



ORIGINAL
UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION
BEAUFORT, SOUTH CAROLINA 29904-5001

ASO 11320.1M
ADJ
10 MAR 2010

AIR STATION ORDER 11320.1M

From: Commanding Officer
To: Distribution List

Subj: MARINE CORPS AIR STATION (MCAS) BEAUFORT FIRE REGULATIONS AND INSTRUCTIONS

Ref: (a) MCO P11000.11B
(b) National Fire Protection Association Codes (NFPA)
(c) Unified Facilities Criteria (UFC) 3-600-01
(d) Unified Facilities Criteria (UFC) 3-600-02
(e) NAVAIR 00-80R-14
(f) Occupational Safety and Health Act

Encl: (1) MCAS Beaufort Structural Fire-Rescue Division Procedural Guidance for Fire Prevention and Suppression

1. Situation. To provide policy and procedural guidance for fire prevention and suppression at Marine Corps Air Station (MCAS) Beaufort and Laurel Bay Housing area.

2. Cancellation. ASO P11320.1K.

3. Mission. This Order provides policy for ensuring the safety of all personnel aboard MCAS Beaufort and Laurel Bay Housing area and to eliminate hazards. Reference (a) is used in the administration of the MCAS SFRD Firefighting and Fire Protection Program. Reference (b) and (c) have been adopted by the Marine Corps for use locally. Technical publications, references (d) and (e), are utilized as guides in the above-mentioned program.

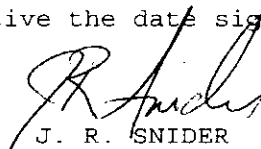
4. Execution. These regulations are binding upon all departments, units and residents aboard the Air Station and Laurel Bay and shall be effective upon receipt. The Commanding Officer, Marine Aircraft Group 31 concurs with this order insofar as it pertains to Fleet Marine Forces stationed aboard Marine Corps Air Station Beaufort.

5. Administration and Logistics. Recommendations concerning the contents of this Order may be forwarded to the S-4 Officer, MCAS Beaufort via the chain-of-command.

6. Command and Signal

a. Command. This Order is applicable to all personnel aboard MCAS Beaufort and Laurel Bay Housing area.

b. Signal. This Order is effective the date signed.


J. R. SNIDER

DISTRIBUTION: A

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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Chapter 1

Administration

1. Mission. The mission of the MCAS Structural Fire-Rescue Division (SFRD) is to effect and supervise a vigorous program of fire protection and fire prevention through public education program plans review and inspection. Provide adequate structural and aircraft crash protection to safeguard lives and property against fires. Provide a mutual aid to those communities, which have a written agreement with MCAS Structural Fire-Rescue Division and provide technical advice to the command on all matters pertaining to force protection.

2. Responsibilities

a. Fire Chief. The Fire Chief is responsible to the Commanding Officer, under the cognizance of the S-4 Office. The Fire Chief is vested with the authority to take immediate action as necessary to protect life and property from fire or other applicable conditions. Functions of the fire chief are to ensure:

(1) Control of all activities and operations of the SFRD, including fire extinguishment, pre-fire planning, fire prevention, and fire-investigation.

(2) SFRD personnel are aware of the policies, regulations, and procedures of the SFRD.

(3) Proper management, discipline, and training of fire department personnel.

(4) SFRD library is maintained in an up-to-date condition, and that it is made readily available to all SFRD personnel and other interested persons aboard MCAS Beaufort.

b. Organizational Commanders and Section Heads. Commanding Officers and Section Heads will become familiar with and comply with this Order. The responsibilities include:

(1) Appoint, in writing, a single Fire Warden from the unit's S-4 shop. The designated individual will be SFRD's primary point of contact on all matters concerning fire protection and prevention. This appointment may be made from a responsible individual, commissioned or noncommissioned officer or, where applicable, civilian personnel of equivalent responsibility and rank. A copy of the written appointment notice shall be forwarded to the Fire Chief.

(2) Ensure master key(s) are made for installation in building knox boxes were provided for access to the building(s) the unit occupies. Also, notify the Fire Chief for an appointment to have keys placed in the box.

(3) Notify the Fire Prevention Officer when any building or groups of buildings are to be activated or deactivated.

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(4) Notify the Fire Chief in writing where billeting of personnel is requested in the buildings or space not specifically designed for this purpose. A pre-occupancy inspection is required and shall be conducted by SFRD personnel.

(5) Ensure that prior to securing an unoccupied building, a thorough inspection has been made to ensure the electrical power and other utilities are secured, the building has been properly policed, and all fire extinguishers issued by the Fire Department are returned.

(6) Organizational Commanders will, after every fire, report total content value loss to SFRD, extension 7854/7339, within 24 hours of occurrence.

(7) The Facilities Maintenance Officer, will after every fire, report structural damage loss to SFRD, extension 7854/7339, within 24 hours of occurrence.

c. Fire Wardens. Fire Wardens will be responsible for promoting fire safe conditions within their respective organizations. Specific duties include:

(1) Report to the Fire Prevention Officer, upon being appointed, and provide a list of the buildings for which he is responsible. Upon approval, attend a program of initial training and continuing guidance provided by the Fire Prevention Branch.

(2) In any case where hazardous conditions can occur that can cause loss of life and/or property, take immediate action to correct the hazards will be taken.

(3) Compile reports on fire inspections, required personnel training, and conditions within their respective organizations as may be required by SFRD and the organizational commanders or section heads.

(4) Ensure that supplemental fire regulations and/or instructions prepared by the organization are submitted to SFRD for approval prior to posting. Supplemental fire regulations and/or instructions will be posted on official bulletin boards and adjacent to MCAS Structural Fire-Division Fire Bill. Fire Bills can be obtained from the Fire Prevention Branch.

(5) Ensure that all personnel in their areas of responsibilities are given initial training in fire reporting procedures and instructed to immediately call SFRD on all fires, even if extinguished.

(6) Inspect all fire suppressions and life safety features at least monthly to ensure that the equipment is in good working order. Inspections shall be documented and a copy forwarded to SFRD. Only the Fire Warden or his/her designated alternate is authorized to initial extinguisher tags.

(7) Ensure that all components of egress (doors, panic hardware and emergency lighting) in buildings occupied by personnel and properly maintained.

Chapter 2

General Fire Regulations

1. Discovery of Fire, Emergency Services Initiation

a. Emergency Services. SFRD shall be notified of all situations that pose a threat to life, property of the environment. Call 9-1-1 for the following.

- (1) Fire.
- (2) Ambulance.
- (3) Police.
- (4) Hazardous materials spills/releases.

b. Initiating an Emergency Service Response. To initiate an emergency service response:

- (1) Dial 911, and/or;
- (2) Pull the nearest fire alarm box (Remain at the alarm box until help arrives if safe to do so);
- (3) State location of incident (street address, building number, cross street, etc.);
- (4) State nature of emergency (fire, medical, police, etc.);
- (5) State your name;
- (6) State the number you are calling from;
- (7) Do not hang up until directed to do so by the dispatcher.

c. Evacuation Procedures

- (1) Direct all occupants to immediately evacuate to the designated muster point.
- (2) Direct emergency personnel to the location of the incident upon arrival.
- (3) Close (do not lock) windows, skylights, and doors.
- (4) Extinguish the fire (if safe to do so).

2. Evacuation Plans and Fire Drills. Evacuation plans will be prepared and published by each unit, section, or agency, and will be posted conspicuously on official bulletin boards and to strategic locations throughout all buildings or departments at the activity. The standard sized "Fire Bill" will be utilized by all activities in addition to the fire evacuation plan.

