

DEPARTMENT OF THE NAVY
NAVAL AIR STATION, WHIDBEY ISLAND
OAK HARBOR, WASHINGTON 98278-5000

NASWHIDBEYINST 11320.1E
N36:Nn
22 Sep 1998

NASWHIDBEY INSTRUCTION 11320.1E

Subj: STATION FIRE REGULATIONS

Ref: (a) NAVMATINST 11320.14

1. Purpose. To establish policy and procedures for fire prevention on board Naval Air Station (NAS), Whidbey Island.

2. Cancellation. NASWHIDBEYINST 11320.1D

3. Scope. These regulations provide policy, guidance, and basic fire protection responsibilities and procedures for all activities within the confines and jurisdiction of NAS Whidbey Island.

4. Policy. Although prime responsibility for fire protection is vested by higher authority in the Commanding Officer, NAS Whidbey Island and commanding officers/officers in charge of tenant activities, daily responsibility for primary fire protection rests with all NAS supervisors, employees, and housing residents. Fire prevention, in particular, is an extremely individualized responsibility.

5. Recommendations. Recommendations concerning this instruction are encouraged and invited. Recommendations should be submitted to the Operations Department, Fire Protection Division, NAS N36.

6. Directive Responsibility. The Fire Prevention Division, NAS N36P is responsible for keeping this instruction current. Additional copies may be obtained from the Fire Prevention Division, building 121 extension 7-6108.

/s/
L. J. MUNNS

Distribution:

NASWHIDBEYINST 5215.2EE
Lists A(less 1,2,13), B(less 3,4,6,7),
C, D, E and G(less 2), Case I

Copy to:
NAS N36P(250c)

(R

(D

(R

(R

TABLE OF CONTENTS

CHAPTER		PAGE
1	INTRODUCTION	
	1. Purpose . . . . .	.1-1
	2. Fire Forces . . . . .	.1-1
	3. Authority and Responsibility . . . . .	.1-1
	4. General Provisions . . . . .	.1-1
2	REPORTING FIRE AND EMERGENCIES	
	1. Fire Incidents . . . . .	.2-1
	2. Instructions in Case of Fire . . . . .	.2-1
	3. False Report of Emergency . . . . .	.2-1
	4. Unlawful Interference with Fire Alarm Apparatus . . . . .	.2-2
3	TASKS PROVIDED BY COMMANDS AND DEPARTMENTS	
	1. Tasks . . . . .	.3-1
4	COMMAND AND COMMUNICATIONS AT THE FIRE SCENE	
	1. Command at the Fire Scene . . . . .	.4-1
	2. Communications at the Fire Scene . . . . .	.4-1
5	SECURITY CONSIDERATIONS	
	1. Fire Prevention Division Personnel . . . . .	.5-1
	2. Sentries, Patrols, Guards, and Fire Watches . . . . .	.5-1
	3. Fire Reporting . . . . .	.5-1
	4. Familiarization . . . . .	.5-1
6	SUPPORTING PLANS AND FIRE BILLS	
	1. Building Fire and Evacuation Bill . . . . .	.6-1
	2. Family Quarters Fire Bill . . . . .	.6-1
	3. Preparation of Special Fire Bills . . . . .	.6-1
7	FIRE DRILLS AND EVACUATION PLANS	
	1. Fire Drills . . . . .	.7-1
	2. Evacuation Plans . . . . .	.7-1
8	VEHICULAR AND FIRE APPARATUS TRAFFIC	
	1. Resident Response to Emergency Vehicle Signals . . . . .	.8-1
9	INSPECTION SERVICES	
	1. Buildings . . . . .	.9-1
	2. Outside Activity Inspections . . . . .	.9-1
	3. Fire Prevention Inspections . . . . .	.9-1
10	FIRE PROTECTION EQUIPMENT	
	1. Portable First Aid Fire-Fighting Appliances . . . . .	.10-1
	2. Sprinkler Systems . . . . .	.10-1

CHAPTER		PAGE
11	GENERAL FIRE PREVENTION REGULATIONS	
	1. Inspection . . . . .	.11-1
	2. Housekeeping . . . . .	.11-1
	3. Trash and Rubbish. . . . .	.11-2
	4. Fire Doors . . . . .	.11-2
	5. Storage of Materials . . . . .	.11-2
	6. Personnel Service Rooms. . . . .	.11-3
	7. Attics, Lofts, and Concealed Spaces. . . . .	.11-3
	8. Exhaust Systems. . . . .	.11-3
	9. Securing Building Doors. . . . .	.11-3
	10. Exits. . . . .	.11-3
	11. Storage and Parking of Vehicles. . . . .	.11-4
	12. Spacing of Buildings, Structures, and Vehicle Vans. . . . .	.11-4
	13. Materials Handling Equipment . . . . .	.11-4
	14. Use of Buildings . . . . .	.11-4
	15. Decorations. . . . .	.11-5
	16. Spaces Within Sprinklered Buildings. . . . .	.11-6
	17. Overhead Storage . . . . .	.11-6
	18. Brush and Grass. . . . .	.11-6
	19. Access Aisles and Fire Lanes . . . . .	.11-6
	20. Sweeping Compounds . . . . .	.11-6
	21. Lighting and Heat-Producing Equipment. . . . .	.11-6
	22. Portable Heaters . . . . .	.11-7
	23. Operation of Internal Combustion Engines . . . . .	.11-8
	24. Fumigation . . . . .	.11-8
12	SPECIAL FIRE PREVENTION MEASURES	
	1. Means of Egress and Exits. . . . .	.12-1
	2. Interior Finish and Insulation . . . . .	.12-2
	3. Electrical . . . . .	.12-2
	4. Stoves, Ranges, and Heating Devices. . . . .	.12-3
	5. Fireworks, Pyrotechnics, and Explosives. . . . .	.12-4
	6. Spray Painting . . . . .	.12-4
	7. Paint Lockers. . . . .	.12-5
	8. Outdoor Facilities and Operations. . . . .	.12-5
	9. Application of Tar, Asphalt, and Similar Materials . . . . .	.12-6
	10. Battery Charging . . . . .	.12-6
	11. Welding and Cutting. . . . .	.12-7
	12. Flammable Liquids. . . . .	.12-9
	13. Day-to-Day Use of Flammable Liquids. . . . .	.12-9
	14. Dispensing Flammable Liquids . . . . .	.12-10
	15. Dispensing Equipment . . . . .	.12-10
	16. Hazardous Chemicals and Gases. . . . .	.12-11
	17. Compressed Gas Cylinders . . . . .	.12-11
	18. Cleaning Operations. . . . .	.12-12
	19. Liquefied Petroleum Gas (LPG). . . . .	.12-12
	20. Liquid Oxygen (LOX). . . . .	.12-12

CHAPTER		PAGE
	21. Shipping and Transferring Hazardous Materials . . . . .	.12-13
	22. Fuel Operations. . . . .	.12-13
	23. Radioactive Materials. . . . .	.12-14
	24. Warehouses . . . . .	.12-15
	25. Hangars. . . . .	.12-16
	26. Aircraft Refueling and Defueling Operations. . . . .	.12-17
13	SMOKING REGULATIONS	
	1. Prohibited Areas . . . . .	.13-1
	2. Disposal of Smoking Materials. . . . .	.13-1
	3. Matches. . . . .	.13-2
	4. "NO SMOKING" Signs . . . . .	.13-2
	5. Designated Smoking Areas . . . . .	.13-2
14	DWELLINGS - FAMILY HOUSING	
	1. Before Retiring at Night . . . . .	.14-1
	2. Hazards. . . . .	.14-1
	3. Annual Fire Prevention Inspections . . . . .	.14-2
	4. Fire Evacuation Drills . . . . .	.14-2
	5. Smoke Detectors. . . . .	.14-2
15	SECURING INSPECTION OF CLUBS AND RECREATIONAL FACILITIES	
	1. Purpose. . . . .	.15-1
	2. Discussion . . . . .	.15-1
	3. Action . . . . .	.15-1
	4. Occupant Load Limit. . . . .	.15-2
16	PREPARATION OF SPECIAL FIRE BILLS	
	1. Purpose. . . . .	.16-1
	2. Objective. . . . .	.16-1
	3. Procedure. . . . .	.16-1
	4. General. . . . .	.16-1

**CHAPTER 1
INTRODUCTION**

1. Purpose. These regulations provide policy, guidance, and basic requirements for fire protection responsibilities and procedures that concern all commands, departments, personnel, buildings, and areas within the confines and jurisdiction of NAS Whidbey Island.

2. Fire Forces. Organized fire protection forces consist of:

a. Fire Protection Division, NAS N36, under the administrative jurisdiction of the Operations Department.

b. Fire protection forces at the following strategic locations:

(1) Structural Fire Station - Seaplane Base, building 16. (R)

(2) Crash/Rescue-Structural Fire Station - Ault Field, building 2526. (R)

(3) Crash Fire Station - Outlying Field (OLF) Coupeville, building 1. (R)

3. Authority and Responsibility. Fire protection is a daily responsibility of all commanding officers/officers in charge, per reference (a). Fire Protection Division, Operations Department, is responsible for the following:

a. Exercise administration and coordination control over all fire protection matters.

b. Provide necessary equipment and trained personnel for the fire division of this shore installation.

c. Ensure that the assigned fire chief or designated representative, as technical supervisor, has authority to:

(1) Directly supervise the internal administration and operations of the Fire Prevention Division.

(2) Develop and carry out a continuing comprehensive and exacting fire prevention program for the overall installation.

(3) Inspect classified areas to develop pre-fire plans.

(4) Assure operational control of all fire fighting operations.

(5) Request assistance and deploy Navy fire forces in conjunction with established mutual aid agreements.

4. General Provisions

a. Naval Facilities Engineering Command (NAVFACENGCOM), Western Division; National Fire Protection Association (NFPA); and United States Navy directives on fire protection regulations shall be used as guides for the Fire Protection Division's fire prevention programs.

NASWHIDBEYINST 11320.1E
22 Sep 1998

b. Recommendations presented by the Fire Prevention Division to activities/units aboard the naval air station shall also fall under the provisions of NAVFAC, NFPA, and U.S. Navy directives.

CHAPTER 2
REPORTING FIRE AND EMERGENCIES

1. Fire Incidents. Always call the Fire Protection Division when an incident involves or potentially involves fire. The Fire Protection Division will be called for the following reasons:

- a. Fire of any nature.
- b. Fuel spills, gas leaks, etc.
- c. Accidents requiring use of oxygen.
- d. Serious accidents of any nature.
- e. Rescue work requiring use of ladders, power forcible entry tools, lines, or other Fire Department rescue equipment.
- f. Where a potential fire hazard is present.
- g. Large capacity pumping (extreme emergency only).
- h. Where breathing apparatus is required.
- i. Hazardous substance releases or a Hazardous Materials emergency. (A)

2. Instructions in Case of Fire. Any person who discovers, smells, or sees smoke, and believes there is a fire, shall immediately:

a. Sound alarm locally. Verbally pass the word and actuate any available evacuation alarm system. Notify anyone in immediate danger of entrapment.

b. Notify the Fire Protection Division. Fire alarms may be transmitted to the Fire Protection Division by the following methods:

(1) Outside fire alarm boxes. Open door and pull handle down to full length of travel and release. Remain at the box to direct the arriving Fire Protection Division apparatus. (R)

(2) Interior alarm boxes. Activate according to instructions thereon. Then proceed to outside street and direct Fire Protection Division personnel to the scene.

