]Deputy Fire Chief. Position may be authorized by DoD Component.
[6]Assistant Fire Chief (Training). Position may be authorized by DoD Component.

STAFFING REQUIREMENTS FOR FIRE PREVENTION POSITIONS

DETERMINED ON AREA OF SPACE REQUIRING FIRE RISK SURVEYS (IN THOUSANDS OF SQ. FT.)[7]	STAFFING REQUIREMENTS[8]
251-750	1
751-1,500	2
1,501-2,500	3
2,501-5,000	4
5,001-8,500	5
8,501-12,500	6
12,501-17,500	7
17,501 and above[9]	

[7]Total square footage of buildings (excluding family housing), continuously used outside storage areas (continuous movement of equipment and/or supplies to and from the storage site), ships and waterfront facilities.

[8]These baseline staffing figures may be increased or decreased depending on the DoD Component'assessment of the hazardous nature of the matrerial stored or operations conducted amount of fire of fighter crew-type inspections conducted on low-hazard occupancies,the mission criticality of the equipment and operations, predominant construction features, utilization of fire prevention personnel for public fire education and review of construction plans, and other local factors bearing on the demand for full-time fire prevention personnel.

[9]The number of fire prevention personnel for areas in excess of 17,500,000 square feet shall be determined on a case-by-case basis by the DoD Component.

Appendix C
Minimum Training Subjects and Frequencies

C–1. Tables C-1 and C-2 list the minimum training subjects that firefighters must complete. The codes under the required frequency column are M-monthly; Q-quarterly; SA-semiannually; and A-annually.

Table C–1
Suppression proficiency training—academic and practical

Item: 1
Subject: Aircraft Egress (Ref: IFSTA)
Required frequency: Q

Item: 2
Subject: First Aid/CPR (Ref: IFSTA)
Required frequency: Q

Item: 3
Subject: Pumper Operation (Ref: IFSTA)
Required frequency: A

Item: 4
Subject: Rescue tools (Ref: IFSTA)
Required frequency: Q

Item: 5
Subject: Training Fires (Ref: IFSTA)
Required frequency: SA

Item: 6
Subject: Mutual Aid (Ref: AR 420-90)
Required frequency: A

Item: 7
Subject: Structural Drills (Ref: IFSTA)
Required frequency: M

Item: 8
Subject: Prefire Planning (Ref: AR 420-90)
Required frequency: Q

Item: 9
Subject: Water Supply for fire protection (Ref: TM 5-813-6)
Required frequency: Q

Item: 10
Subject: Sprinkler Systems (Ref: NFPA 13)
Required frequency: Q

Item: 11
Subject: Fire Inspection Procedures (Ref: IFSTA)
Required frequency: SA

Item: 12
Subject: Breathing Apparatus (Ref: Manufacturer's Manual)
Required frequency: SA

Item: 13
Subject: Apparatus Test (Ref: IFSTA)
Required frequency: A

Item: 14
Subject: Fire Department Communications (Ref: IFSTA)
Required frequency: SA

Item: 15
Subject: Natural Cover Fires (Ref: 5-315)
Required frequency: Q

Item: 16
Subject: Hazardous Chemical Accidents (Ref: NFPA 49, 471, 472, and 1500)
Required frequency: Q

Table C–2
Fire prevention proficiency training—academic

Item: 1
Subject: Inspection Procedures (Ref: IFSTA, NFPA 1031)
Required frequency: SA

Item: 2
Subject: Building Construction (Ref: MIL-HDBK 1008, NFPA 241)
Required frequency: SA

Item: 3
Subject: Classification of Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 4
Subject: Means of Egress (Ref: NFPA 101)
Required frequency: SA

Item: 5
Subject: Features of Fire Protection (Ref: NFPA 101)
Required frequency: SA

Item: 6
Subject: Building Service Equipment (Ref: NFPA 101)
Required frequency: SA

Item: 7
Subject: Places of Public Assembly (Ref: NFPA 101)
Required frequency: SA

Item: 8
Subject: Educational Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 9
Subject: Health Care and Penal Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 10
Subject: Residential Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 11
Subject: Mercantile Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 12
Subject: Business Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 13
Subject: Industrial Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 14
Subject: Storage Occupancies (Ref: NFPA 101)
Required frequency: SA

Item: 15
Subject: Occupancies in Unusual Structures (Ref: NFPA 101)
Required frequency: SA

Item: 16
Subject: Operating Features (Ref: NFPA 101)
Required frequency: SA

Item: 17
Subject: Fire Extinguishers (Ref: NFPA 10)
Required frequency: SA

Item: 18
Subject: Fire Alarm Systems (Ref: NFPA 71, 72 Series, and NFPA 74)
Required frequency: SA

Item: 19
Subject: Installed Extinguishing Systems (Ref: NFPA 96)
Required frequency: SA

Item: 20
Subject: Installed Sprinkler Systems (Ref: NFPA 96)
Required frequency: SA

Item: 21

Table C–2
Fire prevention proficiency training—academic—Continued

Subject: Project Review and Submittal (Ref: MIL-HDBK 1008)
Required frequency: SA

Item: 22
Subject: Fire Investigation (Ref: IFSTA)
Required frequency: SA

Item: 23
Subject: Welding and Cutting (Ref: NFPA 51B)
Required frequency: SA

Item: 24
Subject: Munitions (Ref: DOD 5154.4S)
Required frequency: SA

Item: 25
Subject: Reports and Records (Ref: AR 420-90)
Required frequency: SA

Item: 26
Subject: Base Population Training (Ref: AR 420-90)
Required frequency: SA

Appendix D
Procedure For Determining Fire Flow Demand for Unsprinklered Facilities

D–1. Unsprinklered facilities
The following procedure shall be used to determine the required fire flow demand and duration for buildings that are not fully sprinklered.

D–2. Step one—Determine the classification of occupancy
Appendix C of MIL-HDBK-1008 lists the classifications of occupancy hazard as Light, Ordinary Hazard Group 1, Ordinary Hazard Group 2, and Extra. Table D-7 contains these four occupancy hazard classifications and assigns a water demand for each weighted value category.

D–3. Step two—Determine the water demand weighted factors
The table is divided into three weighted value categories for fire flow and for duration in each occupancy classification. These categories are determined from the values established in the six factors discussed below. The final value is determined by adding the values obtained from all six factors. See sample calculations in table D-8 of this appendix.

D–4. Weighted factors
The six factors to be assigned eighted values are as follows:

a. Response time by fire department. Most installations have on-site fire departments which are familiar with the facility and their hazards. Off-site fire departments will take longer due to distance and unfamiliarity with the hazards of the buildings within the facility. The longer the response time for manual firefighting, the greater will be the water demand and duration. Traffic flow is a factor that must be evaluated on a case-by-case basis. A short distance may be equivalent to a longer distance due to traffic congestion. The fire department response weighing factors are shown in table D-1.

Table D–1
Type of fire department response

Type of fire department response	Value
On-site (within 1 mile)	1
On-site (over 1 but less than three miles)	2
On-site (3 miles or greater)	3
Off-site (less than 2 miles)	2
Off-site (2 miles or greater)	3

b. Type of construction. Section 2.1.3 of the MIL-HDBK-1008 requires that types of construction for building be based on the Uniform Building Code. As structural fire integrity is reduced, the greater will become the water demand and duration. In addition, the combustibility of construction will add to the water demand for an unsprinklered building. The type of construction weighted values are shown in table D-2.

Table D–2
Type of construction

Type of construction	Value
Type I	1
Type II	2
Type III	3
Type IV	2
Type V	5

c. Number of stories. Firefighting is more difficult for multistory buildings. Furthermore, fire spreads faster vertically than horizontally. Fires in multi-story buildings are more difficult to contain and have higher water demands. One-story buildings with high ceiling heights (20 feet or greater) shall be considered multi-story. The weighted values for number of stories of a facility are shown in table D-3.

Table D–3
Number of stories

Number of stories	Value
Single Story	1
Two or More Stories	2 (plus 1 point for each floor more than two; maximum 6 points)

d. Separation distances. The model building codes and NFPA Standard 80A "Recommended Practice for Protection of Buildings from Exterior Fire Exposures" provide that a separation distance of 60 feet or more does not require protection of exterior walls from exposure. The codes indicate that a separation distance of 20 feet or less requires 1-hour or more fire resistant construction. Water demand for protecting exposed facilities increases as separation distance decrease. In addition, exterior firefighting approach becomes hampered as building separations are reduced. The weighted values for the building separation distances are shown in table D-4.

Table D–4
Separation distances (feet)

Separation distances (feet)	Value
60 or more	1
21 to 59	2
20 or less	3

e. Building floor area. Firefighting water demands are higher for

larger unsprinklered buildings. The weighted values for the building floor area factor are shown in table D-5.