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In addition to the posting of the fire bill, responsible commanders shall promulgate regulations governing the staff of the fire warden program in accordance with current Marine Corps policy and instructions. Fire regulations should include, but not be limited to:

a. General Instructions. The objective of fire regulations, fire Department organizations, location of fire stations, and instructions to occupants of quarters and operators of motor vehicles.

b. Fire Alarms and Signals. The method of reporting fires, operation of fire alarms boxes, station fire signals, and the penalty of false alarms.

c. Fire Equipment. The locations and instructions for use of available first aid and fire extinguishing equipment.

d. Fire Prevention. Necessary precautions in handling flammable liquids, electrical equipment, hot plates, rubbish, oily rags, and other hazards inherent to specific operations.

e. Training. It is required of personnel to familiarize themselves with the regulations and other fire emergency procedures.

f. Evacuation Plans. Each individual location will have its own fire evacuation plan containing additional instructions to those detailed in chapter 2, paragraph 1(c) of the Order. Evacuation plans and supplemental instructions will be conspicuously posted and regularly practiced to assure that all personnel are familiar with the plan and fire hazardous conditions related to the specific operations in a particular building or area. Instructions for individual locations should include:

(1) A floor plan showing evacuation routes and actions required for personnel in the particular shop, department, or building, upon alarm of fire.

(2) The location of first aid, fire extinguishing equipment, nearest fire alarm box, special fire reporting equipment, nearest telephone, and personnel muster point.

(3) Special fire prevention measures that may be unique to a particular muster point.

g. Fire Bills. Fire bills shall be posted on official bulletin boards and other conspicuous locations throughout.

h. Fire Exit Drills. Shall be initiated and monitored by the fire department to ensure efficient and safe use of exit facilities. The hours at which drills are held should vary. During fire exit drills, personnel shall evacuate the building to ensure orderly exit under control. Personnel shall muster at a predetermined site according to each building's fire evacuation plan. The responsibility of conducting fire drills is that of the officer in charge or supervisor-in-charge of each building. The fire prevention branch should normally be present at fire drills; otherwise, their assigned representative who is considered competent and qualified to exercise leadership should be present. Fire drills will be conducted as follows:

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(1) Monthly. Hazardous occupancies - Naval Hospital, Child Care/Day Care facilities, etc.

(2) Semiannual. Buildings in which personnel are quartered (e.g., barracks) and in industrial buildings.

(3) In other buildings, drills shall be held as often as the command considers necessary based on the recommendations of the fire chief, but not less frequently than once every 12 months.

i. Trial Run Drills. Drills initiated by building occupants involving the response of motorized fire apparatus to test the alertness of firefighting personnel are prohibited.

3. General Regulations

a. Every precaution shall be taken to prevent fires on MCAS Beaufort and Laurel Bay Housing.

b. No person shall deliberately or maliciously activate an alarm of fire or other emergency when in fact that person knows that no fire exists.

c. No person shall render any portable or fixed fire extinguishing system or device or any fire warning system inoperative or inaccessible except as necessary during emergencies, maintenance, drills or prescribed testing.

d. Where false alarms are turned in from any building, the building supervisors or management shall investigate and where necessary, provide a fire watch to maintain building security.

e. No person shall conduct or maintain any fire hazardous operations unless proper and adequate fire prevention measures have been taken. Such operations shall be inspected, approved, and permitted by the fire department.

f. All fires (even extinguished) shall report to the fire department.

g. All expelled or out of service fire extinguishers shall be immediately reported to SFRD. The occupant may be required to provide a written statement to the Fire Department prior to receiving a replacement.

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Chapter 3

Fire Protection

1. Fire Alarm Equipment

a. Shrubbery, trees, or other obstructions shall not obscure fire alarm boxes and associated equipment. Fire alarm control panels and pull stations shall be kept clear 36 inches and accessible at all times.

b. The fire department is assigned the responsibility of testing manual fire alarm boxes, water flow transmitters, and alarm circuits in accordance with reference (d).

2. Sprinkler Systems

a. If sprinkler heads are activated by fire, the valve shall not be closed until so directed by the Fire Department Officer in Charge at the fire.

b. No material of any sort shall be hung from sprinkler piping.

c. No sprinkler heads shall be painted or otherwise be coated.

d. General storage piled 15 feet high or less shall have at least 18 inches of clearance below the sprinkler heads. General storage piled higher than 15 feet shall have a 36-inch clearance below the sprinkler heads. Storage of hazardous materials and plastics, regardless of height of piles, shall have hydraulically designed sprinkler systems in accordance with approved standard.

e. Sprinkler systems shall be tested and serviced by qualified maintenance or Fire Department personnel at frequencies outlined in the approved standard. Adequate clearance and access as determined by the Fire Chief will be provided for all sprinkler control valves.

3. Fire Extinguishers

a. Any person having discharged a fire extinguisher shall report the fact immediately to the fire department and state the purpose for which it was used.

b. Fire extinguishers shall not be removed from their assigned locations except for firefighting.

c. Any person noting a damaged fire extinguisher or any other damaged firefighting equipment shall immediately report it to the fire department, extension 7854/7339.

d. Responsibility of SFRD

(1) Provide fire extinguishers for the protection of all buildings aboard MCAS, where required.

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(2) Designate the type, quantity, and location of all portable fire extinguishers in structures.

(3) Inspect fire extinguishers at regular intervals. The initials or signature of inspector and date will be marked on the fire extinguisher tag by the building Fire Warden or their designated alternate.

(4) Coordinate maintenance and service of fire extinguishers at regular intervals, not more than one year apart, or when specifically indicated by an inspection; extinguishers shall be thoroughly examined and, as necessary, recharged, repaired, or replaced to ensure operability and safety.

(5) Bring to the attention of the Fire Chief and S-4 Officer, any repeated cases of missing and/or expelled fire extinguishers so that corrective action can be taken.

e. Responsibility of Commanders and Section Heads

(1) Ensure fire extinguishers are inspected by the Fire Warden or his designated alternate at least monthly or at more frequent intervals when circumstances dictate. Ensure extinguishers are in their designated places, that they have not been actuated or tampered with and that there is no obvious physical damage, corrosion or other impairments. Building occupants other than the authorized Fire Warden or Alternate will not mark extinguisher tags.

(2) Ensure that building occupants know how to properly use fire extinguishers in their building.

(3) Immediately notify the fire department whenever a fire extinguisher has been reported to them as being missing or expelled.

(4) Report action taken to prevent repeated occurrences of extinguisher loss and/or discharge to the MCAS Structural Fire Rescue Division Fire Chief.

(5) Purchase fire extinguishers for their own requirements, other than buildings (It is recommended they consult with the Fire Department prior to the purchase of fire extinguishers).

f. Location. Extinguishers shall be conspicuously located, where they will be readily accessible and immediately available in the event of fire. They shall be located along normal paths of travel and near exits.

g. Marking of Extinguishers

(1) Extinguishers shall not be obstructed or obscured from view. In large rooms, warehouses and other areas where visual obstruction cannot be completely avoided, a sign located above shall identify extinguisher location.

(2) Extinguishers shall be marked with appropriate symbols as to their proper rating and use. Extinguishers not properly marked shall be reported to the fire department.

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h. Mounting of Extinguishers. Extinguishers shall be installed on the hangers or brackets supplied or mounted in cabinets, unless the extinguishers are of the wheeled type. Extinguishers having a gross weight not exceeding 40 pounds shall be installed so that the top of the extinguisher is not more than five feet above the floor. Extinguishers having a gross weight greater than 40 pounds (except wheeled type) shall be so installed that the top of the extinguisher is not more than three feet six inches above the floor.

i. Distribution of Extinguishers. Fire extinguishers shall be distributed as per reference (c). Fire extinguishers will be placed on the following types of vehicles aboard MCAS Beaufort, this is not applicable to tactical units:

(1) Buses. Extinguishers to be a dry chemical with a minimum classification of 10:BC.

(2) Ambulances. Extinguishers to be a dry chemical with a minimum classification of 10:BC.

