BY ORDER OF THE COMMANDER,
35TH FIGHTER WING

35 FIGHTER WING INSTRUCTION 32-2001

5 APRIL 2002

Civil Engineer

FIRE PREVENTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes standards and responsibilities regarding fire prevention and fire protection and implements AFPD 32-20, Fire Protection. It applies to all organizations, vendors, contractors, temporarily assigned units, and personnel working on Misawa Air Base.

SUMMARY OF REVISIONS

This instruction was reaccomplished to update information and requirements in FWI 32-2001, Fire Prevention, and put previous edition checklists into clear text. A bar (|) indicates revisions from the previous addition.

The objective of this Fighter Wing instruction is to reduce the cause of fire and to reduce loss of life, injuries, and property damage should a fire occur. It also standardizes, where possible, the facility manager fire prevention assessment process. In addition to this instruction and HQ USAF and MAJCOM publications, the following standards, where applicable, shall apply: AFI 91-301, Air Force Occupational and Enviromental Safety, Fire Protection, and Health (AFOSH) Program, AFOSH 91-56, Air Force Occupational Safety and Health Standard, AFI 32-2001, The Fire Protection Operations and Fire Prevention Program, AFP 87-8, Building Manager's Handbook, Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), Underwriters Laboratories Incorporated (UL), Factory Mutual Engineering Corporation (FM), and Japanese Labor, Safety, and Health Standards.

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1. General Information.

1.1. Authority Having Jurisdiction (AHJ). The Civil Engineer (35 CES/CC), is designated the Fire Marshal and serves as staff advisor to the Commander on fire protection matters. The Fire Marshal is authorized to abate any operations or processes considered to be a fire or explosive hazard.

1.1.1. The Fire Chief (35 CES/CEF) is responsible for the management and operation of the Fire Protection Program. In the absence of the Civil Engineer, the Fire Chief serves as Fire Marshal. The Fire Chief is responsible for the administration of this instruction.

1.1.2. The Assistant Chief of Fire Prevention (35 CES/CEFP) is responsible for determining instruction compliance, adequacy of life safety, and approving acceptable measures or equipment that meet the objectives of this instruction. During coordination, where agreement cannot be reached, the Fire Marshal's decision prevails.

1.2. Responsibilities Assigned. All personnel assigned to or working on Misawa Air Base are responsible for ensuring their areas/processes are as safe and free of fire hazards as possible. Fire hazards and/or unsafe practices shall be reported to the facility manager and Base Fire Prevention Office (35 CES/CEFP, 226-4055) as soon as possible.

1.2.1. Commanders are responsible for and must ensure sound fire prevention procedures are established and practiced in all activities under their jurisdiction. They will appoint by letter, facility managers for facilities under their jurisdiction. Appointees should have at least 18 months remaining before their DEROS and should be a senior NCO.

1.2.2. Facility managers and their alternates are responsible for ensuring their facilities/areas are as free of fire/safety hazards as possible.

1.2.3. Upon notification of assignment as a Facility Manager, view the facility manager's fire prevention training Power Point presentation located on the Misawa Web Page @ **https://www2.misawa.af.mil/orgs/ces/**. Click on: Flight Index, Fire Protection, Fire Prevention Briefing, Facility Manager's Briefing. This briefing is required initially and annually by all assigned facility managers and their alternates.

1.2.4. Maintain a copy of this instruction and any applicable standards/instructions in the fire prevention folder. Contact the fire prevention office for assistance.

1.2.5. Ensure fire prevention orientation is provided to all personnel assigned to the organization/facility.

1.2.6. Conduct monthly facility fire assessments during the facility manager's walk-through. A record of these facility assessments will be maintained by the facility manager for at least 2 years. Notify the Base Fire Prevention Office of any discrepancies which can't be immediately corrected.

1.2.7. Facilities will be inspected annually by the Fire Prevention Office. Random no-notice inspections will be conducted by Senior Fire Officials to investigate complaints.

1.2.7.1. ORGANIZATION: MONTH:

Operations Group, Medical Group & FW Facilities	February - March
Support Group	April - June
Associate Commands	July - September
Logistics Group	November - January

1.2.8. Accompany inspectors during assessments and take corrective actions as directed to correct hazards found. Ensure 911 stickers are placed on all phones within the facility.

1.2.9. Notify the Fire Prevention Office of any changes to the facility, to include occupancy.

1.2.10. Actively track open work requests (AF Form 332) for their facility. Specific attention shall be paid to those requests to correct fire/safety hazards.

1.2.11. Fire Prevention Inspectors shall conduct annual fire prevention assessments, unless required more often by public law or other statutory authority.

1.3. Fire Prevention Program Objectives. The objectives of the Fire Prevention Program are to prevent loss of life and property to fires and prevent interruption of the 35 FW mission.

1.4. Fire Reporting Procedures. All personnel shall be familiar with the fire/emergency reporting numbers and procedures listed below. 911 stickers will be on all phones within base facilities. In addition, personnel must be familiar with actions to take during emergencies unique to their workplace. When a fire/emergency is discovered, personnel shall:

1.4.1. Sound the alarm when facility is equipped with an alarm system

1.4.2. Dial 911 from any on-base phone.

1.4.2.1. Dial 53-1911 from any pay or off-base phone.

1.4.2.2. Answer all questions and stay on the line until instructed to hang up.

1.4.3. Implement unit emergency action plans.

1.4.4. Report ALL fires, regardless of size, or status, Fire Protection personnel will make the determination of whether or not a fire has been completely extinguished.

1.5. False Alarms and Tampering With Fire Safety Equipment. Transmitting a false fire alarm, either by voice or installed fire detection systems, is a serious offense and punishable under the Uniform Code of Military Justice. Occupants of the facility performing evacuation and fire department personnel responding under emergency conditions are subject to unnecessary dangers.

1.6. Fire Evacuation Plans. Fire evacuation plans will be available in billeting and dormitory facilities. Building managers are responsible for providing occupants with an understanding of evacuation procedures, stressing two means of egress.

1.7. Public Education Available. Fire safety training is available to any group or organization. Training may be obtained by contacting the Fire Prevention office @ 226-4055.

1.8. Base Parking and Traffic.

1.8.1. Fire fighting vehicles responding to an emergency request the right-of way by use of sirens and flashing beacon lights. All traffic should immediately clear intersections, move as far as pos-

sible to the left, and come to a full stop. Traffic can continue to move after all fire fighting vehicles have passed. Remain at least 300 feet back if following a fire vehicle.

1.8.2. Parking is not allowed in fire lanes; fire lanes must be free of obstructions at all times. Should it become necessary to use the fire lane for vehicle loading or unloading, the operator must remain with the vehicle.

1.8.3. Vehicles parked next to street curbs must remain at least 15 feet from a fire hydrant.

1.8.4. Motor vehicles (cars, trucks, motorcycles, mopeds, forklifts, etc.) will not be parked inside

1.8.5. building which have not been designated for such purposes. Any deviation must be approved in writing by the Fire Protection Flight.

1.8.6. Streets will not be barricaded or otherwise obstructed without prior notification of the Fire Protection Flight.

1.9. Fire Symbols and Placards.

1.9.1. Fire symbols for explosives, chemical hazards, and "Apply No Water" placards must be posted outside the buildings at the entry to the storage location. They may be posted on the exterior of buildings.

1.9.2. Hazardous material storage areas must have hazardous material placards posted on the exterior of buildings near the storage location. NFPA Standard 704, Identification of the Fire Hazards of Materials, and AFJMAN 23-2 1 0, Joint Service Manual (JSM) for Storage and Materials Handling, provide guidance for posting 704M hazardous material placards.

1.9.3. Facilities that require the storage of mission essential munitions must request an explosive facility license per AFMAN 91-201, Explosives Safety Standards, paragraphs 3.11. EXCEPTION: Facilities storing less than 1,000 rounds of small arms ammunitions do not require an explosive facility license. These licenses must be updated annually.

