



DEPARTMENT OF THE NAVY

UNITED STATES NAVAL ACADEMY

121 BLAKE ROAD

ANNAPOLIS, MARYLAND 21402-5000

USNA/AACINST 11320.8B

4/Fire Department

20 March 1997 CH-1

USNA/AAC INSTRUCTION 11320.8B

From: Superintendent

Subj: FIRE PROTECTION AND PREVENTION PROGRAM

Ref: (a) DODINST 6055.6 (NOTAL)  
(b) DOD Military Handbook -1008B (NOTAL)  
(c) USNAINST 5100.11C  
(d) National Fire Codes and Publications (NOTAL)  
(e) NAVFAC P-1021 (NOTAL)

Encl: (1) Fire Prevention Regulations  
(2) Contractor's Fire Prevention Guide  
(3) Fire Warden Instructions

1. Purpose. To issue responsibilities and procedures for the fire protection and prevention program.
2. Cancellation. USNA/AACINST 11320.8A. No special markings appear in this instruction since changes are extensive.
3. Discussion. This command recognizes the necessity of maintaining adequate fire prevention and protection measures for all naval activities within the area of responsibility of the Superintendent. This includes the U.S. Naval Academy; U.S. Naval Station, Annapolis; Naval Academy North Severn; Naval Medical Clinic, Annapolis; Naval Surface Warfare Center, Carderock, Annapolis Detachment; Naval Surface Warfare Center, Carderock, Arnold Detachment; all located at Annapolis, MD, and the Naval Academy Dairy Farm at Gambrills, MD. All practical means to achieve this objective will be pursued on a continuous basis. Enclosure (1) implements guidance from references (a) through (e). Enclosures (2) and (3) are for information and guidance.
4. Definition. Fire protection includes all measures relating to prevention, detection, control, and extinguishment of fires to prevent loss of life and to minimize injury to personnel and loss or damage to property.
5. Scope
  - a. The provisions of reference (d) are applicable to Department of Defense (DOD) facilities whether acquired by appropriated or nonappropriated funds. Facilities covered by this reference include all types of buildings and their contents, structures (whether considered temporary or permanent), mobile and stationary equipment, waterfront facilities, outside storage, shore protection for ships and craft, and external protection for aircraft.
  - b. Insofar as shipboard fires and fire prevention are concerned, appropriate portions of this instruction are applicable to ships berthed at piers and seawalls.
6. Criteria. Fire protection criteria shall conform to the requirements of reference (b) and the applicable standards contained in the current National Fire Code and the Uniform Building Code, except as modified herein or by specific criteria issued by DOD.

7. Responsibilities

a. There is one central Fire Department serving the Annapolis Naval Complex.

b. The Superintendent is responsible for fire protection and fire prevention measures throughout the Annapolis Naval Complex and for ensuring tenant activities are informed of fire protection and fire prevention measures required by them.

c. Tenant activities shall:

(1) Ensure compliance as per enclosure (1).

(2) Be prepared to assist the Fire Department with support personnel in connection with fire fighting or elimination of serious fire hazards, as necessary.

8. Delegated Responsibilities

a. The Fire Chief is the administrative and technical head of the Fire Department and has overall responsibility under the Security Officer for fire protection and inspection on the Annapolis Naval Complex.

(1) Control all Fire Department operations, personnel, equipment, fire fighting, fire prevention, pre-incident planning, and fire investigations.

(2) Take charge of fire fighting only at the specific request of the Commanding Officer involved if the fire is aboard a ship in commission or in service. The Fire Department and municipal units will render assistance as requested and, if not assisting, will stand by until the fire is extinguished and cause determined and investigated.

(3) Conduct fire prevention inspections, as required by reference (a), of buildings, shops, or spaces for discrepancies noted during inspection.

b. Facilities and Maintenance Division

(1) Provide current diagrams of water, gas, steam and electrical lines to serve as "damage control" diagrams. Diagrams shall clearly indicate the location of root valves and circuit breakers for use in an emergency. Furnish copies of these diagrams to the Heating Plant Supervisor and the Fire Chief.

(2) Provide current copies of maps of the Annapolis Naval Complex reflecting the latest facilities changes.

(3) Provide funds for the maintenance of building fire alarm equipment and fire alarm circuits.

(4) Coordinate facilities changes affecting fire prevention with the Fire Department.

c. Utilities Shop. Assign personnel on each shift who are familiar with the locations of utility lines and their control points. When requested by the senior fire officer-in-charge at the scene, these personnel will provide advice regarding location of switches and valves and perform operations as directed to suppress the fire.

d. Security Officer. Ensure Security Police Officers admit fire fighting equipment and personnel through any gates and escort equipment to the scene of the emergency and assist if requested.

e. Departments and Offices. Establish procedures within their areas of operation for reporting fire hazards or unsafe conditions per enclosure (1) and assist the Fire Department when requested.

9. Fire Reporting System. Upon discovery of a fire, regardless of the location, size, or probable consequence, the alarm should be given immediately by one of the following means:

a. Telephone Alarm. Dial extension 33333. Report as clearly as possible the name and number of the building, street, intersection, pier, or other means of location identification. When reporting a shipboard fire, give name/number of ship and location at pier. Do not hang up until the Fire Department Dispatcher acknowledges receipt of all pertinent information. After completing the call proceed to the point of nearest approach to direct fire apparatus to the scene of the fire or emergency.

b. Fire Alarm Box. To operate for transmission of a fire alarm:

(1) Pull white handle down to expose the lever inside.

(2) Pull lever in a downward motion and let go. If the auxiliary alarm box in a building is pulled, proceed to the outside of the building to direct the fire apparatus to the scene of the fire or emergency. If a street alarm box is used, remain at the box after sounding the alarm until fire apparatus arrives and direct them to the scene of the fire or emergency.

10. Fire Alarm Signals. Building evacuation alarms are installed in most places of public assembly and are automatically relayed to the Fire Dispatcher when activated.

11. Action to be taken in case a fire alarm is sounded on the Annapolis Naval Complex

a. On first alarm:

(1) The Fire Dispatcher will dispatch a Chief Fire Officer to take charge of motorized apparatus and personnel at the scene. A ladder truck will be dispatched from the City of Annapolis or Anne Arundel County Fire Departments on all building alarms.

(2) The City of Annapolis or Anne Arundel County Fire Departments may be called upon to respond with additional motorized apparatus.

(3) Security Officer or Designee and the Naval Academy Duty Officer. Respond to all fire alarms when requested and assist the Fire Chief as needed.

(4) Security Police. Plan for fire fighting equipment and personnel to enter through any gate and escort equipment to the scene of fire and assist as necessary.

(5) Corpsman on duty. Respond when requested by competent authority and proceed in a dispensary vehicle to the scene of the fire or emergency.

(6) Utilities Shops. Dispatch personnel to the Fire Officer-in-Charge at the scene to perform operations as directed.

b. On second and third alarm fires, additional fire apparatus and manpower are available from the City of Annapolis and Anne Arundel County Fire Departments. Requests for additional equipment will be made by the Fire Chief or his representative.

12. Fire Prevention Inspections are covered by enclosure (1). Education and training in fire prevention is considered to be the responsibility of every person. Department Heads and staff officers should insure proper fire prevention indoctrination of all their personnel and familiarity with this instruction.

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a. Members of the Fire Department, when properly identified and on inspection assignment, shall have access to all buildings, ships, shops, and areas.

b. Recommendations for the correction of fire hazards noted and reported shall receive prompt attention by department and office heads.

13. Indoctrination. Briefings shall be conducted for new civilian and military personnel. Topics shall include orientation of the fire protection program and information on fire related conditions, laws, etc., which may impact personnel.

14. Smoke Detectors in family quarters shall be tested and cleaned at least annually. Occupants shall test their detectors monthly.

15. Fire Drills

a. Drills shall be scheduled monthly for the Commissary, Navy Exchange, Naval Station Galley, King Hall, Bachelor Enlisted Quarters, Bachelor Officer Quarters, Navy Lodge, clubs, and Child Care Center.

b. Drills shall be conducted quarterly for the Chapel, Naval Medical Clinic, and Branch Dental Clinic.

c. All other buildings shall be scheduled annually.

16. Engineering Review. The plans for all military construction projects and facility modernization or rehabilitation programs shall be reviewed by the Fire Chief, Fire Protection Office, and Naval Facilities Engineering Command fire protection engineers, to ensure they meet the fire protection criteria of references (b), (c), and (d).

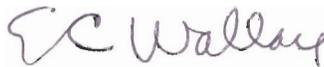
17. Forms and Reports

a. Inspection Tag (NAVFAC-11320/2), Fire Bill (NAVFAC-11320/9), Hazardous Operation Permit (USNA DMD 11320/04) are available at the Fire Department, extension 33401.

b. Reports

(1) Upon request, the report on any fire drill will be sent by the Fire Department to cognizant department or office heads.

(2) Report of fire loss to government property or mutual aid will be prepared on the Department of Defense Fire Incident Reporting System by the Fire Department and sent to the Naval Safety Center, Norfolk, VA, by the Fire Department.



E. C. WALLACE  
Deputy for Operations

Distribution:

AA

Fire Dept (250 copies)

NSWC, Annapolis Safety Office (50 copies)



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FIRE PREVENTION REGULATIONS**I. Introduction**

A. Fire prevention regulations shall not be incorporated with activity safety regulations. Department and office heads are directed to study and become thoroughly familiar with the fire prevention regulations and, as applicable, ensure proper dissemination of, and rigid compliance with, the regulations. Fire prevention regulations are not intended for placard posting as in the case of the Fire Bill (NAVFAC 3-11320/9). However, on the recommendation of the Fire Chief, brief excerpts from regulations may be conspicuously posted in hazardous locations and other areas where they apply and are deemed appropriate. The mere posting of such signs will in no way relieve department or office heads of their responsibilities for enforcement of and compliance with fire prevention regulations.

B. Assigning personnel for certain fire watches and the actual work of maintenance and testing of equipment, except fire extinguishers, are tasks quite properly performed by various other departments and offices which are not under the authority of the Fire Chief. While the adequate coverage of these features from an operating standpoint and on a continuing basis is the primary concern of the Fire Chief, it is not intended that personnel who handle the work be transferred to the Fire Department.

**II. Fire Fighting Equipment****A. Inspection and Maintenance**

1. References (d) and (e) shall be used as the guide for the installation, maintenance, and use of portable first aid fire appliances.

2. The maintenance (including recharging) and proper location and identification of all first aid and fire-fighting equipment are functions of the Fire Department. (R)

3. Any person using a fire extinguisher, or finding that a fire extinguisher has been used, shall report the fact immediately to the Fire Department Dispatcher, extension 33401.

4. Fire fighting equipment shall not be used or moved from its assigned location for any purpose except fire fighting or required repair or maintenance.

5. The Fire Chief and Facilities and Maintenance Division shall be notified of impairment (including blockage) of hydrants, water systems, pumps, sprinklers, carbon dioxide and dry chemical systems, and similar equipment. Restoration of such equipment to service shall also be promptly reported to the Fire Department Dispatcher, extension 33401.

6. Leaking water mains, standpipes, and sprinkler systems shall be promptly reported to the Fire Chief and Facilities and Maintenance Division.