(3) Telephone. Dial 7-3333 on the naval air station, 911 from housing areas. Give your name, location, and the telephone number from which you are calling. Do not hang up until the Fire Division communications specialist acknowledges all pertinent information. Proceed to outside street and direct the arriving Fire Protection Division apparatus to the fire scene.

c. If possible, secure windows, doors, skylights, electrical power, and natural gas/liquefied petroleum gas (LPG) supply to the building involved and in adjacent buildings.

3. False Report of Emergency. PENAL CODE: Any individual who reports, or causes any report to be made, to any city, county,

city and county, or state department, district, agency, division, commission, or board, that an "emergency" exists, knowing that such report is false, is guilty of a misdemeanor and, upon conviction thereof, shall be punished by imprisonment in the county jail, not exceeding one year, or by a fine, not exceeding one thousand dollars (\$1,000), or by both such fine and imprisonment.

4. Unlawful Interference with Fire Alarm Apparatus. PENAL CODE: Any person who willfully and maliciously tampers with, molests, injures, or breaks any public fire alarm apparatus, wire, or signal, or willfully and maliciously sends, gives, transmits, or sounds any false alarm of fire, by means of any public fire alarm system or signal or by any other means or methods, is guilty of a misdemeanor and upon conviction thereof, shall be punished by imprisonment in the county jail, not exceeding one year, or by a fine, not exceeding one thousand dollars (\$1,000), or by both such fine and imprisonment. Added, Stats. 1968, Ch. 273.

CHAPTER 3
TASKS PROVIDED BY COMMANDS AND DEPARTMENTS

1. Tasks. To provide maximum capability for fire-fighting operations, units listed below shall maintain and make available the following supplementary emergency capabilities:

a. Naval Hospital, Oak Harbor. Provide an ambulance at the scene of all fire emergencies that occur on this installation.

b. Base Operating Support Contractor. Provide the following services: (R)

(1) Activate booster pumps, open water main valves to additional water sources.

(2) Secure and isolate electricity, flammable liquids, gas and/or steam lines to buildings or areas involved in fire, as requested by the Fire Protection Division.

(3) Provide vehicles and drivers to transport personnel and equipment.

(4) Specialized equipment, such as wreckers, bulldozers, cranes, water tankers, materials handling equipment, etc., and operators, as required by the Fire Protection Division.

(5) Gasoline tank truck to service fire apparatus as needed for extensive, continuing operations.

c. Security. Provide personnel to:

(1) Control vehicular traffic into, from, and about the fire scene.

(2) Keep spectators a safe distance from the fire scene.

(3) Safeguard property removed from buildings; prevent pilferage.

(4) Establish a watch at the fire site to prevent unauthorized access, pending completion of investigation.

d. Supply. Make available reserve supplies of fire extinguishing agents and fire-fighting equipment for ready use during major fire emergencies.

e. All Personnel. If fire occurs in your area:

(1) Immediately send alarm and notify the Fire Protection Division.

(2) Carry out duties assigned in building fire bill and evacuation plan.

(3) Time permitting, close windows and doors to confine fire and reduce air intake. Do not endanger yourself or others in this effort.

(4) If not assigned fire-fighting duties, evacuate the area in an orderly manner and remain clear of fire-fighting operations.

R) (5) Congregate a minimum of 100 feet from the building to ensure that everyone is out of the fire area.

CHAPTER 4
COMMAND AND COMMUNICATIONS AT THE FIRE SCENE

1. Command at the Fire Scene

a. The Command Duty Officer (CDO) of the activity concerned will assume military control at the fire scene.

b. The Fire Chief or senior fire officer present will assume command of all fire-fighting operations upon arrival at the fire scene. He/she will establish and maintain a command post along with the CDO, for all fire-fighting operations. (R

c. All orders pursuant to the movement of forces at the scene of the conflagration will be issued via the command post.

2. Communications at the Fire Scene

a. In the event of a major conflagration, the Fire Chief or senior fire officer present will establish a command post consisting of a Fire Protection Division vehicle equipped with two-way transceiver radios with both Whidbey (140.100 MHz), and Tactical frequencies (142.700).

b. If a major conflagration threatens the inhabited area within the installation, the Fire Chief will advise the CDO, who in turn will notify the Commanding Officer, who may direct a general alert. If a general alert is sounded, selected disaster control teams shall assemble and the disaster control center will be activated per NASWHIDBEYINST 3440.1F.

CHAPTER 5
SECURITY CONSIDERATIONS

1. Fire Protection Division Personnel. In a fire situation, life safety of personnel is paramount and security considerations become secondary. Persons designated fire-fighting responsibilities within this fire bill shall be granted immediate access to classified spaces when fire occurs. If an element of doubt exists regarding the seriousness of the emergency and/or threat to life safety, full access shall be granted to all fire-fighting and rescue personnel.

2. Sentries, Patrols, Guards, and Fire Watches. The following instruction shall be given to all sentries, patrols, security guards, and fire watches prior to their assuming duty assignments:

a. Upon discovering a fire, to immediately sound the alarm, call the Fire Protection Division, and stand by to direct the fire-fighting force to the scene of the fire. Fire alarm boxes should be used where available.

b. How to secure buildings for the night, what portions are locked, and what parts will normally be unlocked.

3. Fire Reporting. A fire plan for all military sentry posts, patrols, and security guard patrols and posts shall be available in the appropriate headquarters. Plans shall contain:

a. Locations of all fire alarm boxes in the vicinity of the posts and those included in or adjacent to any given patrol route.

b. Fire reporting telephone number. Phone number 7-3333 is the standard telephone fire reporting number when compatible with the installed telephone system. The fire reporting number should be prominently displayed at each telephone instrument. The use of a sticker fastened directly to the instrument is most desirable.

4. Familiarization. Sentries, patrols, and security guards shall be thoroughly familiar with:

a. Procedure for reporting a fire by fire alarm box, telephone, radio, and other fire reporting media.

b. All buildings adjacent to sentry posts or on assigned patrol routes and the proper means of identifying them; i.e., the building numbers, names, and occupants.

c. Operating principles of first-aid fire-fighting appliances and the proper equipment to use on various types of fires.

CHAPTER 6
SUPPORTING PLANS AND FIRE BILLS

1. Building Fire and Evacuation Bill. Will be developed and posted for all major buildings occupied by personnel. This bill will establish procedures for emergency evacuation, notifying Fire Protection Division, extinguishing incipient fires, security of classified materials, and periodic training of occupants in the use of first-aid fire fighting appliances.

2. Family Quarters Fire Bill. Housing residents should develop their own quarters fire bill, at least verbally, and:

a. Establish at least two exits in case of emergency, such as fire or natural disaster.

b. Know the fire telephone number: 911

(D

c. Instruct children in the family not to hide in closets, bathtubs, under beds, etc., in case of fire. See Chapter 14.

3. Preparation of Special Fire Bills. See Chapter 16.

CHAPTER 7
FIRE DRILLS AND EVACUATION PLANS

1. Fire Drills

a. The Fire Protection Division will hold fire drills in schools and day care centers at least monthly and in industrial areas, aircraft hangers, and all other buildings at least quarterly. (R)

b. The Chief Fire Inspector shall be present at fire drills; otherwise, his assigned representative who is considered competent and qualified to exercise leadership should be present. (R)

c. Fire drills at schools will be held monthly during the school term only.

d. Fire drills in hospitals will be for employees only, without alarming patients, guests, or customers.

e. Trial-run fire drills involving response of motorized fire apparatus, without prior warning to personnel and activities involved, are prohibited.

f. In buildings with limited occupancy, drills shall be held as often as the command considers necessary, based on the recommendations of the Fire Chief or the Chief Fire Prevention Officer.

g. The hours at which drills are held should vary. During drills, personnel should perform their assigned duties as outlined in the activity's fire evacuation plan.

2. Evacuation Plans. In addition to the building fire bill, each location will have its own fire evacuation plan. Evacuation plans and supplemental instructions will be conspicuously posted and regularly practiced to ensure that all personnel are familiar with the plan and fire-hazardous conditions related to their particular building.

CHAPTER 8
VEHICULAR AND FIRE APPARATUS TRAFFIC

1. Resident Response to Emergency Vehicle Signals. Individuals observing a flashing red light or hearing sirens or other emergency signals, shall:

a. Pull over to the right, clear of an intersection, and stop so as to assure unrestricted travel for the emergency apparatus.

b. Immediately move automotive vehicles to allow free access for responding fire apparatus.

**CHAPTER 9
INSPECTION SERVICES**

1. Buildings. Regularly scheduled fire inspections of buildings, structures, and areas will be conducted by Fire Prevention Division personnel for the purpose of detecting and eliminating fire/life safety hazards.

a. The Fire Prevention Division will maintain an active file of all hazardous conditions reported and the corrective action recommended. Responsible individuals of an activity reporting hazardous conditions shall ensure that positive measures are undertaken to correct the hazardous conditions. Records of corrective actions taken will also be maintained by the Fire Prevention Division.

b. The Fire Chief will meet periodically with fire prevention inspection personnel to discuss methods and techniques for detecting and eliminating fire hazards. When inspections indicate that laxity in fire prevention practices exists within a unit, the Fire Prevention Division will notify the individual responsible, through the appropriate command channel.

c. Frequency of inspections to be conducted by Fire Prevention Division:

(1) Monthly: Industrial, maintenance, transportation, and aircraft facilities, recreation, ordnance, storage, hazardous gases and liquids, hospitals, schools, day care centers, data processing, and communication facilities, commissaries, and retail stores. (D)

(2) Quarterly: Dormitories, administration, and all other buildings and areas. (R)

Inspections include examination of fire detection systems, as well as fixed and portable fire-extinguishing systems, appliances, equipment, and accessories. NFPA Standards will be used as guides to ensure that effective preventive measures and procedures are employed in maintaining fire systems and equipment. (R)

2. Outside Activity Inspections

a. The NAVFACENCOM area Fire Marshal inspects the activity's fire-fighting equipment and procedures and reviews the training of Fire Protection Division personnel to determine if the division can perform satisfactorily.

b. The Northwest Naval Facilities Command Fire Protection Engineer surveys the physical features of structures and fire protection-related systems, such as water supply facilities and installed fire extinguishing systems, to determine if the facilities provide adequate protection for both common and unusual hazards. Also, as a part of the survey, the Fire Protection Engineer reviews the completeness of the activity's overall fire protection program, including fire regulations.