1.10. Managers of Public Assembly Facilities. Managers of places of public assembly are responsible for the overall fire prevention and life safety program within their facilities. They must:

1.10.1. Maintain a system to certify employees in fire prevention and life safety responsibilities within their work environment. It must include:

1.10.1.1. Quarterly fire drills (no building evacuation).

1.10.1.2. Fire safety training of newly hired employees within 30 days of starting to work.

1.10.1.3. Quarterly employee briefings on fire reporting procedures, location and use off first aid fire fighting appliances, housekeeping practices, evacuation of patrons (to include handicapped), fire exits, and escapes.

1.10.2. Maintain a Fire Prevention folder, binder book, or file that includes, as a minimum, a copy of this instruction, fire hazard reports (AF Form 1487), certification training documentation, a quarterly fire drill log, a record of deep fat fryer test dates, a record of hood and duct cleaning dates, and a daily closing inspection log.

1.10.3. Conduct or have the assistant manager conduct a closing inspection to ensure the facility is in a fire safe condition. This inspection cannot be delegated to janitorial personnel. A record of this inspection will be placed in the daily closing inspection log.

1.10.4. Notify the Fire Protection Flight or Fire Prevention Office prior to any major social event when temporary decorations, large attendance, or unusual arrangements are involved. The Fire Prevention Office will provide guidance to ensure appropriate fire safety measures are taken.

1.10.5. Maintain facility occupancy load information in the manager's office.

1.10.6. Ensure exit doors are unlocked and panic hardware is operational when facilities are occupied.

1.11. Services Division and Army and Air Force Exchange Service (AAFES) Concessionaires. The Director, Services Division, and the General Manager, AAFES, will appoint a supervisor to ensure all contracted projects and concessionaires comply with this instruction.

1.12. Fire Prevention Visits. The Fire Prevention Office conducts fire prevention visits to all base facilities. The objective is to evaluate each organization's fire prevention program. Facility Managers or their alternates will accompany the fire prevention inspector during the visit. A fire prevention visit report will be provided to the commander, and if requested, a briefing will be conducted.

1.12.1. Risk assessment codes (RAC) for hazards that will start a fire, are assigned and managed per AFI 91-301.

1.12.2. Fire safety deficiencies (FSD) are assigned and managed per AFI 91-301.

1.13. Fire Extinguishers. Building managers and organizational responsibilities for fire extinguishers are contained in AFOSH Standard 91-56. Fire extinguisher inspection records must be kept on either 35 FW Form 70, or an automated data base per NFPA 10 *Standard for portable fire extinguishers.*

1.13.1. Fire Prevention personnel are available to assist commanders by providing visual media training on hand-held extinguishers and hands on training of flightline wheeled fire extinguishers.

1.13.2. Owning organizations are responsible for ensuring unserviceable hand-held fire extinguishers are removed from use and delivered to the main Fire Station (Bldg 3003), Extinguisher Maintenance Shop, for repair. They are also responsible for requisitioning a replacement for those fire extinguishers that are not repairable through the supply system.

1.13.3. Using organizations that find an unserviceable flightline wheeled fire extinguisher will bring to the main Fire Station (Bldg 3003).

1.13.4. Hand-held fire extinguishers will not be moved from their designated location except to extinguish a fire.

1.13.5. Because of the ozone-depleting characteristics of halon 1211, flightline wheeled fire extinguishers will not be discharged for any reason except to extinguish a fire.

1.13.6. A minimum clearance of 18 inches will be maintained on each side of all portable fire extinguishers.

1.14. Permits and Approvals. The Fire Protection Flight or Fire Preventioin Office issues permits and approvals pertaining to fire control and fire hazards. Permits issued will continue until revoked or for the period of time designated on the permit.

1.15. Work Request or Self-help Projects. All AF Forms 332, Base Civil Engineer Work Request, must be coordinated with the 35 CES Fire Prevention Office. AF Form 332 for major renovation projects should have drawings attached, showing all details of the work involved, material list, and any information concerning fire safety.

1.16. Technical Design Reviews. The Fire Prevention Office will review and coordinate on all documents and shop drawings for new construction, renovation, and modification, this includes Corps of Engineers/Government of Japan, Misawa Air Base, Civil Engineer SABER, AAFES, Defense Commissary Agency and Services Division projects.

1.16.1. The Fire Prevention office will review all AF Forms 332, DD Forms 1391 (FY 19- Military Construction Project Data), plans, specifications, and project books for technical adequacy of fire protection and life safety features.

1.16.2. The Fire Prevention office requires a minimum of 5 duty days for review of each project. Additional time may be required based on staffing and work load.

1.17. Security Provisions. Areas having restricted access because of security considerations are recognized. In such cases as security/fire protection, a plan will be developed and coordinated with the Fire Chief.

1.18. Equivalencies and Alternatives.

1.18.1. This instruction is not intended to prevent the use of systems, methods, or devices that are equivalent to or of superior quality, strength, fire resistance, effectiveness, durability, and safety However, technical documentation is required to be submitted to the Fire Protection Flight to substantiate quality equal to or greater than those prescribed herein.

1.18.2. The specific requirements of this instruction may be modified by the AHJ (para **1.1.**) to allow alternative means of securing fire safety as practical, but in no case will the modification afford less.

2. Occupancy Requirements.

2.1. Public Assembly Occupancies. These occupancies include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more persons for such purposes as deliberations, worship, entertainment, eating, drinking, amusement, or awaiting transportation.

2.1.1. General information for fire and life safety requirements can be found in AFOSH Standard 91-56 and NFPA Standard l0l, Life Safety Code.

2.1.2. Fire drill training will be conducted quarterly for employees prior to opening or just after closing.

2.1.3. Guidance for fixed and non-fixed seating to conform to appropriate occupancy load and exit criteria is outlined in NFPA Standard 101, paragraph 9-2. Special events requiring setup of additional tables and chairs that are not the normal arrangement must be coordinated with the Fire Prevention Office prior to the event. A diagram showing the proposed arrangement must be submitted with event details for approval.

2.1.4. Trained crowd managers or supervisors must be available at all times to provide crowd control and emergency evacuation. The recommended ratio is 1 crowd manager for every 500 occupants.

2.2. Educational Occupancies. These occupancies include all buildings or portions of buildings used for educational purposes through the 12th grade that are occupied by six or more persons for 4 hours per day or more than 12 hours per week.

2.2.1. General information for fire and life safety requirements can be found in AFOSH Standard 91-56 and Department of Defense Dependent Schools (DoDDS) standards.

2.2.2. Four fire drills will be conducted by DoDDS during the first month of a new school term and at least six additional thereafter. A fire drill schedule will be submitted to the Fire Prevention Office no later than 15 August of each year.

2.2.3. The professional military education will have a fire drill once a month while school is in session.

2.2.4. All educational occupancy fire drills will be initiated by using the fire alarm system. Building managers will coordinate with the Fire Protection Flight prior to conducting the drill.

2.2.5. Principals, managers, and school faculty are responsible for inspecting all facilities daily to ensure students and staff are provided a fire safe environment and a means of egress is readily available.

2.2.6. Clothing and personal effects will not be stored in corridors and lobbies.

2.3. Health Care Occupancies. Health care occupancies include hospitals and those facilities where limited medical treatment and care is provided.

2.3.1. General information for fire and life safety requirements can be found in AFOSH Standard 91-56 and NFPA Standard 99, Health Care Code.

2.3.2. Fire drills in health care occupancies will include the transmission of a fire alarm signal to the Fire Alarm Communication Center.