Table D–5
Weighted values/building floor area

Area (square feet)	Value
7,500 or less	1
7,501 to 15,000	2
15,001 to 25,000	3
25,001 to 40,000	4
Greater than 40,000	5

f. Firefighting access. Studies conducted by fire departments have demonstrated that a responding engine company must be within 180 feet of a fire to effectively control it. This distance is based on the use of a 30 foot stream of water and 150 feet of fire hose. The fire hose distance must be measured as the hose would lay over the terrain from the fire truck. Ideally, this distance should be to any part of the first three stories of a building, either by use of ground ladders through windows or by use of windows. As greater hose connections are required, the efficiency of the manual approach becomes reduced. The weighted values for firefighting access based on hose lay-out distance are shown in table D-6.

Table D–6
Weighted values for firefighting access based on hose layout distance

Maximum Hose Lay-out	Value
(First three stories)	
180 or less	1
181 to 230	2
Greater than 230	4

D–5. Step three—Determine fire flow and duration.

Using the occupancy classification and summation of weighted values of the six factors, select the required water demand for fire flow and duration from table D-7.

Table D–7
Water demands for unsprinklered facilities

	Hose Streams (gpm at 20 psi residual pressure)			Duration (minutes)		
Occupancy Hazard Classification (App C, MIL–HDBK 1008)	6–10	11–15	16+	6–10	11–15	16+
Light	750	1,125	1,500	60	90	120
Ordinary (Group 1)	1000	1500	2000	90	120	150
Ordinary (Group 2)	1500	2250	3000	90	120	150
Extra	2500	3750	5000	150	195	240

Notes:
[1] 1. Sprinklered facilities require a maximum of 750 gpm hose streams or one 750 gpm or higher firefighting apparatus.

Table D–8
Sample calculations

Factors	Value
Administration Office Building (Light Hazard)	
Fire department response: On-site (within 1 mile)	1
Type of construction: Type II	2
Number of stories: Two stories	2
Separation distance: 30 feet	2
Building floor area: 22,000 square feet	3
Firefighting access: 170 feet	2
Total Weighted Value: Or 1125 gpm for 90 minutes per table D–7)	12
Machine shop (Ordinary Group 1)	
Fire department response: Off-site (within 2 miles)	2
Type of construction: Type III	3
Number of stories: Single	1
Separation distance: 20 feet	4
Building floor area: 22,000 square feet	3
Firefighting access: 250 feet	4
Total weighted value: Or 1125 gpm for 90 minutes per table D–7	17

Table D–8
Sample calculations—Continued

Factors	Value
Barracks (Light Hazard)	
Fire department response: On-site (more than 3 miles)	3
Type of construction: Type II	2
Number of stories: Three	3
Separation distance: 40 feet	2
Building floor area: 9000 square feet	2
Firefighting access: 200 feet	2
Total Weighted Value: Or 1125 gpm for 90 minutes per table D–7	14

Appendix E
Management Control Evaluation Process

E–1. Function
Fire and Emergency Services

E–2. Key Management Controls
Figures E-1 through E-6 identify key management controls in this function.

E–3. Management Control Evaluation Process
The installation fire chief will evaluate these key management controls through the annual Operational Readiness Inspections.

Fire and Emergency Services Operational Readiness Inspection
In-Briefing by Fire Chief

Date

1. Name of Installation:
2. Location of Installation:
3. Mission of Installation:
4. New Conditions or Significant Changes Since Last Inspection:
5. Descriptions of Installation:
   a. Structures:
      (1) Number of buildings: Woodframe Noncombustible
      (2) Total square footage of buildings subject to fire inspections (excluding) family housing:
      (3) Improved acres:
      (4) Unimproved acres:
      (5) Number of major buildings:
         (a) Warehouses: Square feet
         (b) Hospitals:
         (c) Public assembly facilities:
         (d) Dormitories:
         (e) Hangars:
         (f) Structures of three stories: Over three stories
         (g) Family housing units:
         (h) Major industrial facilities:
   b. Aircraft Rescue Fire Fighting (ARFF) Mission:
      (1) Number of permanently assigned aircraft:
      (2) Types of aircraft:
      (3) Average number of aircraft movements (landings/takeoffs) months of military aircraft (include transient aircraft):
      (4) Air Crash, Search, and Rescue (ACS&R) maps provided to each airfield:
      (5) Quantities of extinguishing agent on hand:
         (a) Aqueous film forming foam:
         (b) Dry chemical:
         (c) Halon:
         (d) Foam Concentrate:
   c. Total quantity of Halon 1211 and 1301 lost through discharge testing, accidental discharge, fire extinguishment, training, reservicing, R&D, and other uses. Also include amount "banked" in fire extinguishers and cylinders supplying fire extinguishing systems:
      (1) Pounds per fiscal year: Halon 1211 Halon 1301
         (a) Emitted:
         (b) Banked:

6. Fire Protection Systems:
   a. Sprinkler protection systems:
      (1) Number of wet systems:
      (2) Number of dry systems:
      (3) Condition of systems: No. good: No. poor:
      (4) Number of systems out of service:
      (5) Number of systems under contract for repair:
      (6) Number of systems being totally replaced:
   b. Fire alarm systems:
      (1) Number of buildings containing smoke or heat detection systems:
      (2) Describe general condition of systems:
      (3) Number of systems out of service:
      (4) Number of systems under contract for repair:
      (5) Number of systems being totally replaced:
   c. Fire alarm receiving equipment:
      (1) Do all fire protection alarms transmit to the fire department?
      (2) Does the fire department have a fire alarm receiving unit?
      (3) Condition of the fire alarm receiving unit: Poor
      (4) Does the existing fire alarm system transmit by the following?

Figure E-1. Format for fire and emergency services operational readiness inspection in-briefing by fire chief—Continued

(a) Hardwire:
(b) Radio:
(5) What type of fire alarm receiver? Manufacturer model:
(6) What year was the fire alarm receiver installed?
(7) Comments:
d. Other types of fire protection systems:

7. Equipment:
a. Apparatus:

(1) 1000 pumper:	Authorized:	Assigned:	Age(s):
(2) 750 pumper:	Authorized:	Assigned:	Age(s):
(3) Mini-pumper:	Authorized:	Assigned:	Age(s):
(4) Ladder Truck:	Authorized:	Assigned:	Age(s):
(5) 750 Commercial:	Authorized:	Assigned:	Age(s):
(6) P–4/P–17/P–19:	Authorized:	Assigned:	Age(s):
(7) Other type:	Authorized:	Assigned:	Age(s):

(8) Apparatus eligible for replacement because of age, mileage, or uneconomically repairable status:
(9) Issue priority designator (IPD) for fire apparatus repair parts and maintenance:
b. Fire flow requirement based on what building:
c. Other tools and appliances:

(1) Ladders:	No:	Length:
(2) Rescue/Extrication tool:		
(3) Breathing apparatus:	No. of sets:	No. of spare cylinders:
(4) Breathing air recharge capability?	Yes/No	
(5) Power rescue saw:		
(6) Lighting equipment:		
(7) Miscellaneous:		
Personal equipment:		
Fire protective clothing:	No. of sets:	Condition:

8. Number of Personnel:
a. Permanent:
b. Temporary:
c. Part-time:

9. Organization:
a. Work schedule:
b. Fire prevention workload:
(1) Are you able to meet prescribed fire prevention inspection schedules?
(2) Have fire prevention inspectors received specialized training?
(3) Is maintenance and testing of fire protection systems performed by in-house personnel or by contract?
(4) What are significant problem areas?

10. Training Program:
a. What training facilities are available?
b. Who is the assigned training officer?
c. What are the significant problem areas?

11. Budgetary Data:
a. Does the fire chief participate in preparation of the budget?
b. What amount of funds was programmed in the current fiscal year?
c. What amount of funds was expended during previous fiscal year?

Figure E-1. Format for fire and emergency services operational readiness inspection in-briefing by fire chief

Department of the Army
Fire and Emergency Services Operational Readiness
Inspection (F&ES ORI)

Function: Administration and Management. (The fire chief is responsible for the administration and management of the Fire Protection Program.)

Subject/Activity: Facilities, Equipment, Records, Reports, and Supplies.

a. *Critical element:* Fire Station(s).

Measurement method:

(1) Is (are) the fire station(s) properly located and does (do) it (they) meet the facility requirements per AR 420–90?

(2) Is adequate housing provided for fire protection vehicles, fire department ambulances, equipment, and personnel per TM 5–315?

(3) Is there a dining facility or other suitable means of messing to feed on-duty firefighters?

(4) Is there a suitably equipped classroom available to conduct fire protection training?

Measurement method:

b. *Critical element:* Personnel.

(1) Is the fire department manned by qualified civilian and/or military firefighters per AR 420–90?

(2) Are personnel assigned duties that are outside the fire protection function or assigned details that conflict with their primary duties in violation of AR 420–90?

