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Public Works  
FIRE PREVENTION AND PROTECTION

CONTENTS

	PARAGRAPH	PAGE
Chapter 1: GENERAL		
Purpose	1-1	1
Applicability	1-2	1
References	1-3	1
Responsibilities	1-4	1
Chapter 2: FIRE AND EMERGENCY SERVICES		
Classified Area	2-1	2
Inspection Frequency	2-2	2
Authority Jurisdiction	2-3	2
Chapter 3: BUILDING MANAGER/EVACUATION COORDINATION PROGRAM		
Fire Prevention	3-1	3
Building Manager	3-2	3
Evacuation Coordinator	3-3	4
Chapter 4: FIRE PREVENTION		
Construction, Alterations, and Modernization	4-1	5
Life Safety	4-2	6
Care of Buildings	4-3	9
Use of Buildings	4-4	11
Common Hazards	4-5	12
Special Hazards	4-6	15
Chapter 5: FIRE PROTECTION EQUIPMENT		
Tampering With	5-1	25

## Chapter 5: (CONT)

Fire Hydrants	5-2	25
Fire Hose Cabinets	5-3	26
Fire Lanes/Access Aisles	5-4	26
Sprinkler Systems	5-5	26
Fire Alarm Systems	5-6	27
Fire Extinguishers	5-7	27

## Chapter 6: PRE-FIRE PLANNING

Evacuation Plans	6-1	29
Fire Drills	6-2	29
Fire Reporting Procedures	6-3	30

## REFERENCES

32

## APPENDICES

Appendix A: Appointment of Building Managers & Evacuation Coordinator's
Appendix B: Monthly Fire Inspection of Building
Appendix C: Self-Inspection Checklist- (example)
Appendix D: Checklist for Vehicle Repair Garages- (example)
Appendix E: Child Development Center (CDC)
Appendix F: Fire Extinguisher Inspection Log
Appendix G: Hot Work Checklist
Appendix H: RCW Title 9
Appendix I: Classification of Flammable and Combustible Liquids

CHAPTER 1  
GENERAL

1-1. PURPOSE. To establish minimum fire prevention measures for complete fire protection services that prevent loss of life or personal injuries and reduce property loss to the lowest attainable level and is consistent with mission, sound engineering, and economic principles.

1-2. APPLICABILITY. This regulation applies to all Active Army, the Army National Guard (ARNG), Army Reserve, members of other uniform services, organizations (including tenant and contractors), civilian personnel assigned, and family members residing or visiting on the installation. This regulation also applies to off-post facilities under the jurisdiction of Fort Lewis.

1-3. REFERENCES. See Appendix and Reference pages.

1-4. RESPONSIBILITIES. Installation commanders are responsible for Fire and Emergency Services at their installation and other activities where engineering support is provided. The installation Fire Chief is directly responsible for technical development and execution of an effective fire prevention and protection program for the entire installation and sub-installation or other supported activities. Unit commanders, building managers, evacuation coordinators, activity supervisors, and department heads will be thoroughly familiar with this regulation and will ensure that proper dissemination and rigid compliance with this regulation occurs.

CHAPTER 2  
FIRE and EMERGENCY SERVICES (F&ES)

2-1. CLASSIFIED AREAS. Installation commanders will ensure that the installation fire chief, fire prevention inspectors, and firefighting personnel, as necessary, are properly cleared to enter into buildings or areas where classified information, materials, or equipment are maintained. This ensures that complete fire prevention inspections, essential to the safety of life and property, can be done at prescribed intervals with or without escort, as required. (Bringing extinguishers to the entrance for the inspector's examination does not satisfy the requirement for a fire prevention inspection of the spaces or areas within the building.)

2-2. INSPECTION FREQUENCY Fire prevention inspections and services will be conducted as follows:

- a. Facilities located on the installation, as designated by the Chief of Prevention.
- b. Noncontiguous supported activities. Sub-installations, activities, or other facilities outside the boundaries of the installation at remote locations, but which receive engineering support from the installation will be inspected at least annually.
- c. Department of the Army (DA) Form 5381-R, Building Fire Inspection, and DA Form 5382-R, Hazard/Deficiency Inspection Record, will be completed at the time of the inspection (see AR 420-90 and/or a computer-generated form). Copies of the completed inspection forms will be provided to the Building Manager or person in charge at the time of the inspection. The original inspection form will be kept by the inspecting official for use at the time of the next inspection. The fire prevention office will submit all work requests involving deficiencies in fire protection equipment and systems and life safety matters.
- d. Interior Fire Reporting Systems. Automatic sprinkler system attachments, automatic code transmitters, heat responsive devices for smoke detectors, and deluge sprinkler systems will be inspected and tested in accordance with National Fire Protection Association (NFPA) standards.
- e. Fire Extinguishers. The Fire and Emergency Services Division will maintain the Fire Extinguisher Repair Shop for the placement, repair, exchange, and servicing of facility extinguishers to tenant units and organizations covered under this regulation.