(3) Police and Patrol Vehicles. Extinguishers to be a dry chemical with a minimum classification of 10:BC.

(4) Vehicles regularly used to carry explosives, acids, compressed gases, fuel, or other dangerous articles. Extinguisher to be a dry chemical with a minimum classification of 20:BC (An extinguisher with a classification of 30:BC is highly recommended).

(5) Fire extinguishers shall not be furnished by SFRD in MCAS/Laurel Bay housing areas.

4. Fire Hydrants and Fire Department Connections

a. No vehicles or other objects shall be left standing, parked, or stored within a 20-foot radius of any fire hydrant or fire department connection.

b. Shrubbbery, trees, or other obstructions shall not obscure fire hydrants and fire department connections.

c. Connections shall not be made to fire hydrants, nor shall fire hydrants be operated by other than SFRD or authorized maintenance personnel unless approved by permit from the Fire Chief. Only approved hydrant wrenches shall be used on fire hydrant stems.

d. BJWSA personnel shall conduct tests on fire hydrants on an annual basis unless otherwise instructed to do so.

5. Sectional Control Valves and Fire Pumps. Sectional control valves and all stationary water supply fire pumps shall be tested by maintenance personnel in accordance with the schedule in reference (b).

6. Fire Hoses

a. Fire hoses shall not be used for other than firefighting purposes

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without the approval of the Fire Chief.

b. No vehicle shall be driven over a fire hose unless authorized to do so by an SFRD Officer.

7. Fire Apparatus

a. Unless specifically authorized by the Fire Chief, unauthorized persons are prohibited from riding upon, in, operating, or using any fire apparatus.

b. When responding to an alarm, fire apparatus shall be under control of the driver at all times and shall be driven at such speeds as may be safe according to road and weather conditions. Fire apparatus drivers shall observe all traffic regulations when returning from an alarm

8. Locking of Doors and Gates

a. Knox Box Key Vaults

(1) Knox Boxes shall be required on all buildings equipped with a fire alarm system, detection system, or suppression system and where otherwise required.

(2) Building managers, responsible officers or Station locksmith shall provide the required access key(s) for installation in the Knox Box key vaults.

(3) Keys shall be locked into the Knox Box key vault only by authorized SFRD personnel and by appointment only.

(4) SFRD personnel shall not accept building keys unless for the purpose of locking them into the Knox Box key vault.

b. After Hours Access to Enclosed Areas

(1) Fences, gates or compounds shall be locked by use of padlocks and hasps or chain only (entry into the area by firefighters may be made by cutting the hasp or chain).

(2) In all cases where security of an area or building has been broken by firefighters in the line of duty, a firefighter will remain at the location to monitor for security until arrival of a guard.

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Chapter 4

Life Safety

1. General

a. Every building or structure, new or old, designed for human occupancy shall be provided with exits sufficient to permit the prompt escape of occupants in case of fire or other emergency. The design of exits and other safeguards in case of fire or other emergencies shall not depend solely on any single safeguard, and backup safeguards shall be provided in case any single safeguard is ineffective due to some human or mechanical failure.

b. Every building or structure shall be so constructed, arranged, equipped, maintained, and operated as to avoid undue danger to the lives and safety of its occupants from fire, smoke, fumes, or resulting panic during the period of time reasonably necessary for escape from the building or structure.

c. Every building or structure shall be provided with exits of kinds, numbers, locations, and capabilities appropriate to the individual building or structure to afford all occupants convenient facilities for escape.

d. In every building or structure, exits shall be so arranged and maintained as to provide free and unobstructed egress from all parts of the building or structure at all times when it is occupied. No lock or fastening device to prevent free access from the inside of any building shall be installed except where supervisory personnel are continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.

e. In every building or structure requiring artificial illumination, adequate and reliable illumination shall be provided for all exit facilities.

f. In every building or structure of such size, arrangement, or occupancy that a fire may not in itself provide adequate warning to occupants, fire alarm notification shall be provided where necessary to warn occupants of the existence of fire so that they may escape.

g. Every building or structure, section, or area of such size, occupancy, and arrangement that the reasonable safety of occupants may be endangered by the blocking of any single means of egress, shall be so arranged as to provide a remote alternate means of egress, eliminating the possibility of both being blocked under emergency conditions.

2. Capacity of Occupancy Load

a. The capacity or occupant load permitted in any assembly building, structure, or portion thereof, shall be determined by SFRD personnel in accordance with reference (c) and shall be posted.

b. The capacity or occupant load permitted in a building or portion thereof may be increased above that specified where authorized in writing by the Fire Chief. Requests to increase occupant load shall be submitted, with

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appropriate diagrams, in writing to the Fire Chief.

c. Personnel shall not be permitted to be seated, or to stand in aisles, doorways or exits in places of assembly.

3. Means of Egress

a. Interior Finish (Materials). Interior finish for walls and floor coverings used in the means of egress to include stairs, passageways, halls and exit discharge shall conform to references (b) and (c).

(1) Temporary or relocatable structures (trailers) shall meet the same interior finish and fire protection criteria as that which is required for permanent facilities.

(2) Camouflaged netting shall not be used indoors or outdoors near exterior exits.

b. Exit Marking

(1) Every exit shall be clearly visible, and the route to reach it shall be conspicuously marked with signs in such a manner that every occupant will readily recognize the direction of escape from any point. Every exit sign shall have the word "EXIT" in plainly legible letters not less than six inches high, with principal strokes of letters not less than three-quarters of an inch wide.

(2) There shall not be any brightly illuminated sign (for other than exit purposes), display, or object in or near the line of vision of such a character as to detract attention from the exit sign.

(3) Any doorway, stairway or passageway not constituting an exit or way to reach an exit, but of such a character as to be possibly mistaken for an exit, shall be so arranged or marked as to minimize its possible confusion with an exit. A sign shall be posted reading "NOT AN EXIT" or the door shall be identified by a sign indicating its actual character such as "TO BASEMENT", "STOREROOM", etc..

(4) An internally illuminated exit sign shall be provided in all occupancies where reduction of normal illumination is permitted, as in motion picture theaters, and may be used in any occupancy.

(5) Every required exit and associated components of exit shall be continuously illuminated to facilitate egress.

(6) Luminescent, fluorescent or reflective material may not be used as a substitute for any of the required illumination specified.

c. Dead-end corridors and travel distance to exits shall be arranged in accordance with references (b).

d. Emergency and Exit Lighting

(1) Emergency and exit lighting, as required by appropriate occupancy

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classification, will conform to the standards contained in reference (b).

(2) In places of assembly, emergency lighting should be checked daily by a responsible staff member prior to the use of the facility and periodically by SFRD.

e. Maintenance of Means of Egress. Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in case of fire or other emergency. No restrictive hardware, such as hasps and padlocks, throw bolts, cross bars, etc. will be installed on any door along the required route of egress.

f. Emergency Exits and Fire Doors

(1) Exit Doors

(a) Exit doors shall open in the direction of exit travel.

(b) Exit doors shall be arranged so that they can be readily opened from the side from which egress is to be made at all times when the building is occupied.

(2) Panic Hardware

(a) Emergency exit doors requiring panic bolts shall be equipped with proper type panic hardware in good operating condition. On exits where panic hardware is required, only listed panic hardware shall be used.

(b) Required panic hardware shall not be equipped with any locking or dogging device, set screw, or other arrangement, which can be used to prevent the release of the latch when pressure is applied to the bar or prevents the free use of the door for exit purposes.

(c) Locks, where provided, shall not require the use of a key for operation from the inside of the building. Any latch or other fastening device on an exit door shall be provided with a knob, handle, panic bar, or other type of releasing device; the accessibility and method of operation of which is obvious, even in darkness.