(3) Are sufficient fire protection personnel recognized, authorized and assigned according to Army Manpower Staffing Standards System (MS–3)?

(4) Is data used for applying the Army Manpower Staffing Standards System (MS–3) accurate and up-to-date?

(5) Are SOPs established and properly implemented per AR 420–90?

(6) Is the fire alarm emergency communication center operated in the most effective and efficient manner?

(7) Can the full time, paid fire department be restricted to part day or part paid status without adversely affecting support?

c. *Critical element:* Management Procedures and Policies

Measurement method:

(1) Is the fire department part of the Installation's Spill Prevention Control and Countermeasure Plan (SPCCP) and Installation Spill Contingency Plan (ISCP) per AR 200–1?

(2) Are written or verbal mutual aid agreements properly established per AR 420–90?

(3) Is a publication reference operational library properly established and maintained with appropriate standard and special publications on hand per AR 420–90?

(4) Are fire department records properly maintained per TM 5–315? For example:

(a) Daily log or journal.

(b) Hose records.

(c) Annual pumper tests per NFPA 1901.

(d) Annual aerial ladder certification per NFPA 1904.

(5) Are vehicles authorized per AR 420–90?

(6) Is the Fire Information Resource Management System (FIRMS) being used by the fire department per TN 420–90–02.

(7) Is an annual FPORI self-inspection performed and documented per AR 5–3, paragraph 4–21, 1(1)(a).

Figure E-2. Format for fire and emergency services operational readiness inspection (F&ES ORI) of administration and management

Department of the Army
Fire and Emergency Services Operational Readiness
Inspection (F&ES ORI)

Function: Training

Subject/Activity: Training Records, Facilities, and Reports

Critical element: Training Program

Measurement method:

a. Has an individual been assigned as a training officer?

b. Is a continuous training program established and in effect for all assigned personnel per AR 420–90?

c. Are monthly training schedules posted in each station and approved by the chief?

d. Is a training facility available per AR 420–90?

e. Are training records maintained that reflect current and accumulative training for each firefighter?

f. Is fuel (no more than 10 percent by volume of oils or lubricants) made available for live training fires?

g. Are current lesson plans established per AR 420–90?

h. Is training conducted using prefire plans per AR 420–90?

i. Are training exercises being conducted per AR 420–90 (chap 3)?

j. Are all firefighters at least first responder or equivalent certified?

k. Is an adequate number of self-contained breathing apparatus (SCBA) positive pressure (three for each company) and spare air cylinders (one per each SCBA) on hand and properly maintained with maintenance and inspections records? Are one hour bottles being used for HAZMAT and rescue in extra large facilities?

l. Is a training program in-place to certify those firefighters not first responder or equivalent or to re-certify those already certified when required?

m. Does each firefighter receive a minimum of 3 hours proficiency training a week?

Figure E-3. Format for fire and emergency services operational readiness inspection (F&ES ORI) of training

Department of the Army
Fire and Emergency Services Operational Readiness
Inspection (F&ES ORI)

Function: Operations

Subject/Activity: Fire Suppression, Vehicle Maintenance, and Pre-Fire Planning

Critical element: Operational Proficiency

Measurement method:

a. Does the appearance of assigned vehicles (including compartments, engines and undercarriages) reflect satisfactory cleaning per TM 38–600?

b. Are first echelon maintenance and daily apparatus checkouts being accomplished and documented per TM 38–750?

c. Are grid maps carried in ARFF vehicles, and are they compatible with those in the air traffic control tower, police, ambulance, and rescue aircraft per AR 420–90?

d. Are current prefire plans prepared on major facilities and aircraft per AR 420–90?

e. Are current post utility maps available at the fire alarm communication center or main fire station?

f. Is the appropriate force activity designator (FAD) and urgency of need designator used to procure parts for fire vehicles?

g. Are sufficient portable radios available for communication between fire vehicles and foot party elements per AR 420–90?

h. Is the fire station public address system audible throughout the facility and exterior work areas?

i. Is an automatic start emergency generator source provided for the fire station to include alarm room, communications center, overhead doors and lights?

j. Is a refractometer on hand to insure accurate test of foam meter settings on all Crash Fire Rescue vehicles?

k. Is an adequate number of self-contained breathing apparatus (one per vehicle position) and spare air cylinders (one per SCBA carried on apparatus) on hand and properly maintained?

l. Are current maintenance and operation manuals available for all assigned fire trucks?

m. Are firefighters furnished appropriate protective clothing and is it properly inspected and maintained per NFPA 1971?

n. Is a job-related physical fitness program established per AR 420–90?

o. Are breathing air samples tested per AR 420–90?

p. Is a voice recorder interconnected to all emergency communication equipment?

Figure E-4. Format for fire and emergency services operational readiness inspection (F&ES ORI) of operations

Department of the Army
Fire and Emergency Services Operational Readiness
Inspection (F&ES ORI)

Function: Fire Prevention Program

Subject/Activity: Deficiency Correction Program, Population Training, Facility Inspection, and Installed Fire Protection Systems

Critical element: Program Effectiveness

Measurement method:

a. Has a comprehensive fire prevention program been incorporated in an installation fire prevention regulation?

b. Is an effective organization or activity fire marshal program established per AR 420–90?

c. Are the installation FE/DEH and fire chief actively involved in, and fully supporting, the fire prevention function per AR 420–90?

d. Does the fire chief or designated representative review all project plans and specifications (including nonappropriated funds (NAF) for technical adequacy of fire protection features? Are comments maintained until project is satisfactorily completed per AR 420–90?

e. Are fire protection deficiencies correctable through facility engineering methods and included in an appropriate work plan?

f. Are employees in places of public assembly receiving fire prevention and emergency evacuation training?

g. Does each facility have a file folder containing pertinent data on fire prevention affecting that particular facility?

h. Is a procedure established that identifies the date of the last inspection, date next inspection is due, and if any hazard/deficiency inspections (DA Form 5382–R) are outstanding?

i. Do facility folders contain building inspection, DA Form 5381–R for the last inspection performed and for any other inspections during the past 18 months?

j. Are records available to indicate family housing occupants are receiving a fire prevention orientation within 30 days after arrival?

k. Are facility inspection frequencies conducted per AR 420–90?

l. Are fire deficiencies being identified, monitored, and corrected on a timely basis?

m. Is the FE/DEH informed of significant problems and kept abreast of the status of deficiencies?

n. Are fire deficiencies that fall under the OSHA Program coordinated through the local safety office for funding?

o. Are all burning and welding operations being inspected per AR 420–90? Is DA Form 5383–R (Hot-Work Permit) on file for these burning operations?

Figure E-5. Format for fire and emergency services operational readiness inspection (F&ES ORI) of fire prevention program

Department of the Army
Fire and Emergency Services Operational Readiness
Inspection (F&ES ORI)

Function: Fire Fighting Exercises

Subject/Activity: Performance Standards for Fire Fighting Exercises

a. *Critical element:* Aircraft Rescue Fire Fighting (ARFF) Egress Training Drill. (Set up a simulated ARFF egress training drill scenario.)

Measurement method:

(1) Alarm dissemination from control tower to airfield crash station.

(2) Proper transmission of simulated incident to responding crews by alarm room operator.

(3) Response and positioning of personnel and equipment in accordance with prefire plan.

(4) Establishment of an Incident Command System at the best possible location from which to observe and direct fire suppression and rescue efforts. Communications between the senior fire officer and subordinate supervisors must be maintained by using vehicle public address (PA) systems, portable radios, voice hailers, or hand signals.

(5) All personnel working in the fire environment are to wear protective clothing. On cargo type aircraft, at least one firefighter will don and fully use breathing apparatus.

(6) Availability of required equipment (cutting tools, hurst tool, and so on).

(7) Development of standard and systematic predesignated duties to designated rescue men to insure—

(a) Quick and proper entry into aircraft.

(b) Correctly shutting down engine(s).

(c) Proper safetying of ejection systems.

(d) Sequential release of crew member restraints (life support, survival kit, harness, belts, and so on).

(8) Proper emergency first aid procedures involving heart massage, smoke inhalation, shock, and burns.

(9) Meaningful drill critique by senior fire officer highlighting any operational deficiencies.

b. *Critical element:* Structural Training Drill. (Set up a simulated structural training drill scenario.)

Measurement method:

(1) Alarm dissemination from alarm room operator to senior fire officer and crews responding to the simulated incident.

(2) Response and positioning of personnel and equipment per the prefire plan. NFPA 1410, Initial Fire Attack, suggests minimum acceptable performance standards during initial fire attack. Initial sizeup by senior fire officer would determine positioning of equipment in most cases.

(3) Establishment of an Incident Command System (ICS) by the senior fire officer at the best possible location from which to observe and direct fire suppression and rescue efforts. Communications between the senior fire officer and subordinate supervisors must be maintained by using vehicle PA systems, portable radios, voice hailers, or hand signals.