2.3.3. A facility fire safety plan will be developed and include the use of fire alarms, transmission of alarm

2.3.4. Portable space heaters will not be used in sleeping areas of health care and ambulatory health care occupancies.

2.4. Residential Occupancies. These type of occupancies provide sleeping accommodations such as hotels, apartments, dormitories, billeting, and multiple family dwellings.

2.4.1. General information for fire and life safety requirements can be found in AFOSH Standard 91-56.

2.4.2. All billeting employees will receive training each quarter in the duties they are to perform during a fire emergency. Additionally, drills will be conducted each quarter by the facility manager to assess the employee's capability to perform these duties.

2.4.3. A diagram reflecting the actual floor arrangement, exit locations, and room identification numbers must be posted in every guest room above the ground floor.

2.4.4. Fire safety information will be provided in each guest room.

2.4.5. Dormitory managers will be responsible for planning and conducting semiannual fire drills using the fire alarm systems for dormitories under their control. Prior to conducting the drill, coordinate with the Fire Protection Flight.

2.4.6. Residents of military housing are encouraged to conduct a monthly fire exit drill and testing of smoke detector.

2.4.7. The following general fire safety rules apply in billeting, VOQ, and dormitories:

2.4.7.1. Draperies, curtains, and similar loosely hanging furnishings and decorations must be flame resistant.

2.4.7.2. Smoking while reclining, lying on or in bed, is prohibited. Heavy smoking by occupants may activate smoke detectors. Windows should be opened to provide ventilation and prevent activation. Managers must post "NO SMOKING IN BED" signs in areas highly visible to occupants.

2.4.7.3. Cooking appliances are prohibited except in approved kitchens. Microwaves, blenders, hot air popcorn makers and UL approved coffee makers placed on non-combustible surfaces will be authorized in individual rooms.

2.4.7.4. All cooking and electrical devices will have a Underwriters Laboratories (UL) or other approved testing agency label. They must be unplugged if not in use or the room is left unattended. Automatic shutoffs for these type devices are highly recommended.

2.4.7.5. Outdoor cooking equipment, barbecue grills, etc., will not be used or stored inside dormitories or billeting. This includes outside exit stairwell landings.

2.4.7.6. Portable electric heaters will not be used in dormitories or billeting rooms except by special approval of the Fire Prevention Office.

2.4.7.7. The burning of candles and incense is prohibited. Smoke from these items may affect the operation of smoke detectors.

2.4.7.8. Extension cords must not be placed under carpets or rugs.

2.4.7.9. Dormitory managers will monitor clothes dryers daily to eliminate lint accumulation in and around the machines. Lint accumulation should be removed after each drying operation.

2.4.7.10. Quantities of flammable liquids exceeding one cup will not be kept in dormitory rooms. Containers of flammable liquids will not be stored in dormitory and billeting facilities.

2.4.7.11. Motorcycles, mopeds, etc., with or without oil or gas, will not be kept in dormitory or billeting facilities.

2.4.7.12. Explosive materials will not be stored in dormitory or billeting facilities.

2.4.7.13. Bicycles will not be stored in exit corridors, stairwells, or lobbies.

2.5. Mercantile Occupancies. These type occupancies include stores, markets, or structures for the display and sale of merchandise.

2.5.1. General information on fire and life safety requirements can be found in AFOSH Standard 9l-66, General Industrial Operations; AFOSH Standard 91-56, and NFPA Standard 231, General Storage Code.

2.5.2. Fire exit drills in sales stores will be conducted semiannually with the use of the fire alarm system. Mercantile managers must coordinate with the Fire Department in advance of the drill concerning the use of alarms. Planning and conducting drills will be assigned to the store manager. Recommended drills should be conducted before opening or after closing.

2.5.3. AAFES and Defense Commissary Agency store managers are charged with the responsibility for maintaining good fire safety practices within their facilities.

2.6. Business Occupancies. These type occupancies include facilities used for the transaction of business such as keeping of accounts and records, and similar purposes.

2.6.1. General information concerning fire and life safety requirements can be found in AFOSH Standard 9l-66, AFOSH Standard 91-56, and NFPA Standard 101.

2.6.2. Supervisors of office buildings with an occupancy of more than 100 persons will conduct a fire drill once each year. Drills can be conducted internally and annotated in the building manager's records.

2.6.3. Fire prevention practices in office areas are the responsibility of all employees. The following areas should be monitored closely during the day and just prior to the end of the duty day:

2.6.3.1. Hallways and aisles should be clear of obstruction.

2.6.3.2. Containers of flammable liquids or sprays must be stored properly.

2.6.3.3. Wiring for office machines must be free from defects, fraying, etc.

2.6.3.4. Coffee pots, microwaves, and toasters will have a UL or other approved testing, agency label and will be unplugged at the end of the day.

2.6.3.5. Cooking will not be left unattended.

2.7. Industrial Occupancies. These type occupancies include facilities which manufacture products and conduct operations devoted to processing, assembling, mixing, packaging, finishing or decorating, and repairing.

2.7.1. General information on fire and life safety requirements can be found in AFOSH Standard 91-66, AFOSH Standard 91-56, and Industrial Fire Prevention Handbook. The latter publication is available for reference at the Fire Prevention Office.

2.7.2. Supervisors are responsible for ensuring a fire safe environment within their facility. They should provide training on fire prevention, fire reporting, and fire evacuation procedures for all personnel that work in the facility.

2.8. Storage Occupancies. These type occupancies include all buildings or structures used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals.

2.8.1. General information on fire and life safety requirements can be found in AFJMAN 23-210; AFOSH Standard 9l-66; AFOSH Standard 91-56; AFOSH Standard 91-43, Flammable and Combustible Liquids; and NFPA Standard 231.

2.8.2. Supervisors are responsible for ensuring a fire safe environment within their facility. They should provide training on fire prevention, fire reporting, and fire evacuation procedures for all personnel that work in the facility.

2.8.3. Store materials in such a manner to ensure a clear aisle space for fire lanes. Good housekeeping is essential in warehouse and storage facilities.

2.8.4. Do not store materials under buildings or in attics, or pile materials against buildings, doors, or exits.

2.8.5. Store combustible packing materials, such as excelsior and shredded paper, in fire-resistant bins or containers with self-closing covers.

2.8.6. When stock height is 15 feet or less, maintain a minimum clear zone of at least 18 inches around sprinkler heads, fire detectors, and light fixtures.

2.8.7. When stock height is over 15 feet, maintain a minimum clear zone of at least 36 inches around sprinkler heads, fire detectors, and light fixtures.

2.8.8. Maintain an 8-foot main aisle and 4-foot cross aisles in authorized flammable liquid storage areas.

2.8.9. Store and handle pryoxylin plastics and cellulose nitrate film or other flammable plastics per NFPA Standard 40, Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film.

2.8.10. Maintain a clear aisle space of at least 25 inches between stored combustible supplies (including supplies packed in combustible containers) and interior fire walls and partitions.

2.8.11. When storing materials outside, do not locate them less than 20 feet from the building and do not restrict access of fire fighting vehicles.

2.8.12. Equip any material handling self-propelled equipment operated in a warehouse with a fire extinguisher. If the equipment is parked inside a building, designate a parking area and obtain approval from the Fire Prevention Office. Provide a drawing showing the parking plan with the request for approval. Approvals must be updated annually or when changes occur.

3. Means of Egress.

3.1. Means of Egress. Means of egress is a continuous and unobstructed way of exit travel from any point in a building to a public way. Means of egress must be free of any obstruction that would prevent its use. In no case will access to an exit be through kitchens, storerooms, rest rooms, workrooms, or rooms subject to locking.

3.2. Aisles and Exits. Aisles and exits must comply with NFPA Standard 101.

3.2.1. Exit doors must swing freely without restriction and the door and panic hardware must be in good repair.

3.2.2. Building managers must take immediate action to have exit doors repaired should they become inoperable. If exits cannot accommodate the existing occupancy, notify the Fire Protection Flight or Fire Prevention Office.