3. Fire Prevention Inspections

a. The Fire Prevention Division shall conduct inspections of:

- (1) Buildings.
- (2) First-aid fire-fighting extinguishers.
- (3) Hazardous operations.
- (4) Explosives vehicles.
- (5) Ordnance areas.

b. The Fire Prevention Division will be notified prior to starting any of the following operations aboard the naval air station:

- D)
- (1) Welding, cutting, or burning.
 - (2) Hauling unusual flammable liquids, highly combustibles, hazardous materials, or explosives.
 - (3) Modification, rehabilitation, construction, or major repairs to buildings or structures.
 - (4) Repair or replacement of fixed fire protection extinguishment systems, first aid fire-fighting extinguishers, or related fire protection devices.
 - (5) Pre-construction conferences or contract awards.

CHAPTER 10
FIRE PROTECTION EQUIPMENT

1. Portable First Aid Fire-Fighting Appliances

a. The Navy's Military Handbook 1008 (Fire Protection For Facilities Engineering, Design, and Construction Manual), and the National Fire Protection Association (NFPA) 10 shall be used as guides for the installation of portable fire extinguishers and fixed extinguishing systems. (R)

b. Fire Protection Division functions pertaining to portable first aid fire-fighting appliances include:

(1) Location, inspection, and maintenance (including recharging) of all first aid fire-fighting equipment.

(2) Inspection and testing of all automatic sprinkler systems, standpipe hose systems, special extinguishing systems, and fire alarm systems. (R)

c. Persons in charge of departments, divisions, branches, and activities are responsible for the following:

(1) Contact the Fire Protection Division, NAS N36P, for instructions and recommendations before purchasing fixed or portable extinguishing systems.

(2) Any person discharging a fire extinguisher, or finding indication that a fire extinguisher has been used, shall immediately inform the Fire Protection Division.

(3) Fire-fighting equipment shall not be used or moved from its assigned location except for fire fighting, fire drills, or maintenance of the equipment.

(4) The Fire Chief and the Public Works Officer, or their representatives, and the building supervisor shall be notified immediately of any impairment of fire protection involving water systems, hydrants, fire pumps, sprinkler systems, CO2 systems, foam or dry chemical systems, and similar equipment. Restoration of equipment to service shall be given priority, and restoration shall be reported promptly to the Fire Chief and the Public Works Officer.

(5) When fire-fighting equipment is lost or stolen, the activity/department requiring the equipment--not the Fire Prevention Division--shall be responsible for replacement.

(6) Adequate access aisles with proper identification signs shall be maintained at all times, providing easy location of, and access to, fire alarm boxes, standpipe hose, fire extinguishers, fire escapes, sprinkler system valves; electric, gas, water, and steam controls; and major buildings.

2. Sprinkler Systems

a. Control Valves

R) (1) Operation in the event of fire: Sprinkler control valves shall be sealed in the open position. If sprinkler heads are fused because of fire, the valve shall not be closed until directed by the Assistant Fire Chief/Acting Assistant Fire Chief. To provide for the immediate opening of the control valve in the event of a re-flash, a firefighter should be stationed at the main valve until the fire-fighting operations are concluded.

(2) Operation by accident: When a sprinkler system is actuated, it shall not be shut off until the Fire Protection Division arrives, unless the operation is accidental. If accidental, the sprinkler control valve should be closed and the system drain valve opened to minimize water damage. Replacement of sprinkler heads and restoration of service should be effected immediately.

(3) Notification of valve operation: The Fire Prevention Division and the Public Works Officer, or his representative, shall be notified before closing sprinkler control valves for alterations or repairs. Necessary work on sprinkler systems shall be conducted on an emergency basis, to limit impairment of protection to an absolute minimum period of time. When sprinkler protection must be impaired overnight, emergency measures shall be effected to maintain maximum sprinkler protection during the period of impairment.

b. Sprinkler Piping

(1) Sprinkler piping shall not be used for any other purpose nor shall anything be hung from the piping.

(2) An 18-inch clearance shall be maintained between sprinkler heads and the top of stored materials piled under 15 feet high.

(3) A 36-inch clearance shall be maintained between sprinkler heads and stored hazardous materials, regardless of height of piles.

(4) A 36-inch clearance shall also be maintained between sprinkler heads and storage of non-hazardous materials with pile heights in excess of 15 feet. (Hazardous materials are defined as materials which, either by themselves or in combination with their packaging, are highly susceptible to ignition and will contribute to the rapid spread of fire.) Examples include flammable liquids with a flash-point below 100 degrees Fahrenheit (37.8 degrees Celsius) such as acetone, alcohol, benzol, ether, gasoline, and naphtha; flammable solids (materials subject to spontaneous ignition when exposed to air, moisture, friction, or moderate warmth); oxidizing materials such as chlorates, nitrates, and peroxides; corrosive liquids such as acids; and those materials which, because of their characteristics under fire conditions, are abnormally difficult to extinguish such as rubber tires, crude rubber, and cordage fibers.

c. Testing and Maintenance

(1) Wet and dry pipe systems shall be maintained annually by Base Operating Support Contractor (BOSC) personnel.

(2) Deluge and other special types of sprinkler systems, because of their complicated and specialized features, shall be tested and maintained annually by technically qualified persons.

(3) Tests and maintenance of sprinkler systems shall be witnessed by a fire inspector. Documented certification of these tests will be maintained in Fire Prevention Division files.

d. Riser Clearance. An 18-inch clearance shall be maintained to and around the sprinkler riser and piping.

e. Sprinkler Heads. Sprinkler system heads shall not be painted or obstructed in any way.

CHAPTER 11
GENERAL FIRE PREVENTION REGULATIONS

1. Inspection. The Fire Prevention Division shall make monthly inspections of all buildings except family housing, which shall be inspected annually. Hazardous areas will be inspected monthly. The purpose of inspections is to eliminate fire hazards in buildings and areas, and to ensure that potentially hazardous operations are carried on per station regulations and recognized fire prevention practices. The NFPA inspection manual provides guidance on common fire hazards.

2. Housekeeping. Good housekeeping is a basic factor toward maintaining an adequate fire prevention program. Disposal, limitation, or segregation of combustibles reduces the danger of fire.

a. Occupied Buildings

(1) Swabs, cleaning gear, and other materials subject to spontaneous ignition shall be kept outside of buildings or stored in tight metal containers with metal covers.

(2) Paint, brushes, drop cloths, rags, etc., must be removed from the building at the close of the workday. If materials are left on the job, they shall be placed in a metal container with metal cover, away from combustible materials.

(3) Wastepaper baskets shall be emptied and combustible rubbish removed from the building to a safe location.

(4) Heating devices not required to be kept in operation during the night shall be secured. Portable heating devices shall be attended while in use.

(5) Containers used for the recycling of material will be stored in areas approved by the Fire Prevention division, and monitored by the building occupant for proper use. (A

b. Vacant Buildings

(1) Combustible trash shall be removed. Floors shall be swept clean and furniture neatly stacked, preferably in the center of the room.

(2) Cleaning gear shall be removed from the premises. Gear lockers or closets shall be thoroughly cleaned and doors thereto left in an open position.

(3) All points of entry shall be locked.

(4) Buildings shall be posted prohibiting entry except on order of the Commanding Officer, NAS Whidbey Island, or his authorized representative.

(5) In securing unoccupied buildings, electric power to the building shall be disconnected at the main control panel and at the service line fuse. Gas main valves shall be closed when securing, capped outside the building when deactivated, and an

inspection made by Fire Prevention Division personnel prior to the final securing of the building.

3. Trash and Rubbish

a. Trash and rubbish containers will not be located in public corridors or stairways of buildings, or placed in locations where ignition of the contents and resulting hot gases or smoke will prevent safe evacuation of a building. Particular attention will be given to enforcing the foregoing regulation in bachelor officers quarters, bachelor enlisted quarters, lodging facilities, and multi storied buildings.

b. To prevent extension of a fire from trash containers to the insides of buildings, exterior trash containers should not be located under combustible buildings or adjacent to window openings. Dumpsters and other central trash disposal units shall be spaced a minimum of 15 feet from combustible buildings, metal wall buildings, unprotected openings in masonry wall buildings, or storage areas.

c. Trash and rubbish containers will be noncombustible, metal-type, with metal covers. Open-top wastebaskets shall be of metal or other noncombustible materials.

d. Combustible trash and debris will not be located near buildings, structures, or outdoor storage and will not be permitted to accumulate so as to create a fire hazard to other property.

D) e. Burning activities will be coordinated with the Fire Prevention Division and other appropriate agencies as required by Federal environmental pollution control regulations.

4. Fire Doors. Fire doors or shutters shall not be obstructed, blocked, or wedged open. Highly combustible material that may produce a flash fire shall not be stored near an opening in a firewall. Fire doors shall be closed during non-operating periods.

5. Storage of Materials

a. Metal or metal-lined containers with automatic or self-closing covers shall be used for storing cleaning rags, waste, packaging materials such as excelsior and shredded paper, and other similar combustible materials.

b. Plainly marked, self-closing metal containers shall be used for oil, paint, and chemical-soaked rags, and other hazardous materials. The metal covers shall be kept closed, never wedged or blocked open. Containers shall be emptied and contents removed from buildings as required during working hours and before securing buildings after working hours.

c. Storage of combustibles is prohibited in equipment rooms, air conditioned rooms, boiler rooms, exit corridors, on stairways, in stairway enclosures, or under stairways built in whole or in part of combustible materials, and in attics with no sprinklers.

6. Personnel Service Rooms

a. Covered metal containers with self-closing lids shall be provided in all washrooms, toilet rooms, and other areas where paper towels, napkins, or disposable cups are used.

b. Clothing lockers should be adequately ventilated, should be of metal, and should be maintained in a clean and orderly condition. Material shall not be stored on top of or underneath lockers. Work clothes kept in lockers shall be aired and cleaned regularly. Flammable liquids, chemicals, paints, paint-soaked rags, and similar materials shall not be kept in lockers with clothing or other combustible materials.

c. Combustible materials shall not be placed on radiators, heaters, steam pipes, or other heating system components.

7. Attics, Lofts, and Concealed Spaces

a. Attics, lofts, and concealed spaces shall be kept clean. Attics, lofts, and concealed spaces without sprinklers shall not be used for storage of combustible materials. Scuttle holes and other access openings communicating to attics or concealed spaces shall be fitted with doors or hatch covers equivalent in fire resistance to the ceiling construction, and normally shall be kept closed. This does not apply to grilles provided for the passage of heat into attics protected by wet pipe automatic sprinkler systems. Such openings should be equipped with self-closing trap doors held open by fusible links and having a fire resistance equal to that of the ceiling.

b. Hatches, trap doors, and communicating openings to confined spaces shall not be used for ventilation, and shall be kept closed when not in use.

8. Exhaust Systems. Exhaust systems and duct work shall be kept free of grease, paint residue, combustible dust, etc. Duct systems shall be constructed of noncombustible materials and cleaned frequently. Filters shall be the Class I type as listed by Underwriters' Laboratories (UL), and shall be kept clean.