(d) Any device or alarm installed to restrict the improper use of an exit shall be so designed and installed that it cannot, even in the case of failure, impede or prevent emergency use of such exit. Locking devices on doors and exits of brigs will conform to the requirements set forth in Chapter 2 of reference (e).

(3) Fire Doors and Walls

(a) Fire doors shall be equipped with fusible links or smoke activated closures for automatic closing in the event of fire. Fusible links shall not be painted, coated or covered.

(b) Fire doors, dampers or shutters shall not be obstructed or blocked in any manner or intentionally wedged open. Sufficient space shall be maintained to allow personnel fire doors to swing clear. Material will not be stored within 36 inches of fire door openings. Highly combustible

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material that may produce a flash fire should not be stored near any fire door or other opening in a firewall.

(c) At the close of the workday, personnel shall ensure that fire doors and all other doors and windows are closed and latched.

(d) Care shall be exercised that fire doors and dampers are not damaged. Inoperable doors or dampers shall be reported to the Maintenance Officer for immediate repair and SFRD shall be notified.

(e) Penetrations or damage to firewalls shall be repaired with like material to maintain required fire resistance rating.

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CHAPTER 5

Fire Prevention Fire Safety

1. Smoking/Open Burning/Fireworks

a. Prohibited Smoking Areas. There shall be no smoking:

- (1) While sitting or laying in bed.
- (2) In or around any public facility except at exterior, posted smoking areas.
- (3) At open-air storage areas.
- (4) Within 50 feet of:
 - (a) Gasoline dispensing operations.
 - (b) Places where bituminous and plastic coatings are being applied.
- (5) In Aircraft parking areas.
- (6) Where explosives, chemicals, flammable or highly combustible materials are being stored or handled.
- (7) In any vehicle while the vehicle is parked or passing through storage areas, warehouses, or on or against the ramps of warehouses.
- (8) In government vehicles.

b. Smoking areas

- (1) Where smoking is permitted, signs shall be posted and suitable "safety" ash and butt receptacles shall be provided.
- (2) Metal receptacles for the disposal of smoking material shall be painted red and marked "BUTTS ONLY" visible from all angles and provided at all locations in which designated smoking areas are authorized.
- (3) Designated smoking areas shall not be located within 10 feet of building exits or building ventilation intakes.

c. Disposal of Smoking Material

- (1) The contents of ash trays and butt receptacles shall be suitably extinguished and emptied into water before being placed in trash receptacles.
- (2) Smoking material, including lighted cigars, cigarettes, and matches shall not be thrown in trash receptacles or on the floor, in brush, out of windows, or from vehicles and must be extinguished before being discarded.

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(3) All matches, cigars, and cigarette butts shall be extinguished and deposited in containers which are located in smoking areas for that purpose and shall not be thrown on the floor or disposed of in any other manner. The use of these containers for the disposal of anything other than smoking material is strictly prohibited. Lighted cigarettes, cigars, and other smoking material shall not be thrown from a moving vehicle.

d. Open Flame, Burning, and Use of Matches

(1) Open flame or fires shall not be allowed except by written permit from SFRD and NREAO.

(2) Matches, candles or open flame devices shall not be used for illumination purposes.

e. Fireworks. The sale, storage, or use of fireworks of any description on any part of MCAS Beaufort/Laurel Bay Housing is strictly prohibited. Fireworks or incendiaries, except those requested by authority of the Commanding Officer, under contract, and subject to government control, shall not be permitted on MCAS Beaufort/Laurel Bay Housing.

2. Fire Prevention

a. Report of Fire Hazards. Fire Wardens and their designated alternates shall exercise vigilance in guarding against the creation of fire hazards in all buildings and shall promptly report to the Fire Chief:

(1) Any hazardous conditions which cannot be corrected immediately.

(2) Any changes in assignment of occupancy or contents of the building.

(3) The placing of any building in an unoccupied status.

(4) The reopening of any building previously unoccupied.

b. Rubbish, Trash and Debris

(1) All buildings, occupancies and work sites shall be policed for good housekeeping regularly to reduce fire hazards.

(2) Trash and refuse containers will not be located in corridors, stairways, within 10 feet of exits, or placed in any location where ignition of the refuse or trash, and resulting hot gases or smoke will prevent safe evacuation of a building. Particular attention will be given to enforcing this regulation in guest houses, lodging facilities, bachelor officer quarters, troop billets, and multi-storied family housing quarters.

(3) Trash containers shall be constructed of metal or noncombustible material and provided with tight fitting covers in good condition (waste baskets are exempt from the cover requirement)

(4) Trash shall be removed from buildings daily and placed in dumpsters. No trash shall be burned on MCAS Beaufort/Laurel Bay Housing.

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(5) Dumpster and other trash disposal units shall be spaced a minimum of 15 feet from buildings or storage areas and in such position as not to obstruct traffic or operations. The doors or hatches of such units shall be kept closed except when being used for disposal of trash.

(6) No flaming or glowing substances, hazardous materials or explosives will be placed in any dumpsters.

(7) Dry weeds, grass, brush, trash and debris shall not be permitted to accumulate within 50 feet of buildings or within open storage areas. Areas shall be policed regularly and such materials removed frequently and disposed of in a safe manner.

c. Storage of Combustibles

(1) The storage of combustibles shall be limited to daily usage, with storage prohibited in attics, mechanical rooms, on roofs of buildings and under ladderwells.

(2) Rags and materials contaminated with oil (especially animal or vegetable oils), paints, thinner, wax, furniture polish, and other liquids which can cause spontaneous heating will be kept in safe self-closing covered metal containers when not in use.

(3) Metal or metal-lined containers with covers shall be provided and used for storing supplies of clean rags, waste, packing materials (such as excelsior and shredded papers), and other combustible materials in current use.

(4) All used waste, oil, paint, chemical-soaked rags, and other combustible materials shall be deposited in plainly marked self-closing metal safety containers. The metal covers shall be kept closed and never wedged or blocked open. The contents shall be removed from the building as required, during working hours.

3. Specific Occupancies

a. Places of Public Assembly

(1) For purpose of this Order, "places of public assembly" includes theatres, meeting halls, recreation rooms, hobby shops, offices, warehouses, shops, clubs, or any similar places where 10 or more persons may assemble or pass through at any time, and they are not residents.

(2) Per reference (b) Public Assembly Facility Managers shall be trained in proper fire prevention responsibilities due to high loss potential.

(3) Prior to the decorating of any place of public assembly, the officer, noncommissioned officer, or civilian-in-charge shall notify the fire department. All combustible material including curtains, acoustical materials, streamers, cloth, cotton batting, straw, vines, leaves, trees, and moss shall be rendered flameproof. All materials shall be inspected and tested at frequent intervals to determine their resistance to flame and the retention of their proofing qualities. Exits, exit markers, stairways shall

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not be obscured by decorations or obstructed in any manner.

(4) Per reference (b) special events requiring an increase in occupant load or change in building layout shall require SFRD review and approval. Managers of such facilities shall place a request in writing to the Fire Chief and provide a floor map detailing arrangement.

(5) Storage and use of flammable liquids or chemicals are prohibited in all buildings where assemblies, entertainment, or recreational facilities are provided.

(6) Fresh cut and live Christmas trees are prohibited in workspaces and public buildings in accordance with reference (c). Decorated artificial trees shall be inspected by SFRD.

(7) Exhaust systems and associated ductwork, especially in galleys, shall be kept free of grease accumulation. Grease filters in range hoods shall be kept cleaned frequently utilizing steam or a non-flammable liquid.

b. General Storage Warehouse

(1) Doors may not be blocked by storage unless authorized by SFRD. Doors that are blocked on one side shall be plainly marked on the opposite side by a sign with letters not less than six inches high reading, "THIS DOOR IS BLOCKED".