3.3. Discharge From Exits. Exits must terminate directly at a public way or at an exit discharge. All portions of an exit discharge must be of required width and size to provide occupants with safe access to a public way.

3.4. Illumination of Means of Egress. The floors of means of egress must be illuminated at all points, including angles and intersections of corridors and passageways, stairways, landings of stairs, and exit doors, to values of not less than 1 foot-candle measured at the floor.

3.5. Emergency Lighting. Emergency lighting must be provided in the means of egress for every building or structure where required per NFPA Standard 101. Emergency lighting must be provided for a period of 1½ hours in the event of normal lighting failure.

3.6. Marking of Means of Egress.

3.6.1. Exits must be marked by an approved sign readily visible from any direction or exit access. *EXCEPTION: Main exterior exit doors that obviously and clearly are identifiable as exits.*

3.6.2. Where an exit or way to reach it is not readily apparent, access will be marked by an approved readily visible sign.

3.6.3. Exit signs will be of such size, distinctive color, design, and so located to be readily visible and contrast with interior decorations.

3.7. Occupant Load. The occupant load in any building, or portion thereof will not be assumed to be less than the number determined by dividing the floor area bv the occupant load factors for each type occupancy. The occupant load permitted in any building may be increased when the AHJ (paragraph **1.1.**) has determined that all requirements of NFPA Standard 101 have been met. The AHJ requires an aisle, seating, or fixed equipment diagram to substantiate any increase in occupant loading.

3.8. Fire Escape Stairways. Stairways must provide a continuous, unobstructed, safe path of travel to the exit discharge or a safe area.

3.8.1. Storage of combustible materials or flammable liquids underneath stairways is not permitted.

3.8.2. Exterior fire escape stairways and landings must be kept free of stored items.

3.9. Locks, Latches, and Alarm Devices. Exit doors must be arranged to be readily opened from the egress side whenever the building is occupied. Locks, if provided, must not require the use of a key, tool, special knowledge, or effort for operation from the inside of the building.

3.9.1. Exit doors must be operable with no more than one releasing operation.

3.9.2. No lock, padlock, hasp, bar, chain, or other device, or combination of devices will be installed or maintained on any door with panic hardware while being occupied.

3.9.3. When exiting from buildings that must be monitored due to pilferage problems, panic hardware may incorporate an alarm device with a sign that reads "FOR EMERGENCY EXIT ONLY." Operation of the release bar will activate an alarm signal near the door.

3.9.4. Where pairs of doors are required in a means of egress, each leaf of the pair must be provided with its own releasing device. Both leafs will be unlatched at the top and bottom for free use during normal occupancy.

4. Interior Finish and Decorations.

4.1. Interior Finish. Interior finishes include interior walls, ceilings, and floor finishes.

4.2. Use of Interior Finish. Wall, ceiling, and floor finishes must conform to the following requirements:

4.2.1. Only CLASS-A interior finish materials will be used for exit and sleeping room walls, ceilings, and partitions. Interior finishes for all other areas will be either CLASS-A or CLASS-B.

4.2.2. Use of CLASS-C or lower materials is not permitted except for trim and incidental finishes. (paragraph **4.5.**).

4.2.3. Interior paint finishes must comply with the Detachment paint policy, which is available at the Base Self-Help Store.

4.2.4. Carpet installation will conform to Headquarters Pacific Air Forces (HQ PACAF) Carpet Guidance Program. All carpets procured must be fire-rated CLASS-I or CLASS-II, and approved by the Fire Prevention Office prior to installation.

4.2.5. Textile materials having a napped, tufted, looped, woven, non-woven, or similar surface will not be used for wall or ceiling covering.

4.2.6. Cellular or foamed plastic materials will not be used as interior wall and ceiling finish.

4.3. Interior Wall and Ceiling Classification. Interior wall and ceiling finishes will be classified by testing in accordance with NFPA Standard 255, Standard Method of Test of Surface Burning Characteristics of Building Materials.

4.4. Interior Floor Finish Classification. Interior floor finishes will be classified by testing in accordance with NFPA Standard 253, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems.

4.5. Trim and Incidental Finishes. Interior wall and ceiling finishes not in excess of 10 percent of the wall and ceiling area of any room or space may be of CLASS-C materials. Wood wainscots should be limited; however, when used, they will be installed on a wall of noncombustible material and not exceed 4 feet in height.

4.6. Fire Retardant Coating. Fire retardant paints, varnishes, or coatings are not authorized for use on new or used materials in existing or new buildings to obtain the flame spread and smoke development rating requirements specified for stairs, fire exits, corridors, and sleeping rooms. Fire retardant coatings may be used for temporary installation of non-fire-rated materials and decorations with the approval of the AHJ (paragraph **1.1.**) if all requirements listed in NFPA Standard 703, Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials, have been met.

4.7. Temporary Decorations and Furnishings. Decorations must be of the fire resistive type or conform to the requirements of NFPA Standard 703.

4.7.1. Contact the Fire Prevention Office to make arrangements for a fire inspection of all major decorative scenes.

4.7.2. Open flames, including candles, will not be allowed near combustible items.

4.7.3. Candles and incense will not be burned in dormitories or billeting facilities. Candles may be used in clubs, dining facilities, and religious facilities, providing they are installed in noncombustible holders and flames are protected by a glass globe or shield.

4.7.4. Combustible materials will be kept away from lighting systems that produce extreme heat.

4.8. Christmas Trees. Natural Christmas trees should be put up 2 weeks before Christmas and taken down 1 week after. Trees must be placed in an appropriate container and watered daily. No decorative lighting on the tree will be left on while the facility is unattended.

4.8.1. Only noncombustible Christmas trees and decorations are authorized for installation in public assembly occupancies and individual sleeping rooms.

4.8.2. Natural Christmas trees may be used inside all other occupancies provided the following conditions are met:

4.8.2.1. The tree base is cut diagonally to expose maximum surface and the cut portion is submerged in sugar water.

4.8.2.2. Only noncombustible decorations are authorized for use.

4.8.2.3. The tree is kept clear of exits and other combustible materials.

4.8.2.4. Christmas tree lights and wiring have a UL or other approved testing agency label. Defective or deteriorating wiring will not be used.

4.8.2.5. Outdoor lights and wiring are approved for outdoor use by the manufacturer and are weatherproof.

4.8.3. When Christmas trees, lighting, or decorations are determined to present a fire hazard, they will immediately be removed from use.

5. Installed Fire Detactions/Supression Systems.

5.1. Fire Detection Systems. Requirements for these systems are found in NFPA Standard 101; NFPA Standard 72, National Fire Alarm Code, NFPA Standard 74, Fire Warning Equipment, Household; Military Handbook 1008C; AFOSH Standard 91-56, and AFMAN 91-37, Maintenance of Fire Protection Systems.

5.1.1. Battery-powered smoke detectors are only approved for use in family day care homes or as temporary fire detection measure when approved by the AHJ (paragraph **1.1.**).

5.1.2. Fire detection system inspection, testing, and maintenance will be conducted by the 35 CES Operations Flight. Tasks will be accomplished per AFMAN 91-37 and NFPA Standards 72 and 74.

5.1.3. Prior to and after performing tests or maintenance on the fire detection system, technicians will be responsible for informing the Fire Alarm Communication Center and the building manager. The building manager will be responsible for informing the occupants.

5.1.4. Fire detection systems will be restored to service as promptly as possible after each test, activation, or failure. These systems will be maintained in normal ready condition for operation. The Fire Protection Flight, Fire Prevention Office, and building occupants will be immediately notified at any time a system is out of service.