9. Securing Building Doors

a. All doors, including fire doors, and all windows shall be closed and properly secured at the end of the workday, unless excepted in writing by the Commanding Officer or his authorized representative.

b. No doors shall be permanently secured without advance approval of the Security Officer and the Fire Chief. All such doors shall be identified by a sign, approved by the Fire Prevention Division, placed on both sides of the door. Exit doors in utilized buildings shall not be secured so as to prevent their use as exits.

10. Exits

R) a. Exits shall comply with MIL-HNDBK 1008 and shall be in accordance with the applicable requirements of the NFPA Life Safety Code (Standard No. 101).

R) b. No restrictive hardware, such as hasps, throw bolts, or crossbars, shall be installed on an exit door. Where the risk of theft makes control of unauthorized entrance necessary, exit locks listed by UL, and so identified, may be used. These locks can be operated in emergency without a key, but such operation activates an alarm bell. Also refer to MIL-HNDBK 1008.

c. Where classified operations may require greater physical security than that afforded by UL-listed exit locking mechanisms (such as electrically powered annunciators) to indicate operation of individual doors, placarding doors intended for use as emergency exits generally will provide the required physical security as well as necessary safety for personnel.

11. Storage and Parking of Vehicles

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

b. When it is considered in the best interest of the Government to store vehicles inside buildings not specifically designed for such purposes, a request will be submitted to the Commanding Officer for further action.

c. Vehicles will not be parked within 15 feet of a temporary combustible-type building or fire hydrant. Fire Prevention Division equipment (e.g., sprinkler system connections, post indicator valves, pedestal-mounted alarm boxes, etc.) should be unobstructed by vehicles.

12. Spacing of Buildings, Structures, and Vehicle Vans

a. The spacing of buildings and structures will be as outlined in MIL-HNDBK 1008.

(R)

b. A 40-foot spacing will be required between buildings and special high-value vehicle vans, regardless of construction, unless provided with a separation wall that will allow a complete burnout of one unit without damage to the adjoining unit.

13. Materials Handling Equipment

a. Electric-driven forklift trucks used on upper floors of multistory buildings and electric-powered, hand-pallet lift trucks may be left in buildings, provided they are located at least 10 feet from combustible materials and provided the electrical connecting plug from the batteries to the power is disconnected.

b. Gasoline or LPG-powered equipment shall be as listed by the UL. This equipment must be refueled out of doors, and shall be stored in detached buildings used only for this purpose, out of doors, or in areas that are separated from adjacent occupancies by adequate fire cutoffs. When in garages, LPG tank valves must be secured.

14. Use of Buildings

a. No building, structure, or area will be constructed, repaired, altered, or used without the approval of the Commanding Officer or his authorized representative.

b. When the use of a building, structure, or area is changed, the Fire Chief must be notified to assure that necessary fire protection adjustments are made in the Fire Protection Division response plans for the new occupancy.

c. Pump houses, generator buildings, and furnace rooms will not be used for any occupancy other than that for which they were designed.

d. Plans for buildings to be repaired, altered, or constructed will be checked with the Fire Prevention Division.

15. Decorations

a. Decorative materials include curtains; draperies; streamers; wall, ceiling, and floor covering for acoustical or other effects; and all cloth, paper, cotton, batting, and vegetation used for decorative effect. They do not include floor covering, ordinary window shades, or wallpaper or other material 1/40 inch or less in thickness applied directly on, and adhering tightly to, a noncombustible material base.

b. No decorative material will be used in day rooms, clubs, field houses, and similar types of buildings which, as applied, will ignite and allow the flame to spread over the surface when exposed to a match flame test.

D) c. The match flame test will consist of the application of a flame from a common paper match held in a horizontal position, 1/2 inch underneath the material to be tested, and at a constant location for a minimum of 15 seconds.

R) d. The Fire Protection Division will be notified before temporary holiday decorations or permanent, new, or replacement decorations are installed in public areas.

e. No furnishings, decorations, or other objects will be placed where they will obstruct exits, access to exits, egress from exits, or visibility of exits; or where they will obstruct access to, or visibility of, fire alarms or fire-fighting equipment.

R) f. No furnishings or decorations of an explosive or highly flammable character will be used in any building or structure.

R) g. Combustible holiday decorations will be removed within seven days after the holiday. Cut trees, pine branches, and similar foliage and vegetation will be removed as soon as the material poses a fire hazard.

h. The Fire Prevention Division will issue special fire precaution reminders prior to holidays.

16. Spaces Within Sprinklered Buildings. In buildings that are sprinklered, the construction of office spaces, rooms, and storage areas shall not block the water spray from sprinkler heads to floor material.

17. Overhead Storage. Overhead storage may be used for storing combustibles only when approved by the Fire Prevention Division.

18. Brush and Grass. Grass, weeds, and brush within 25 feet of all structures shall be kept trimmed. Use of oxidizing agents or controlled burning to eliminate grass and weeds requires approval of the Fire Prevention Division.

19. Access Aisles and Fire Lanes

a. Access Aisles

(1) Access aisles to standpipe hoses, fire extinguishers, fire escapes, sprinkler system components, and electric, gas, water, and steam control valves shall be a minimum of 36 inches in width and properly posted.

(2) Access aisles within aircraft hangars shall be a minimum of 48 inches in width along all walls and a minimum of 10 feet in width down the center of hangar bays, and marked per the following color scheme: a six inch wide yellow stripe with the words "FIRE LANE - KEEP CLEAR" stenciled in red yellow. The stenciled lettering shall be four inches high and two inches wide. (R)

b. Fire Lanes

(1) Fire lanes shall be maintained and properly posted with signs. Fire lanes shall be a minimum of 20 feet in width around major buildings and air equipment. A dead-end road more than 300 feet long shall have a turnaround at the closed end, at least 90 feet in diameter. (R)

(2) Fire lanes shall be provided for all buildings which are set back more than 150 feet from public roadways or which exceed 30 feet in height and are set back over 50 feet from a public road.

20. Sweeping Compounds. Only approved water solutions or detergents, floor sweeping compounds, and grease absorbents shall be used for cleaning floors. The use of sawdust or similar combustible materials to soak up combustible or flammable liquids spilled or dropped on the floor from machinery or processes is prohibited.

21. Lighting and Heat-Producing Equipment. Proper clearances shall be maintained between heating and lighting equipment and ordinary combustibles, per NFPA codes and standards. Lighting and heating processes and equipment utilizing flammable or combustible liquids shall be designed in accordance with NFPA codes and standards.

22. Portable Heaters. All portable heaters must be approved by the Fire Protection Division, and issued through the BOSC, with the exception of portable heaters used in housing units. No (R)

portable heaters brought from home will be authorized for use in work spaces. All portable electric heaters shall have a safety tip over switch built into their design that will shut the unit off should it be knocked over. Portable heaters fueled by gasoline or kerosene are not authorized in any Navy building, including housing units, unless specifically approved by the Fire Protection Division and for emergency use only. All portable heaters shall be kept a minimum of 36 inches away from any combustible materials when in use, and shall be turned off or unplugged when unattended. The Fire Prevention Division may prohibit the use of any portable heaters when their use would present undue danger to life or property.

23. Operation of Internal Combustion Engines

a. Internal combustion engines, either stationary, portable, or mobile, operating within grain, hay, grass, or brush-covered areas, shall be equipped with an effective means for arresting the issuance of burning carbon and sparks. Openings in arresting devices shall not exceed 1/32 of an inch.

R) b. Vehicles with catalytic converters are not allowed in dry grass areas.

24. Fumigation. The Fire Prevention Division shall be notified of fumigation operations per NFPA Standard No. 57 (standard for fumigation).

CHAPTER 12
SPECIAL FIRE PREVENTION MEASURES

1. Means of Egress and Exits. Means for egress and exits will generally conform to NFPA Standard No. 101. To reduce life safety hazards to building occupants:

(R)

a. An alternate means of escape (e.g., fixed ladders, outside stairways, or built-in enclosed stairways) will be provided from the upper floors of buildings in which an outbreak of fire might trap personnel above the ground floor.

b. Buildings housing personnel above the ground level that do not have fire-resistant stairways, or at least two ways of exit from occupied floors, will be provided with an alternate method of exit.

c. Fire exits will be kept unobstructed, adequately lighted, and clearly marked.

d. When necessary to pass through a locked room to reach a fire escape, a key to the door will be hung in a clearly marked, glass-covered, sealed box located near the door handle. This method of providing emergency exits should be used only in limited occupancy situations where a low life safety risk is involved and where a standard alternate fire exit is not practical or feasible.

e. Standard exit signs, for interior use where illuminated signs are not required, may be requisitioned through supply channels.

(R)

f. Interior and exterior doors of buildings containing combustible storage in amounts sufficient to deny use of adjacent means of egress, or that would otherwise create a life safety hazard to occupants if a fire occurs, will be the self-closing type fire doors having a sufficient fire-resistance rating to ensure safe evacuation of the building. This requirement is particularly applicable to places of assembly and educational occupancies.

g. Glazed openings in building walls within 10 feet of exterior stairway type fire escapes should be equipped with wire glass in steel frames.

(D)

h. Panic hardware (a fire exit bolt which causes a door latch to release when pressure of not more than 15 pounds is applied to the releasing devices (bars or panels) in direction of exit of travel) will be installed on exit doors in places of assembly having a capacity of more than 100 persons, as prescribed by NFPA Standard No. 101. Panic hardware shall not be equipped with locking or dogging devices, set screws, or other arrangement which can be used to prevent the release of the latch when pressure is applied to bar; i.e., free use of the door for egress.

i. Flush bolts and friction-type doorstops will not be permitted on exit doors in places of assembly and educational occupancies. Hold-back hardware designed to hold doors in an

open position will not be installed on interior doors that should normally be kept closed.

- R) j. Doors that should normally be kept closed to maintain a safe means of egress from a building (e.g., doors in stairways, enclosures, and smoke-stop barriers) will be equipped with reliable self-closing hardware and posted with signs reading "FIRE DOOR DO NOT BLOCK OPEN."

2. Interior Finish and Insulation. Interior finish will conform to NFPA Standard No. 101, Life Safety Code, except:

- a. Interior finish for exits will be Class "A" only.
- b. Classes "C" and "D" interior finish materials are not permitted.
- c. Smoke-developed classification by American Society for Testing and Materials (ASTM) will be:
 - (1) Not higher than 50 for Class "A" interior finish materials.
 - (2) Not higher than 100 for Class "B" interior finish materials.

These requirements apply to all alterations, additions, modifications, and new construction. The restrictions do not apply to wood trim and floors.

d. Wood, plywood, and low-density fiberboard are types of life safety hazards that cannot be corrected economically. Treating of combustible materials with fire-retardant paint is not a permanently acceptable solution and should be discouraged for economic reasons. Accordingly, maximum use of noncombustible materials is encouraged.

e. Thermal and acoustical insulation shall have flame-spread rating not higher than 25 and smoke-developed rating not higher than 50 by ASTM E-84 Test (NFPA Standard No. 255).