7. A key box shall be installed on the exterior (size, type, and location to be determined by the Fire Chief or Assistant Chief Fire Prevention) of structures. The key box shall contain all necessary keys to gain access as required as well as keys for alarm systems. The key box shall be approved by the Fire Chief or Assistant Chief Fire Prevention. The Building First Lieutenant shall immediately notify the Fire Department and provide new key(s) any time a lock is changed or rekeyed. (A)

**B. Sprinkler Systems**

1. Sprinkler control valves shall be maintained and sealed in the open position. If sprinkler heads are fused because of fire, the valve shall not be closed until directed by the Fire Department.

- R) 2. In the event of accidental actuation of the sprinkler system, the sprinkler control valve should be closed and the drain valve opened to minimize water damage. Replacement of sprinkler head and restoration of service should be effected immediately.
3. The Fire Department and Facilities and Maintenance Division shall be notified before closing a sprinkler control valve for alterations or repairs on the system. Necessary work on a system shall be done on an emergency basis to limit impairment of protection to a minimum of time. Where sprinkler protection is impaired overnight or for a longer period of time, emergency measures shall be effected to ensure the maximum possible degree of fire safety during the entire period of impairment .
4. No material of any kind shall be hung from sprinkler heads or piping. Sprinkler heads shall not be covered or coated with white wash, paints or other material.
5. A clearance of 18 inches shall be maintained between sprinkler heads and storage of materials stacked not over 15 feet high. Clearances of 36 inches shall be maintained between head and storage of hazardous materials regardless of height of stacks and between sprinkler heads and storage of nonhazardous material with stacks in excess of 15 feet.
6. Inspection, test, maintenance, and repair of fire protection systems and equipment shall be performed by personnel specifically qualified for this task. Systems shall be tested and maintained per NAVFAC MO-117.
- R) C. Fire Detecting, Foam, Dry Chemical, and Gaseous Systems. The Fire Department Dispatcher, extension 33401, shall be notified before any maintenance, remodeling, or installation of these systems.

### **III. Care of Buildings**

#### **A. Inspection Frequency**

1. The frequency of local fire prevention inspections of facilities is found in reference (e).
- R) 2. The purpose of inspection is to eliminate the causes of fire, to minimize loss of life, injuries, and property damage if fire occurs, to monitor hazardous operations, and to ensure compliance with recognized fire-prevention practices.

#### **B. Rubbish and Debris**

1. Working and storage areas, new construction, or rehabilitation/renovation areas shall be policed regularly to reduce or eliminate fire hazards.
2. Combustible trash, rubbish, and scrap materials shall be disposed of in properly identified and located metal cans, receptacles, bins, or dumpsters. All trash and rubbish shall be cleared from buildings at the end of the work day, including emptying of waste receptacles.
3. Open-top waste receptacles shall be made of metal or other noncombustible material. Containers used to collect trash from a group of offices, before dumping in outside containers, may be of a heavy plastic material provided the container is clearly labeled "CAUTION, COMBUSTIBLE CONTAINER - NOT TO BE USED TO STORE TRASH." Waste baskets with perforated sides and plastic waste baskets shall not be used.
4. Dumpsters and other central trash disposal units shall be spaced a minimum of 15 feet from combustible buildings, metal wall buildings, any openings in buildings, fire hydrant, fire protection system control valve, and storage of flammable or combustible material.

C. Storage of Combustibles

1. Metal or metal-lined containers with automatic or self closing lids shall be provided and used for storing supplies of clean and dirty rags, waste packing materials such as excelsior, shredded paper, or other combustible materials in current use.

2. Plainly marked self-closing metal containers shall be used for:

a. All oil, paint, and chemical soaked rags.

b. All used waste.

c. Other extrahazardous waste materials.

d. The clearance between stored materials and unit heaters, space heaters, duct furnaces, and flues shall not be less than 36 inches in all directions.

e. A Material Safety Data Sheet (MSDS) for flammable materials shall be available and readily accessible to workers.

f. Metal covers shall be kept closed and never wedged or blocked open. These containers shall be removed from buildings and emptied as required during working hours and before securing of buildings at the end of the work day.

3. Storage of combustibles is prohibited in equipment rooms, air-conditioning rooms, boiler or heater rooms, exit corridors, transformer rooms, attic spaces, and on or under stairways.

D. Personnel Service Rooms

1. Covered metal receptacles with self-closing lids shall be provided in all heads and other areas where paper towels or disposable paper cups are used.

2. Clothing lockers, adequately ventilated, shall be made of metal and maintained in a clean and orderly condition. Combustible material shall not be stored on tops of or underneath lockers. Working clothes kept in lockers shall be aired and cleaned regularly. Flammable liquids, chemicals, paints, grease-soaked rags, and similar materials shall not be kept in clothes lockers.

3. Combustible material shall not be placed on or stored near radiators, heaters, or steam pipes.

E. Attics and Concealed Spaces

1. Attics and concealed spaces shall be kept clean. Unsprinkled attics shall not be used for storage of combustible material.

2. Scuttle holes and other openings connecting to attics and concealed spaces shall be fitted with doors equivalent in fire resistance to ceiling construction and normally shall be kept closed. This does not apply to grills or louvers provide for passage of heat into attics protected by wet pipe automatic sprinkler systems. Such openings shall be equipped with automatic closing traps having a fire resistance equal to that of the ceiling.

3. Hatches, trap doors, and connecting openings to confined spaces shall not normally be used for ventilating purposes and shall be kept closed at all times when not in use.

F. Exhaust Systems. Installation, renovation, and maintenance of the kitchen hood and duct system shall be in compliance with reference (d). Filters and duct systems shall be constructed of noncombustible materials and cleaned frequently. Flammable liquids shall not be used. Exhaust systems and duct work shall be kept free of grease, residue, dust, etc.

G. Decorations

1. Only noncombustible or nonflammable materials shall be used for decorations, window coverings, or placed on or about electric light fixtures. The Fire Prevention Office must approve all decorations before they are used.

2. All draperies and decorations in personnel buildings such as BEQs, BOQs, Clinic etc., and in places of public assembly shall be noncombustible or treated with an approved flameproof solution, and shall be approved by the Fire Chief or qualified fire protection personnel before installation. Where flameproof materials are used, periodic retreatment will be necessary.

3. The location of any decoration shall be approved by qualified fire prevention personnel. Under no circumstances shall any artificial tree be located in a position where if involved in a fire, the tree would block access to exits or paths of egress. All artificial trees shall be nonflammable and noncombustible. Tree ornaments and other decorations shall be noncombustible or nonflammable. Flame candles are not authorized.

4. At work sites on the Annapolis Naval Complex, live decorations (such as trees) shall not be permitted. Artificial trees or decorations may be put in place on or after the beginning of the holiday month. Due to continuing safety and energy conservation concerns, electric decorations (such as lights) are not authorized.

5. Housing Decorations

a. All lights used in Christmas decorations shall bear the label of the Underwriters' Laboratories (UL) and shall be in good condition. No lights shall be placed on metal trees. All artificial trees shall be nonflammable.

b. Combustible holiday decorations will be removed within 7 days after the holiday. Cut trees, pine branches, and similar foliage and vegetation will be removed after 10 days. The butt ends of Christmas trees (cut on a diagonal) should be kept immersed in water when indoors.

H. Exits

1. Exit facilities shall comply with the applicable requirements of references (b) and (d).

2. No restrictive hardware such as hasps and padlocks, throw bolts, cross bars, etc., shall be installed on any exit door.

3. All exit doors shall be unlocked when facilities are occupied.

4. Locking devices on doors and exits of the Brig shall conform with current Navy and Bureau of Prisons regulations.

5. Curtains, displays, or exhibits shall not block access to or interfere in any way with any required exit; and they must not conceal exit signs.

6. Exit accesses, corridors, and enclosed stairways shall not be used for any purpose which obstructs means of egress.

7. Parking a motor vehicle within 15 feet of an exit is prohibited.

#### **IV. Securing of Buildings**

##### **A. Securing at End of Day**

1. All doors, including fire doors, and windows shall be properly secured at the close of working hours unless exempted in writing by the Superintendent or an authorized representative.

2. All heating devices and window air-conditioning units not required to be kept in operation during the night shall be secured at the close of working hours.

3. The Fire Department shall be notified 30 minutes before the securing of clubs, hobby shops, or recreation areas. Duty managers shall inspect the building and area thoroughly after all patrons have left and immediately before securing the building. The person in charge of any club or recreational facility must ensure that the Fire Department is notified for closing inspection. Duty managers will inspect clubs, hobby shops, and recreational facilities for fire hazards before securing. The Fire Department shall indoctrinate and train all managers and duty managers as required.

4. No door shall be permanently secured or blocked without advance approval of the Fire Chief. All such doors shall be identified by a sign, approved by the Fire Department, placed on both sides of the door. Exit doors shall not be secured in such a manner as to prevent their use as an exit.

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

6. All paint, brushes, drop cloths, rags, etc., must be removed from a building at the end of the work day. If materials are left on the job, they shall be placed in metal containers at least 15 feet from the building and away from combustible materials.

7. Gasoline and electric powered vehicles or material handling equipment shall not be parked or stored in warehouses or sheds, except as follows:

a. Gasoline and electric-powered government vehicles may be parked or stored in the above locations if the building is of fire resistant construction, sprinkled, and vehicles assigned spaces will be well away from combustible materials.

b. Electric-powered hand pallet lift trucks may be left in buildings provided they are located at a safe distance from combustible materials and the electric plug is disconnected.

c. Private vehicles shall not be parked for any purpose in a building except the buildings that are designed for that purpose.

d. Gasoline or liquefied gas-powered equipment shall be listed by the UL. They must be refueled outside of buildings, and they shall be stored either in detached buildings used only for this purpose or in areas that are separated from adjacent occupancies by adequate fire cut offs.

##### **B. Vacant Buildings**

1. Remove all combustible trash from the building, sweep floors, and neatly store furniture, preferably in the center of the rooms.

2. Remove all cleaning gear from closets or gear lockers and thoroughly clean these areas and leave doors open.

3. Lock windows and lock and board up all entry doors.
4. Post signs prohibiting entry, except on order of the Superintendent or an authorized representative.
5. Smoking is prohibited in secured buildings.
6. Upon securing unoccupied buildings, disconnect electric power at the control panel and remove line fuses. Close and disconnect main gas valves when securing unoccupied buildings and cap valves outside the building when deactivating buildings.
7. Notify the Fire Chief when a building is to be deactivated. An inspection shall be made by Fire Department personnel before deactivating the structure.

#### C. Sentries and Security Patrols

1. Before assuming duty assignments, instruct all sentries, patrols, and security guards on proper procedures to follow. Upon discovering a fire, procedures are to notify the building occupants by sounding the alarm, notify the Fire Department, and stand by to direct the fire fighting force to the scene of the fire. Building fire-alerting systems shall be used where available. Further instructions to sentries, patrols, and guards shall include information as to secured portions of building which may be unlocked
2. A fire plan for all military sentry posts, patrols, and security guards shall be available in the appropriate headquarters for personnel instruction; and such plans shall contain:
  - a. Location of fire reporting telephones in the vicinity of sentry posts and those located in or adjacent to any given patrol route.
  - b. The proper fire reporting telephone number.
  - c. The locations of telephones which are available for use during nonworking hours.
3. To be of maximum value, sentries, patrols, and security guards should be thoroughly familiar with:
  - a. Buildings adjacent to sentry post or on assigned patrol routes to ensure prompt notification, of the building number, in event of fire.
  - b. Operating principles of first aid fire fighting appliances and the correct ones to use on various fires.
  - c. The proper procedure to report a fire, by telephone, radio, fire alarm box, or other fire reporting media.