5.1.5. Building managers and occupants must not tamper with or obstruct fire detection devices and alarm equipment. Compliance with the following provisions will help ensure fire detection systems function as designed and provide early detection of a fire:

5.1.5.1. Painting of fire detection devices will only be accomplished with approval of the Fire Protection Flight.

5.1.5.2. Items will not be stored close to fire or smoke detectors.

5.1.5.3. Only Fire Protection Flight personnel are authorized to open fire alarm panels for silencing the bells or resetting the system.

5.1.5.4. Cigarette smoke, cooking smoke, aerosol spray, steam, and heat can activate smoke and heat detectors. Efforts should be made to prevent inadvertent activation of these devices.

5.1.5.5. Rapid rise in temperature can activate heat detectors. Efforts should be made to control the heat increase in areas where heat detectors are installed.

5.1.5.6. Use of welding torches in areas containing smoke detectors will not be permitted unless the detectors are covered or the detection system is deactivated for the period of work.

After the work is completed, ensure covers are removed and the detection system is returned to service.

5.1.6. Prior to final acceptance of any new fire detection system, the Fire Protection Flight will require a complete test in the presence of a 35 CES/CEF fire official and an alarm technician. Government of Japan projects will be accepted by Government of Japan officials and off-base city fire protection personnel.

5.1.7. Building managers must train occupants annually on proper use of fire detection systems.

5.1.8. Ground equipment such as Dash 60's and other fuel operated equipment shall not be started or operated inside HASs or Hangars. These operations set off detection systems resulting in false ararms, and unnessesary responses from emergency services.

5.2. Fire Sprinkler Systems. Requirements for these systems are found in NFPA Standard 101; NFPA Standard 1, Fire Prevention Code; NFPA Standard 13, Standard for the Installation of Sprinkler Systems; NFPA 13A, Recommended Practice for the Inspection, Testing and Maintenance of Sprinkler Systems; Military Handbook 1008C; AFOSH Standard 91-56; NFPA Standard 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems; and AFMAN 91-37.

5.2.1. Fire suppression system inspection, testing, and maintenance will be conducted by the 35 CES Operations Flight pera AFMAN 91-37 or NFPA Standard 13.

5.2.2. Prior to and after testing or performing any maintenance on systems, the technician will notify the Fire Alarm Communication Center and the building manager.

5.2.3. Building managers and occupants will not tamper with or obstruct sprinkler system components. Compliance with the following provisions will help ensure fire suppression systems function as designed and extinguish fires in their early stages:

5.2.3.1. Do not paint over any sprinkler system component without approval from the Fire Protection Flight or the Fire Prevention Office.

5.2.3.2. Do not store items close to sprinkler risers sprinkler heads and test valves.

5.2.3.3. Do not park vehicles or store items in a manner that would block access to a Fire Department connection.

5.2.3.4. Welding operations will not be conducted in sprinkled facilities when the system is out of service.

5.2.4. Prior to final acceptance of any new systems, the Fire Protection Flight will require a full test of all system components in the presence of a 35 CES/CEF fire official and a system technician. Government of Japan projects will be accepted by Government of Japan and off-base fire protection personnel.

5.2.5. Building managers must train occupants annually on how their fire suppression system operates.

5.3. Halon Systems. Requirements for these systems are found in NFPA Standard 101; NFPA Standard 12A, Standard on Halon 1301 Fire Extinguishing Systems; NFPA Standard 12, Carbon Dioxide Extinguishing Systems; Military Handbook 1008C; AFOSH Standard 91-56; and AFMAN 91-37.

5.3.1. Halon systems activate an audible and visual evacuation alarm and transmit a coded signal to the Fire Alarm Communication Center.

5.3.2. It is incumbent upon all users and maintenance personnel to take every precaution to prevent inadvertent release of halon into the atmosphere.

5.3.3. Personnel who work in areas covered by halon systems will be familiar with emergency evacuation procedures. The Fire Protection Flight or the Fire Prevention Office will provide annual training for these personnel.

5.3.4. Halon systems must be restored to service as promptly as possible after each test or repair. The Fire Alarm Communication Center will be notified at any time a system is out of service.

5.4. Dry Chemical System. Requirements for these systems are found in NFPA Standard 101; NFPA Standard 1; NFPA Standard l7, Standard for Dry Chemical Extinguishing Systems; NFPA Standard 17A, Standard on Wet Chemical Extinguishing Systems; Military Handbook 1008C; AFOSH Standard 91-56; and AFMAN 91 -37.

5.4.1. Automatic fire suppression systems are required to protect cooking equipment and will be operational at all times except for scheduled maintenance. When a system is out of service for any reason, cooking equipment protected by that system will not be used.

5.4.2. Building managers are responsible for visually inspecting systems prior to cooking each day. This inspection is to provide reasonable assurance that the system is fully charged and operable.

5.4.3. Dry chemical discharge nozzles will be aligned directly above the cooking equipment to be protected. All nozzles will have protective caps in place to minimize grease build-up in the nozzle.

5.4.4. Dry chemical discharge stations will be located near exits, not be obstructed, and not be located in dead-end spaces.

5.4.5. A means to ensure the automatic shutdown of fuel or power will be provided for cooking appliances protected by an automatic dry chemical extinguishing system.

5.4.6. Dry chemical extinguishing system inspection, testing, and maintenance will be conducted per AFMAN 91-37 or NFPA Standard 17 by the 35 CES Operations Flight.

5.4.7. A maintenance tag will be affixed to each supply bottle for the system showing the last date tested and the type of maintenance performed.

5.4.8. The Fire Alarm Communication Center will be notified prior to and after completion of any maintenance on a dry chemical extinguishing system.

5.4.9. Prior to final acceptance test of any new systems, the Fire Protection Flight will require a full test of all system components in the presence of a 35 CES Fire official and a system technician. Government of Japan projects will be accepted by Government of Japan and off-base city fire protection personnel.

5.4.10. The Fire Prevention Office will provide annual training to personnel who work in dry chemical-protected areas.

5.5. Aqueous Film Forming Foam (AFFF). Hangar Deluge Systems. Requirements for these systems are found in NFPA Standard 1; NFPA Standard 11, Standard for Low-Expansion Foam; NFPA Standard 11A, Standard for Medium- and High-Expansion Foam Systems; NFPA Standard 16, Standard on Deluge Foam-Water Sprinkler and Foam-Water Spray Systems; Military Handbook 1008C; AFOSH Standard 91-56; and AFMAN 91-37.

5.5.1. AFFF fire suppression system inspections, testing, and maintenance will be conducted by the 35 CES Operations Flight. This will be IAW AFMAN 91-37 or NFPA Standard 16. The Fire Alarm Communication Center will be notified prior to and after accomplishing any procedure on a system.

5.5.2. A sufficient amount of foam concentrate will be readily available to meet design requirements to return the system to service after operation or testing. Foam concentrate may be stored in separate tanks, compartments, drums, or cans on the premises, or available from an outside source within 24 hours.

5.5.3. The building manager is responsible for providing annual training on the operation of the AFFF deluge system for occupants. The Fire Protection Flight or Fire Prevention Office will provide assistance as required.

5.6. Stand Pipe Hose Systems. Requirements for these systems are found in NFPA Standard 1; NFPA Standard 14, Standard for Installation of Standpipe and Hose Systems; Military Handbook 1008C; AFOSH Standard 91-56; and AFMAN 91-37.

5.6.1. Standpipe hose system inspection, testing, and maintenance will be conducted by the 35 CES Operations Flight.

5.6.2. Building occupants must not tamper with or obstruct hose cabinets.

5.6.3. Prior to final acceptance of any new standpipe hose system, the Fire Protection Flight will require a complete test in the presence of a 35 CES fire official and an alarm technician. Government of Japan projects will be accepted by Government of Japan officials and off-base city fire protection personnel.