(4) Removal of sufficient fire hose to reach the farthest point of the expected or probable fire area and endangered exposures.

(5) Proper forcible entry, ventilation, and laddering procedures.

(6) Logical and systematic building search procedures by properly attired firefighter using breathing apparatus and lifelines if appropriate.

(7) All personnel working in the fire environment are completely attired in protective clothing, including SCBA.

(8) Simulated shutoff of utilities by designated fire department or Facilities Engineering utilities equipment personnel.

(9) Demonstration of pump operating procedures and knowledge of the calculation of friction loss, nozzle pressure, and engine pressure.

(10) Provision of adequate water supply lines to pumper (2½-inch, 3-inch, 4½-inch, large diameter hose, hard or soft suction hose).

(11) Application of emergency first aid procedures.

(12) When appropriate, use of pumper to augment water supply to sprinkler systems and a designated person to respond to booster pump station for starting, stopping pump engine(s).

(13) Meaningful drill critique by senior fire officer highlighting any operational deficiencies.

c. *Critical element:* Live ARFF training drill. (Set up a simulated live training fire scenario.)

Measurement method:

(1) A thorough predrill briefing by the senior fire officer using a lesson plan containing as a minimum, the following items: type aircraft, situation, dissemination of alarm, vehicle response, approach and positioning, simulated rescue, proper aqueous film forming foam (AFFF) application technique from vehicle turrets and handlines, overhaul, wind direction, fuel spillage, emergency withdrawal signals, use of protective clothing, and safety procedures.

(2) Use of training aids, IFSTA, and Air Force TO 00–105E–9, chalk board for supplementing the lesson plan.

(3) Establishment of an Incident Command System by the senior fire officer at the best possible location from which to

Figure E-6. Format for fire and emergency services operational readiness inspection (F&ES ORI) of firefighting exercises—Continued

observe and direct fire suppression and rescue efforts. Communications between the senior fire officer and subordinate supervisors must be maintained by using vehicle PA systems, portable radios, voice hailers, or hand signals.

(4) Effective use of vehicle turrets when within range of the fire.

(5) Proper AFFF application techniques from turrets and handlines.

(6) Simulated rescue by firefighters, protected by handline personnel and turrets.

(7) Meaningful drill critique by senior fire officer highlighting any operational deficiencies.

Figure E-6. Format for fire and emergency services operational readiness inspection (F&ES ORI) of firefighting exercises

Glossary

Section I
Abbreviations

AAFES
Army and Air Force Exchange Service

ACSIM
Assistant Chief of Staff for Installation Management

ADAAG
Americans with Disabilities Act Accessibility Guidelines

AFFF
aqueous film forming foam

AFRC
Armed Forces Reserve Center

AR
Army regulation

ARFF
Aircraft Rescue Fire Fighting

ARNG
Army Reserve National Guard

ASA(I,L&E)
Assistant Secretary of the Army (Installations, Logistics, and Environment)

BC
Designation for Class B and Class C fires

BRAC
Base Realignment and Closure

CDC
Child Development Center

CFR
Code of Federal Regulations

COCO
Contractor-owned, contractor-operated

CONUS
The contiguous continental United States and Alaska, Hawaii, and Puerto Rico.

COR
Contracting officer's representative

CTA
common table of allowances

DA
Department of the Army

DD
Department of Defense

DESC
Defense Environmental Security Council

DF&ES
Director/Directorate of Fire & Emergency Services

DGSC
Defense General Supply Center

DIS
Director/Directorate of Installation Support

DLA
Defense Logistics Agency

DOD
Department of Defense

DODI
Department of Defense Instruction

DOT
Department of Transportation

DPS
Director/Directorate of Public Safety

DPW
Director/Directorate of Public Works

DSHE
Director/Directorate of Safety, Health and Environment

EMS
Emergency Medical Services

EMT
Emergency Medical Technician

EO
Executive Order

EPA
Environmental Protection Agency

EPCRA
Emergency Planning and Community Right-To-Know Act

EQL
Equivalent Level of Protection

FAA
Federal Aviation Administration

FAD
Force activity designator

F&ES
Fire & Emergency Services

FIRMS
Fire Information Resource Management System

FM
Factory Mutual

FOA
Field Operating Agency

FOIA
Freedom of Information Act

GOCO
Government-owned, contractor-operated

GSA
General Services Administration

HAZMAT
Hazardous materials

HQDA
Headquarters Department of Army

IAFC
International Association of Fire Chiefs

IFSTA
International Fire Service Training Association

IPD
Issue priority designator

ISSA
Inter Service Support Agreement

JCAHO
Joint Commission on Accreditation of Healthcare Organizations

MACI
Military Adaptation of Commercial Item

MACOM
major Army command

MEDCOM
Medical Command

MIL-HDBK
military handbook

MILSTRIP
Military Standard Requisitioning and Issue Procedures

MIS
Management Information System

MOA
Memorandum of Agreement

MOS
Military Occupational Series

MTOE
Modified Tables of Organization and Equipment

NAF
Nonappropriated Fund

NFPA
National Fire Protection Association

NGB
National Guard Bureau

OCAR
Office of the Chief, Army Reserve

OCONUS
Facilities under U.S. control outside the contiguous continental United States and Alaska, Hawaii, and Puerto Rico. Specifically, U.S. bases in Sovereign foreign countries, or other U.S. possessions.

ODC
Ozone Depleting Chemicals

ORI
Operational Readiness Inspection

OSD
Office of the Secretary of Defense

OSHA
Occupational Safety and Health Administration

OTAG
Office of the Adjutant General

PASS
Personal Alert Safety Systems

PL
Public Law

PMCS
Preventive Maintenance Checks and Services

POL
petroleum, oils, and lubricants

POM
Program Objective Memorandum

PPA
Pollution Prevention Act

PPBERS
Planning, Programming, Budgeting, Execution and Review System

RA
Risk Assessment

RCS
Report Control Symbol

SB
supply bulletin

SCBA
Self contained breathing apparatus

SFO
Senior fire officer

SNAP
Significant New Alternatives Policy

SOFA
status of forces agreement

SOWs
Statements of Work

TAG
the Army guidance

TB
technical bulletin

TDA
Table of distribution and allowances

TM
Technical manual

TO
Technical order

UFAS
Uniform Federal Accessibility Standards

UL
Underwriter's Laboratories

UPH
Unaccompanied Personnel Housing

USACE
U.S. Army Corps of Engineers

USACIC
United States Army Criminal Investigation Command

USACPW
U.S. Army Center for Public Works

USARC
U.S. Army Reserve Center

USC
United States Code

Section II
Terms

Active Fire Protection System
Automatic detection, alarm and suppression systems.

Addition or Expansion
A change to a real property facility that adds to its overall external dimension.

Aerospace
Of or relating to the science or technology of flight.

Alteration
A change to interior or exterior facility arrangements to improve its current purpose. This includes installed equipment made a part of the existing facility. Additions, expansions, and extensions are not alterations.

Authority Having Jurisdiction (AHJ)
The organization, office, or individual responsible for approving equipment, an installation or a procedure. The commanding officer or departmental official may be the AHJ at government installations.

Base Realignment and Closure (BRAC)
A DOD program mandated by law (see PL 100-526, Defense Authorization Amendments and Base Closure & Realignment Act and PL 101-510, Defense Base Closure and Realignment Act of 1990), that consolidates defense activities at fewer installations, while disposing of those no longer essential to national defense.

Base/Installation Emergency Preparedness Officer
This official establishes and maintains Disaster Preparedness Plans per NFPA 1600, Recommended Practices for Disaster Management (in coordination with adjoining, local, civil jurisdictions).

Biological Materials
Those organisms that have a pathogenic effect to life and the environment and can exist in normal ambient environments. Examples of biological hazards would include those requiring an Etiologic Agent label on packaging, such as for toxins or microorganisms that cause disease (cholera, tetanus, botulism). Disease-causing organisms might be found in waste from hospitals, laboratories, and research institutions.

Cardiovascular
Relating to, or involving the heart and the blood vessels.

Caretaker Status
Installation not needed for production. Retention efforts include maintaining the property only to the extent necessary to offset serious deterioration, operation of utilities as may be necessary for fire protection, repairs necessary to maintain property, environment and land management. Modified caretaker status may occur in active or inactive installations. (see 41 CFR 101.47.401 et. seq.).

Chemical Materials
Those materials that pose a hazard based upon their chemical and physical properties. Examination of the U.S. Department of Transportation list of hazard classes indicates that most of the classes would fall under the chemical hazard type of material. The effect of exposure to chemical hazards can be either acute or chronic.

Concurrent Legislative Jurisdiction
This term is applied in those instances wherein, in granting to the United States authority which would otherwise amount to exclusive legislative jurisdiction over an area, the State concerned has reserved to itself the right to exercise, concurrently with the United States, all of the same authority.