#### V. Smoking Regulations

##### A. Prohibited Areas

1. All warehouses, store rooms, transit sheds, packing sections, salvage buildings and areas, except in designated smoking areas approved by the Fire Department.
2. Attics, lofts, concealed spaces on roofs and under structures.
3. Theaters (including projection booths), gymnasiums, auditoriums, general merchandise, and grocery areas.

4. Bunks or beds, storerooms (including baggage rooms), restrooms, and classrooms.
5. Within 10 feet of hectograph (ditto) machines.
6. Secured or vacant structures, auto hobby, maintenance and repair shops, battery charging rooms, joiner shops, box factories, photographic processing and dark rooms, paint shops and sheds, carpenter and woodworking shops, shipping and receiving areas, fuel storage areas, and any area where flammable liquids are handled or explosive vapors may be present.
7. Wooden piers and wharves, barges and lighters loaded with flammable materials, in or on cargo holds of ships, on loading ramps, in beds of trucks or trailers while loading or unloading combustible materials, rooms containing pesticides, open storage areas, high rise stairways or landings, and on station buses and ambulances.
8. Gasoline dispensing operations, where bituminous and plastic coating are being applied, flammable liquid and gas handling or storage, aircraft parking areas, in passenger and freight elevators.
9. Within a minimum of 200 feet of a ship engaged in gasoline or explosive transfer operations, or any high-speed refueling area.
10. Any area that, due to prevailing conditions or operations, requires the posting of "NO SMOKING" signs.
11. In all areas where explosives, chemicals, flammable or highly combustible materials are stored or handled.
12. Appropriate "NO SMOKING" signs shall be displayed in the above areas.

B. Receptacles for Disposal of Smoking Materials

1. 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 spent matches shall be placed in such receptacles.
2. At the end of each work day, contents of ash trays shall be disposed of in a safe manner. Waste baskets of any kind shall not be used for this purpose.
3. Discarding of lighted matches, cigarettes, and other smoking material from vehicles is prohibited.
4. Hot ashes shall not be placed in any trash container.

C. Matches. The use or possession of "strike anywhere matches" is forbidden.

D. Posting of "No Smoking" Signs. "No Smoking" signs shall be posted in all areas where smoking is prohibited. NO SMOKING (Large), PLACARD, SN 0177-LF-440-0010, or NO SMOKING (18" x 4"), PLACARD, SN 0177-440-0000, (small sign), shall be used.

E. Designated Smoking Areas. Special areas designated and approved by the Fire Department for smoking, located within a prohibited smoking area, shall be clearly defined and have appropriate signs posted. The highest standard of housekeeping shall be maintained in such areas.

F. Places of Public Assembly. Managers of clubs, theater, and recreation buildings will ensure that the following tasks are performed at closing time for compliance with all fire regulations, to include but not be limited to the following:

1. Determine that the contents of all trash containers, ash trays, and butt cans have been disposed of in a safe manner outside of all buildings (only approved UL listed fire extinguishing open metal trash receptacles will be used under or behind bars of clubs).

2. Inspect all sofa and chair cushions for smoldering cigars or cigarettes. Cushions that are not fixed will be removed for inspections, and those that are fixed shall be carefully examined.

3. Ensure that all electrical appliances except those designated for continuous operations (refrigerator, clock, water cooler, etc.) are turned off and unplugged.

4. Soiled table linen (table cloths) will be stored, pending laundering, in closed metal containers (may be covered metal trash cans).

5. Smoking is prohibited in club and mess storeroom. "No Smoking" signs shall be posted and supervisors will ensure that employees comply with the fire regulations.

6. Fire exit lights will be on; and a test of standby emergency lights, if provided, will be conducted prior to opening.

7. A monthly fire drill will be held in all recreation buildings, theaters, messes, and clubs, at a time other than when patrons are in the building, to familiarize management and employees with procedures in case of an actual fire in these high life hazardous establishments.

8. On completion of the above closing inspection, the person making the inspection will call the Fire Department Dispatcher, extension 33401, giving his or her name, and certifying that a proper closing, fire-prevention inspection has been made (references (a) and (e)).

G. Theater Fire Regulations

1. Fire prevention regulations for theater employees are as follows:

a. Before performances, exits will be examined for proper exit lighting and satisfactory operation. Exit lights will be on during use of theater including use during daylight hours. Emergency, battery-powered, standby lighting will be tested before the initial performance of the day.

b. During performances, exits will be kept clear of standees and obstacles, including portable seating.

c. Smoking is prohibited in theaters. "NO SMOKING" signs will be posted and regulations strictly enforced.

d. Self-closing metal containers will be provided for all scrap and refuse. These containers will be emptied at least once daily or at completion of the final performance.

e. Scrap film will be put in closed metal receptacles and removed from the theater daily.

f. Theaters will be inspected by management personnel daily after the final performance, and they shall ascertain if any potential fire hazards exist. Telephone the Fire Department, extension 33401, to report that a fire prevention inspection has been accomplished.

g. An audible announcement shall be made before the start of each program to notify occupants of the location of the exits to be used in case of a fire or other emergency.

2. Fire emergency procedures for theater employees are as follows:

a. Individuals such as ushers, ticket takers, and cashiers will be assigned specific exits for assisting evacuation of personnel from the theater in the event of fire.

b. Personnel discovering a fire shall inform the Fire Department Dispatcher, extension 33333, and the person in charge of the theater immediately.

c. The person in charge of the theater, after verifying that the Fire Department Dispatcher has been notified, shall announce to the patrons that there is a fire and direct the clearing of the theater in a quiet orderly manner. Caution shall be exercised to avoid disorder and panic.

d. Projectionists shall turn on house lights, turn off projection equipment, close the fire shutters at projection room port, close projection booth doors, and aid in clearing the theater. Projectionists will use appropriate extinguishers provided to extinguish projection room fires.

3. Theater personnel shall be familiar with the location and use of fire alarms and equipment including the emergency battery lighting.

a. Butt cans, candy bar displays, and popcorn dispensers or other equipment will not interfere with the opening of, or free passage through, exit doors. All doors will be unlocked during performances or occupancy.

b. All unnecessary electrical circuits in the theater will be turned off at the main electric panel box when the theater is closed at the final performance.

## **VI. Heating System**

### **A. General**

1. All heating equipment shall be labeled and listed by the American Gas Association, UL, or Factory Mutual and shall be installed, maintained, and operated to ensure maximum safety. Heating units shall be checked and serviced as necessary before the start of each heating season.

2. Adequate clearances shall be maintained between combustible material and steam pipes, furnaces, flues, and appurtenances. Exposed surfaces too hot for the bare hand shall be considered hazardous.

3. Where permitted, portable heat-producing equipment shall be of approved type by UL or by Factory Mutual System and shall have such listing, label, or approval affixed. A station permit system shall be established to provide adequate safeguards for the use of such equipment within, under, or against structures.

4. Portable space heaters using gas or liquid fuel are only authorized for use at construction sites and as interim emergency heating in facilities requiring protection from the cold.

5. Tar pots shall have properly operating lids, and controls shall be located 15 feet away from exposure hazards and shall not be operated on roofs.

6. Where permitted, portable electric space heaters shall have built-in pilot thermostats and tip over devices. All other devices shall have either a built-in pilot light or be powered from a switch controlled receptacle with pilot light.

7. Coffee makers, cup warmers, and similar devices shall be located with adequate clearances from combustibles and shall not be operated in storage rooms, closets, or other out-of-sight places. Automatic timers shall not be used for coffee makers.

Note: All appliances are to be UL approved only. Approval inspections of coffee makers will be conducted to ensure compliance with requirements listed above.

8. The use of open flame lighting devices (such as oil lamps and candles) shall be prohibited except in family housing, by permit for ceremonial purposes, and in use in clubs/dining facilities. Open flame, portable cooking and food warming devices (such as gas fired grills, solid fuel cans, and candles) shall require permits when used in structures other than family housing.

9. Charcoal-fired grills are prohibited within structures and on combustible balconies, decks, or porches.

B. Containers of gasoline shall not be carried within any government or privately owned vehicle while on the complex. This shall not apply to approved safety containers, not exceeding 6 gallons, used to transport gasoline from service stations to private residences for use in powered lawn and garden equipment and recreational vehicles.

C. Outdoor hazards shall be controlled as follows:

1. Grass, shrubs, and brush within 25 feet of structures shall be kept trimmed. For open storage, fuel handling, and fuel storage areas, the trim line shall be a minimum of 50 feet.

2. Trash and dry vegetation shall not be permitted to accumulate under or against any structure.

3. Controlled/prescribed burning of ground cover shall be conducted under the supervision of the Fire Department.

4. Open burning shall be by permit only.

5. Flammable or combustible liquids shall be turned in to hazardous waste management personnel for disposal.

D. Placement of equipment. Shrubbery or any items that restrict or unreasonably delay the utilization of fire hydrants, sprinkler connections, post indicator valves, hoses, alarm boxes, and hose connections is prohibited. Activities shall provide appropriate marking of fire hydrants and other fire protection equipment per reference (d).

E. A written permit system for burning and welding, including fire watch requirements, shall be issued by qualified fire protection personnel.

## **VII. Electrical installations**

A. Wiring shall be per reference (d) and shall be installed by qualified personnel. Electrical devices shall be labeled or listed by UL, for the intended application. Unless specifically permitted by the National Electrical Code, flexible cords and cables shall not be used:

1. as a substitute for fixed wiring of structure,

2. run through holes in walls, ceilings, or floors,

3. run through doorways, windows, or similar openings,

4. when attached to the building surface,
5. when concealed behind building walls, ceilings, or floors.

B. Renovations. All Annapolis Naval Complex and tenant-level new construction/renovation/facility improvement projects (including self-help projects) which may impact on property or life safety due to fire, shall be reviewed and approved by fire protection personnel prior to the start of the work. Fixed fire protection systems installed or modified under such projects shall be subjected to an acceptance test conducted under the cognizance of the Naval Facilities Engineering Command fire protection engineer.

C. Electronic Computer/Data Processing Equipment and facilities shall be installed per (b) and inspected per reference (d).

D. Circuits

1. Electrical circuits shall not be overfused so that circuits may be overloaded. Fusing of circuits shall be per reference (d) and accomplished by a Utilities Shop electrician before restoring power to the circuit.
2. No device shall be installed which will interfere with the normal operation of the circuit breaker or fuse. When a circuit has been interrupted by a blown fuse or a tripped breaker, the source of disturbance must be located and eliminated by an authorized Utilities Shop electrician before restoring power to the circuit.
3. All electrical switches in light and power panels shall be correctly labeled to indicate the circuits or devices which they control.
4. The locking of a circuit breaker switch in the "ON" position by use of tape or other means is prohibited.

E. Hazardous Areas

1. Electrical equipment (including plugs, fittings, lights, extension cords, etc.) used or located in areas where combustible gases, vapors, or dusts are present shall be listed by UL for the particular hazard involved.
2. Tools, metal fan blades, door latches, and similar devices used in the vicinity of flammable gases or vapors shall be of nonferrous or nonsparking type. Nonsparking or nonconductive shoes shall be worn where necessary.
3. Special electrical requirements for hospital operating rooms and supporting areas are detailed in reference (d) and shall be observed.