5.6.4. Building managers will provide annual training on the proper use of hose standpipe systems. Hose standpipe systems are for fire department personnel use only

5.7. Inoperative Systems. Emergency priority will be assigned for returning inoperative fire detection and suppression systems to service. With approval of the AHJ (para **1.1.**), systems may be returned to limited service until complete repairs can be accomplished. 35 CES Operations Flight technicians will notify building managers and the Fire Alarm Communication Center of any system outage and provide an estimated date it will be returned to service.

6. General Fire Safety Rquirements.

6.1. Fundamental Requirements. Requirements of new and existing buildings or structures must be constructed, arranged, equipped, maintained, and operated per this instruction. This will provide a reasonable level of life safety and property protection from actual and potential hazards created by fire, explosion, and other hazardous conditions.

6.1.1. New and existing building and structures will be in compliance with this instruction and NFPA Standard 101.

6.1.2. Anyone who deliberately or through negligence, sets fire to or causes the burning of any combustible material in such a manner as to endanger the safety of any person or property will be in violation of this instruction and the Uniform Code of Military Justice.

6.1.3. No person will fail to leave any overcrowded premises when told to do so by a manager, representative from the Fire Protection Flight, or Security Police. Overcrowding is when the occupant load exceeds the exit capacity.

6.1.4. When a fire alarm is activated, all personnel except those assigned to fire fighting duties, must evacuate the building. In buildings not equipped with a fire alarm system, the person discovering a fire will make every effort to ensure all personnel are alerted and the building is evacuated. If the building has not been totally evacuated, notify Fire Department personnel upon their arrival.

6.2. Electrical Fire Safety. All electrical appliances, fixtures, and wiring will be installed and maintained per NFPA Standard 70, National Electrical Code, and AFOSH Standard 91-66. Only USAF electricians or licensed electrical contractors may alter or repair electrical wiring and outlets.

6.2.1. All switches, receptacles, junction boxes, and control panels will have suitable cover plates or panel doors.

6.2.2. Deteriorated wiring, frayed cords, and cracked and broken plugs are not authorized for use.

6.2.3. All unnecessary electrical equipment and appliances will be unplugged prior to leaving the work area or home.

6.2.4. All electrical equipment used near flammable gases or vapors must be of an approved explosion-proof type.

6.2.5. Grounding of installed and portable electrical equipment will be accomplished per NFPA Standard 70. The 35 CES Operations Flight will provide advice concerning grounding criteria.

6.2.6. All lighting will have protective guards or wire shields to guard against breakage of bulbs in areas where flammable or explosive vapors are likely to exist.

6.2.7. A clearance of at least 18 inches will be maintained between electrical light fixtures and combustible materials.

6.2.8. Circuits will be fused per NFPA Standard 70 or as specified by the 35 CES Operations Flight. Fuses will not be bridged, by-passed, or replaced with one of a larger capacity.

6.2.9. Multi-receptacle bars (American or Japanese made) used for computers and other appliances will be fused and have a UL, Japanese Industrial Standard (JIS), or other approved testing agency label.

6.2.10. Extension cords or flexible wiring are prohibited from use when:

6.2.10.1. Used as a substitute for fixed wiring of structures.

6.2.10.2. Ran through holes in walls, ceilings, or floors.

6.2.10.3. Ran through doorways, windows, or similar openings.

6.2.10.4. Attached to building surfaces by nails, staples, or glue; wrapped around beams or columns; or hanging by hooks.

6.2.10.5. Concealed under carpets.

6.2.10.6. They have been spliced.

6.2.10.7. Cord size is smaller than the cord of the item being used.

6.2.10.8. The receptacle end is a homemade device using metal boxes.

6.2.11. Electrical equipment, appliances, and machines will be discontinued upon recognition of an unsafe or hazardous condition.

6.2.12. A clear area of 36 inches will be maintained around all circuit breaker panels. Each circuit in a panel will be marked as to what it supports.

6.2.13. Individual air conditioning units must be installed on separate circuits and properly grounded.

6.2.14. Electric coffee makers must be thermostatically controlled, in good repair, and only used on a noncombustible surface.

6.3. Smoking and Disposal of Smoking Materials. Smoking in Air Force facilities is prohibited in most cases (AFI 40-102, Tobacco Use in the Air Force).

6.3.1. Smoking, striking matches, or operating lighters is prohibited within 50 feet of flammable liquids, fuel vehicles, aircraft and 100 feet of munitions storage areas and hydrant fueling systems.

6.3.2. Smoking by anyone reclining or lying on a bed is prohibited.

6.3.3. Butt cans with self-closing lids and ashtrays with holders in the middle of the dish should be provided in all areas where smoking is allowed.

6.3.4. Ashtrays will be emptied into butt cans and not into waste baskets. Do not put trash into butt cans. Prior to disposal, ensure cigarette butts are soaked with water and placed into a sealed plastic bag.

6.3.5. All areas will be considered "NO SMOKlNG" areas unless a "DESIGNATED SMOKING AREA" sign is posted.

6.4. Open Outdoor Fires, Incinerators, and Barbecues.

6.4.1. Open fires are not permitted unless approved by the Fire Prevention Office. Approved open fires will be located no closer than 25 feet from any structure and constantly attended by a competent person until they are totally extinguished. Fire extinguishers, garden hoses, buckets of water, or fire trucks must be available at the burn site.

6.4.2. Incinerators must meet environmental compliance laws of the United States and Japan. Commercial incinerators will be equipped with spark arrestors and maintained in a good state of repair. (NFPA Standard 1, paragraph **3.-4.8.**)

6.4.3. Barbecue grills will not be used within 10 feet of a building or 50 feet from an aircraft or flammable storage. EXCEPTION: Apartment balconies may be used to barbecue.

6.4.3.1. Use only a labeled starter fluid to start fires in the grill.

6.4.3.2. When using propane fueled barbecues, ensure to follow and adhere manufacturer's instructions. Propane cylinders, fuel lines, and regulators should be inspected annually.

6.4.3.3. For disposal instructions of propane cylinders, contact 35th HAZMAT Pharmacy. Do not throw them away or place them next to the street for trash pickup.

6.5. Mechanical, Boiler, and Electrical Rooms. Mechanical, boiler, and electrical rooms will not be used for storage purposes per AFJMAN 23-210.

6.6. Vacant Buildings. The responsible authority for any vacant building will ensure all combustible waste and refuse are removed from the building and all openings are locked, barricaded, or otherwise secured to prohibit entry by unauthorized persons. Installed fire protection systems will be maintained in the building unless it is scheduled for demolition.

6.7. Commercial Cooking Equipment. Commercial cooking equipment will be maintained per AFOSH Standard 91-56 and NFPA Standard 96. Building managers must enforce the following procedures:

6.7.1. Hood and duct filters will be maintained in a clean and serviceable condition at all times. Spare filters will be available for systems that operate continuously.

6.7.2. Installed filters and exposed surfaces of hoods will be cleaned daily or more often if necessary to prevent grease buildup.

6.7.3. Hood and exhaust ducts will be cleaned per NFPA Standard 96, Standard for Installation of Equipment for the Removal of the Smoke and Grease-Laden Vapors From Commercial Cooking Equipment, at 6 month intervals or more often if directed by the Fire Prevention Office.

6.7.4. Exhaust systems will be operated while cooking equipment is in use.

6.7.5. Cooking equipment that uses grease or oil will be located beneath an installed fire extinguishing system.

6.7.6. Deep fat fryers will have a primary thermostat of 400 degrees Fahrenheit ('F) and a secondary thermostat to limit temperature to a maximum of 475 'F. Thermostats will be tested semi-annually and after any repair. Documentation of the last date tested must be affixed to the unit.

6.8. Combustible Waste and Refuse. Building managers will not allow combustible waste to accumulate in a manner to create a fire hazard. Combustible waste will be stored or disposed of to prevent unsafe conditions. Dumpsters will be positioned 15 feet from any building. If not practical, the maximum distance possible will be used.