Confined Space
A space with limited or restricted means of entry and exit; not meant for human occupancy; and may contain a hazardous atmosphere (oxygen deficiency or enrichment, flammable or explosive, toxic, physical hazards). In short, a space in which because of its construction, location, contents or work activity therein, the accumulation of a hazardous gas, vapor, dust or fume, or the creation of an oxygen deficiency atmosphere may occur.

Construction
The erection, installation, or assembly of a new facility. The addition, expansion, extension, alteration, conversion, or replacement of an existing facility. Installed equipment made a part of the facility, related site preparation, excavation, filling, landscaping, or other land improvements.

Conversion
A change to interior or exterior facility arrangements so that the facility may be used for a new purpose. This includes installed equipment made a part of the existing facility. Results in a change of facility category code.

Cross-staffing
A structural or ARFF fire fighting crew, cross trained and used on other F&ES apparatus without any increase in staffing. For example, a structural fire fighting crew may cross staff HAZMAT, or Rescue apparatus.

Defense Logistic Agency (DLA) Reserve
The quantity of ODCs to be maintained and managed by DLA for meeting wartime (combat) and operational requirements until acceptable non-ODC substitutes are evaluated, qualified and their use implemented within weapon systems and facilities.

Disaster Preparedness
Disaster planning programs covering response to natural and man-made disasters and operational procedures for sustained emergency operations.

DOD Fire Fighter Certification System Lesson Plans
Detailed lesson outlines covering certification levels that are keyed to the Career Development Courses (CDCs) obtained from the Extension Course Institute (ECI) at Maxwell AFB, Alabama. The applicant must pass the practical (performance) skills test as well as the CDC written test to be certified at that level.

Emergency Medical Services (EMS)
Emergency medical response programs staffed with appropriately certified emergency medical personnel and personnel.

Equivalent Level of Protection (ELP)
Systems, methods, or devices of equivalent or superior quality strength, fire resistance, effectiveness, durability, and safety, provided technical documentation is submitted to the AHJ to demonstrate equivalency, and the system, method, or device are approved for the intended purpose.

Exclusive Legislative Jurisdiction
This term is applied when the Federal Government possesses, by whatever method acquired, all of the authority of the State, and in which the State concerned has not reserved to itself the right to exercise any of the authority concurrently with the United States except the right to serve civil or criminal process in the area relative to activities which occurred outside the area. This term is applicable even though the State may exercise certain authority over the land pursuant to the authority granted by Congress in several Federal Statutes permitting the State to do so.

Expansion
A change to a real property facility that adds to its overall external dimension.

F&ES Risk Assessment
An analytical, comprehensive, evaluation of F&ES based on mission criticality, life safety, monetary value, and facility deficiencies.

Field Operating Agency (FOA)
Technical support agency for an ARSTAF element. For example, USACPW is FOA for HQDA(ACSIM), supporting the DPW/DEH organizations.

Fire & Emergency Services
Fire fighting, fire prevention, and emergency services. Emergency services include (1) structural, (2) aircraft rescue fire fighting (ARFF), (3) HAZMAT, (4) emergency medical service (EMS) responses, and disaster preparedness plans.

Fire Detection System
An automatic fire alarm system consisting of devices that initiate an alarm without any action on the part of people. The automatic devices sense some symptom or product of a fire such as heat, smoke, infrared or ultraviolet radiation, or waterflow in a sprinkler system.

Fire Loading
Represent the potential fuel available to a fire. When the building is combustible, the building itself is part of the fire load. The weight of the fuel is multiplied by the caloric value and divided by the floor area, to arrive at Btu/sq. Ft, the measure of the fire load.

Fire Risk Management Surveys
Inspections conducted per DODI 6055.1, DOD Occupational Safety and Health Programs. The frequency of surveys will be based on occupancy hazard, known fire loading, and mission criticality.

Fire Suppression system
An automatic system consisting of devices that apply various extinguishing agents (water, foam, dry and wet chemical, gaseous) on a fire without any action on the part of people and usually arranged to transmit an alarm to a fire communication center.

Force Activity Designator (FAD)
A Roman Numeral (I to V) assigned to the Secretary of Defense, the JCS, or A DOD Component to indicate the mission essentiality of a unit, organization, installation project or program to meet national objectives.

Hazardous Waste
EPA uses the term hazardous wastes for chemicals that are regulated under the Resource, Conservation and Recovery Act (40 CFR Part 261.33). Hazardous wastes in transportation are regulated by DOT (49 CFR Parts 170-179).

HAZMAT
A material or substance in a quantity or form that, when not properly controlled or contained, may pose an unreasonable risk to health, safety, property, and the environment, is of such a nature as to require implementation of special control procedures supplementing standard departmental procedures, and may require the use of specialized equipment and reference material. For the purpose of this plan, hazardous material, hazardous substance, dangerous material, and dangerous chemical are synonymous.

Interactive Multimedia
Use of realistic video, still photos, computer graphics and sounds linked together, using 486 or Pentium microcomputers.

International Fire Service Accreditation Congress (IFSAC)
A peer driven organization, located at Oklahoma State University that accredits state, provincial, and federal government fire service training certification programs. IFSAC Board of Governors accredited the DOD Fire Fighter Certification Program on 1 May 1993.

Issue Priority Designator (IPD)
The numeric entry that consists of a two-position code of Arabic numerals, made by combining the Force Activity Designator (FAD) and the Urgency of Need Designator (UND).

Laidaway
Facilities retained and maintained in a high state of readiness in support of emergency replenishment planning requirements.

Maintenance
The work required to preserve and maintain a real property facility in such a condition that it may be effectively used for its designated functional purpose. Maintenance includes work done to prevent damage that would be more costly to restore than to prevent. It also includes work to sustain components.

Memorandum of Agreement (MOA)
Formal agreement detailing specific functions performed for and by the signing agencies.

Military Adaptation of Commercial Item (MACI)
A multi-role (aircraft, building and brush), on or off the road, C130 and C141 air transportable, 1000 gpm, 660 gallon water tank, fire fighting vehicle.

Mission critical
Direct impact on combat mission capability and are integral to combat mission assets or affect operability of these assets.

Mutual aid
A non-binding, no cost, F&ES agreement signed by the installation commander and equivalent authority (ies) offering unspecified fire department assistance, if available.

Non-standard Fire Fighting Equipment
Other than those listed under standard fire fighting equipment term.

Nuclear Materials
Nuclear materials (upon impact or detonation of the high explosive) become dispersed as finely divided particles or, if a fire occurs, as oxides. These particles, or oxides, are alpha emitters. Unlike the beta or gamma radiation in the fallout of a nuclear explosion, alpha radiation has a very short range and lacks the ability to penetrate the skin.

ODCs (Ozone Depleting Chemicals)
ODCs are halogenated hydrocarbons characterized by combinations of Chlorine, Fluorine, Bromine, Iodine (halogen atoms), Hydrogen and Carbon. ODCs are generally characterized by three numbering system designations, CFCs, halons, and HCFCs. ODCs display a propensity to destroy ozone molecules under certain environmental conditions. ODCs have been identified, characterized and ranked for ozone depletion potential (ODP). The Montreal Protocol and the Clean Air Act contain listings of ODCs. Class I and Class II ODCs are identified in the Clean Air Act. Class I ODCs have higher ozone depletion potentials.

P-19
A U.S. Air Force, 1000 gallon water tank, 1000 gpm pump, ARFF vehicle used for large helicopter and fixed winged aircraft.

Partial Legislative Jurisdiction
This term is applied in those instances where the Federal Government has been granted, for exercise by it over an area in a State, certain of the State's authority, but where the State concerned has reserved to itself the right to exercise, by itself or concurrently with the United States, other authority constituting more than merely the right to serve civil and criminal process in the area attributable to actions outside the area. For example, the United States is considered to have partial legislative jurisdiction where the State has reserved the additional right to tax private property.

Passive Fire Protection System
System designed to confine fire and smoke in zones, a concept called compartmentation. Special attention is given to protection of the building's structural integrity and the spaces through which occupants will move to safety.

Pathogens
An agent that causes disease, especially, a microorganism such as a bacterium or fungus.

Personal Alert Safety Systems (PASS)
A device complying with NFPA Standard 1982, Personal Alert Safety Systems (PASS) for Fire Fighters. PASS monitor fire fighter motion and signal an audible alarm when motion is undetected for more than 30 seconds. The fire fighter can also actuate the audible alarm if he or she needs assistance.

Planning, Programming, Budgeting, Execution and Review System (PPBERS)
An integrated system that establishes, maintains, and revises the Five Year Defense Program and the DOD budget.

Program Objective Memorandum (POM)
A formal document submitted to OSD containing the Army proposals for resource allocation in consonance with program guidance. The POM describes all aspects of Army programs to increase the operational readiness of the total Army. It highlights forces, personnel, and material acquisition. It also addresses the equipment distribution and logistics support required to meet the strategy and objectives specified by the Secretary of Defense.