F. Grounding

1. Substantial conductors having low resistance to ground shall be used to ground all stationary and portable machines, equipment, and other devices in which static charges may be generated in the vicinity of flammable gases or vapors. Strict safety precautions shall be observed.
2. Extension cords on portable lights and portable, electrically-operated tools or devices, together with their connections and fittings, shall be grounded and inspected frequently and shall be maintained in a safe condition. All extension cords shall be kept dry and free of oil and grease.
3. All vending machines using electrical power shall be properly grounded. Motors, compressors, etc., shall be kept free from accumulation of grease and lint.

4. Extension cords will not be used in lieu of permanent wiring; extension cords may be used on a temporary basis subject to the following conditions:

- a. Cord is of one continuous length without splice or tape and of a size consistent with its use.
- b. Cord is replaced when it is noticeably worn or frayed, or when connections are loose or broken.
- c. Cords will not be placed under rugs, through combustible material, doorways or windows, attached to pipes, nailed or tacked to walls or partitions, etc.
- d. Cords must be UL approved.

**VIII. Storage in Warehouses.** DOD Instruction 4145.19-R-1 establishes requirements for the arrangement of storage in warehouses. The details are summarized below:

A. Definition of Degrees of Combustibility

1. Hazardous. Materials which, 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 80 degrees Fahrenheit, 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.).

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

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

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

B. Maximum Area of Storage Blocks

1. Hazardous materials - 2,000 square feet

2. Materials of moderate and low combustibility - 8,000 square feet

3. Noncombustible - No limit

C. Storage Heights. Heights will not be limited except as necessary for operational stability and to maintain the following clearances:

1. Below Automatic Sprinkler Deflectors. Where height of blocks does not exceed 15 feet an 18-inch clearance shall be maintained. Where height of blocks exceeds 15 feet, a 36-inch clearance shall be maintained regardless of heights of blocks.

2. Below Joists, Rafters, Beams, and Roof Trusses. Where height of blocks does not exceed 15 feet, an 18-inch clearance shall be maintained. Where height of blocks exceeds 15 feet, a 36-inch clearance shall be maintained regardless of heights of blocks.

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

1. Hazardous materials (2,000 square feet blocks) - aisles 4 feet wide shall be maintained.
2. Materials with moderate or low combustibility (8,000 square feet blocks) - aisles 6 feet wide shall be maintained.

E. Clearance Between Blocks and Walls

1. Exterior and standard (4-hour) fire walls - no clearance 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.
4. Clearance around fire doors - a 24-inch clearance shall be maintained around the path of travel of fire doors unless a barricade is provided, in which case no clearance will be required. Materials shall not be stored within 36 inches of fire door openings.

F. Other Clearances

1. Access to equipment - aisles will be maintained for access to electrical equipment or fire fighting equipment (fire extinguishers and hose stations), or the equipment shall be moved to an accessible location. As storage is removed and replaced, action should be incorporated to eliminate unsatisfactory storage arrangements.
2. Lighting and heating fixtures - an 18-inch clearance shall be maintained around lighting fixtures and 36-inches around heating fixtures.

**IX. Outdoor Areas**

A. Open Areas: Dry weeds, grass, and brush shall not be permitted around buildings, open storage areas, fuel storage areas, and tanks. Such growth should be cut frequently and disposed of in a safe manner or chemically controlled. Vehicles having catalytic converters shall not be driven over fields of grass, brush, or onto any area where fuel spills are likely. Areas beneath or within 100 feet of buildings shall be regularly policed to keep them free of accumulation of debris and combustible vegetation.

B. Water Distribution System - Fire Hydrants, Siamese Connections, and Post Indicator Valves (PIV)

1. When fire hydrants, fire mains, automatic sprinkler systems, and similar fire protection facilities are removed from or returned to service, the Fire Chief shall be notified immediately in order that appropriate inspections or tests can be made and recorded by the Fire Department.
2. No vehicles or other objects shall be left standing within 15 feet of any fire hydrant. Adequate clearance as determined by the Fire Chief shall be provided for all sprinkler control valves and siamese pumper connections.
3. No vehicles shall be driven over a fire hose unless specifically directed by a fire officer.
4. Fire hydrants, siamese connections, PIV indicators, and other underground control valves shall be clearly visible and free of all obstructions.

5. The use of fire hydrants is prohibited except as authorized by the Fire Chief and the Facilities and Maintenance Division.

6. Hydrants (fresh water) shall be painted in brilliant yellow.

7. Requirements for numbering and identifying hydrant are in reference (d) also NAVFAC P-309 and MIL-STD-IOIB.

C. Fire Alarm Boxes

1. Street telegraphic alarm boxes shall not be obstructed by shrubbery, trees, etc.

2. Inspection, testing, and operation of alarm boxes will be conducted by the Fire Department. Maintenance of telephonic alarm boxes will be provided by the Facilities and Maintenance Division.

D. Storm Drains, Sewers, and Water Areas. Gas, oil, or any other flammable material shall not be discharged into or permitted to accumulate in waters on or adjacent to the naval installation.

E. Fires

1. Incinerators or large shredding machinery maintained by departments and offices for the disposal of classified matter or contaminated material shall be approved by the Fire Chief.

2. Fires, open flames, burning, welding, and cutting operations shall not be conducted near flammable or combustible material unless precautionary measures have first been taken and unless a fire watch, properly instructed and equipped with fire extinguishers of the proper type, has been approved and provided by the Fire Chief. Burn Permits are required.

F. Open Storage. Open storage shall conform with reference (d).

G. Obstruction of Passage

1. No material or unattended vehicle shall obstruct free passage of vehicles on streets or obstruct access to fire hydrants, fire alarm boxes, or fire fighting equipment.

2. Materials or equipment left on ramps or loading platforms overnight shall not block access to any door or window.

3. Station roadways open for use shall be kept clear and accessible at all times. If necessary to block a road at anytime, notify the Fire Department before the road is closed and immediately upon reopening.

H. Fireworks. The sale or use of fireworks of any description on any naval reservation or property, including Navy-owned housing areas, is strictly prohibited. Rockets, black powder, signaling flares, and similar pyrotechnic devices which are used by the Navy shall be handled and stored per the current ordnance handling instructions.

I. Excavations. Extra care shall be taken in excavating around gas mains, oil tanks, gasoline or other pipelines, fire alarm cables, etc. Smoking or open flames of any kind are prohibited in areas where flammable gaseous conditions are suspected. In such places the air shall be tested and, if gas is present, ventilation shall be provided by portable blowers or other satisfactory method. Electrical equipment used in such areas shall meet the requirements of reference (d) for hazardous location.

**X. Hazardous Activities**

A. Tar Pots - Application of Tar, Asphalt, and Similar Materials

1. Tar pots shall not be operated inside, on the roof, or within 25 feet of any building. They must be continuously attended by a competent operator. A minimum of one, 20-pound, dry chemical extinguisher shall be provided both at the tar pot and at the area of tar application. A "Hot Work Permit" shall be obtained from the Fire Department.

2. Kettles for heating the materials shall be equipped with proper heat control thermostats and means of agitation to assure controlled uniform temperatures throughout contents to prevent spot heating.

3. The material shall not be heated above 450 degrees or the temperature necessary to produce workable fluidity and in no case above its flash point.

4. Surface on which the material is to be flooded, mopped, or otherwise applied shall be clean and free of any foreign substance.

5. When the material is applied within a building or other enclosed area, the atmosphere shall be free of dust. Adequate ventilation shall be provided to completely remove smoke and fumes.

6. All open flame devices, smoking, or other sources of ignition shall be prohibited in or near the area of application of the material.

7. Mops, brushes, and other applicators, when not in use, shall be stored in an area approved by the Fire Chief.

8. All portable fuel tanks shall be a minimum of 25 feet from any kettle or tar pot.

B. Painting

1. Spray painting shall not be conducted within buildings unless standard spray booths and exhaust systems are provided. Spray booths shall be designed, installed, and maintained per references (b) and (c). Interior spray painting of buildings may be permitted if all required safeguards are provided.

2. Tarpaulins and drop cloths used in painting operations shall not be folded or stored in buildings. Such cloths may be folded if they are stored within metal lockers that are detached at least 15 feet from the building. Such lockers must be ventilated to reduce the possibility of spontaneous ignition.

3. All fire protection devices are to be protected from any painting or over spray.

C. Battery Charging

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

2. The battery shop shall be adequately ventilated at the highest point to allow removal of hydrogen gas.

3. Air inlet openings at or below the level of the batteries are essential regardless of the kind of exhaust.

4. For a small number of batteries, a vented hood over the batteries may be satisfactory.

5. Where natural ventilation is used, a vent stack to aid in producing upward draft shall be allowed in the vicinity of the batteries on charge.
6. Smoking, open type lights and switches, or flames and spark producing devices shall not be allowed in the vicinity of the batteries on charge.
7. Battery vent caps shall be in place before attaching or detaching charger cable, and connections between batteries shall not be disturbed while charging switch is "ON." Care shall be taken to assure vent caps are functioning.
8. The charging rates shall reduce as cells approach full charge, thus lowering the rate of hydrogen liberation.
9. Where forklift truck batteries are charged within buildings, the foregoing requirements should be applied. Areas where large numbers of lift truck batteries are charged within the building must be cut off from adjacent areas by adequate fire walls, or the areas must be at ground level and be equipped with a sprinkler system.
10. Battery charging installations shall be located in areas designated for that purpose.
11. Racks and trays shall be substantial and treated to resist the electrolyte.
12. Floors shall be of acid-resistant construction or be protected from acid accumulation.
13. Facilities for quick drenching of the eyes and body shall be provided for emergency use in the work area.
14. Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from mechanical damage, and for ventilation dispersal of fumes from batteries.

D. Welding and Cutting. Standard set forth in reference (d) and NAVSHIPS Technical Manual (NAVSEA 0901-920-0003), Chapter 990, shall be considered in formulating station fire regulations on welding and cutting.

1. Welding and cutting operations shall be conducted in locations that have been specifically designated for that purpose. Other locations may be used if they have been freed of fire hazards by removal or protection of combustible materials, flammable liquids, vapors in dust, and if suitable precautions have been taken against the accumulation of such materials. When welding or cutting is to be done in any location other than one specifically designated for such purpose, approval of the job and of precautions to be taken shall be obtained from the Fire Chief before operations are started. Hazardous Operation Permit (USNA DMD 11320/04) is required.
2. Operators of welding or cutting equipment shall be properly instructed and qualified to operate such equipment. Instructions shall include precautions against hazards related to the operations.
3. All welding or burning operations shall be under the supervision and control of a competent supervisor who shall see that all regulations pertaining to welding and burning operations are complied with.
4. When combustible or flammable materials are exposed to welding or cutting operations, a fire watch with necessary extinguishers or fire hose shall be posted in the vicinity. Fire watches shall be posted on both sides of a deck, 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 time (at least 30 minutes) after the job is completed** to ensure that there are no live sparks or smoldering fires.
5. Welding or cutting operations shall not be performed in or on the outer surfaces of rooms, compartments, or tanks, or in areas adjacent to rooms, compartments, or tanks, or on enclosed drums, tanks, or other containers which contain or have contained flammable or combustible liquids or vapor unless and until fire and explosion hazards have been eliminated per Navy Safety Precautions for Shore Activities and references (c) and (d).