6.9. Fire Doors and Fire Windows.

6.9.1. Annual inspection and maintenance of fire doors and fire windows will be conducted by the 35 CES Operations Flight as part of their Recurring Work Program, per NFPA Standard 80, Standard for Fire Doors and Fire Windows.

6.9.2. Doors, shutters, and windows must be operable at all times. They will be kept closed, latched, or arranged for automatic closing.

6.9.3. Areas around door openings will be kept clear of anything that would obstruct or interfere with the free operation of a door.

6.9.4. Fusible links and heat-actuated release devices will not be painted.

6.9.5. Combustible and flammable materials will be kept away from fire door-protected openings.

6.10. Fire Hydrants. Fire Hydrants are for use by the Fire Department and will not be used indiscriminately for the other purposes. The Fire Protection Flight is the approval authority for use of fire hydrants. When fire hydrant use is terminated, it will be shut off and all caps replaced.

6.10.1. Fire hydrants will not be obstructed with fences, bushes, or other barriers.

6.10.2. The Fire Protection Flight will be notified of any proposed water curtailment that will affect fire hydrants. An "OUT OF SERVICE" sign will be placed on an inactive fire hydrant and removed when it is returned to service.

6.11. Housekeeping. Good housekeeping relative to fire safety is the responsibility of commanders, supervisors, building managers, and military housing sponsors.

6.11.1. Greasy and oily rags, paint rags, and polishing cloths must be kept in self-closing metal containers when not in use.

6.11.2. Trash must be taken from shops, buildings, and work areas daily.

6.11.3. Plastic, polyethylene, and combustible trash cans will not be used unless UL-approved.

6.11.4. Mops and brooms must be stored on outside racks or in utility rooms designed for that purpose. Ensure mop heads are cleaned after use to reduce the possibility of spontaneous combustion.

6.11.5. Extra boxes, papers, furniture, and equipment will be kept in rooms designed for storage.

6.12. General Storage Habits. Primary storage considerations are the construction of the building, properties of the commodity to be stored, and the arrangement of the storage. Various potential ignition sources must also be considered.

6.12.1. When making storage arrangements, AFJMAN 23-210 is mandatory for use by all Department of Defense components.

6.12.2. Adequate main aisles, generally not less than 8 feet wide, and cross aisles are necessary to minimize the spread of fire and to allow access for fire fighting and overhaul operations.

6.12.3. A clearance of 24 inches will be maintained:

6.12.3.1. Around hazardous materials.

6.12.3.2. Between stock and a fire door except for the portion of the door near the aisle that will have a 36-inch clearance.

6.12.4. Safety practices for forklifts and material handling equipment are in AFJMAN 23-210. The Fire Protection Flight is the approval authority for parking of forklifts and powered handling equipment inside buildings. Approval must be renewed annually.

6.12.5. Rules for safe storage are in AFJMAN 23-210.

6.13. Spontaneous Heating. Under special conditions, certain materials generate enough heat to ignite spontaneously. Oils, lubricants, and fats are very dangerous when absorbed by fibrous materials such as rags, waste, and paper. Spontaneously combustible materials will be segregated from each other and other flammable materials. Proper containers for oily rags will be provided.

7. Special Processes and Material Handling.

7.1. Flammable and Combustible Liquids. Flammable and combustible liquids, including spray cans, will be handled and stored per AFOSH Standard 91-43 and AFJMAN 23-210.

7.1.1. Mission-essential or daily-use requirements of flammable and combustible liquids or sprays that do not exceed 5 gallons may be used in facilities for less than 10 days without special storage. Facilities that use amounts exceeding 5 gallons must store the liquids and sprays in Occupational Safety and Health Administration (OSHA) approved metal cabinets. EXCEPTION: Inci-

dental storage of flammable liquids in metal lockers marked "FLAMMABLE-KEEP FIRE AWAY" is permitted for industrial occupancies per AFOSH Standard 91-43. Storage amounts cannot exceed 11 gallons.

7.1.2. Dispensing and storage units, such as tanks and drums, will be grounded at all times. Flammable storage cabinets located outside buildings will be grounded. Cabinets located inside do not require grounding unless the environment is subject to static electricity.

7.1.3. A general-purpose metal storage shed located 25 feet or more from any building, grounded, and marked "FLAMMABLE KEEP FIRE AWAY" may be used to store a maximum of 25 gallons of flammable liquid. A shed that cannot meet this criteria will be used to store a maximum of 10 gallons of flammable liquid. Storage containers must be able to contain content of all flammable liquids stored.

7.1.4. Open flames, sparks, or spark-producing devices will not be allowed within 50 feet of flammable liquid work and storage areas.

7.1.5. Gasoline, paint remover, paint thinner, or volatile liquids will not be used for cleaning purposes.

7.1.6. Flammable liquids will not be disposed of in manholes, sewers, or storm drains. Organizations must contact the 35 CES Environmental Flight for disposal procedures.

7.1.7. Portable fuel cans will be painted red and have a tight vent cap or spring type lid. Plastic or glass containers used for flammable liquids must be UL approved. EXCEPTION: This subparagraph does not apply to the Petroleum, Oil, and Lubricant (POL) Laboratory and testing facility.

7.1.8. Dip tanks will be made of metal and have a fusible link or links installed on a hinged cover that will not be secured open in any manner that would prevent automatic closing. Dip tanks will only be used in a room specifically designed for that purpose.

7.1.9. Dispensing facilities must keep suitable pails or drip pans to catch leaking flammable liquids. These pails and drip pans will be emptied and cleaned daily.

7.1.10. Display of flammable liquids at retail stores must comply with the provisions of AFOSH Standard 91-43, paragraph 5b(1) through (3).

7.1.11. Small gasoline engine-powered equipment must comply with the provisions of AFOSH Standard 91-43, paragraph 5e(1) through (3). Prior to extended off-season storage, this type equipment must be thoroughly cleaned, fuel tank drained, and spark plug wire disconnected.

7.2. Compressed Gas Cylinders. General precautions for handling and storing compressed gases can be found in AFJMAN 23-210 and NFPA Standard 58, Standard for the Storage and Handling of Liquefied Petroleum Gases.

7.2.1. Compressed gas cylinders must never come in contact with fire, sparks, or electrical circuits.

7.2.2. Compressed gas cylinders will be stored in designated locations only. Oxygen and acetylene gas will be stored separated by a wall or 60 feet of distance. Storage areas will be separated and posted according to their hazard group.

7.2.3. Outside storage sheds or racks must be located at least 50 feet from any building.

7.2.4. Compressed gas cylinders (full or empty) will be stored in an upright position, firmly secured, with the dome cap in place.

7.3. Fireworks. Fireworks are prohibited on Misawa AB. EXCEPTION: Annual demonstration conducted by Japanese contractor.

7.3.1. Displays of fireworks must be coordinated at least 1 month in advance with the 35 FW Safety Office (35 FW/SE), 35th Fighter Wing Commander (35 FW/CC), 35th Support Group Commander (35 SPTG/CC), the Fire Marshall and the Fire Prevention Office. The Fire Protection Flight must receive a drawing showing the discharge site, fire works fallout area, and spectator area. The areas selected must be inspected and jointly approved by the Fire Protection Flight and 35 FW Safety Office.

7.3.2. All firework displays will be conducted by Japanese contractors. These operators or contractors have the primary responsibility for safety and fire prevention. Fire protection will be provided by the Fire Protection Flight. However, portable fire extinguishers must be provided by the operator or contractor.

7.3.3. No smoking will be allowed within 50 feet of any area where fireworks or other pyrotechnic materials are present.

7.4. Heating Appliances. The installation of fixed or portable fuel fired heating systems will comply with NFPA Standard 31, Installation of Oil-Burning Equipment. Portable electrical heaters must comply with NFPA Standard 1, paragraph 32-3.