(2) When a door is authorized by SFRD to be blocked by storage, the storage inside may be consistent with other storage in the building. For example, if material is stored within 24 inches of the walls, the material may also be stored within 24 inches of the exterior doors.

(3) Doors that have been caged in by partition shall be plainly marked on the outside by a sign with letters not less than six inches high reading, "CAGED". Doors used as entrances to fire aisles shall not be blocked or caged.

(4) Storage shall be at least 24 inches from the path of travel of fire doors unless a barricade is provided; in such case no clearance will be required.

(5) Clearance between stored materials and walls shall be maintained as follows:

(a) At precast concrete walls (2 Hour rating) clearance: 18-inch

(b) Metal, Gypsum board walls: 24-inch clearance.

(c) Hazardous materials stored in general purpose storage buildings: 36-inch clearance.

(6) Aisles and clear access (36 inches in all directions and 8 feet from finished floor) shall be maintained for access by firefighters to fire alarm electrical equipment, firefighting equipment, and sprinkler valves.

(7) Clearance and Storage Limitations

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(a) When clearances are found necessary to maintain storage block limitations, such clearance between stacks shall be four feet in width for 2,000 square-foot blocks and six feet for 8,000 square-foot blocks. Where operations require, working aisles may be used as clearance aisles between storage blocks.

(b) Heights of stacks shall be limited to 15 feet. As required by reference (b), clearances shall be maintained as follows:

1. Below automatic sprinkler deflectors: 18-inch clearance.
2. When hazardous commodities are involved: 36-inch clearance.
3. Below joists, rafters, beams, and roof trusses: 18-inch clearance.
4. Stacks in buildings not equipped with sprinklers: 36-inch clearance.

(c) When the clearance between lower roof truss members or beams is sufficient to permit stacking of supplies above the lower horizontal extremity of such structural members, the lateral clearance between supplies and structural members or other installed devices shall be 18 inches.

(d) Materials, supplies, or equipment shall be stored as prescribed in the associated reference. Storage between or adjacent to warehouses or within the required clearance between structures and areas shall not be permitted.

(e) A clear space of three feet shall be maintained between any outside combustible storage and exterior walls of buildings.

(f) All stock in open storage shall be stored as stated in reference (b).

(8) Required Aisles

(a) Plano graphs shall be made for the storage of materials, equipment or supplies in all warehouses, storage sheds, and open storage areas. Plano graphs shall indicate stock clearance from walls, fire doors and fire aisles. The location of the fire aisles may be changed by the warehousing office provided such changes meet the criterion for fire aisles as shown in this manual.

(b) All fire aisles shall be accessible from doors or gates so that the firefighting force may enter them without moving stored material.

(c) Materials, equipment, tools, pallets, vehicles, or forklifts shall not be left in fire aisles at any time.

(d) Fire aisles shall not be used for temporary storage while storage operations are being carried out, but shall be cleared at all times.

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(e) In sprinkle red buildings storage racks shall be provided with in rack sprinklers or arranged such that existing sprinklers can reach all areas of the storage placed on the rack.

c. Carpenter and Woodworking Shops

(1) Welding, cutting, torch soldering, and other open flame operations are not authorized except by permit issued by SFRD.

(2) Flammable liquids will not be used or stored in these shops.

(3) Materials stored within the building shall only be stored in sufficient amounts for work or for in an "in-use" status.

(4) Doors, exits, or passageways shall not be blocked only by special permit of the fire chief and in such cases shall be plainly marked on the outside in 6 inch letters "DOOR BLOCKED".

(5) Vehicles shall not be driven into or parked inside of the building.

(6) Shops shall be well ventilated to prevent the suspension of dust in the air.

(7) Deposits of dust on rafters and building supports shall be removed frequently by vacuum or other suitable means to prevent dust explosions.

(8) Lumber stacks for supply of carpenter shop operations shall not be stored within 15 feet of shop buildings or within 15 feet of fire hydrants or Fire Department connections.

d. Quarters

(1) Persons assigned quarters shall be fully responsible for violations of fire safety regulations by their families or guests and shall adhere to all aspects of this Order.

(2) Tenants shall be responsible for maintenance and good police and shall not allow accumulation of trash, flammable liquids, or materials, which may cause fire hazards in or about their quarters.

(3) Explosives, flammable liquids, or fireworks are not permitted in quarters, except as authorized in this Order.

(4) Personal belongings, fencing or other articles shall not obstruct stairs, halls, exits and sidewalks.

(5) Materials of any type shall not be hung on or fastened to fire suppression systems, sprinkler systems, or fire extinguishers.

(6) Stoves or appliances operated by the use of gasoline or kerosene are not permitted in buildings.

(7) Lawn mowers may be stored in garages or outside storage rooms.

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Gasoline for use in these machines may also be stored in garages or detached buildings but should not exceed two gallons and must be in approved safety cans.

(8) Any hazardous condition found by the Fire Chief or his representative shall be immediately corrected by the tenant.

(9) Tenants shall not attempt to remove clothing, furniture, or other articles from a burning building.

(10) After evacuation of a building during a fire or alarm, tenants shall stand clear of the streets and fire hydrants and be at least 150 feet from the building involved.

(11) Tenants or other persons shall not attempt to assist firefighters unless called upon.

(12) Portable barbeque equipment, either briquette or liquid petroleum gas (LPG) operated, shall not be used indoors or on balconies and shall be at least ten feet from building eaves while in operation.

(13) Combustibles stored in multi-family dependent housing storage rooms should be limited, located, and arranged to prevent children from starting a fire with matches or lighters.

(14) Occupants of housing will ensure that any electrical equipment personally owned and used meets the requirements of the UL and be kept in good repair at all times. If there is any question that use of the equipment, will overload the circuit to which it is connected for service, Facilities Maintenance will be consulted and approval secured prior to the use.

(15) Additional fire regulations and instructions applicable to occupants of family quarters are available from the Housing Office.

4. Fuel Fired Heating Systems

a. General

(1) Furnace and boiler rooms, heating units, and garages shall be kept free of unnecessary storage.

(2) Heating equipment shall not be allowed to become overheated.

(3) Adequate clearances, as specified by reference (b), shall be maintained between flammable material and steam pipes, furnaces, flues, and appurtenances.

(4) Exposed surfaces, too hot for the bare hand, shall be considered hazardous.

(5) Storage in rooms designed for housing of heating and air conditioning equipment is prohibited.

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(6) Steam radiators and piping shall not be used for drying purposes.

(7) Open flame type heating devices are prohibited in areas when flammable vapors may accumulate, such as gasoline stations, garages and paint shops. Kerosene heaters are prohibited.

b. Oil-Fired Heaters and Stoves

(1) Accessible shut-off switches and valves shall be provided on all oil fired heaters and similar equipment.

(2) Oil burning equipment shall be inspected frequently and overhauled periodically by maintenance personnel.

(3) Heating units, vent stacks, and flues shall be cleaned thoroughly at least once a year.

(4) Oil heating stoves shall not be left burning overnight.

c. LP and Natural Gas-Fired Heaters

(1) Gas-fired heaters and stoves shall be installed and maintained in accordance with reference (b).

(2) Portable Heaters. The introduction and use of any liquid fueled portable heater aboard MCAS Beaufort/Laurel Bay Housing is prohibited. Temporary use of such heaters may be authorized on a case basis where no other alternative exists.

5. Vehicle Storage and Parking

a. Vehicles will not be stored inside buildings, unless the building was designed, constructed, and operated as a vehicle parking facility.

b. Vehicles will not be parked within 20 feet of temporary combustible-type buildings, 50 feet of any flammable storage building or locker, or within 15 feet of fire hydrants, fire department connections.

c. Fire lanes shall not be used for vehicle parking or for storage, loading or unloading of any type of material.

d. Separation of Structures and Vehicle Vans for Fire Protection.