Radioactive Materials
Also known as Radiological Material, it is any material or combination of materials that spontaneously emits ionizing radiation and has a specific gravity greater than 0.002 microcuries per gram. U.S. DOT lists three classes of radioactive materials, with Class I being the least harmful. Packaging requirements for radioactive materials will vary depending on the varying hazard potentials presented by the material itself. The three types of harmful radiation emitted by radioactive materials are alpha, beta, and gamma.

Real Property Facility
A separate building, structure, utility system, or improvement.

Reclaim/Recovery/Recycle
Reclaimed material is obtained by processing used material and extracting useful constituents. Common usage is to "reclaim" solvents. Recovered material is that which is removed from an existing system and placed in another container. Additional processing may be required prior to reuse. Recycled material is removed from an existing system and processed to bring its quality up to a minimum standard that is available for any application for which the material meets the system requirement.

Repair
The restoration of a real property facility to such a condition that it may be effectively used for its designated purpose. Repair may be overhaul, reprocessing, or replacement of deteriorated components' parts or materials. Correction of deficiencies in failed or failing components or existing facilities or systems to meet current Army standards and codes where such work, for reasons of economy, should be done concurrently with restoration of failed or failing components. Repair work may involve incidental increases in qualities or capacities.

Significant New Alternative Policy (SNAP)
Under the Clean Air Act, Title VI, Section 612 the U.S. Environmental Protection Agency (EPA) was directed to establish a program to help identify new chemicals and processes as alternatives to ozone-depleting chemicals. The "SNAP" list contains chemicals and processes that have been tested in specific applications and have been approved for use in that application by the EPA. Army policy requires that chemicals and processes being introduced into the Army system as alternatives to ODCs be listed by SNAP and receive an independent toxicity clearance approved by the Office of the Surgeon General.

Standard Fire Fighting Equipment
Includes: LIN H56391, MACI; LIN X45095, P-19; LIN X44701, 1000 GPM Pumper; and LIN X39426, Twinned Agent ARFF.

Standby
Applies to equipment.

TDA
Tables of Distribution and Allowances are authorization documents for non-combat, non-deployable units. Each document is unique for a particular unit (predominantly general support units) or organization.

Technical Services
Fire risk management surveys, installed detection and suppression system inspections, construction program monitoring, fire prevention educational programs and extinguisher services.

The Army Plan (TAP)
The TAP provides a definitive basis for program action. DCSOPS prepares the TAP in coordination with the ARSTAF and major commands. It implements the decision by the Chief of Staff and Secretary of the Army as to the desired alternative for the objective force, discusses the threat and military strategy, and lays out what the Army wants to do in support of the mission and how it will build the objective force.

TOE
Tables of Organizations and Equipment are requirements guides for "type" units, usually deployable combat units, i.e., infantry, artillery or armor battalions.

Water Mist
Fine water droplets (less than 100 microns) having a high heat transfer rate, produced by special nozzles using either high pressure or a separate gas component to eject the water from the nozzle in small droplets.

Section III
Special Abbreviations and Terms

This section contains no entries.

Index

This index is organized alphabetically, by topic and by subtopic within a topic. Topics and subtopics are identified by paragraph number.

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RESERVED

MANAGEMENT CONTROL EVALUATION CERTIFICATION STATEMENT

For use of this form, see AR 11-2; the proponent agency is ASA(FM).

1. REGULATION NUMBER

2. DATE OF REGULATION

3. ASSESSABLE UNIT

4. FUNCTION

5. METHOD OF EVALUATION *(Check one)*

	a. CHECKLIST		b. ALTERNATIVE METHOD *(Indicate method)*
APPENDIX *(Enter appropriate letter)*			

6. EVALUATION CONDUCTED BY

a. NAME *(Last, First, MI)*	b. DATE OF EVALUATION

7. REMARKS *(Continue on reverse or use additional sheets of plain paper)*

8. CERTIFICATION

I certify that the key management controls in this function have been evaluated in accordance with provisions of AR 11-2, Army Management Control Process. I also certify that corrective action has been initiated to resolve any deficiencies detected. These deficiencies and corrective actions *(if any)* are described below or in attached documentation. This certification statement and any supporting documentation will be retained on file subject to audit/inspection until superseded by a subsequent management control evaluation.

a. ASSESSABLE UNIT MANAGER

(1) Typed Name and Title	b. DATE CERTIFIED
(2) Signature	

INDIVIDUAL TRAINING EVALUATION RECORD

For use of this form, see AR 420-90; the proponent agency is ACSIM

NAME

CALENDAR YEAR

LINE	TRAINING SUBJECTS	SUBJ FREQ	JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		TOTAL YEAR HRS
			Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	
	FIRE SUPPRESSION PROFICIENCY TRAINING																										
1	AIRCRAFT EGRESS	Q																									
2	FIRST AID – CPR	Q																									
3	PUMPER OPERATIONS	A																									
4	RESCUE TOOLS	Q																									
5	TRAINING FIRES	SA																									
6	MUTUAL AID	A																									
7	STRUCTURAL DRILLS	M																									
8	PREFIRE PLANNING	Q																									
9	WATER SUP FOR FIRE PROT	Q																									
10	SPRINKLER SYSTEMS	Q																									
11	FIRE INSP PROCEDURES	SA																									
12	BREATHING APPARATUS	SA																									
13	APPARATUS TESTS	A																									
14	COMMUNICATIONS	SA																									
15	NATURAL COVER FIRES	Q																									
16	HAZARDOUS CML ACDT	Q																									
17	OTHER *(List)*																										
17A																											
17B																											
17C																											
17D																											
17E																											
17F																											
	FIRE PREVENTION PROFICIENCY TRAINING																										
18	INSPECTION PROCEDURES	SA																									
19	BUILDING CONSTRUCTION	SA																									
20	CLAS/OCCUPANCIES	SA																									
21	MEANS OF EGRESS	SA																									
22	FEATURES OF FIRE PROT	SA																									
23	BLDG SERVICE EQUIP	SA																									

LINE	TRAINING SUBJECTS	SUBJ FREQ	JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		TOTAL YEAR HRS
			Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	Eval Gr	Hrs	
24	PLACES OF PUBLIC ASSEMBLY	SA																									
25	EDUCATIONAL OCCUPANCIES	SA																									
26	HEALTH CARE AND PENAL OCCUPANCIES	SA																									
27	RESIDENTIAL OCCUPANCIES	SA																									
28	MERCANTILE OCCUPANCIES	SA																									
29	BUSINESS OCCUPANCIES	SA																									
30	INDUSTRIAL OCCUPANCIES	SA																									
31	STORAGE OCCUPANCIES	SA																									
32	OCCUPANCIES IN UNUSUAL STRUCTURES	SA																									
33	OPERATING FEATURES	SA																									
34	FIRE EXTINGUISHERS	SA																									
35	FIRE ALARM SYSTEMS	SA																									
36	INSTALLED EXTINGUISHING SYSTEMS	SA																									
37	INSTALLED SPRINKLER SYSTEMS	SA																									
38	PROJECT REVIEW/SUBMITTAL	SA																									
39	FIRE INVESTIGATION	SA																									
40	WELDING AND CUTTING	SA																									
41	MUNITIONS	SA																									
42	REPORTS/RECORDS	SA																									
43	BASE POPULATION TRAINING	SA																									
44	OTHER *(List)*																										
44A																											
44B																											
44C																											
44D																											

REMARKS

Reverse of DA Form 5376-R, Jan 85

FIRE AND EMERGENCY SERVICES TRAINING RECORD

For use of this form, see AR 420-90; the proponent agency is ACSIM

1. DATE

2. NAME, GRADE AND TITLE OF INSTRUCTOR	3. TIME		
	STARTED	FINISHED	DURATION

4. SUBJECT	5. OBJECTIVE
6. LOCATION OF TRAINING	7. EQUIPMENT AND TRAINING AIDS USED

8. AMOUNT OF AGENTS AND FUEL USED

AGENT	AMOUNT	FUEL	AMOUNT

9. DESCRIPTION OF TRAINING CONDUCTED

10. NUMBER OF PERSONNEL ATTENDED	11. TOTAL MANHOURS

12. REMARKS *(Include Days/Interruptions)*

13. INSTRUCTOR'S SIGNATURE	14. TRAINING OFFICER'S SIGNATURE	15. OFFICER IN CHARGE SIGNATURE

16. DATA RECORDED ON INDIVIDUAL'S TRAINING RECORD

DATE	NAME, GRADE AND TITLE OF RECORDER	SIGNATURE

17. **PERSONNEL ATTENDING CLASS AND EVALUATION GRADE**

NAME *(Last, First, MI)*	EVAL GR*	SIGNATURE OF ATTENDEE

EVALUATION LEGEND

GRADE

1 FIRE FIGHTER I NFPA 1001
2 - FIRE FIGHTER II NFPA 1001

GRADE

1 - FIRE INSPECTOR I NFPA 1031
2 - FIRE INSPECTOR II NFPA 1031
3 - FIRE INSPECTOR III NFPA 1031

* Evaluation grade to be recorded on Individual Training Evaluation Record, DA Form 5376-R