6. All cylinders shall be handled carefully; acetylene and liquefied gas cylinders shall be secured by noncombustible material in vertical positions.
7. Keep oxygen cylinders free of oil and grease at all times. A high pressure leak from an oxygen cylinder may cause a sufficient amount of rapid oxidation to ignite gasoline, oil, grease, alcohol, or organic material and result in fire or explosion.
8. While equipment is in use, especially in confined spaces, inspect it frequently for evidence of leaks in the hose, couplings, valve stems, or other points of the system.
9. When welding or cutting is being performed in any confined space, except in authorized welding shops, leave the gas cylinders on the outside unless specifically approved by the Fire Chief.
10. Close acetylene and oxygen valves at the cylinders when the equipment is left unattended or when work is stopped. Follow detailed procedures outlined in references (c) and (d).
11. Where welding cable or hose is in the path of traffic, protect it from chafing damage by a protective wrapped covering properly secured by lines to prevent undue strain on cable or hose.
12. When the operator using electric welding equipment has an occasion to leave his/her work or stop work for any appreciable time, open the power supply switch to the equipment. The equipment shall be completely disconnected from the source power when not in use.
13. Store acetylene and oxygen cylinders, except where installed in standard welding rigs, at detached, well ventilated locations, shielded from the sun by a noncombustible shelter. Cylinders shall be lashed in vertical position to prevent tipping, and 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 for indoor storage (1 hour). Smoking shall be prohibited within 50 feet of such area.
14. No hot work is permitted on or adjacent to a wooden wharf.
15. Fire watches are required per references (c) and (d).

E. Cleaning, Refinishing Floors. Gasoline, benzene, benzol, naphtha, acetone, turpentine, and other flammable liquids with a flash point below 100 degrees Fahrenheit shall not be used to clean and/or refinish floors or decks. Flammable liquids, however, with flash points well above the accepted minimum (100 degrees Fahrenheit) for cleaning and refinishing floors often become hazardous when exposed in hot and dry climates or when used in hot and dry rooms or areas. Under these conditions, flammable liquids with a flash point below 140 degrees Fahrenheit shall not be used for such process.

1. Cleaning. When cleaning floors, the following fire prevention precautions shall be observed:
  - a. Where practicable, use only cleaning fluids with a flash point above 140 degrees Fahrenheit.
  - b. Clean only a small area at one time.
  - c. Provide all possible natural ventilation. Where this is not adequate to dissipate vapors, portable mechanical ventilating equipment of approved types shall be used.
  - d. Keep all open flames and spark-producing devices away from cleaning operations.
  - e. Prohibit smoking in the area where work is being done.

f. Restrict amount of liquid to that necessary for the immediate operation, and return unused cleaning fluid to its approved place of storage as soon as cleaning is completed. Open containers shall not be used.

g. Provide self closing metal cans for used cleaning rags. Remove all rags/cans from the building upon completion of job and prior to close of the work day.

h. Wax mixed with flammable liquids shall not be used.

i. Fuses should be removed from electrical circuits or circuit breakers shall be opened prior to the start of floor cleaning operations which involve flammable liquids.

2. Refinishing operations are more hazardous than cleaning, and the following fire prevention precautions shall be observed:

a. All precautions required for cleaning operations shall be applied to refinishing operations.

b. All personnel not engaged in this work shall be excluded from the area.

c. Where practicable, work shall be done by natural light. When removal of fuses as required by reference (d) is not practicable, all electrical appliances of any kind in the vicinity (including water coolers, soft drink dispensers, and other automatic stopping and starting appliances) shall be disconnected before finishing material is applied and shall not be reconnected until drying is complete.

d. Prohibition of open flames and smoking shall be continued for 1 hour after drying is complete.

e. Place residue from sanding machines in metal cans, wet down, and remove from building promptly.

f. The Fire Chief shall be notified before operations are started. Any additional precautions required by the Fire Chief shall be complied with.

## **XI. Hazardous Material Storage and Segregation**

A. Chemicals Reacting With Water. Some chemicals must be stored in fire resistive structures without automatic sprinkler protection. These include calcium carbide, unslaked lime, sodium and potassium peroxide, metallic calcium, sodium and potassium, and other chemicals that react violently with water. They shall never be stored in a building containing combustible or valuable materials. If the quantities or values are small, they may be stored in small detached combustible warehouses in preference to buildings containing other types of storage. Such storage, wherever located, must be specifically designated by signs to advise the Fire Department of the nature of the material. All storage areas for HAZMAT will be identified for the Fire Department. Planned changes of storage areas must be approved by the Fire Department.

B. Explosives. Dynamite, blasting caps and explosives must never be kept in general storage buildings. They will be kept in magazines or other structures approved by Naval Sea Systems Command. Storage instruction must be observed at all times.

C. Organic Oils. Substances susceptible to spontaneous heating in contact with combustible fiber, cloth, and mattresses frequently cause serious and stubborn fires. Materials include linseed oil, cottonseed oil, fish oil, and castor oil. Generally speaking, these materials do not present serious problems of protection when segregated from combustible, porous, or fibrous materials. They shall, however, be stored in separate fire resistive buildings having automatic sprinklers. When materials are in their original shipping containers and no mixing or drawing is involved, they may be stored in oil and paint storage buildings provided separate piles are maintained. When there are only a few drums (no more than 10), they may be stored in separate piles in the same area as noncombustible supplies if the building is fire resistive and/or has sprinklers. No drawing or mixing is permissible in these areas.

D. Accidental Hazards. Dangerous chemicals and compressed gases shall be stored in such a manner that accidental breakage, leakage, or rupture of containers or exposure to fire, heat, or water will not result in the combining of such materials with other substances which might produce fire, explosive or flammable gases, toxic fumes, or jeopardize the safety of personnel and material.

E. Fire doors or shutters shall not be obstructed or blocked in any manner or wedged open. Highly combustible material that may produce a flash fire should not be stored near any opening in a fire wall.

F. General Storage. Flammable liquids shall be stored per reference (d). Safety precautions shall be taken as follows:

1. Flammable liquids having flash points below 80 degrees Fahrenheit should be isolated and stored in separate bays.
2. Handle containers carefully to avoid breakage.
3. Remove and destroy leaky containers.
4. Maintain accessibility to stack interior for fire fighting purposes.
5. Ensure proper ventilation for materials which give off flammable vapors.
6. Avoid any location where spilled liquids may come into contact with spark or flame.
7. Use clean, dry sand, fuller's sand, or diatomaceous earth, etc., to absorb spilled flammable liquids, oil, and grease. Sawdust shall not be used.
8. Use only forklift trucks approved or listed by UL or Factory Mutual Laboratories for use in hazardous locations.
9. Combustible materials shall be kept at least 6 feet from flammable liquids.
10. Storage areas shall be conspicuously posted with "No Smoking" signs.
11. Approved metal cabinets or portable safety storage buildings shall be used when storing flammable materials.

G. Day-to-Day Use of Flammable Liquids. Day-to-Day stocks of flammable liquids shall be kept only in areas approved by the Fire Chief. Amounts of stored materials shall be procured as needed and kept in an approved, labeled, and closed container. Any surplus shall be returned to the storage area prior to close of the work day. Storage areas used for flammable material shall be well ventilated and plainly marked to indicate such storage. Flammable or hazardous material containers must be labeled per Safety Precautions for Shore Activities, NAVMAT P-5100.

H. Fuel Storage Tank Cleaning and Repair Operations. The cleaning and repair of the tank shall be conducted per NAVDOCKS P-342, NAVSEA S9086-SH-STM-030/CH-074 V3 and API Publication.

## **XII. Compressed Gas Cylinders**

A. Compressed gas cylinders showing evidence of excessive 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 testing (every 5 years) or which have the markings or labels obscured should be returned for testing before recharge.

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

1. Noncombustible or reactive gases stored within buildings shall be separated by gas-tight partitions.
2. Gas cylinders stored in the open shall be protected from the sun by a noncombustible cover or roof.
3. All locations or areas used for cylinder storage of flammable gases shall be provided with natural cross ventilation.
4. Cylinders in storage or use shall be secured to prevent movement or falling.
5. Acetylene cylinders shall be stored and used in upright position.

## **XIII. Shipping and Transferring Hazardous Materials**

A. Notifications. The Fire Chief shall be notified of proposed transfers of bulk gasoline, oil, explosives, or other hazardous materials. Such transfer shall be subject to the provisions of appropriate instructions and orders. Simultaneous transfer of more than one type of hazardous material shall not be made except in case of emergency. There shall not be any simultaneous transfers of such materials at the same location except upon approval; precautions shall be complied with. In the case of ammunition transfer, the operation shall be under the supervision of the activity Ordnance Officer who shall ensure that appropriate ordnance regulations are complied with.

1. Labeling. All flammable materials shall be in containers approved for shipment of such materials and tagged or labeled per regulations of the DOT or Coast Guard, whichever is applicable. All MSDS papers shall be available for inspection.

### 2. Permits And Supervision

a. The Fire Department, extension 33401, shall be notified of proposed transfer of bulk gasoline, oil, explosives, or other hazardous materials. Such transfer shall be subject to the provisions of appropriate instructions and orders. Simultaneous transfer of more than one type of hazardous material at the same pier shall not be made except in case of an emergency and only upon the approval of the Shipyard Commander. All fire prevention precautions shall be complied with.

b. Flammable liquids having flash points below 100 degrees Fahrenheit or flammable gases, except medical supplies or similar material which may require inside storage for security reasons, shall not be stored in transit sheds or on piers and wharves.

B. Fueling Operations

1. Personnel

a. Only authorized and qualified 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 liquids, also they must be familiar with reference (d) and:

- (1) location and operation of nearest fire alarm box,
- (2) telephone number of Fire Division emergency (extension 33333),
- (3) location and operation of first aid fighting equipment provided.

b. Operators of vehicles, aircraft, or other equipment shall turn off engines, vehicles lights, and short-wave radio transmitter before taking on fuel.

c. During fueling of vehicles, the operator shall not smoke or light a match or lighter; and there shall be no open flame in the vicinity.

d. Navy motor vehicles shall not be refueled when there are passengers aboard.

e. No fuel operation will commence until boom is in place.

f. Prior to commencing ship's fueling operations, the ship shall hoist the "Bravo" flag. The "Bravo" flag shall remain in place until the completion of fueling operations.

g. Fire Division personnel shall inspect before operation.

2. Bonding

a. The dispensing nozzle must be in contact with the fill 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 such covers have been replaced. Internal vapor pressure shall be relieved before the dome covers are opened. Bonding and grounding shall conform with reference (d).

b. All tanks, hose, and containers shall be kept in constant electrical bond while flammable liquids are being transferred to prevent static discharges.

c. After unreeling the gasoline hose from 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 tank to make sure no differential in static exists.

d. Flammable liquids having flash points below 100 degrees Fahrenheit will not be dispensed into containers unless the nozzle and container are in constant electrical bond.

3. Leaks and Spills

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

b. Wedges, locking devices, etc., which restrict shutoff in gasoline lines during loading or unloading operations, shall be prohibited.

c. Automotive vehicles and other spark producing equipment shall not be operated within 50 feet of a gasoline spill until the exposed area has been thoroughly cleared of gasoline and the flammable vapors dissipated.

d. The operation of any vehicle leaking fuel shall be prohibited until repairs are effected. If a private vehicle, the operator shall be notified and vehicle removed from the Naval Complex.

e. Notify the Fire Department and the Naval Academy Environmental Office of all of spills of gasoline, fuels, oils, and solvents.