(1) Factors determining distance between buildings and/or open storage blocks of material are specified in references (b) and (f). The Fire Chief is available for consultation on reference material.

(2) Fire breaks shall be maintained as described by reference (b).

(3) A 40-foot spacing will be required between buildings and any special high-value vehicle van, regardless of construction, unless it is provided with a separation wall that will allow a complete burnout of one unit without damage to any adjoining unit.

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(4) Spacing for trailer courts, relocatable prefabricated structures, and shop vans containing limited value equipment will be as specified in reference (b).

6. Hazardous Operations

a. Cleaning Operations

(1) The use of gasoline, naphtha, thinners, or other flammable liquids for cleaning automobile parts, floors, decks, etc., is prohibited. All cleaning operations shall be performed with non-flammable safety solvents.

(2) Residue from sanding machines shall be placed in metal cans, wetted down, and removed from the building promptly.

(3) SFRD shall be notified before operations are started and any additional precautions required by the Fire Chief or his representatives will be implemented.

b. Battery Charging Shops. Only qualified personnel shall be assigned to battery shops.

(1) Battery shops shall be adequately ventilated to allow removal of hydrogen gas. Air inlet openings at or below the level of the batteries are required regardless of the kind of exhaust. For a small number of batteries a vented hood over the batteries may be satisfactory. Where natural ventilation is used, a vent stack to aid in producing upward draft should be installed.

(2) All electrical wiring and equipment shall be explosion proof in accordance with reference (b).

(3) Smoking, open flame and spark producing devices shall not be allowed in the vicinity of batteries on charge. Appropriate warning signs shall be posted.

c. Spray Applications Using Flammable or Combustible Material

(1) Where practicable, the main electrical switch for the entire building and all pilot lit appliances should be disengaged or secured and work done by natural light. When this is not feasible, all electrical appliances and pilot lit appliances of any kind in the vicinity - water coolers, soft drink machines, water heaters or other automatic stopping and starting appliances shall be disconnected before material is applied and shall not be connected again until drying is complete.

(2) Prohibition of open flames and smoking shall be continued for at least one hour after ventilation and drying is completed.

(3) Maintenance on or Near Flammable Area. Non-spark tools shall be used when working on any part of a system or unit designated for storage or handling of flammable liquids. The use of other than nonferrous tools or open flame devices in the vicinity of flammable liquids or vapors is expressly forbidden.

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(4) Evacuations. Evacuating around gas mains, oil tanks, gasoline, or oil pipes is prohibited in areas where flammable gaseous conditions are suspected. In such places, the air shall be tested and if gas is present, ventilation shall be provided by portable blowers or other satisfactory methods. Electrical equipment used in such areas shall meet the requirements of reference (b) for explosive atmospheres.

d. Steam Jennies (Portable), Tar Heating Units, and Operations

(1) Steam Jennies

(a) Steam Jennies shall not be operated within 25 feet of a building or combustible material.

(b) Steam Jennies shall not be left unattended and shall be equipped with a minimum 20:BC fire extinguisher.

(2) Tar Kettles and Heating Units

(a) Tar kettles and heating units shall be inspected and a hot work permit issued by SFRD prior to operation.

(b) Tar kettles shall not be operated within 25 feet of any building, in a controlled area, and identified, by the use of traffic cones or barricades.

(c) Two approved, 20:BC fire extinguishers shall be provided and maintained within 25 feet of the operating kettle.

(d) An operating kettle shall be attended by a minimum of one employee knowledgeable of the operations and hazards. The employee shall be within 25 feet of the kettle and have the kettle within sight.

(e) Units shall be of an approved type as specified by the National Board of Underwriters. The tar or compound "in use" shall not be heated over specific "use" temperatures.

(f) While roofing work is carried out with tar or compound, at least two, minimum 20:BC extinguishers shall be kept on the roof close to the work site. Tar pots shall not be operated inside or on the roof of any building.

(g) Empty or discarded tar block sacks shall be placed in containers and removed at the end of the day.

e. Welding, Cutting, and Torch Operations

(1) All work shall be performed in accordance with reference (b).

(2) All job sites where the use of an open flame or torch is required shall be inspected and a hot work permit issued from SFRD prior to operation.

(3) All welding shops shall be approved and have in place an internal program operated under the direct supervision of the welding shop supervisor. The supervisor shall be responsible for operations conducted under his or her

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permit and/or authority.

(4) All conditions of the hot work permit shall be satisfied prior to hot work operations and maintained throughout the duration of the job.

f. Properly trained, authorized personnel shall only conduct hot work operations.

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Chapter 6

Electrical Safety

1. Generala. Wiring

(1) All electrical wiring permanent or temporary and equipment shall conform to the requirements of standards 70, and 70E of reference (b). Changes, attachments to, or alterations of, authorized electricians on the order of the Facilities Maintenance Officer shall not make except electrical wiring or electrical appliances.

(2) All defective electrical equipment shall be tagged out of service immediately and reported to Facilities Maintenance for repair by authorized electricians. Defective or frayed wiring or cords of fixtures, appliances, lighting, or switches shall be replaced.

(3) No article other than an approved appliance or equipment will be attached to electrical wiring or conduit. Electric wiring or conduit shall not be used for any purpose other than, for which it was intended.

(4) Extension cords will only be used for temporary applications and shall be the three pronged grounded type with an Underwriters Laboratories (UL) approval. Where extension cords are used for temporary applications they shall be of appropriate gauge for the electrical load and of the grounded type. They shall be inspected frequently, kept dry and free from oil and grease and maintained in a safe condition.

(5) Every effort shall be made to rearrange the workspace to eliminate the need for extension cord use. In no case shall an extension cord be connected to a heat-producing appliance.

(6) The ends of unused wires shall be properly taped and/or withdrawn from the receptacle or conduit. Disconnected electrical wiring shall be removed immediately upon installation of new wiring.

b. Circuits

(1) Electrical circuits shall not be overloaded. When a circuit has been interrupted by a blown fuse or tripped breaker, the source of disturbance shall be located and eliminated by an authorized Facilities Maintenance electrician before restoring power to the interrupted circuit.

(2) Circuit breakers shall not be used as switches, tampered with, taped in the open position or otherwise rigged.

(3) All breakers in service panels shall be correctly labeled to indicate the circuits and/or devices that they control.

(4) Electricity for the air station and its areas shall be cut off only by approval of the Head, Installation Division, or due to fire or other emergencies, by order of the Maintenance Officer or Fire Chief. Except in cases of power failure, the Fire Department shall be notified before

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electricity is cut off.

2. Electrical Equipment

a. Electrical equipment used or located in areas where explosive vapors are present shall conform to the requirements of references (b) and (f).

b. Spark Dangers

(1) Tools, metal fan blades, door latches, and similar devices used in the vicinity of flammable gases or vapors shall be of nonferrous or non-sparking type. Non-sparking type shall be worn where appropriate.

(2) Substantial conductors having a low resistance to ground shall be used to ground all stationary and portable machines, equipment, and other devices in which static charges may be generated in the vicinity of flammable gases or vapors. The contact between conductor and ground shall be in accordance with references (b) and (f).

(3) All vending machines using electrical power shall be properly grounded, and motors, compressors, etc, shall be kept free from accumulations of grease and lint.

c. Lighting Fixtures

(1) Combustible material, other than listed lampshades, shall have at least 18 inches clearance from electric light bulbs or electric heaters. Precautions will be taken at all times to prevent combustible lampshades from coming in contact with light bulbs.

(2) Fluorescent light fixtures shall be installed with a minimum of one and one-half inches from combustible ceilings and shall be equipped with thermally protected ballasts. Fluorescent lights will not be used as standing lights.

(3) Light bulbs and fluorescent bulbs shall be protected from accidental contact.

3. Special Heat Producing Appliances

a. All special heat-producing appliances, including coffee makers of the urn type, hot plates, portable heaters, and soldering irons shall be listed by UL and the following.