7.4.1. Use of portable kerosene space heaters is prohibited in all facilities. EXCEPTION: Heaters used in tent operations for mobility training.

7.4.2. Portable electric space heaters are permitted. However, they must be equipped with a safety tip-over switch to shut off electric power to the unit when tilted or turned over. An approval/request letter has to be submitted by the using organization and be on file at the Fire Prevention Office.

7.4.3. Space heaters will be kept at least 36 inches away from combustible materials such as papers, furniture, or curtains.

7.4.4. The AHJ (paragraph 1.1) is authorized to prohibit the use of portable heaters in facilities or situations in which such use or operation would present an undue danger to life or property.

7.5. Spray Application Using Flammable and Combustible Materials. Operations involving the spray application of flammable and combustible materials will comply with AFOSH Standard 91-17, Interior Spray Finishing, and NFPA Standard 33, Standard for Spray Application Using Flammable and Combustible Materials.

7.5.1. Spray painting of aircraft inside hangars is prohibited unless approval is granted by the Fire Prevention office, 35 FW Safety, and Bioenvironmental Engineering

7.5.2. Paint spray booth design and operation will comply with NFPA Standard 33, paragraph 33-3, and AFOSH Standard 91-17, Interior Spray Finishing.

7.5.3. Ventilation and exhaust systems will comply with NFPA Standard 91, Standard for Exhaust Systems for Air Conveying of Materials.

7.6. Welding, Cutting, and Use of Torches. Welding, cutting, and open flame operations will comply with AFOSH Standard 91-5, Welding, Cutting, and Brazing, and NFPA Standard 51B, Standard for Fire Prevention in Use of Cutting and Welding Processes.

7.6.1. All welding or torch operations will be performed by qualified personnel and, if possible, in booths or rooms constructed for that purpose.

7.6.2. When welding or torch operations are to be accomplished outside authorized welding booths or rooms, the Fire Prevention office will be contacted to inspect the work site and equipment. If the operation is safe, AF Form 592, USAF Welding, Cutting and Brazing Permit, will be issued per AFOSH Standard 91-5.

7.6.3. Employees involved in welding or cutting operation will be scheduled for annual fire safety training with the Fire Prevention Office.

7.6.4. Personnel performing welding or cutting operations will ensure the appropriate fire extinguisher is readily available prior to beginning work.

7.6.5. Prior to any welding or cutting on piping, tanks, or containers that contain or contained flammable liquids, they will be thoroughly purged and vented. Detection equipment will be used to sample for explosive mixtures. The supervisor of the operation will contact 35 FW Safety, Bioenvironmental Engineering, and Fire Protection Flight to inspect the work site.

7.7. Dust Explosion Prevention and Combustible Fibers. Equipment, processes, and operations involving dust particles of any material will comply with NFPA Standard 1, Fire Prevention Code; NFPA 61, NFPA 65, Standard for the Processing and Finishing of Aluminum; NFPA 69, Standard on Explosion Prevention Systems; NFPA 70, National Electrical Code; and NFPA 91, Standard for Exhaust Systems for Air Conveying of Materials. Suitable dust-collecting equipment will be installed and accumulation of dust will be kept at a minimum in the interior of buildings. Proper grounding and elimination of open flames, sparks, and static electricity are paramount for fire safety.

7.8. Furnaces and Boilers. Industrial furnaces and boilers will comply with NFPA Standard 86, Standard for Ovens and Furnaces. Do not use closets or rooms containing furnaces or boilers as storage areas. Clean or replace all filters as necessary.

7.9. Explosive Materials. The manufacture, transportation, storage, sale, and use of explosive materials will comply with AFMAN 91-201, Explosives Safety Standards, and NFPA Standards 495, Explosive Materials Code, and 498, Standard for Explosives Motor Vehicle Terminals. Notify the Fire Protection Flight prior to any transportation and movement of explosives, and provide them with the departure point and time, destination, and anticipated arrival time.

7.10. Air Conditioning, Ventilation, and Exhaust Systems. These systems will be installed and maintained per NFPA Standards 90A, Standard for the Installation of Air Conditioning and Ventilating Systems; 90B, Standard for the Installation of Warm Air Heating and Air Conditioning Systems, and 91, Standard for Exhaust Systems for Air Conveying of Materials. Systems that exhaust flammable vapors, paint residue, grease vapors, or dust must be cleaned on an annual basis by qualified personnel. EXCEPTION: When automatic cleaning residue extractors are installed within the system.

7.11. Refueling. Operations involving aviation fuels, ground equipment fuels, aircraft hydrant equipment, and ground fuels dispensing systems must comply with AFOSH Standard 91-39, Fuel Servicing Operations.

7.11.1. Fuel spills, regardless of size, will be immediately reported to the Fire Protection Flight in the most expedient manner possible. Personnel responsible for the fuel spill must have the equipment and training to take cleanup actions. Corrective action must be taken to prevent recurrence of spills.

7.11.2. Small engine refueling will be accomplished per AFOSH Standard 91-43, paragraph 5e.

7.12. Battery Shop Operations. Battery shops will be operated per AFOSH Standard 91-66, AFOSH Standard 161-2, and NFPA Standard 70.

7.12.1. Battery-charging shops will be equipped with exhaust ventilation systems to ensure total removal of flammable toxic vapors being generated.

7.12.2. No more than two batteries will be charged at any one time in areas other than authorized battery shops.

7.12.3. Charging operations will not be conducted near flammable or combustible materials.

7.12.4. Charging operations will be discontinued when facilities or shops are not occupied.

7.13. Treatment of Floors. Sanding, varnishing, and polishing of large floor areas such as gyms and bowling lanes create a serious explosive hazard.

7.13.1. The Fire Protection Flight will be contacted in advance before any floor treatment begins.

7.13.2. All unnecessary electrical exhaust fans, lights, motors, and pilot lights will be shut off prior to any treatment of floors.

7.13.3. All electrical equipment used during floor treatment will be in good repair and conform to NFPA Standard 70. Buffers must be equipped with spark arrestors. No open-flame devices are authorized. Doors and windows will be opened for ventilation.

7.14. Construction Fire Safety. Contractors, supervisors, and base contract monitors are responsible for fire prevention at construction sites.

7.14.1. The Fire Protection Flight will be notified of all pre-construction conferences. Fire prevention personnel will provide fire safety briefings to contractors and project monitors. During the construction phase, a fire inspector is authorized to inspect the site to assess contractor fire safety practices. Any problems will be directed to the contract monitor.

7.14.2. The AHJ (paragraph **1.1.**) is authorized to stop contractor work if a severe fire or life safety hazard exist.

7.14.3. Contractors will brief their employees and subcontractors on fire reporting procedures, use of fire extinguishers, and locations of facility fire detection or suppression systems, if applicable.

7.14.4. Contractors will not place dumpster type trash collection devices closer than 15 feet to any building or fire hydrant.

7.14.5. Contractors will not store flammable liquids inside buildings, next to buildings, or near exit ways.

7.14.6. When welding, cutting, soldering, or use of open-flame devices are required, contractors will notify the contract monitor, who will initiate action to obtain a site inspection and issue of an AF Form 592 prior to work beginning.

7.14.7. Fire detection and suppression systems and devices will not be degraded in any form. Contractors will notify the contract monitor or supervisor when an operation may involve these systems and devices. The supervisor will notify the Fire Protection Flight.

7.14.8. Access for fire fighting vehicles must be maintained at all construction sites. Requirements of NFPA Standard 241 will be adhered to.

7.14.9. Use of asphalt kettles must comply with NFPA Standard 241. Prior to any kettle operation, approval must be obtained from the Fire Protection Flight. Kettle operations must be supervised at all times and the appropriate fire extinguisher will be readily available. Mop heads and associated debris from work areas will be removed from the site on a daily basis.

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Commander