4. Explosives In Vehicle. Do not refuel the gasoline tank of a vehicle while explosives are in the vehicle except in an emergency and then only after the engine of the vehicle is stopped, all lights turned off, and static grounding devices properly connected.

5. Radar and Radio. Fuel operations or transfer of flammable liquid having a flash point below 100 degrees Fahrenheit shall be prohibited in the vicinity of operating high-frequency, high-intensity radar equipment; NAVMAT P-5100 should be observed.

### C. Flammable Liquid Dispensing Containers

#### 1. Containers

a. Containers used for dispensing flammable liquids shall be of a type approved for such use by UL or Factory Mutual Laboratories. Containers for flammable liquids shall be maintained in good condition. All portable containers used for handling, storage, or dispensing flammable or combustible liquids shall be clearly marked to indicate their contents. Transfer contents of leaking containers to serviceable containers.

b. Check dispensing equipment at regular intervals for leaks at pipe connections, stuffing boxes, and meters. When leaks are found, they shall be repaired by an authorized repairman; Keep the pumps out of service until the repairs have been made.

c. All 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, will be equipped with drum (barrel) pump of approved type.

d. Bungs, caps, or stoppers shall not be left out of drums, barrels, tanks, or other flammable liquid containers. This rule also applies to empty containers.

e. Empty, flammable-liquid containers shall not be stored or repaired until they have been thoroughly cleaned of hazardous vapors. All containers that have held flammable liquids shall be thoroughly cleaned before they are used for less hazardous materials. The fuel tanks of gasoline engines shall be similarly cleaned before indoor storage.

#### 2. Tank Trucks

a. Before fueling operation begins and after all connections have been completed, fire inspector approval is required (permit issued).

b. Fuel trucks having leaking or otherwise defective pumping equipment shall not be used and shall be so labeled.

c. 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 should be parked in an open area at least 100 feet from buildings and flammable areas. When numerous tank trucks are being stored, they should be in detached groups so that there will not be an aggregate cargo capacity exceeding 25,000 gallons in a single group. Groups should be detached at least 50 feet from each other, and the slope of the pavement or ground should be such that a serious spill at one group would not flow to or near another group, structure, or yard storage area.

### 3. Valves and Faucets

a. Discharge valves for dispensing flammable liquids over 100 degrees Fahrenheit from drums shall be spring loaded and manually operated. Blocking faucets open is prohibited. Place a metal drip pan under faucets and clean after each use.

b. Approved drum pumps shall be used for dispensing flammable liquids with flash-points below 100 degrees Fahrenheit, and the drums shall be maintained in a upright position.

c. Dispensing drums for liquids with flash points below 100 degrees Fahrenheit shall be equipped with UL approved, flame-arrestor bung vents.

### 4. Nozzles

a. UL label nozzles used in connection with gasoline dispensing apparatus. The nozzles may be either the manually controlled automatic closing type or the automatic closing type with an approved built-in, hold-open device. Wedges, gasoline tank caps, or other makeshift hold-open devices on gas dispensing nozzles are strictly prohibited.

b. The procurement and use of unattended, automatic, gasoline-dispensing nozzles is approved for use in Navy Exchange and Naval Complex Gas Stations providing the following precautions are observed:

(1) The engine and lights of the vehicle being fueled shall be shut off. The exhaust of other internal combustion engines operating in the area shall not be closer than 10 feet from the point of delivery.

(2) Each automatic shutoff nozzle shall be inspected weekly and removed and repaired or adjusted by a manufacturer's representative at 6-month intervals or after 50,000 cycles of operation, whichever comes first. Records of inspections shall be kept by the service station.

(3) Attendants shall be fully trained in the regular inspections of the automatic shutoff nozzles and the use of the fire extinguishers.

### D. Wharves and Piers

1. Fueling or Defueling operations are to be conducted in compliance with references (c) and (d).

a. The fueling or defueling of any type of equipment on wooden piers or wharves is prohibited. Any such equipment requiring fueling shall be towed from the pier or wharf for fueling.

b. Fueling of material-handling-equipment aboard ships and on barges other than the open type barges is prohibited when ships or barges are berthed at wooden piers and wharves.

c. Fueling of equipment aboard open type barges shall be permitted only after special protective measures have been arranged in advanced with the Fire Chief. Gasoline for fueling equipment on barges, lighters, etc., shall be transported in approved safety cans. Refueling material-handling-equipment in ship holds is strictly forbidden.

2. Berthing Restriction. Gasoline tankers and gasoline barges should not be berthed abreast of other gasoline tankers or other gasoline barges. Neither should they be abreast of other ships, except as required to conduct necessary fueling operations.

3. Welding and Cutting

a. During fuel operations no "hot work" will be accomplished aboard the ship handling fuel or any other ship alongside.

b. Definition of "hot work". Hot work is defined as work with any equipment that produces an arc, flame, or high temperature and can or could conceivably cause a fire or explosion. This includes welding, brazing, flame cutting, the use of open flame equipment, or any work involving the heating of metal to or above a red heat.

4. Access Lanes

a. Access lanes of sufficient width to permit free travel of emergency vehicles on and off piers, roadways and wharves shall be maintained (minimum of 15 feet - preferably 20 feet).

b. Remove and secure all automotive and other mobile equipment not in use overnight or prior to nonwork days from piers. If equipment must remain on piers, it will be placed in an area that will not hinder the operation of fire department apparatus. No mobile equipment will be left on piers overnight without approval of the Security Officer.

c. Fire fighting equipment and facilities such as alarm boxes, hose racks, extinguishers, fire hydrants, etc., will be kept unobstructed and accessible at all times.

d. Gangways, materials, equipment, trash containers, etc., will be placed or stowed on piers in the designated area only. No vehicle or equipment shall be allowed to be parked or left standing in the pier fire lane at any time. Fire lanes are to be a minimum of 15 feet (preferably 20 feet).

e. When it is necessary to block off thoroughfare on piers, the Fire Department, extension 33401, shall be notified immediately. Notify the Fire Department again when the thoroughfare is again accessible.

E. Dockside Fueling Operations

1. It is incumbent upon both shipboard officers and shore-side supervisors to ensure that close liaison is maintained between ship and shore to the end that adequate and effective fire prevention measures are observed, and all operations are to be in compliance with reference (c).

2. Oil and other flammable substances shall not be discharged into the drydock or water under any circumstances. A fire watch shall be maintained at all sludge tanks to prevent overflowing.

F. Fire Protection Equipment

1. Fueling operations shall not be conducted by vessels without approval of the Small Craft Division Officer and an inspection by the Fire Department. The Fire Department shall be notified again 30 minutes before securing of fuel operations so that an inspector may be on hand during the breaking of fuel lines.

2. The ship's fire hose and other fire fighting equipment shall be connected and ready for immediate use during fuel transfer operation. Wet burlap should be kept at hand for blanketing a vent fire.

3. Shore side fire equipment shall be in ready condition and a sufficient supply of Aqueous Film Forming Foam (AFFF) shall be available for immediate use.

4. Phone communication between ship and fueling vehicle is mandatory.

G. Transferring Fuel Oil. While oil is being received, no naked lights, open flame, or electrical or mechanical apparatus likely to spark shall be permitted within 50 feet of an oil hose, tank compartment receiving the oil, or the vent from a tank. The storage tanks shall be watched closely for leaks, and care shall be taken that all outlets except the vents are closed.

#### H. Requirements Aboard Ships

1. A competent hose watch shall be provided from ship's force for all discharge operations. The hose watch will stand by at all times to raise or lower hose, to watch for strains or chafing of the hose, to close the ship's valves, or to signal the pump operator in the event of emergency or upon receipt of signal from the wharfmen.

2. All tank manhole openings shall be kept closed. The ullage lugs shall be kept closed, but not clamped, or with frame arrestor screens, if open. All other flame arrestor screens must be in place and in good condition.

#### I. Dockside Personnel Requirements and Duties

1. An experienced and responsible supervisor shall be in charge of dockside operations when any transfers are started or stopped or when tanks are being sampled. The whereabouts of the supervisor shall be known at all times during fueling operations in order that he or she will be ready and available in event of emergency.

2. The principal assistants (wharfmen and hose watch) shall have a thorough understanding of established rules and regulations governing fuel transfer operations. Upon noticing violations or omissions which endanger the operations, an immediate stoppage of transfer shall be ordered and shall remain in effect until the unsafe condition has been corrected.

3. At least one experienced and responsible wharfman, in addition to hose watch, shall remain on duty at dockside during the entire period of bulk cargo transfer. The hose watch shall stand by at all times to close the wharf valve and to order pumping or gravity transfer stopped on signal from the ship or in the event that a spill or leak is observed. Spills or leaks shall be removed before fuel operations are resumed.

4. All operations are to be in compliance with references (c).

#### J. Sources of Ignition

1. The smoking lamp shall be out aboard a ship involved in flammable handling operations as well as aboard any vessel within 200 feet of such ship. The smoking lamp shall be out before start of operations and shall remain out until the Commanding Officer of the ship deems it safe to remove the restriction. However, in no case shall smoking be permitted until 15 minutes after completion of operations or in any area within 50 feet of pumping operations.

2. All sources capable of igniting gasoline vapors shall be prohibited within an area of at least 200 feet of a ship engaged in gasoline transfer operations, including those sources aboard other vessels. In addition to such sources of ignition as smoking, open flames and fires, other hazards include motor vehicles, power boats, fork lifts, welding operations, nonsparking electrical devices and motors, naked lights, friction sparks resulting from metal-to-metal contact, cranes and mechanical loading devices, whether self powered or not. Under some conditions, the foregoing minimum conditions may have to be increased.

3. Streets or roadways leading to piers and wharves over which gasoline transfers are being made shall be effectively barricaded at a minimum of 200 feet from the transfer area.

4. Personnel engaged in loading or unloading shall not wear shoes or boots with exposed metal objects in soles or heels.

5. Only nonsparking tools shall be used within the restricted area surrounding gasoline transfer operations.

6. Only those electrical devices approved or listed by UL or Factory Mutual Laboratories for use in hazardous locations will be permitted in gasoline handling areas. Temporary electrical installations are not permitted in such areas.

7. Transfer of gasoline will be prohibited during electrical storms, except under emergency circumstances.

8. Energized radar should not be aimed in the direction of operations involving fuel or fuel handling, explosives, or transfer of ammunition.

K. Bonding

1. Static bonding services shall be in place and secured between the ship and shore pipeline before fueling hose is connected and shall be left in place until after hose is disconnected.

2. Before permitting a powered boat to fuel from shore, a proper bonding connection will be made. These connections should be of wire or solid metal, and care will be taken to see that the contacts are positive.

3. Where the use of metallic hose is not practical and a container must be used to pour fuel into the boat tanks, such container shall first be bonded with boat tanks by a flexible conducting wire.

4. The Military Fuel Operations H201 (NAVSUP P-284) and NFPA 77 shall be used for detailed information and precautions.

L. Fires Aboard Ships. In case of fire on board ship, the officers and crew shall immediately go to fire quarters and proceed per the ship's fire bill. In addition, the Fire Department dispatcher shall be notified by alarm box and telephone. The Fire Department and assigned emergency units will be made available at the scene (quarter deck) for shipboard fires. However, the Commanding Officer retains full responsibility for his ship at all times and can refuse any assistance offered.

M. Telephone Alarm. Dial extension 33333. Report as clearly as possible the name of ship/number and location at pier. DO NOT hang up until the Fire Department dispatcher acknowledges receipt of all pertinent information.