(1) Shall comply with reference (f) which requires that in all except residential occupancies, some form of automatic shut off or pilot light be provided for all electrically-heated appliances intended to be used on or near combustible material. Reference (b) also requires that ample space be provided between the appliance location and any combustible material.

(2) Shall be located on a non-combustible surface or within a non-combustible shield.

b. The number of special heat producing appliances should be kept to a

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minimum. Installation of these types of appliances shall be only upon approval of SFRD, and their installation shall be inspected regularly by the Fire Warden or his designated alternate. Such devices shall not be installed in closets, lockers, or out-of-sight locations. Automatic time devices are unauthorized.

c. Deep fat fryers shall be provided with a primary thermostat to limit temperature to 425 degrees Fahrenheit and a secondary backup thermostat or thermal electric cutout to limit temperature to 450 degrees Fahrenheit. Qualified personnel shall test thermostats periodically.

d. Electric heaters, of portable type, are not to be installed in any building without authorization of facilities maintenance and not until a fire safety inspection has been made by SFRD. In order for electric portable heaters to be acceptable, they shall meet standards as set forth in reference (e). These requirements are a thermostat for heat control and a tip over switch for automatic shut off if tipped over. Heaters shall be unplugged when not in use.

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Chapter 7

Special Processes and Material Handling

1. Flammable and Combustible Liquids

a. General. For purposes of this chapter, the word "liquid " or "liquids" shall mean flammable and/or combustible liquids.

(1) Class I liquids shall include those having flash points below 100 degrees Fahrenheit.

(2) Class II liquids shall include those having flash points at or above 100 degrees Fahrenheit.

b. Class I liquids shall not be used for cleaning purposes.

c. Class II solvents in volume may be used for "parts" cleaning if done in an approved type room and if in accordance with reference (b), where safety measures and recommended equipment are used.

d. Drawing of Class II liquids from drums will not be permitted unless automatic self-closing spigots are used. Class I liquids may be drawn by pump only.

e. Class I or II liquids, which are soluble with water, shall not be stored with liquids of petroleum base.

f. Blankrola, paint, kerosene, solvents, gasoline, alcohol, bowling ball cleaner, and other highly flammable liquids shall be kept in safety containers at all times when in use, or capped in the original container.

g. Class I or II liquids shall not be taken into quarters, warehouses, maintenance shops, places of public assembly, mess halls, cafeterias, recreation buildings, or theaters.

h. In the event of a spill or leak of Class I or II liquids in any quantity deemed dangerous emergency notification procedures shall be followed.

i. A lined earth dike will be built up around areas of above ground storage for Class I and II liquids. The height of the dike will be at least 18 inches or higher where necessary to provide complete containment. Minimum containment shall be sufficient to contain 10% of all liquids stored at 110% of the largest container whichever is greater.

j. Gasoline tanks of portable or stationary engines shall be fueled by use of "safety nozzles" or "safety containers" only.

k. All gasoline-powered vehicles shall be fueled outdoors.

2. Portable Fuel Containers

a. Gasoline shall not be pumped or transferred, moved, stored, poured, or received by use of open, glass, or unapproved plastic containers.

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b. Containers used for dispensing Class I and II liquids shall be listed for that use by a recognized testing authority. They shall be maintained in good condition. Contents of leaking containers shall be transferred to serviceable containers. Fifty-five gallon drums used for Class I and II liquids shall not be transported aboard vehicles without prior approval of SFRD.

c. All portable fuel containers will be properly marked with the, type of contents such as "GASOLINE", "KEROSENE", or "STOVE OIL #10" in two-inch minimum black letters on a #14 yellow background.

(1) Dispensing equipment shall be checked regularly for leaks at pipe connections, stuffing boxes, and at meters. When leaks are found, an authorized repairman shall repair them, and the equipment shall be kept out of service until the repairs have been made.

(2) All dispensing of Class I and II liquids from tank trucks or from underground tanks shall be done by an approved pumping or water displacement system. This rule applies to containers of over 55 gallons capacity. Gasoline drums, when used as dispensers, shall be equipped with drum (barrel) pumps of approved type.

(3) Faucets on drums shall not be used for gravity feed dispensing of Class I liquids.

(4) Faucets used on drums for dispensing Class II liquids shall be of the approved spring-type that will flow only while held open manually. Such drums shall be equipped with Underwriters Laboratory approved flame arrestor bung vents. Blocking faucets open is prohibited. Non-combustible drip pans shall be placed under faucets and cleaned regularly.

(5) Nozzles used in connection with gasoline dispensing apparatus shall be of Underwriters Laboratory approved type and manually controlled with an automatic closing valve.

(6) Operators dispensing liquids shall not leave nozzles or valves unattended when they are in use.

(7) No ratchets or other "hold open" devices shall be used on nozzles of gasoline dispensing apparatus.

(8) Bungs, caps, or stoppers shall not be left out of drums, barrels, tanks, or other liquid containers.

(9) Empty liquid containers shall not be stored or repaired until they have been thoroughly cleaned of hazardous vapors. The fuel tanks of small gasoline engines shall be similarly cleaned before indoor storage.

3. Bulk Fuel Storage

a. Limitations on floor areas and clearance of different types of stored materials are included in references (e), (g) and (h).

b. Flammable and combustible liquids should be stored in special areas of fire-resistive buildings equipped with sprinkler systems and firewalls, as

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required by published standards. When liquids are stored in flammable storehouse (bulk) buildings, the following precautions shall be taken:

- (1) Handle containers carefully to avoid breakage.
- (2) Remove and dispose of leaky containers.
- (3) Maintain accessibility for firefighting purposes.
- (4) Ensure proper ventilation for materials that give off flammable vapors.
- (5) Avoid any location where spilled liquids may come in contact with a spark or flame.
- (6) Clean up of any spills or leaks of hazardous materials shall be in accordance with federal, state, and local directives.
- (7) Use only spark-proof forklifts.
- (8) Do not store liquids near combustible material.
- (9) Post "NO SMOKING" signs.

c. All liquids, including intrastate shipments, shall be in containers approved for shipment of such materials, which are tagged or labeled in accordance with regulations of the Interstate Commerce Commission.

d. Day-to-day stocks of liquids shall be kept in places approved by the Fire Chief for such storage. Amounts of stored materials shall be procured only as needed and kept in approved, labeled and closed containers. Any surplus shall be returned to the storage area prior to the close of the workday. Storage places of flammable or explosives shall be plainly marked to indicate such storage.

e. Class I or Class II liquids, as defined in reference (b), shall not be drawn from or dispensed into tanks or containers within a building, except within liquid storage and dispensing rooms. Drums shall be in an upright position using approved type barrel pumps in approved locations, i.e., flammable liquid storage and dispensing room. Containers other than approved safety cans from which Class III liquids are dispensed shall be equipped with an approved quick closing valve.

f. Gravity discharge within a building of Class I or Class II liquids from tanks, drums, or containers other than safety cans is specifically prohibited.

g. Used liquids shall be collected in steel drums, cans, or other designated receptacles and disposed of appropriately in accordance with current directives.

h. All duplicator fluid containers must be marked: "FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR OPEN FLAME. DO NOT USE INTERNALLY", and an additional label marked "POISON".

i. Lockers, buildings, and areas used for storage of flammables will be

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posted with letter signs on a #14 yellow background reading "FLAMMABLES" in four-inch minimum letters and "NO SMOKING WITHIN 50 FEET" in two-inch minimum letters. This is to include paint storage. Lockers or buildings used for storage of flammables will not be painted red, nor will it be located within 50 feet of any other building or structure.

j. Gasoline, oil, or any other hazardous material shall not be discharged into or permitted to accumulate in storm drains, sewers, or upon any waters aboard or adjacent to the air station or Laurel Bay housing.