3. Electrical. Except as modified herein, all electrical facilities provided and installed must satisfy the requirements of the National Electric Code, NFPA Standard No. 70.

a. Installation, replacement, or alteration of electrical wiring, interior and exterior, will be accomplished only by qualified personnel designated by the Public Works Officer.

b. When fault is detected in electrical wiring (e.g., short circuit, overheating, insulation failure, and exposed conductors), the current will be turned off until the fault has been corrected by authorized maintenance personnel.

c. Automatic circuit breakers will not be taped, fastened, or altered to prevent automatic disconnection of electrical power as designed. Electrical fuses will not be bypassed or replaced with hazardous substitutes or with fuses having a higher amperage capacity rating.

d. Telephone wires will not be used for lighting or power circuits. Portable transformers will be de-energized when not in use. Portable electric tools shall be grounded.

e. Electrical wiring will not be looped; fastened by nails, hooks, or other non-approved methods; or placed within 12 inches of stovepipes. Flammable material will be insulated or kept at a safe distance from electrical light bulbs to avoid ignition by heat radiation. Fluorescent light fixtures having exposed ballast or transformers will not be installed in contact with combustible material unless the fixture is specifically designed for such installation.

f. Electrical wiring and fixtures installed or used in places where a dangerous concentration of explosive vapors, gases, or dusts may be present or generated will be of an approved explosion-proof, vapor-proof, or dust-proof type, as required by regulations of the National Electric Code, NFPA Standard No. 70.

g. Extension cords may be used if the cord and its connectors are suitable for the purpose. Electrical extension cords shall be protected by approved cord protectors when used in foot traffic areas. If extension cords are left plugged in as the "normal" source of supply, that should be sufficient evidence of the need for a permanently wired receptacle at that location. Cords shall be of three-wire grounded type.

h. Flexible cords shall not be used as substitutes for the fixed wiring of a structure, where run through walls, ceilings, floors, doorways, windows, or similar openings; where concealed behind walls, ceilings, or floors; or where attached to building surfaces.

i. The use of toasters, portable water heaters, percolators, and similar equipment in warehouses, storehouses, and buildings containing high value or critical material or equipment is prohibited, unless specifically approved by the Fire Prevention Division.

(R

D)

4. Stoves, Ranges, and Heating Devices

a. Exhaust hoods and ducts serving cooking stoves and ranges will be kept clean and free of grease. Grease residue will be removed regularly to prevent ignition. Removable access panels will be provided in exhaust ducts to permit cleaning of the inside of the exhaust system, where necessary, because of the length or construction of the ducts. Design of exhaust systems should be per NFPA Standard No. 96.

b. Ranges and stoves will be repaired or modified only by qualified personnel.

c. At the approach of and during cold weather, the Fire Prevention Division will publicize operational safety information for heating devices.

D)

R)

d. Recommended practices to increase the safety of personnel against the hazards of kitchen fires are:

(1) Cooking devices (i.e., broilers, deep-fat fryers, ovens, ventilating systems, etc.) must be of a laboratory approved type listed by the Underwriters' or Factory Mutual Laboratories or American Gas Association.

(2) Provide deep-fat fryers with a primary thermostat to limit the temperature to 425°F and a second backup thermostat or thermal electrical cutout to limit temperature to 450°F.

(3) Thoroughly acquaint persons using cooking equipment with operating procedures. Post operating instructions near galley units.

(4) Do not operate fryers when cooking smoke becomes heavy.

(5) Keep hoods and ducts free of grease accumulations by performing daily inspections and periodic cleaning as required.

(6) Check thermostats periodically and permit only qualified personnel to conduct the checking. Secure units with defective thermostats until repairs are completed.

e. A fixed fire protection system should be installed in the hoods over all ranges, grills, deep-fat fryers, and broilers when they are initially installed or modified.

5. Fireworks, Pyrotechnics, and Explosives

a. Except as authorized in this paragraph, the use or ignition of fireworks is prohibited aboard all areas of Ault Field and the Seaplane Base. SAFE and SANE types of fireworks are allowed to be discharged in Ault Field and Seaplane Base housing areas only, and only during the times and days specified by the NAS Fire Prevention Division. SAFE and SANE fireworks are generally characterized as those that do not explode or fly.

(R)

6. Spray Painting (using combustible/flammable paints or solvents)

(R)

a. Production-type spray painting shall not be conducted within buildings unless standard spray booths and exhaust systems are provided. Spray booths shall be designed and installed per NFPA Standard No. 33.

b. Spray painting of building interiors may be permitted subject to Fire Prevention Division approval and observance of the following precautions:

(1) Secure all electrical power. Remove fuses or trip and placard circuit breakers.

(2) Eliminate open flames. Secure open flame equipment and devices.

(3) Provide adequate natural draft ventilation. Forced draft ventilation may be used only if fans are air-operated or

(D)

have motors listed and labeled by Underwriters' Laboratories, Inc. as suitable Class I, Division I locations and with power supplied from outside the building or fire area.

(4) Bring only previously mixed paint, within the tank supplying the spray gun, into a building.

c. Spray painting shall not be done in spaces below ground level because of the difficulty of providing adequate ventilation. Tarpaulins and drop cloths used in painting operations (other than those using water-thinned paints) shall not be stored within the building. Such cloths shall be stored in metal lockers that are detached at least 15 feet from buildings and ventilated to reduce the possibility of spontaneous ignition.

7. Paint Lockers. Where approved facilities are not available inside of buildings for the storage of containers of flammable or combustible liquids as required by NFPA Standard No. 30, Flammable and Combustible Liquid Code, all paints, thinners, solvents, brushes, drop cloths, rags, etc., must be removed from the building at the close of the workday. If these materials are left in the area, they shall be placed in clearly marked metal containers or lockers at least 15 feet from buildings and away from combustible materials.

D)

8. Outdoor Facilities and Operations

a. Open Areas. Dry weeds, grass, and brush shall not be permitted around buildings, open storage areas, fuel storage areas, or fuel storage tanks. Such growth should be cut frequently and disposed of in a safe manner. Controlled burning shall be permitted only in safe locations and only under direct Fire Prevention Division supervision. Areas beneath or within 50 feet of buildings shall be regularly policed to keep them free from accumulation of debris and vegetation.

b. Storm Drains, Sewers, and Open Water Areas. No gasoline, oil, or flammable liquid shall be discharged into or permitted to accumulate in storm drains, storm or sanitary sewers. No flammable liquids shall be drained or dumped into, or permitted to accumulate in, water on or adjacent to a naval shore installation.

c. Controlled Fires. Open fires shall not be started at any location on naval premises without advance notice to, and approval by, the Fire Prevention Division. Incinerators maintained by departments for the disposal of classified matter or contaminated material shall be approved by the Fire Prevention Division. Fires, open flame devices, burning, and welding and cutting operations shall not be conducted near flammable or combustible materials unless precautionary measures have first been taken and unless a fire watch, properly instructed and equipped with fire extinguishers of the appropriate type, has been provided. Arrangements shall be approved by the Fire Prevention Division prior to implementation.

d. Outdoor Storage. Open storage shall conform to NAVFAC DM-32 and NFPA Standard No. 231 (part B).

e. Maintenance of Access. No material or unattended vehicle shall be allowed to obstruct access to fire hydrants, fire alarm boxes, or fire-fighting equipment. Materials or equipment left on ramps or loading platforms overnight shall not block access to doors or windows. Station roadways open for use shall be kept clear and accessible. If necessary to block a road, the Fire Protection Division shall be notified before the street is closed. The Fire Protection Division shall be notified again when the obstruction is removed.

f. Dumpster Units. Dumpster and other central trash disposal units shall be spaced a minimum of 15 feet from combustible buildings, metal wall buildings, unprotected openings in masonry, and fire-resistive buildings and storage areas.

g. Excavating Work. Extra care shall be taken in excavating around gas mains, oil tanks, gasoline or oil pipelines, etc. Smoking and open fires are prohibited in areas where the presence of flammable gases is suspected. In such places the air shall be tested using an approved and properly calibrated flammable gas indicator. If gas is present, ventilation shall be provided by portable blowers or other approved methods. Electrical equipment used in these areas shall meet UL requirements for hazardous locations.

9. Application of Tar, Asphalt, and Similar Materials. The following procedures will be observed for the operation of tar kettles:

a. Tar kettles involve the hazards of fuel, heating of the material, and exposure of combustibles. Therefore, minimum distance from kettle to work site or other combustibles shall be 15 feet.

b. Unit will be attended at all times during operation. If attendant must work from roof, it is recommended that the optional automatic control unit with remote control features be purchased.

c. Ideal kettle temperature is 425°F. At no time is the kettle to be operated in excess of 590°F.

d. Two 20-pound minimum (each) dry chemical powder fire extinguishers shall be mounted on the tongue of trailer to permit access in the event of fire. When reaching the work site, one extinguisher is to be placed on the windward side of the kettle and the other at the area of application.

e. A gaff hook (with extension) mounted on the trailer is recommended for securing the kettle cover in the event of fire.

f. Roofing mops, brushes, and other applicators soaked either in tar or pitch should be stored at a safe distance when not in use, and at no time left near combustible surroundings or in the vicinity of heat production devices.

10. Battery Charging

a. Only authorized personnel instructed in the hazards and precautions connected with the handling of acids and charging of batteries shall be employed in battery shops.

b. Battery shops shall be adequately ventilated at the highest point to allow removal of hydrogen gas. ("Adequately ventilated" means when hydrogen concentration at a distance greater than 6 inches above the cells is maintained below 3 percent.) Air inlet openings near and below the level of the batteries on charge should be provided to assure good air circulation. Where natural ventilation is used, a vent stack to aid in producing upward draft is desirable. (R)

c. Neither smoking nor open flames shall be allowed in battery charging rooms or shops. Warning signs shall be posted.

d. Battery vent caps shall be in place before attaching or detaching charger cables and shall be removed during actual charging. Connections between batteries shall not be disturbed while the charging switch is "ON."

e. The charging rates shall be reduced as cells approach full charge, thus lowering the rate of hydrogen liberated.

f. Where forklift truck batteries are charged within buildings, the foregoing requirements should be met. Areas where large numbers of lift truck batteries are charged within buildings should be isolated from adjacent occupancies by adequate firewalls.

g. Battery charging spaces will be used exclusively for that purpose.

11. Welding and Cutting

a. Applicable standards and precautions in NAVAIROSH Requirements for the Shore Establishment, NAVAIR A1-NAOSH-SAF-000/P-5100-1, and in NFPA Standards No. 51 and 51B shall be observed in all cutting and welding operations.

b. Welding and cutting operations should, where feasible, be conducted in locations that have been specifically established for the purpose. Other locations may be used if they have been freed of fire hazards by removal or protection of combustible materials, flammable liquids, vapors, and dusts, and if suitable precautions have been taken against the accumulation of such materials.

c. When welding or cutting is to be done in any location other than a shop specifically designated for such use, approval of the job and of precautions taken shall be obtained from the Fire Prevention Division before operations are started. As evidence of this approval, the Fire Prevention Division shall issue a signed and dated permit indicating approval of the specific job and building involved.

d. Operators of welding and cutting equipment shall be properly instructed and qualified to operate the equipment. Instruction shall include precautions against hazards related to the operations.

e. When combustible or flammable materials are exposed to welding or cutting operations, a fire watch with necessary fire extinguishers or fire hose shall be posted in the vicinity. Fire watches shall be posted on both sides of the bulkhead, wall, or ceiling being worked on when fire hazards exist on both sides. The fire watches shall remain at their stations for a reasonable amount of time (at least 30 minutes) after the job is completed to ensure that there are no live sparks or smoldering fires.