FACILITY RESPONSE CARD

For use of this form, see AR 420-90; the proponent agency is ACSIM

1. BUILDING NO. OR AREA	2. TYPE OF OCCUPANCY	3. ORGANIZATION

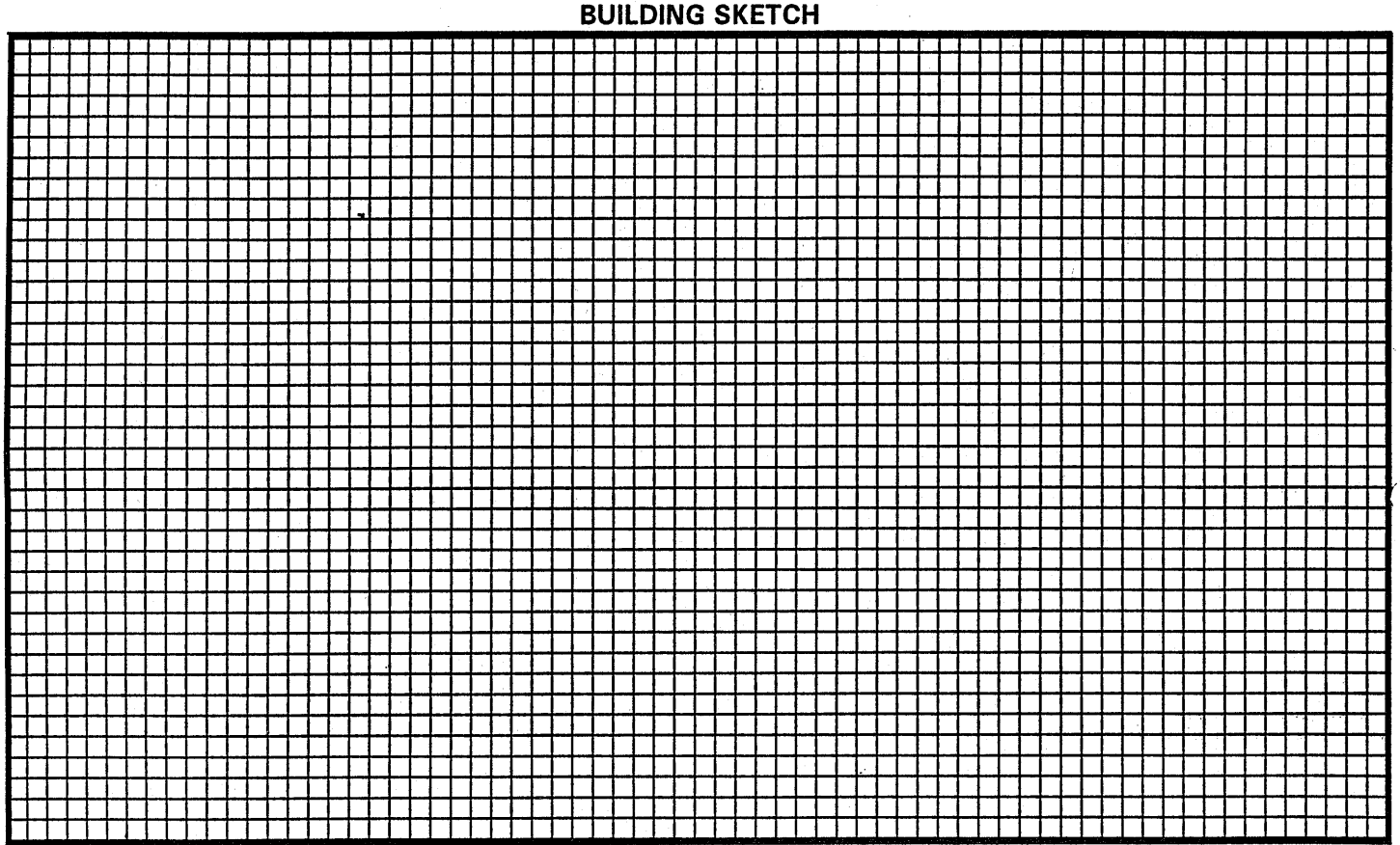
4. BUILDING NO.OR AREA		5. FIRE PROTECTION/SUPPRESSION SYSTEMS				6. HEATING/FUEL	7. WATER STORAGE
(COMBUSTIBLE)	*(NONCOMBUSTIBLE)*	HEAT DET.	DELUGE	HALON		NATURAL GAS	TANK
WOOD FRAME	STEEL	SMOKE SET.	WET PIPE	DRY CHEM		PROPANE TANK	RESERVIOR
HEAVY TIMBER	BRICK	TR/UV DET.	DRY PIPE	FIRE PUMPS		FUEL OIL	RIVER
WOOD SIDING	TILE	MANUAL	PREACTION	OTHER		ELECTRICAL	LAKE
WOOD FLOORS	CONCRETE	LOCAL	STAND PIPE			COAL	POND
OTHER	OTHER	OTHER	COR			OTHER	OTHER
NO. OF STORIES	NO. OF STORES		FORM				

8. UTILITY SHUT OFF LOCATIONS	9. SPECIAL HAZARDS
A. GAS	10. FIRE HYDRANT LOCATION
B. FUEL	11. F.D. CONNECTION LOCATION
C. WATER	12. EXPOSURES
D. ELECTRICITY	13. REMARKS
E. ALARMS	

14. SIGNATURE	15. DATE

DA FORM 5378-R, SEP 92 EDITION OF JAN 85 IS OBSOLETE

BUILDING SKETCH



Reverse of DA Form 5378-R, SEP 92

APPARATUS MAINTENANCE CHECKLIST

For use of this form, see AR 420-90; the proponent agency is ACSIM

APPARATUS	MONTH	CALENDAR YEAR

SECTION A - DAILY INSPECTION STATUS *(see legend below)*

LINE	ITEM INSPECTED	DAYS OF THE MONTH																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	FUEL *(fill at 3/4)*																															
2	ENGINE OIL																															
3	RADIATOR																															
4	TIRE AIR PRESSURE																															
5	LIGHTS																															
6	BATTERY																															
7	FAN BELT																															
8	BRAKES																															
9	AIR PRESSURE *(drain tanks)*																															
10	CLUTCH																															
11	WINDSHIELD WIPERS																															
12	START ENGINE																															
13	WARNING DEVICES																															
14	ENGAGE PUMP																															
15	INSTRUMENT PANEL																															
16	FIREFIGHTING AGENTS																															
17	RELIEF VALVE SET *(150 psig)*																															
18	PRIMER OIL																															
19	FLUSH PUMP *(monthly)*																															
20	VACUUM TEST *(monthly)*																															
21	DRAFTING OPERATION *(annual)*																															
22	GRID MAPS																															
23	JAWS OF LIFE *(weekly operation)*																															
24	HOSE CHANGE *(pumper - monthly)*																															
25	K-12 SAW *(weekly operation)*																															
26	RADIO CHECK																															
27	APPEARANCE																															
28	OPERATOR'S INITIALS																															
29	SUPERVISOR'S INITIALS																															

LEGEND: Daily Inspection Status
(Enter status of item inspected in columns above)

1 = OK
2 = LOW
3 = DAMAGED
4 = DIRTY
5 = NEEDS ADJUSTMENT
6 = NEEDS REPLACING
7 = MALFUNCTION
8 = INCOMPLETE
9 = MISSING
10 = FIRE DEPARTMENT RESPONSIBILITY
11 = MAINTENANCE RESPONSIBILITY

DA FORM 5379-R, JAN 85

SECTION B - ACTION TAKEN

LINE	ITEM INSPECTED *(from Section A)* (a)	DAILY INSPECTION STATUS (b)	NAME OF INDIVIDUAL PROBLEM REPORTED TO (c)	DATE/ TIME REPORTED (d)	WORK ORDER NO. (e)	MECHANIC'S SIGNATURE (f)	REMARKS (g)

Reverse of DA Form 5379-R, Jan 85

FIRE APPARATUS TEST RECORD

For use of this form, see AR 420-90; the proponent agency is ACSIM

1. INSTALLATION	2. DATE
3. OFFICER CONDUCTING TEST	

4. ARMY REG. NO.	5. CLASS	6. MANUFACTURER	7. MODEL	8. MFR SERIAL NO.	9. ACQ. DATE
10. CHASSIS MAKE	11. CHASSIS SERIAL NO.	12. ENGINE NO.	13. ENGINE MAKE	14. PUMP MAKE	15. ARMY SERIAL NO.
16. TYPE PUMP	17. CAPACITY	18. RELIEF VALVE TYPE		19. PRIMER TYPE	

CAPACITY TEST 150 LBS PUMP PRESSURE *(100% for 20 Min)*

20. HOSE LAYOUT	21. LIFT	22. TIP SIZE	23. PUMP PRESSURE	24. NET PRESSURE	25. PITOT READING
26. NOZZLE PRESSURE	27. G. P. M.	28. RPM *(Engine)*	29. RPM *(Pump)*	30. OIL PRESSURE	31. ENGINE TEMP

CAPACITY TEST 200 LBS PUMP PRESSURE *(70% for 10 Min)*

32.	33.	34.	35.	36.	37.
38.	39.	40.	41.	42.	43.