N. Ambulance Service. Required medical care and emergency ambulance service will be provided to shipboard personnel by the Fire Department, extension 33333.

O. Terminal Yards

1. Terminal Operations. Shall establish and enforce fire prevention regulations and be responsible for the provision and maintenance of fire protection equipment. The responsibility requires an understanding of applicable laws, ordinance, and regulations. The terminal operator shall be responsible for the training of employees in fire prevention and the proper emergency action in event of fire or other emergency and for providing the necessary equipment to control the spread of fire and to handle any necessary movement of evacuation of vessels. The terminal operator shall prepare and implement an emergency operations plan detailing action to be taken in event of fire, explosion, leak, spill, or damage to container or cargo.

2. Fire Organization Fire Safety Plan. The terminal operator shall designate a competent and reliable employee or employees who shall be responsible to assure that all standpipe, fire hose, sprinkler equipment, portable fire extinguishers, and other fire protection devices and equipment are properly maintained. The designated employee or employees shall be familiar with the locations of all telephones, valves, alarm boxes, fire hose stations.

3. Vessels. All vessels shall be moored in an orderly manner. When mooring the vessel, due regard shall be given to rapid removal in the event of a fire originating on either the pier or vessel. International shore connection shall be available for fire fighting equipment to be connected to vessel's fire main system.

4. Smoking. Smoking shall be allowed only in posted designated areas. Smoking and open flames shall not be permitted within 50 feet of hazardous materials storage.

5. Maintenance-Repairs and Housekeeping. Special periodic inspection shall be made beneath the pier deck to determine conditions relating to fire prevention and protection in the substructure. All buildings and yard areas shall be kept free of debris and waste materials. Such materials shall be kept in metal containers and removed or emptied at sufficiently frequent intervals to prevent dangerous accumulation. Vegetation shall be kept short on dikes by frequent cutting. All cuttings or dry vegetation shall be removed immediately.

6. Electrical Installations. Electrical installations shall be performed per reference (d).

7. Wharves

a. Pipe lines on wharves shall be adequately bonded and grounded if Class I and Class II liquids are handled.

b. Suitable portable fire extinguishers with a rating of not less than 20-B shall be located within 75 feet of those portions of the facility where fires are likely to occur; such as hose connections, pumps, and separator tanks.

c. Each tank vehicle shall be provided with at least one portable fire extinguisher having at least a 20-BC rating or; when more than one is provided, each extinguisher shall have at least a 10-BC rating.

P. Storage Areas

1. Requirements

a. The entire property shall be surrounded by a fence. An adequate number of gates shall be provided in the surrounding fence to permit ready access of fire apparatus in case of fire.

b. Vehicular routes, traffic rules, and parking area shall be established, identified, and used. Private vehicle parking in marine terminals shall be allowed only in designated areas.

2. Container Yard Operation

a. The terminal should designate three hazardous materials storage areas known as Area A, B, and C. Each area should be located:

(1) fifty feet from buildings and other general cargo storage areas,

(2) twenty feet from property lines,

(3) one hundred feet from other hazardous materials temporary storage area.

b. The maximum dimension for these areas should be:

- (1) Area A: 40 feet x 125 feet with access for Fire Department vehicles,
- (2) Area B: 40 feet x 144 feet with access for Fire Department vehicles,
- (3) Area C: 40 feet x 34 feet with access for Fire Department vehicles.

c. Storage areas should be surrounded by a 3-inch-wide, painted line 20 feet out from the storage area. Such lines should be of contrasting color to the surface. The words "Hazardous Cargo Area - No Smoking - No Flames" should be painted on the surface in letters not less than 6 inches high, every 30 feet adjacent to the perimeter line. The terminal should be responsible for all hazardous materials at the terminal regardless of ownership.

3. Fire Protection. Fire protection shall be provided in all fuel facility areas per references (b) and (d).

#### **XIV. Radioactive Materials**

A. The Fire Chief or Senior Fire Officer on duty shall be notified immediately of the transportation, storage, handling, or use of any radioactive material, including weapons, which comes into the confines of the Annapolis Naval Complex.

B. The department or offices using the material shall make the above notification to include 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 it may be associated.

C. The Fire Department will make appropriate pre-incident planning surveys to evaluate the hazards and prepare the best possible fire protection principles of operations.

#### **XV. Contractor's Guide**

A. Contractors working on the Annapolis Naval Complex shall conform to and be guided by current NFPA and OSHA regulations regarding fire safety.

B. Before starting work, the contractor shall contact the Fire Department and ROICC representative for a briefing of these regulations and the issuance of the Contractor's Fire Prevention Guide (enclosure 2).

#### **XVI. Fire Warden Responsibilities**

- A. Conduct a daily inspection of assigned area.
- B. Carry out instructions indicated in enclosure (3).

## **CONTRACTOR'S FIRE PREVENTION GUIDE**

### REQUIRED FIRE PREVENTION PRACTICES FOR AREAS OR BUILDINGS UNDERGOING REMODELING, CONSTRUCTION, OR DEMOLITION

1. Prior to performing "hot work" (welding, burning, lead melting, sweating, soldering, blow torches, tar pots, grinding etc.) or operating other flame producing devices, the contractor shall request a burn permit (via ROICC representative) from the Fire Prevention Office by calling the Fire Department dispatcher at 293-3401.

2. Contractor shall furnish appropriate fire extinguishers and provide fire watch as required. **NOTE:** The fire watch must remain on scene for a minimum of 30 minutes or until hot work is cool to the touch. Minimum acceptable types of extinguishers are:

- a. 10 lb. ABC Dry Chemical extinguisher,
- b. 20 lb. BC Dry Chemical extinguisher when using tar pots.

3. No person shall enter and no work shall be permitted in any closed compartment or poorly ventilated space until it is certified that the space is safe for personnel and safe for the type of work intended.

**NOTE: Any job will be secured immediately if operator does not have burn permit in his/her possession and appropriate safeguards have not been taken.**

4. Oil painting materials (paints, brushes, empty paint cans, rags, overalls, drop cloths, etc.) or other flammable liquids shall be removed from the building or area at quitting time.

5. Painting materials and flammable liquids shall be stored outside in a suitable locker or box located a safe distance from any structure or area.

6. Accumulations of trash, paper, shavings, sawdust, excelsior, boxes, and other packing materials shall be removed from the building or area at the close of each workday and material disposed of in the proper containers located away from the building or area (35 feet).

7. The storage of lumber, roofing paper, or other combustible supplies shall be kept a safe distance from structures.

8. The areas outside of buildings undergoing work shall be cleaned of trash, paper, or other discarded combustibles at the close of each workday.

9. All portable electric devices (saws, sanders, compressors, extension cords, or lights) shall be disconnected at the close of each workday. When possible, the main electric switch in the building should be deactivated.

10. All portable flammable materials and containers shall be a minimum of 50 feet from the work site. All class I and II liquids shall be kept in approved safety containers and stored in a separate flammable material locker.

11. Dispensing of any flammable liquids shall be within a spill containment area. Means shall be provided to dispose of leakage and spills promptly and safely.

12. Class I liquids shall only be dispensed where there are no open flame or other sources of ignition within the possible path of vapor travel.

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13. Smoking is strictly prohibited in areas where flammable liquids, compressed gases, highly combustible materials, or explosives are stored, handled, or processed.

14. Prior to quitting time, a reliable person designated by the contractor should make a check of the building or area to obtain compliance with the instructions.

15. Any fire, no matter how small, shall be reported to the Fire Department dispatcher immediately. (Emergency telephone number is 293-3333).

16. Fire hoses or extinguishers in or around buildings or area shall not be used for any purpose other than fire. (Contractors are not to use a building fire extinguisher as a supply for their operation).

17. Fire hydrants shall not be used without special permission from the Fire Department and shall not be blocked at any time by material or supplies.

18. Fire prevention personnel are available for advice and assistance on any matter regarding fire prevention or these instructions.

FIRE DEPARTMENT EMERGENCY TELEPHONE NUMBER IS.....**293-3333**  
FIRE PREVENTION BRANCH OFFICE IS .....**293-5778**

CONTRACTORS ARE TO COMPLETE THIS FORM AND HOLD FOR INSPECTION BY THE FIRE PREVENTION OFFICE AS A RECEIPT OF ACKNOWLEDGMENT AND UNDERSTANDING OF THE CONTRACTOR'S FIRE PREVENTION INSTRUCTIONS:

DATE: \_\_\_\_\_ COMPANY: \_\_\_\_\_

NAME: \_\_\_\_\_ WORK SITE OR BUILDING: \_\_\_\_\_

## **FIRE WARDEN INSTRUCTIONS**

### **DAILY / MONTHLY / INSPECTIONS**

1. FIRE EXTINGUISHERS -- CHECK FOR THE FOLLOWING (monthly)
  - a. Proper pressure on gauge
  - b. Seal not broken
  - c. Hose and horn in good condition
  - d. Nozzle clear
  - e. Extinguisher in proper location
  - f. Band tight
  - g. No debris or decorations hanging from extinguisher
  
2. EXITS (daily)
  - a. Exit light operable
  - b. Passage and doors not blocked
  - c. Emergency lighting working
  - d. No storage in/on or under stairs or hallways
  - e. Doors not locked from exiting
  
3. COFFEE MESS (daily)
  - a. Not located in closets or storage rooms (not to be in out of sight places)
  - b. No home made automatic timers
  - c. Coffee maker to be UL approved
  - d. No extension cords -- NO substitute for permanent wiring
  - e. All combustibles away from the coffee maker, etc.
  
4. TRASH AND WASTE (daily)
  - a. To be removed from the building at the end of each workday
  - b. Dumpster -- 15 feet from building
  
5. WIRING (daily). All electrical wiring and equipment shall be in compliance with standards of the National Electrical Code.
  
6. PORTABLE ELECTRICAL SPACE HEATER (daily)
  - a. Must be UL approved
  - b. Have built in thermostat and tip over switch
  - c. Away from all combustibles
  - d. Unplugged when not in use
  
7. SMOKING (daily). SMOKING is to be done in APPROVED DESIGNATED AREAS ONLY.

## MONTHLY EXTINGUISHER INSPECTION

### 1. DRY CHEMICAL

- a. Check condition of hose for breaks or cracking.
- b. Check condition of nozzle -- free, smooth operation (not stiff).
- c. Check condition of extinguisher body for dents, rusting, etc.
- d. Check pressure gauge for proper pressure; indicator needle should be within area identified as charged; and if inspection reveals no discrepancies, sign and date inspection tag.
- e. If any discrepancy is found, call the Fire Prevention Inspector for your area.

### 2. 2 ½ GALLON PRESSURIZED WATER

- a. Check pressure gauge for proper pressure; indicator needle should be within area identified as charged.
- b. Check that safety pin/seal are in place.
- c. Check condition of nozzle/hose for breaks or cracking.
- d. Check condition of extinguisher body for dents, rusting, etc.
- e. If inspection reveals no discrepancies, sign and date inspection tag.
- f. If any discrepancy is found, call the Fire Prevention Inspector for your area.

### 3. CARBON DIOXIDE (CO<sub>2</sub>)

- a. Check that safety pin and seal are in place.
- b. Check condition of hose, horn, and insulated handle for breaks or cracking, and horn clear of foreign matter.
- c. Check condition of extinguisher body for dents, rusting, etc.
- d. If inspection reveals no discrepancy, sign and date inspection tag.
- e. If any discrepancy is found, call the Fire Prevention Inspector for your area.