(D)

f. Welding or cutting operations shall not be performed in or on the outer surfaces of rooms, compartments, or tanks, or on/in closed drums, tanks, or other containers which contain combustible materials or which contain or have contained flammable or combustible liquids or vapors, until fire and explosion hazards have been eliminated per NAVAIR P-5100-1.

g. No cutting or welding shall be performed within 35 feet of combustible storage or combustible packaging without special safeguards and approval of the Fire Prevention Division.

h. Acetylene shall not be generated, piped (except in approved cylinder manifolds), or utilized at pressure in excess of 15 psi gauge pressure. This does not apply to acetylene in cylinders. The pressure limitation is necessary to avoid explosive decomposition.

i. All cylinders shall be handled carefully. Acetylene and oxygen cylinders in use shall be secured in the vertical position using noncombustible banding, cable, or chain.

(R)

j. Oxygen cylinders shall be kept free of oil and grease. A leak from an oxygen cylinder may cause a sufficient amount of rapid oxidation to ignite hydrocarbons, such as gasoline, oil, grease, or alcohol, and result in fire or explosion.

k. While equipment is in use, especially in confined spaces, it shall be frequently inspected for evidence of leaks in the hose, couplings, valve stems, and other points of the system. If leaks are not promptly detected an explosive or lethal mixture of gas and air may accumulate, with serious results.

l. When welding or cutting is being performed in a confined space, except in an authorized welding shop, the gas cylinders shall be left outside of the building, unless an inside location has been specifically approved by the Fire Prevention Division.

m. When welding cable or hose is in the path of traffic, it shall be protected from chafing damage by a protective, wrapped covering properly secured by lines to prevent undue strain on cables or hose.

n. When the equipment is left unattended or when work is stopped for more than 15 minutes, acetylene and oxygen valves shall be closed at the cylinders. Detailed procedures outlined in NAVAIR P-5100-1 shall be followed.

o. When an operator using electric welding equipment has occasion to leave his/her work or stop work for any appreciable time, the power supply switch to the equipment shall be opened.

The equipment shall be completely disconnected from the source of power when not in use.

- R) p. Acetylene and oxygen cylinders, except where installed in standard welding rigs, shall be stored at detached, well-ventilated locations, and shall be shielded from the sun by a noncombustible shelter or canopy. Cylinders shall be secured in the vertical position with non-combustible banding material to prevent tipping. The storage of acetylene shall be isolated from oxygen cylinders by a clear distance of at least 20 feet or by an unpierced, gas-tight noncombustible wall. Smoking shall be prohibited within 50 feet of such areas.

12. Flammable Liquids

- a. Flammable liquids shall be stored per NFPA Standard No. 30.
- b. Flammable liquids having a flash point below 100°F and aerosol containers shall be isolated and stored in separate bays.
- c. Containers shall be handled carefully to avoid breakage.
- d. Leaking or uncapped containers shall be removed.
- e. Adequate floor level ventilation shall be provided for materials that give off flammable vapors.
- f. Locations where spilled liquids may come into contact with sparks or flame shall not be used.
- g. Clean and dry sand, fuller's earth, diatomaceous earth, etc., shall be used to absorb spilled flammable liquids, oil, and grease. Sawdust shall not be used.
- D) h. Lift trucks should be of Type EE as listed by UL, or Type EE as approved by Factory Mutual.
- i. Storage areas shall be conspicuously posted with "NO SMOKING" signs.
- j. Filling, loading, unloading, or transfer of flammable liquids or flammable gases shall only be done in approved locations. Under no circumstances shall flammable liquids or gases be transferred in an inhabited or congested area.
- k. Containers, trucks, or vehicles transporting flammable liquids or gases shall be left overnight only in locations approved by the Fire Prevention Division.

13. Day-to-Day Use of Flammable Liquids

- a. Day-to-day stocks of flammable liquids shall be kept only in areas approved by the Fire Prevention Division. Amounts of stored materials shall be procured as needed. Any surplus shall be returned to the storage areas outside and well clear of any building or combustible area prior to the close of the workday. Storage areas used for flammables shall be well ventilated and plainly marked to indicate such storage. Flammable or hazardous material containers shall be labeled and color-coded per NAVAIR P-5100-1.

(R)

b. Flammable liquids stored at private residences will not exceed 10 gallons in UL-approved safety cans, to be stored away from sources of ignition in a well-ventilated area. Five gallons is the maximum for one container.

14. Dispensing Flammable Liquids

a. Use of Drums Within Buildings. Flammable liquids having flash points below 100°F shall not be drawn from or dispensed into tanks or containers within buildings except with the drum in an upright position, using manually operated barrel pumps, and only in flammable liquid dispensing rooms that comply with NFPA Standard No. 30. Containers, other than approved safety cans, from which flammable or combustible liquids having flash points above 100°F are dispensed shall be equipped with self-closing valves.

b. Bonding. All tanks, hose, and containers shall be positively bonded while flammable liquids are being transferred to prevent discharge of static electricity.

c. Pressurized Containers. Transfer of flammable or combustible liquids by compressed air or gas is prohibited.

15. Dispensing Equipment

a. Containers. Containers used for handling working supplies of flammable liquids shall be safety cans of a type listed by UL for such use and bearing the UL label, or shall be approved by Factory Mutual bearing the FM label. Containers for flammable liquids shall be maintained in good condition. Portable containers used for handling, storing, or dispensing flammable or combustible liquids shall be clearly marked to indicate their contents. Contents of leaking containers shall be transferred to serviceable containers.

b. Maintenance. Dispensing equipment shall be checked at regular intervals for leaks at pipe connections, stuffing boxes, and meters. When leaks are found, they shall be repaired by an authorized repairman, and the equipment shall be kept out of service until the repairs have been made.

c. Dispensing from Trucks and Tanks. Dispensing of flammable liquids from tank trucks or underground tanks shall be done by an approved pumping or water displacement system. Gasoline drums, when used as dispensers, shall be equipped with drum (barrel) pumps of approved type.

d. Containers To Be Kept Closed. Bungs, caps, or stoppers shall not be left out of drums, barrels, tanks, or other flammable liquid containers. This rule applies to empty as well as to full containers.

R) e. Valves. Discharge valves for dispensing flammable liquids with flash points under 100°F from drums shall be spring-loaded and manually operated. In lieu of spring-loaded valves, approved drum pumps may be used.

f. Pumps. Approved drum pumps shall be used for dispensing flammable liquids with flash points below 100oF, and the drums shall be maintained in an upright position.

g. Drums. Dispensing drums for liquids with flash points below 100oF shall be equipped with safety bungs, incorporating a flame arrestor, of the type approved by Factory Mutual. Blocking faucets open is prohibited. Metal drip pans shall be placed under faucets and cleaned regularly.

R) h. Discharge Nozzles. Nozzles may be either the manually controlled self-closing type or the automatic closing type with approved built-in hold open device. Nozzles of either type shall be UL listed. Wedges, gasoline tank caps, or other makeshift holding devices on gasoline and other flammable liquid dispensing nozzles are strictly prohibited.

D) i. Cleaning Empty Flammable Liquid Containers. Empty flammable or combustible liquid containers shall not be stored or repaired until they have been thoroughly cleansed of hazardous vapors. All containers that have held flammable liquids shall be thoroughly cleansed before they are used for less hazardous materials. The fuel tanks of gasoline engines shall be similarly cleansed before being stored within buildings.

R) j. Disposal of Used Flammable Liquids. Used flammable and combustible liquids shall be collected in accordance with approved hazardous materials disposal criteria.

16. Hazardous Chemicals and Gases. Dangerous chemicals and compressed gases shall be stored so that accidental breakage, leakage, rupture of containers, or exposure to fire, heat, or water will not result in the mixing of these materials with other substances which might produce fire, explosion, flammable gases, or toxic fumes.

17. Compressed Gas Cylinders

a. Compressed gas cylinders showing evidence of rust, corrosion, dents, or other surface defects shall be considered hazardous and shall be bled down to atmospheric pressure.

b. Compressed gas cylinders which have not had the required hydrostatically tested (every 5 years), or which have the markings or labels obscured, should be returned for test before recharge. (R)

c. The following general storage requirements for compressed gas cylinders shall be observed:

(1) Compatibility. Non-compatible or reactive gases stored within buildings shall be separated by gas-tight partitions. When stored in the open, they shall be protected from the sun by a noncombustible roof, and cylinders containing these gases shall be separated by a well-ventilated clear space of at least 20 feet.

(2) Ventilation. Areas used for cylinder storage of flammable gases shall be provided with natural draft cross-ventilation.

(3) Prevention of Accidental Tip Over. Cylinders in storage shall be secured with noncombustible material to prevent movement or falling.

(4) Acetylene Cylinder Storage. Acetylene cylinders shall be stored and used in an upright position.

(5) Color Coding. Compressed gas cylinders shall conform to NAVMIL Standard.

(R)

18. Cleaning Operations. No flammable liquid with a flash point below 100°F shall be used for cleaning. Wherever possible, nonflammable or water-soluble detergents should be used for cleaning operations.

19. Liquefied Petroleum Gas (LPG)

a. This term includes any material that is composed predominantly of the following hydrocarbons or mixtures of them: propane, normal butane, isooctane, and butylenes.

b. The storage and handling of LPG shall conform to NFPA Standard No. 58, Standard for the Storage and Handling of Liquefied Petroleum Gases. Installations in mobile homes shall comply with NFPA Standard No. 501B.

c. Smoking is strictly prohibited within 50 feet of LPG containers.

20. Liquid Oxygen (LOX)

a. The design, construction, and location of facilities for LOX storage, transfer, and vaporizing, and for LOX generating, storage, and transfer shall conform to the requirements of NAVFAC DM-24.

b. Normally, the only interior fire protection equipment required is a portable fire extinguisher. A 20-pound Halon 1211 extinguisher or equivalent is recommended in the work shop area. Two 20-pound Halon 1211 extinguishers should be provided in the transfer area.

c. The following precautions should be taken in LOX areas:

(1) No organic material, hydrocarbon, or flammable liquid shall be allowed to come in contact with LOX or oxygen vapors.

(2) Smoking shall be prohibited in shops/areas that contain oxygen equipment.

(3) Oil shall not be used around oxygen equipment where it might come in contact with oxygen liquid or vapor.

(4) Rubber hose shall not be used for transfer of LOX, because the hose becomes hard and brittle when exposed to the low temperature of LOX.

(5) Storage of maintenance supplies of grease and oil shall be kept in a detached metal locker located at least 75 feet from the LOX plant and from any oxygen storage.

R) (6) Brush and weed growth shall not be permitted within 100 feet of the LOX plant or oxygen storage. Growths shall be controlled by frequent mowing or use of a weed killer that does not have a petroleum base.