4. Operation of Filling Stations. The following rules shall be strictly enforced, copies of these rules shall be conspicuously posted at each gasoline dispensing station.

a. Smoking, open flame, torches, sparks, exposed coil heaters, or other sources of ignition shall not be permitted within 50 feet of gasoline dispensing pumps.

b. No gasoline shall be dispensed to a vehicle while the engine is running.

c. No gasoline shall be dispensed to a vehicle unless it is equipped with proper cap for the gasoline tank.

d. All personnel will dismount from their vehicle when fueling at military fueling points.

e. In the event gasoline is spilled near a vehicle, the engine shall not be started within 50 feet of the spilled gasoline or until the spill has been thoroughly washed down and dissipated.

f. During fueling operations, the gasoline hose nozzle shall be kept in direct metallic contact with the tank or container to prevent formation of static electricity.

g. Manually operated nozzles with shut-off features may be used on tanks of vehicles driven by internal combustion engines, provided:

(1) the nozzles used are approved and listed by American Insurance Association without limitations.

(2) the automatic dispensing nozzles are used only when the engine of vehicles being filled are shut off.

(3) Automatic-closing type nozzle with latch-open device is permitted only when all dispensing of Class I liquids is to be done by the service attendant.

h. Class I or II liquids will not be dispensed or transported in other than approved containers. Transportation of Class I or II liquids in "Jerry Cans", not attached to a vehicle, will be allowed but will not exceed 20 gallons. The transporting vehicle must be equipped with a portable fire extinguisher rated at a minimum 20:BC and comply with all other requirements for fuel transportation vehicles.

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i. Small amounts of gasoline for emergency use may be dispensed at the discretion of the filling station operator but only in approved type safety cans.

j. Personnel engaged in dispensing gasoline must be familiar with:

(1) Telephone number of the Fire Department.

(2) Proper operation of firefighting equipment provided.

(3) The above regulations.

k. Ignition switches of vehicles being serviced shall be turned to the "OFF" position prior to fueling.

5. Fuel Carrying Vehicles and Refuelers

a. "NO SMOKING" signs shall be posted inside the cabs of all fuel tank trucks.

b. Fuel carrying vehicles, whether empty or full, shall not be parked inside of or within 50 feet of any structure. Every effort shall be made to park trucks 50 feet from one another or from other vehicles.

c. Fuel tank trucks shall be attended by qualified and authorized personnel at all times during loading and unloading operations.

d. Fuel tank trucks shall be properly grounded during all loading and unloading operations. Where applicable, refueling shall be conducted at fuel dispensing points only.

e. Wedges, locking devices, etc., which restrict instant shutoff in fuel lines during loading and unloading operations are prohibited.

f. Fuel trucks having leaky or otherwise defective pumping equipment or other fuel leaks shall not be used and shall be dead lined. Commercial vehicles are included in this category.

g. Tank trucks, trailers, or semi-trailer vehicles used for transporting Class I or II liquids will be posted with red lettered signs on white background reading "FLAMMABLE" in three-inch minimum letters and "NO SMOKING WITHIN 50 FEET" in three-inch minimum letters. When not in use, they shall have a clear distance of 50 feet between vehicles and/or buildings.

h. All tank trucks, trailer, or semi-trailer vehicles used for transportation of Class I or II liquids will be equipped with two fire extinguishers rated at a minimum 40:BC. All tank trucks manufactured after 1 January 1980 shall be equipped with a fire extinguisher rated at minimum 2:A-20:BC.

i. All tank trucks, trailer or semi-trailer vehicles used for the transportation of Class I or II Flammable liquids shall restrict their travel to and from fuel dumps and/or to dispensing operations. Traveling through or parking in the "main camp" area is prohibited, except in cases of emergency.

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j. Refuelers operating under field conditions shall be lined and bermed to contain accidental releases.

k. Top loading, or otherwise referred to as splash filling, is prohibited unless a proper bonding nozzle assembly is used which extends to and bonds with the bottom of tank being refueled and all parts of fill line bonded.

6. Compressed Gases and Liquid Petroleum Gases

a. The storing and handling of liquefied petroleum (LP) gases shall conform to standards set forth in references (e) and (g).

b. Compressed gas cylinders showing evidence of excessive rust, corrosion, dents or other surface defects shall be considered hazardous and shall be disposed of at the Hazardous Waste Facility.

c. Cylinders of compressed gases, whether in use or in storage, shall be secured in place to prevent them from overturning.

d. Compressed gas cylinders shall be stored and handled in accordance with reference (b). Cylinders shall comply with color codes and labels as specified by MIL-STB-101B.

e. Noncompatible or reactive gases stored within buildings shall be separated by gas-tight partitions. When stored in the open, cylinders of such gases shall be separated by well ventilated and clear space of at least 20 feet and protected from the direct rays of the sun.

7. Painting and Spraying Applications

a. No mixing of flammable compounds shall take place in any building or area other than those specifically approved for such operations as stated in reference (b).

b. Unopened or previously opened containers of paint or other flammable compounds used in painting or preserving shall be stored in approved paint lockers.

c. Spray painting, except for interior painting of buildings, shall not be conducted within buildings unless standard spray booths and exhaust systems are provided. Spray booths shall be designed, installed, and maintained in accordance with Standard 33 of reference (b) and general requirements of reference (e).

8. Radioactive Materials

a. When radioactive material (including weapons) are transported, stored, handled, or used aboard the air station or its areas, the Fire Department will be immediately notified.

b. The department controlling or using the material shall make the above notification and shall include the following information:

- (1) The general type of radioactive material and possible emission

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hazard, if any.

(2) The specific location where the radioactive material will be used or stored.

(3) Specific information on the physical properties and characteristics of the radioactive material, which could aid in fighting a fire in which it may be associated.

c. It is essential that the Fire Department obtain the above information for the protection of firefighters and other personnel in the event of fire or similar emergency involving radioactive material.

d. The Fire Department is authorized to make appropriate pre-fire planning surveys to evaluate the hazards involved and prepare the best possible fire protection principles or operation.

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Chapter 8

Ammunition Magazine and Ammunition

1. General

a. The fire department will be notified before new ammunition dumps and magazines are established and when they are abandoned.

b. A chart showing the layout of the area and type of ammunition stored in each structure will be posted in the magazine area office. Particular hazards associated with fire or with the ammunition stored therein, (i.e., explosives, intense heat, poisonous gases, etc.) should be noted in addition to firefighting equipment best suited to combat the conflagration.

c. Explosives, including ammunition and pyrotechnics, will be kept in magazines except when being transported or being held in readiness for immediate use. When the quantity of ammunition on hand exceeds the magazine storage capacity, necessitating temporary outdoor storage, the Ammunition Officer (IOC, Magazine Area) will notify the MCAS Structural Fire-Rescue Division Fire Department.

d. Individual magazines will have combustible vegetation cleared for a minimum distance of 50 feet in all directions.

e. Vehicles loaded with Class V(W) materials shall not be allowed to enter troop inhabited areas, to park in public lots, or to stand overnight, except in authorized holding areas.

f. Field Ammunition Supply Points (ASPs) of Class V(W) Material SHALL meet all requirements in accordance with references (e) and (f).

2. Storage. Ammunition will not be used in any building aboard the air station and its areas except as follows:

a. Ammunition magazines and storehouses designated as such and approved by Bureau of Weapons.

b. Unit commanders are authorized to store small amounts of small arms ammunition for arming guards, chasers, sentries, etc. Such ammunition, when stored, will be kept in a sealed metal container segregated from other stores and in a locked or controlled access storehouse or locker. The container will be marked to identify the contents as ammunition.

c. Persons authorized to store small ammunition will submit a written report to the MCAS Structural Fire-Rescue Division Fire Chief giving the building number, quantity, and location within the building of such ammunition.