PRESSURE TEST 250 LBS PUMP PRESSURE *(50% for 10 Min)*

44.	45.	46.	47.	48.	49.
50.	51.	52.	53.	54.	55.

56. GAUGE ACCURATE	64. DRAIN VALVES
57. PRIMER OPERATION	65. EQUIPMENT MEET NFPA 1901
58. RELIEF VALVE OPERATION	66. AFFF SYSTEM OPERATIONAL
59. OIL LEAKS	67. TIRE THREAD CONDITION
60. GATE VALVE LEAKS	68. PUMP PACKING
61. THROTTLE OPERATION	69. CONDITION OF H_2O/AFFF TANKS
62. TRANSFER VALVE OPERATION	70. CONDITION OF INTAKE SCREENS
63. ENGINE OVERHEAT	71. CAVITATION DEVELOP

72. REMARKS

ACCELERATION TESTS

73. STANDING TO 35 MPH in 25 SECONDS	☐ YES	☐ NO
74. STEADY 15 MPH TO 35 MPH IN 30 SECONDS *(High Gear)*	☐ YES	☐ NO
75. TOP SPEED 50 MPH LEVEL TERRAIN	☐ YES	☐ NO

76. REMARKS/ACTIONS TAKEN TO IMPROVE APPARATUS PERFORMANCE *(continue on reverse, if necessary)*

BUILDING - FIRE RISK MANAGEMENT SURVEY

For use of this form, see AR 420-90; the proponent agency is ACSIM

USE REVERSE SIDE FOR REMARKS

1. BUILDING NUMBER OR AREA	2. OCCUPANCY	3. ORGANIZATION	4. DATE

5. **SECTION A - INSPECTION CHECK LIST** *(Common and/or Special Fire Hazards)*

A.	**HOUSEKEEPING:**		**D. PETROL, OIL, LUBRICANTS:**		**G. FIRE DETECTION:**		**J. FIRE EXTINGUISHERS:**		Girders
	General Order		Pipe Leaks		Detectors		Service Date		Trusses
	Rubbish		Refueling		Batteries		Location		Stairs
	Cleanliness		Defueling		Wiring		Hydrostatic Test Date		Fire Escape
	Vegetation Growth		Grounding		Control Box		Pressure Guage		
	Improper Storage		Bonding		Fuses		Horn	**M.**	**STORAGE:**
	Overall Poor		Electrical				Nozzle		Procedures
	Outdoor Housekeeping		Compatibility	**H.**	**FIRE SUPPRESSION SYSTEMS**		Control Valve		Fire Lanes
			Manhole Cover		Sprinkler Riser		Safety Pin		Wall to Storage Spacing
B.	**SMOKING:**		Distance to Building		Compressor	**K.**	**FLAMMABLE STORAGE:**		Storage Height
	Unauthorized Area		Drains		Post Indicator Valve		Flammable Gases	**N.**	**HAZARDOUS MATERIALS:**
	Smoking Permit		Nozzles		2-inch Drain		Flammable Liquids		Containers
	Disposal of Materials	**E.**	**HEATING**		Branch Lines		Electrical Fixtures		Compatibility
	Receptacles		Fuel Pipe		Sprinkler Heads		Diking		Storage Method
	No Smoking Signs		Fuel Lines		Inspector's Test Valve		Barrier Protection		Improper Facility
	Improper Lighter		Filters		Agent		Venting		Items Not Labeled
	Matches		Damper		Fusible Links		Labeling		Warning Signs
			Cooking Equipment		Nozzles		Containers		Ventilation
			Deep Fat Fryers		Fire Hydrant		Cabinet		
			Ovens				Leakage		
C.	**ELECTRICAL:**		Burners	**I.**	**LIFE SAFETY CODE:**		Overstock		
	Multiple Outlets		Exhaust Hoods		Occupancy Load				
	Extension Cords		Housekeeping		Means of Egress	**L.**	**BUILDING CONSTRUCTION:**		
	Frayed Wiring		Chimney		Exit Requirement		Doors		
	Hazardous Locations		Thermostat		Emergency Lighting		Windows	**O.**	**SPECIAL HAZARDS:**
	Improper Wiring	**F.**	**FIRE DOORS:**		Exit Impediments		Hardward		Welding & Cutting
	Fuses & Panel Boxes		Fusible Link		Exit Lights		Fire Walls		Finishing Processes
	Conduit & Raceways		Door Guides		Exit Signs		Door Frame		Hot Work Permit
	Conductors		Operational		Interior Finish		Floors, Bearing		Spontaneous Heating
	Outlet Boxes		Rated		Smoke Barriers		Roofs		Interior Finish
	Switches & Fixtures		Damaged		Ramps		Columns		
			Hardware				Beams		

6.a. NAME OF INSPECTOR *(Print or Type)*	7.a. NAME OF ORGANIZATION FIRE MARSHALL *(Print or Type)*
6.b. SIGNATURE	7.b. SIGNATURE

HAZARD/DEFICIENCY INSPECTION RECORD For use of this form, see AR 420-90; the proponent agecny is ACSIM	SUSPENSE DATE

TO:	FROM: *(Fire Chief)*
LOCATION OF FIRE SAFETY VIOLATION	DATE AND TIME OF VIOLATION

HAZARDS/DEFICIENCIES NOTED	**CORRECTIVE ACTION TAKEN** *(Return to Fire Chief)*

DATE	REPORT DONE BY:
DATE	INSTALLATION FIRE CHIEF SIGNATURE
DATE	INSTALLATION FIRE MARSHALL SIGNATURE
DATE	ORGANIZATION OR ACTIVITY FIRE MARSHALL SIGNATURE

FOLLOW UP INSPECTION ☐ SATISFACTORY ☐ UNSATISFACTORY

DATE _____ INSPECTED BY _____

DA FORM 5382-R, SEP 92 EDITION OF JAN 85 IS OBSOLETE

HOT-WORK PERMIT

For use of this form, see AR 420-90; the proponent agency is ACSIM

1. LOCATION	2. DATE	3. PERMIT NO.
4. TYPE WORK	5. START TIME	6. FINISH TIME
7. a. NAME OF PERSON RESPONSIBLE FOR HOT-WORK AT JOB SITE *(Contractor/Government Employee)*	7. b. SIGNATURE	

PRECAUTIONS BEFORE OPERATIONS

CHECKLIST	CHECK ONE	
	YES	NO
8. Did Fire Department Inspector inspect site?		
9. Are there procedures for Fire Department emergency notification? *(Emergency No.)*		
10. Are combustibles in area noted?		
11. Should combustibles be covered? *(If yes, note in remarks)*		
12. Are proper extinguishers on hand?		
13. Is wet-down necessary? *(If yes, note in remarks)*		
14. Is smoking permissible at work sites?		
15. Is continuous fire watch required?		
16. Is Fire Department standby required?		
17. Are other precautions required? *(If yes, note in remarks)*		

18.a. FIRE DEPARTMENT INSPECTOR'S SIGNATURE	18.b. DATE

PRECAUTIONS AFTER OPERATIONS

CHECKLIST	CHECK ONE	
	YES	NO
19.a. Was Fire Department notified after hot-work operation was completed?		
19.b. Time:		
20.a. Did Fire Department inspector inspect work site?		
20.b. Time:		
21. Are after work conditions safe? *(If no, note in remarks)*		
22. Are heat producing devices safe if left at work site?		

23.a. FIRE DEPARTMENT INSPECTOR'S SIGNATURE	23.b. DATE

24. REMARKS

NOTE: PERMIT VALID ON DAY OF OPERATION AT ONE LOCATION ONLY

WATER FLOW TEST

For use of this form, see AR 420-90; the proponent agency is ACSIM

LOCATION	DATE

HYDRANT NUMBER	OUTLET DIAMETER *(Inches)*	PITOT PRESSURES *(PSI)*	DISCHARGE *(Gallons per Minute)*	STATIC PSI	RESIDUAL PSI
				TOTAL DISCHARGE DURING TEST *(Gallons per Minute)*	AVAILABLE GALLONS PER MINUTE *(AT 20 PSIe)*

WATER FLOW CHART