21. Shipping and Transferring Hazardous Materials

a. Hazardous materials and flammables offered for shipment in interstate or intrastate commerce shall be in containers approved for shipment of such material, and tagged or labeled per Department of Transportation (DOT) regulations and NAVAIR P-5100-1.

b. The Fire Chief or his representative shall be notified of proposed transfer of bulk gasoline, oil, explosives, LOX, and other hazardous materials. Such transfer shall be subject to appropriate Navy activity instructions and orders. Simultaneous transfer of more than one type of hazardous material shall not be made except in an emergency. All fire prevention precautions shall be supervised by the activity ordnance officer, who shall ensure that appropriate ordnance regulations are followed. A fire watch, approved by the Fire Chief or his representative, shall be posted and provided with proper fire-fighting equipment ready for use, except for special or unusual conditions.

c. Flammable liquids having flash points below 100°F, or flammable gases, except medical supplies or similar material which may require storage for security reasons, shall not be stored in sheds. While being processed for or after shipment, these materials shall be placed in a storage area approved in advance by the Fire Chief.

22. Fuel Operations

a. Personnel Qualifications. Only authorized personnel shall be permitted to operate fueling equipment. They shall have a thorough knowledge of the hazards involved and know the regulations for handling flammable and combustible liquids. Also, they must be familiar with:

(1) Location and operation of the nearest fire alarm box and telephone.

(2) The fire emergency telephone number: extension 7-3333.

(3) Location and operation of available first aid fire-fighting equipment.

(4) Spark-producing equipment. Operators of vehicles, aircraft, or other equipment shall turn off the engine, vehicle lights, and short wave radio transmitters before taking on fuel.

(5) Fire safety during fueling of vehicles. During fueling of vehicles, the operators shall not smoke or light a match or lighter, and there shall be no open flame within 50 feet. Campers, motor homes, and other recreational vehicles

shall have pilot lights secured before entering refueling areas; and passengers shall not occupy the living area while the vehicle is being refueled.

b. Bonding

(1) The dispensing nozzle must be in contact with the filler pipe and attended at all times when in use. Bonding connections shall be made to tank trucks and tank cars before dome covers are removed and shall not be disconnected until covers have been replaced. Internal vapor pressure shall be relieved before the dome covers are opened. Bonding and grounding shall conform to NFPA Standard No. 77.

(2) To prevent static discharges, tanks, hoses, and containers shall be kept in constant electrical bond while flammable liquids are being transferred.

(3) After unreeling the gasoline hose from a tank truck and before using it, the hose nozzle must be brought in contact with some metal part of the vehicle remote from the fuel tanks to make sure no differential in static charge exists.

(4) Flammable liquids having a flash point below 100oF shall not be transferred into containers unless the dispensing nozzle and containers are in constant bond.

c. Leaks and Spills

(1) Gasoline tank cars and tank trucks shall be attended by qualified and authorized personnel during loading and unloading operations.

(2) Gasoline tank trucks shall neither enter nor be stored in any building not designated for the purpose, unless approved by the Fire Chief. Tank trucks shall not be parked in open areas within 100 feet of buildings, flammable storage areas, and aircraft parking aprons. When tank trucks are being stored, they should be in detached groups so that the aggregate cargo capacity will not exceed 25,000 gallons in a single group. Groups should be detached at least 50 feet from each other. The slope of the pavement or ground should be such that a serious spill will not flow towards a building, a structure, yard storage area, or into drains.

23. Radioactive Materials

a. The Fire Chief or senior fire officer on duty shall be notified immediately of the transportation, storage, handling, or use of radioactive materials, including weapons, within the confines of the activity.

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

(1) The general type of radioactive material and the possible emission 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 be of aid in fighting a fire in which the material may be involved.

IT IS MANDATORY THAT THE FIRE PROTECTION DIVISION OBTAIN THE ABOVE INFORMATION FOR THE PROTECTION OF FIREFIGHTERS AND OTHER PERSONNEL IN THE EVENT OF FIRE OR SIMILAR EMERGENCY INVOLVING RADIOACTIVE MATERIALS.

c. The Fire Protection Division shall make appropriate pre-fire planning surveys to evaluate the hazards involved and prepare the best possible plan of action to be followed in an emergency.

24. Warehouses

(D)

a. Hazardous. Materials that, by themselves or in combination with their packaging, are highly susceptible to ignition and will contribute to the intensity and rapid spread of fire. This includes flammable liquids with a flash point below 100°F, flammable gases, flammable solids (materials which are subject to spontaneous ignition when exposed to air, moisture, friction, or moderate warmth), oxidizing materials, corrosive liquids, and miscellaneous materials which, when ignited, are abnormally difficult to extinguish (crude rubber, rubber tires, cordage fiber, etc.).

b. Moderate Combustibility. Materials and their packaging, both of which will contribute fuel to a fire.

c. Low Combustibility. Materials that in themselves will not normally ignite but which will, in combination with their packaging, contribute fuel to a fire.

d. Noncombustible. Materials and their packaging which will neither ignite nor support combustion.

e. Storage Blocks. The following is the maximum allowed square feet permitted for the above materials located in blocks, inside of warehouses:

(1) Hazardous material = 2,000 square feet.

(2) Moderate and low combustibility = 8,000 square feet.

(3) Non-combustibles = no limit.

f. Height Limits. Where fire-fighting clearances above piles are of concern:

(1) A minimum of three feet clear space above piles is needed in buildings where hose streams are to be used in fire fighting.

(2) In sprinklered buildings, an 18-inch clearance above piles is specified.

(3) The clearance space is measured from the top of the pile to the sprinklers in sprinklered buildings, and to the ceiling in other cases; but under trussed roof construction, the clearance is measured to the bottom of the trusses.

(4) For stock piled over 15 feet high, they should be at least doubled.

(5) Where hazardous materials are involved, regardless of block height, a 3-foot clearance shall be maintained.

g. Clearance Between Blocks. When clearances are needed to maintain storage block limitations, the following aisle widths shall be maintained:

(1) Hazardous materials (2,000 sq. ft. block): Aisles 4 feet wide.

(2) Moderate and low combustibility (8,000 sq. ft. block): Aisles 6 feet wide.

h. Clearance Between Blocks and Walls

(1) Exterior and standard (4-hour) fire walls: No clearance is required.

(2) Substandard fire walls: A 24-inch clearance shall be maintained.

(3) Hazardous materials (stored in general purpose storage buildings): A 24-inch clearance shall be maintained.

i. Clearance Around Fire Doors. A three-foot clearance shall be maintained around fire doors. No material shall be stored within this 36-inch clearance.

j. Other Clearances

(1) Access to equipment: Aisles shall maintain a one square foot clearance to electrical equipment and fire-fighting equipment.

(2) Lighting and heating fixtures: A one square foot clearance shall be maintained around lighting and heating fixtures.

k. Re-warehousing. Nothing in this section shall be construed as requiring major re-warehousing programs. As storage is removed and replaced, action should be incorporated to eliminate unsatisfactory storage arrangements.

25. Hangars

a. Grounding regulations shall be rigidly observed. Grounding cups (pad eyes) shall be kept clean. Grounding wires and clamps shall be maintained in good repair. Service pit lids shall not be used for grounding aircraft.

b. Grounding cables, when not in use, shall be hung on hooks in designated locations on bulkheads. Care shall be taken to prevent the clamps on grounding cables from becoming damaged.

c. Service pits shall be kept clean, with lids in place, except when in actual use.

d. Fire doors shall not be wedged, wired, or blocked open.

e. Sliding door recesses shall not be used for storage purposes nor shall they be blocked by vehicles, trash containers, or other materials.

f. No vehicles shall be parked in front of hangar doors nor shall they be parked outside the hangar so as to restrict fire-fighting apparatus or operations or the evacuation of aircraft from the hangar decks or hangar in an emergency.

D)

g. No storage is permitted in utility tunnels under hangar decks or in passageways leading from one side of a double hangar to the other side.

h. No heater employing an open flame or glowing element shall be installed in aircraft storage and servicing areas or sections communicating therewith, except as authorized by the Fire Prevention Division.

i. Exits and access aisles shall be conspicuously and permanently marked on floors and shall always be kept clear. Fire equipment lanes shall be marked and kept clear at all times.

j. Doors leading to shop areas shall not be wedged, wired, or blocked open.

26. Aircraft Refueling and Defueling Operations

a. The following refueling methods shall be adhered to:

(1) Remain a minimum distance of 50 feet from any aircraft turning up.

(2) Park the refueler as far from the aircraft to be filled as the hose will permit.

(3) Remain a minimum distance of 50 feet from sources of ignition.

R) (4) An approved, wheeled fire extinguishing unit shall be manned and positioned no closer than 75' from the operation.

28. Vehicles Carrying Ordnance (NAVORD OP 2239)

D) a. The danger of fire is inherent in every motor vehicle loaded with hazardous materials. All drivers of vehicles carrying dangerous cargoes shall be required to:

(1) Know contents of the load and be aware of its hazards.

(2) Have in his/her possession a written fire-fighting instruction appropriate to the specific load being transported. The special instruction shall include:

- (a) Placards required for the load being transported.
- (b) Safe following distances.
- (c) Safe operating distance for firefighters and fire-fighting equipment.
- (d) Warning instructions.
- (e) Safe evacuation distance for others.
- (f) General precautions.

b. Drivers shall exert every effort to prevent fires in vehicles transporting hazardous material and shall adhere to rules and regulations for:

- (1) Convoy distances.
- (2) Flame-producing devices.
- (3) Refueling.
- (4) Safe driving.
- (5) Smoking.
- (6) Vehicle inspection.
- (7) Parking. A vehicle must not be parked within 300 feet of an open fire.

c. Each vehicle loaded with Class A, B, or C explosives shall be equipped with two fire extinguishers, each with a rating of 2A, 10B:C, or greater capacity; located on either side of the vehicle for immediate use by driver and/or passenger.

d. Fire extinguishers shall be inspected daily by the driver to ensure they have not been lost, damaged, or tampered with. (R)

e. Should a fire break out on a truck carrying dangerous cargo, the driver shall stop the truck as far from the highway as possible.

f. If any part of the truck except its actual cargo catches fire, the driver shall immediately use the hand extinguisher to attempt to extinguish the fire. He/she shall make every effort to prevent the fire from reaching the cargo of the vehicle. If the cargo does catch fire, the driver shall not attempt to fight the fire unless reasonably certain that it is burning only on the outside of the containers and has not reached the actual cargo.

g. If the fire reaches the cargo contents of the containers (or if any part of the vehicle cannot be controlled with the equipment at hand), the driver shall:

(1) Notify the Fire Protection Division by the best means available. Upon arrival of firefighters at the scene, furnish the specific instruction listed on the DD 836, Special Instructions for Drivers.

(2) Warn the public, by the best means available, to keep at least one-half mile from the fire in all directions.

h. A vehicle transporting hazardous materials shall not be driven past a fire that is burning on or near the highway, until the driver has determined that passing the fire can be done safely and without stopping.