**NOTE:** If there are any 2 ½ gallon pressurized water or carbon dioxide (CO<sub>2</sub>) fire extinguishers left in your building, it is the responsibility of the building manager or building 1st LT to purchase 10 pound ABC dry chemical extinguishers to replace them.

**DEFINITION OF FIRE WARDEN**

The Fire Warden Program has been established to assist command(s)/activity(ies) and will provide a more adequate fire prevention/protection program for your building(s) and area(s). Your job as a Fire Warden is a very important one. You will assist the Fire Prevention Division with fire hazards and abatement and fire equipment checks. You will be the liaison between the Fire Prevention Division and your command/activity. You will be the key person the Fire Prevention Division will contact on scheduled inspections and/or problems. You will contact the Fire Prevention Office on any proposed building modifications prior to job start-up.

Please take a few minutes to review the Fire Prevention Regulations (USNA/AACINST 11320.8B). A Fire Inspector will be assigned for your area and will be your point of contact for any assistance. This assistance includes annual training/fire drills and any fire supplies you might need. Fire Prevention would like to **“THANK YOU”** for becoming a Fire Warden.

**Fire Safety plays a big role in everyone’s life.**

**DETAIL INFORMATION**

Area Fire Inspector: \_\_\_\_\_

Your building(s)/area(s) include: \_\_\_\_\_

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**FOR FIRE EXTINGUISHER REPAIR/SERVICE:** Please call your area Fire Inspector for problems with fire protection system(s), or call our 24-hour dispatcher desk at extension 33401 or 35760.

**FOR FIRE HAZARD IDENTIFICATION/ABATEMENT:** Contact your area Fire Inspector. Write a brief description of the hazard(s) and submit to Fire Prevention Office, Mail Stop 18e. For any additional information or assistance, please contact the Assistant Fire Chief Fire Prevention at extension 35778.

**IF YOU RELOCATE, TRANSFER, OR LEAVE:** Please contact the Fire Prevention Office with the name of the person relieving you. Please transfer this booklet to the new Fire Warden.

**“Thank you for a JOB WELL DONE”**

## **FIRE BILL**

### 1. Fire Bill

a. Fire bill, NAVFAC 3-11320/9 (in the form of a placard), gives pertinent information relative to the action to be taken by personnel in the event of a fire.

b. Cognizant supervisory personnel shall be responsible for the adequate and conspicuous posting of the Fire Bill and, for the indoctrination of all personnel, will procure necessary Fire Bills from the Fire Prevention Office.

### 2. Instruction in Preincident Planning and Action in Event of Fire

a. Fire Wardens will:

(1) Obtain advice from the Fire Prevention Office in their administration of the fire prevention program.

(2) Organize personnel to carry out duties outlined on Fire Bill NAVFAC 3-11320/9.

(3) Arrange for lectures and demonstrations by personnel of the Fire Prevention Office to instruct personnel in proper performance of their duties.

(4) Conduct daily fire prevention inspections at the end of each day throughout the building and/or area for which they are responsible and report immediately any fire hazard or deficient firefighting equipment to the Fire Department, extension 33401. Write a brief description of the hazard(s) and submit to Fire Prevention Office.

(5) Notify the Fire Chief of any intention to change the occupancy classification of a structure or to add or change task performed in it (i.e., change administration to shop or vice-versa). Notify the Fire Department of any structure that is to be secured.

(6) Ensure that corrective action is initiated on all hazards reported on Fire Inspection Hazard form.

(7) Ensure that adequate "NO SMOKING" signs are prominently posted where required. Ascertain that proper safeguards have been taken, permits obtained where applicable, and proper authorities notified of all hazardous operations.

(8) Coordinate the required fire and evacuation drills (article) of this document for all buildings and/or structures under their control with the Fire Chief.

(9) Ensure that each piece of first aid fire fighting equipment will have an appropriate inspection tag (NAVFAC 11320/2) attached which will be marked with the date of the inspection, the inspector's initials, and any other appropriate notes. In addition, each piece of equipment must be unobstructed and easily accessible and hung on a bracket or rack as applicable.

## **FLOOR WARDENS**

### 1. Floor Wardens Shall:

- a. Familiarize themselves with fire protection requirements. This includes familiarization with all requirements pertaining to their personnel or areas of responsibility;
- b. Establish procedures within their areas of operations for reporting fire hazards or unsafe conditions and for taking prompt actions;
- c. Organize personnel to carry out duties outlined on the Fire Bill (NAVFAC 3-11320/9).

### 2. Emergency Guidelines

- a. When the audible fire emergency signal sounds (horn), evacuate as required:

**WALK DON'T RUN.**

- b. Know where all emergency and regular exits are located:

**DO NOT USE ELEVATORS.**

- c. Know the Fire Department emergency number:

**Extension 33333.**

- d. Know where the fire alarm pull boxes and fire extinguishers are located:

(1) Fire alarm box - Pull white handle down to expose the lever inside.  
Pull lever in the downward motion and let go.

(2) Know when and how to use fire extinguishers.

- e. Sound the alarm:

If you see smoke or detect a burning smell.

- f. If time permits:

Close doors and windows.

- g. Assign personnel to assist handicapped personnel out of the building.

- h. "Stop Drop and Roll" if clothing catches fire:

Cover face with hands to guard against breathing in smoke or fire and roll back and forth to smother fire on clothing.

- i. Assemble outside building and report to supervisor.

- j. Maintain a safe distance from the building and keep clear of emergency operations.

k. Smoke can impair vision, hinder judgment, damage respiratory passage, and even cause death ... so if you get caught in smoke:

- (1) Crawl low (on hands and knees) quickly away from smoke;
- (2) keep head low to ground to inhale air; and
- (3) hold breath occasionally to reduce smoke inhalation.

l. If you are trapped:

(1) Don't panic! If you exert yourself, you will breathe faster and take in more smoke/toxic gases that can burn your lungs or render yourself unconscious.

(2) Feel door from bottom to top with the back of your hand. Using the back of your hand will prevent you from burning the palm of your hand if the door is hot (if the palm on your hand is burned it will be difficult to crawl). If the door is hot or warm, stuff clothing/towels in the cracks to keep out smoke/gases.

(3) Open a window at the top to let out heat/smoke collecting on the ceiling. Open window at the bottom and bend down to breath in fresh air. Never open a window if smoke is rising from lower floors.

- (4) Stand by the window, waving something and wait for rescue.

m. Remember:

- (1) Hold regularly scheduled fire and disaster drills.
- (2) Treat all FIRE DRILLS as if they were REAL!

(3) After each exit drill, a meeting of the responsible floor wardens should be held to evaluate the success of the drill and to solve any problems that may have arisen.

### **FIRE EVACUATION PROCEDURES**

In case of fire keep calm, anyone who discovers a fire, regardless of location, size or possible consequence shall:

1. Turn in Fire Alarm at the alarm box nearest FIRE AREA or by telephoning extension 33333. Give the exact location of fire or smoke, building, floor, etc.
2. See that handicapped persons are helped to the outside (responsible people should be assigned to this task).
3. If fire isn't too large, try to contain it with fire extinguisher (don't be a hero).
4. Close doors and windows to prevent spread of fire or smoke to adjacent areas.
5. Shut off power (electrical, gas, etc.). Persons should be assigned to do this.
6. Put valuables in safe or take with you.
7. Get out of building as fast as possible, but do it in an orderly fashion (don't push or shove and don't panic).
8. Assemble at least 100 feet from building, and take a count of personnel.

## MEMORANDUM

From: Assistant Fire Chief, Fire Prevention  
To: All Building No. \_\_\_\_\_ Personnel

Subj: BUILDING NO. \_\_\_\_\_ FIRE BILL

1. REPORTING A FIRE: Upon discovery of a fire regardless of the location, size, or probable consequence, the alarm should be given immediately by all of the following means:

a. **Telephone Alarm**: Dial extension 33333. Report as clearly as possible the name, and number of the building, exact location of the fire, type of fire, your name and call back number. Do not hang up until the Fire Department dispatcher acknowledges receipt of all pertinent information. When completed, proceed to the nearest point of approach to direct fire apparatus to the scene of the fire.

b. **Fire Alarm Box**: To operate the alarm box, pull the white handle down to expose the lever inside; pull the lever downward and let it go. If one of the auxiliary alarm boxes inside the building is pulled, proceed to the master alarm box outside the building to direct the Fire Department to the scene of the fire. The master alarm box is located at \_\_\_\_\_.

c. **Word of Mouth**: Spread the alarm so all personnel will become aware of the danger and evacuate the building.

2. Alarm: If the fire alarm should sound, whether a drill or real fire condition, all personnel will immediately evacuate the building at the nearest exit and reassemble at \_\_\_\_\_ of the building for muster. It is vital that you contact your supervisor to insure no one is trapped in the building.

3. Fire Warden: The Fire Warden for building No. \_\_\_\_\_ will be appointed and will be revised on the need be basis. The Fire Warden will assign Floor Wardens to close doors and windows as practicable, secure machinery and equipment, shut off power (electricity and gas), put valuables in appropriate location (classified material, funds, etc.), assign person to assist handicapped personnel out of the building, use appropriate extinguishers (without endangering themselves), and finally, follow procedures for evacuating the building.

4. Mustering Personnel: Each supervisor/acting supervisor (fire warden) will muster his personnel at a preassigned area (assigned by appropriate authority) at least 100 feet from building and take a count of his/her personnel. Personnel will be required to stay in the immediate vicinity unless released by their supervisor. In the event of missing or unaccountable personnel, the supervisor will provide name (s), suspected location, and if possible, the description of the person (s) to the driver of the fire apparatus who will relay information to higher authority. Under no circumstances are personnel to reenter the building unless authorized to do so by appropriate authority.

5. Instruction and/or Training: Personnel assigned as floor wardens will be regularly instructed in the location and operation of fire alarm boxes, telephone, the operation and use of the fire extinguisher. Responsibility for unit training rest with the Head of the Department/Staff Officer (military and/or Civilian). Instructors for training will be furnished by the Fire Department, extension 35778, when requested.

6. Fire Drills: Building # \_\_\_\_\_ is scheduled for a mandatory fire drill in \_\_\_\_\_; however, a fire drill may be conducted at the discretion of the Commanding Officer or his representative at anytime.

7. Point of Contact: Point of contact for all action regarding this program will be directed to \_\_\_\_\_.

\_\_\_\_\_  
(Signature)

Enclosure (3)



DEPARTMENT OF THE NAVY

UNITED STATES NAVAL ACADEMY  
121 BLAKE ROAD  
ANNAPOLIS, MARYLAND 21402-5000

USNA/AACINST 11320.8B CH-1  
4/Fire Department  
DEC 12 1997

USNA/AAC INSTRUCTION 11320.8B CHANGE TRANSMITTAL 1

From: Superintendent

Subj: FIRE PROTECTION AND PREVENTION PROGRAM

Encl: (1) Revised pages 1 and 2 of enclosure (1)

1. Purpose. To publish change 1 to subject instruction which provides guidelines on installing key boxes on the exteriors of structures.
2. Action. Remove pages 1 and 2 of enclosure (1) and replace with revised pages 1 and 2.
3. Cancellation. When required action has been taken.

  
JO DEE C. JACOB  
Deputy for Operations

Distribution:

AA

Fire Dept (250 copies)

NSWC, Annapolis Safety Office (50 copies)