CHAPTER 13
SMOKING REGULATIONS

1. Prohibited Areas. Smoking shall be prohibited in the following areas:

a. Production buildings, Navy Exchange areas, maintenance buildings, warehouses, storerooms, transit sheds, packing sections, salvage buildings and areas, except in designated areas.

b. Unoccupied spaces: attics and lofts.

c. Places of assembly: theaters, gymnasiums, and school auditoriums.

d. Dormitory spaces: bunks or beds and storerooms.

e. Special hazard occupancies: secured structures, battery charging rooms, joiner shops, box factories, photographic processing rooms, print shops and sheds, carpenter or woodworking shops, aircraft hangars, aviation fuel storage areas, and any place where flammables or explosives are handled or explosive vapors may be present.

f. Transportation facilities: on loading platforms and ramps, in beds of trucks or trailers while loading or unloading combustible materials, in open storage areas, and in station ambulances.

g. Flammable liquids:

(1) Within 100 feet of gasoline dispensing operations, where bituminous and plastic coatings are being applied, and flammable liquid and gas handling or storage areas.

(2) Within 50 feet of LPG containers.

(3) Within 10 feet of ditto machines.

h. Aircraft parking areas:

(1) Within a minimum of 200 feet of gasoline or explosives transfer operations, or any high-speed refueling area.

(2) Any area due to prevailing conditions or explosives transfer operations, or any high-speed refueling operations.

(3) In all areas where explosives, flammable or highly combustible materials, or hazardous chemicals are stored or handled.

2. Disposal of Smoking Materials

a. Suitable receptacles for discarding smoking materials shall be provided in adequate numbers in all areas where smoking is permitted. Only cigarette and cigar butts, other tobacco remnants, and used matches shall be placed in these receptacles.

b. Contents of ashtrays shall be disposed of in a safe manner. Wastebaskets shall not be used for this purpose.

c. Discarding of lighted matches, cigarettes, and other smoking material from moving vehicles is prohibited.

3. Matches. Only safety matches (or lighters) shall be used. The use or possession of "strike anywhere matches" is forbidden.

4. "NO SMOKING" Signs. "NO SMOKING" signs shall be posted in all fire hazardous areas where smoking is prohibited.

5. Designated Smoking Areas. Special sections designated for smoking within prohibited smoking areas shall be clearly defined, and appropriate signs shall be posted. They shall be established only after approval of the installation commander. The highest standards of housekeeping shall be maintained in smoking areas.

CHAPTER 14
DWELLINGS - FAMILY HOUSING

1. Before Retiring at Night

a. If anyone has smoked in the house, check for smoldering cigars, cigarettes, or pipe tobacco that may have fallen into upholstered chairs, couches, beds, or rugs.

b. Ensure that stove burners are off and pilot lights are lit.

c. If possible and feasible, close bedroom and hall doors. (D)

2. Hazards. Periodically review the following and correct or eliminate as necessary:

a. Check for ample air space around all electronic equipment. (R)

b. The use of electrical power strips is acceptable under the following conditions: (A)

(1) The unit body should be metal and not plastic.

(2) The unit shall contain a built in circuit breaker.

(3) The unit will be maintained in good working condition.

c. Do not run electrical cords under rugs or carpeting.

d. Check appliance and lamp cords for wear. (If they are worn or frayed, take them to an electrician to be repaired or replace them with an approved cord with UL label.)

e. Do not let grease accumulate on or around stoves and ovens.

f. Do not leave cooking and portable heating appliances operating when residence is unoccupied. (R)

g. Do not overload electrical circuits.

h. If quarters have a fuse box rather than a circuit breaker panel, only use proper-sized fuses.

i. Do not tape circuit breakers in the "ON" position.

j. Attic spaces shall be kept clean and not used for storage spaces.

R) k. Gasoline, flammable liquids, outboard motors, etc., shall not be permitted in or under living spaces.

l. Dry grass, rubbish, etc., shall not be burned but placed in containers for the Base Operating Support Contractor (BOSC) to haul away.

m. Clothes or other combustibles shall be kept well away from stoves, furnaces, water heaters, steam pipes, baseboard heaters, or other heating equipment.

n. Electrical wiring or changes to electrical wiring shall only be done by BOSC electricians.

o. Window curtains and drapes shall be one and one-half inches above electric baseboard heaters in Enlisted Capehart housing. All other combustibles (furniture, pillows, etc.) shall be kept well clear of the front of heaters.

p. Loose or defective electrical wall plugs or fixtures and switches shall be reported immediately to the BOSC and shall only be repaired by an authorized electrician. These fixtures shall not be used until repaired.

R) 3. Annual Fire Prevention Inspections. All family housing units on the naval air station shall be inspected annually by Fire Prevention Division personnel. The occupant shall cooperate in showing the fire inspectors through the premises. The purpose of these inspections is to make units fire safe, and to educate the occupants to recognize and eliminate fire hazards that jeopardize life and property.

R) 4. Fire Evacuation Drills. Every family should establish a plan for each member to escape the quarters at any time, day or night, in case of fire. This plan should be practiced periodically so that every person knows two ways out of the building in case the normal exit is blocked by fire. Practice the foregoing procedures and establish a pre-determined assembly point to assure everyone is out.

5. Smoke Detectors

R) a. Detectors should be tested a minimum of once a month. Smoke detectors are equipped with a test button that can be pushed to test the unit. If the detectors are battery operated, change the batteries at least twice a year.

R) b. Be sure the smoke detector is unobstructed at all times. Never paint a smoke detector; it will result in a delayed operation. To keep the detector free from dust and dirt, clean it regularly according to the manufacturer's recommendations.

D)

CHAPTER 15
SECURING INSPECTION OF CLUBS AND RECREATIONAL FACILITIES

1. Purpose. To reduce the losses occurring as a result of fire caused by human error in clubs and recreational facilities.

2. Discussion. Self-inspection is a function to be provided in each property regardless of the frequency or character of the Fire Prevention Division inspection.

3. Action. Managers should give primary consideration to conditions that may endanger the safety of persons in their facilities. Inspections cover practically all fire conditions, because fire may endanger lives and may interfere with the normal life of the community in many ways. To clarify different types of fire hazards that may be found in recreational facilities, the following items shall be inspected by the manager each evening before securing. Fire Prevention personnel will conduct spot inspections of club facilities at or before closing, to ensure compliance with fire safety items listed below. (R)

a. Exit Lights. Shall be inspected by the manager as early as possible in the day. If exit lights are not functioning properly, they shall be repaired prior to the evening operating hours of the facility.

b. Exits. Shall be secured at the end of the workday. During normal hours of operation, exits shall not be blocked, locked, or obstructed in any way. (R)

c. Windows. Shall be secured at the end of the workday. Open windows permit drafts, causing fire to spread throughout the interior of the building.

d. Lights. All lights, except those that need to be left on for security reasons, shall be secured at the end of the workday and/or before securing the facility for the day.

e. Trash Containers. Shall be emptied prior to closing, and their contents shall be removed from the building. Lack of janitorial service will not be used as an excuse to leave trash containers full. (R)

f. Appliances. All heating and cooking appliances (coffee makers, toaster, etc.) shall be secured at closing time. (D)
(R)

g. Smoking Receptacles. Shall be inspected for live cigarette butts and emptied prior to closing. (R)

h. Fire Extinguishers. Managers shall ensure that all first aid fire fighting appliances (fire extinguishers) are in their proper location and that they have not been tampered with.

R) i. Housekeeping. Good housekeeping shall be practiced throughout the facility.

R) j. Extension Cords. Shall not be used as permanent sources of supply. If they are used as permanent supply lines, they shall be replaced by permanently wired receptacles at that location.

R) k. Space Heaters. See chapter 11 paragraph 22 of this directive.

R) l. Decorations. All decorations shall be inspected by the Fire Prevention Division. (Refer to chapter 11, paragraph 15.)

4. Occupant Load Limit. The maximum number of personnel permitted in places of assembly, clubs, and recreational facilities shall be per NFPA Standard No. 101, Life Safety Code. Occupant load limit signs shall be posted at the main entrances of facilities and elsewhere, as appropriate. Information on load limits may be obtained from the Fire Prevention Division.

CHAPTER 16
PREPARATION OF SPECIAL FIRE BILLS

1. Purpose. To provide for the protection of life and property from fire and panic by issuing instructions on fire prevention and fire fighting, including proper procedures for sounding an alarm for fire.

2. Objective. To ensure that personnel are assigned to fire stations to man available fire-fighting equipment for effective combating of fire, to secure and protect property, and to evacuate personnel not assigned to fire stations.

3. Procedure. The person discovering a fire shall:

a. Report or cause the fire to be reported to the Fire Protection Division by:

(1) Pulling the nearest fire alarm box or auxiliary box. He/she shall stay at the box to direct the Fire Protection Division.

(2) Calling on the telephone, giving the building number and location and stating the nature of the fire.

b. Sound the alarm by activating the nearest pull station or by voice, pass the word of the fire, alerting all personnel in the building/area to evacuate. (R)

c. Extinguish the fire, if possible, without taking unnecessary risks. Do not delay transmitting any alarm of fire. Upon the sounding of a fire alarm, all personnel will man, assigned fire stations and take appropriate action to assist in extinguishing the fire or to carry out duties as assigned by the fire bill or as directed by the person in charge of the fire. Unassigned personnel will muster at least 100 feet clear of the building to assist as directed or until termination of the emergency. Heads of organizational subdivisions should report as promptly as possible the manning of fire stations and muster of personnel to the appropriate authority. (Provisions may be included for notifying key personnel of an emergency occurring after normal working hours.) (R)

4. General

a. Fire bills should contain:

(1) Fire prevention regulations pertinent to assigned buildings/areas. Although regular fire prevention inspections are conducted by the Fire Prevention Division, each organization should organize and maintain a continuous program of fire prevention to include: maintenance of good housekeeping; proper use, storage, and handling of flammable liquids; grounding of aircraft; inspection of electrical equipment; enforcement of smoking regulations; heating equipment and other heat-producing devices or sources of ignition; maintenance of stored materials so as not to create additional hazards, blocking of fire lanes, fire doors; or accessibility of exits, etc.

- R) (2) Provisions for holding fire drills at regular intervals. The Fire Prevention Division should be notified at least 48 hours in advance and clearance obtained for holding a fire drill. While a great degree of realism normally cannot be effected during a fire drill, each drill should be a simulated fire emergency that will enable observation of readiness for an emergency.
- (3) Provisions for a training program in fire prevention and fire fighting.
- (4) All hands should know the location of fire alarm boxes in areas where they work or are quartered. The Fire Prevention Division will furnish information upon request.
- (5) Locations of fire extinguishers, fire hose, fire doors, and other assigned areas or duties should be referred to as fire stations and should be numbered for ready reference and assignment of personnel.
- (6) Duties requiring assignment of personnel to fire stations will normally include: manning of fire-extinguishing equipment; closing of doors, windows; securing papers, files, safes, etc., and standby to remove same if necessary and directed; de-energizing of power; moving of aircraft.

D)