2-3. AUTHORITY JURISDICTION. The Fire Chief, Fire and Emergency Services Division, or his designed representative for all subjects relating to fire protection and prevention has the jurisdiction authority. Interpretation of subjects not addressed by this regulation will be examined by the authority having jurisdiction who will use other governing regulations and polices to insure a sound fire prevention program is meant. (NFPA 1, 1-4)

**CHAPTER 3  
BUILDING MANAGER AND EVACUATION COORDINATOR PROGRAM**

**3-1. FIRE PREVENTION BRANCH.** The Fire Prevention Branch is responsible for providing staff and technical supervision and guidance for this program. In Accordance With (IAW) AR 420-90, the Fire Prevention Branch will provide professional fire prevention orientation and guidance. All Building Managers and Evacuation Coordinators shall be required to attend. Orientations will be conducted the 1<sup>st</sup> Wednesday of each month, at Building 7924. A Memorandum of Appointment (Appendix B) will be submitted to the F&ES, Fire Prevention Branch, requesting the number of persons to attend the orientation one week before the class date.

**3-2. BUILDING MANAGERS.** Each command level is required to evaluate their immediate subordinate level of operations to insure a fire prevention program is established and maintained. Unit commanders and activities directors will appoint one Building Manager for each building or portion of a building that is hand received for facilities from Public Works, Master Plans, and Building Assignments. The Building Manager will be responsible for:

a. Assuming responsibility for all activities, buildings, or facilities under their command or direction regardless of physical location. Accompany Fire Prevention inspector on regular scheduled inspection.

b. Conducting or designating an assistant to conduct monthly fire prevention inspections of all buildings, structures, grounds, and portable fire extinguishers in their assigned area.

c. Appointing Assistant Building Managers to carry out their mission in all matters pertaining to fire prevention. Names of all assistants will be furnished to the Fire Prevention Officer and will include unit, section, telephone numbers, and the facilities for which he/she is responsible. This roster will be current at all times. (See Appendix B).

d. Insuring that all personnel and building occupants are instructed annually and trained in the use of fire extinguishers, fire reporting methods, and fire prevention measures.

e. Eliminating all fire hazards that can be eliminated, reporting all remaining hazards to the Fire Prevention Office. (See Appendix C).

f. Insuring all fires in the area (including structural fires, vehicle fires, tent fires, and range fires) are reported to the Fire and Emergency Services Division regardless of size.

g. Posting guards for security and fire watch after each fire and when a building fire alarm is inoperative. The guard service is to be continued until terminated by Fire and Emergency Services Division.

h. Reporting any person(s) causing a fire, damage to firefighting equipment or failure to comply with the provisions of these regulations, regardless of negligence or carelessness for appropriate action. (See Appendix A & J).

3-3. EVACUATION COORDINATOR. The Evacuation Coordinator (EC) will be a service member in the grade of E-5 or above or a civilian of commensurate rank. Responsibilities will include the facility or any portion of a facility used by a unit or organization. The EC duties include:

a. Performing inspections of the building for fire hazards. (See Appendix D and E).

b. Inspecting the building's fire fighting equipment and fire extinguishers each month. Extinguishers needing service will be delivered to the Extinguisher Repair Shop, Building 2014. All serviced fire extinguishers will be returned to the proper location in the building. (See Appendix G, Fire Extinguisher Inspection Log).

c. Preparing a list of corrective actions taken and forward this to the Fire Inspection Report to the (ABM).

d. Correcting or reporting hazardous conditions immediately to the ABM. Hazards of an emergency nature which threaten life, safety, or property, should be called into the Fire Prevention Office for immediate response.

CHAPTER 4  
FIRE PREVENTION

4-1 CONSTRUCTION, ALTERATIONS, AND MODERNIZATION

a. The Installation Fire Chief or designated representative shall monitor construction, alterations, and renovation projects to be forwarded for review by fire protection personnel. These projects include, but are not limited to, non-appropriated funds (NAF), Army Air Force Exchange Services (AAFES), and self-help projects.

b. Construction renovation plans should contain a description of the work and materials in sufficient detail for fire prevention personnel to determine if the project materials are fire safe and do not interfere with life safety, fire protection systems, or firefighting operations.

c. Contractors. The term "contractor" includes all persons or firms performing work or services on this reservation for the U.S. Government or any of its branches or holders of concessions involving any type of work or service on the installation. All provisions of these fire regulations are applicable to these parties.

d. Plans for major changes or closing of roadways will be coordinated with the Fire Chief.

e. Each contractor will appoint a responsible person and provide the name and telephone number and/or location to the Fire and Emergency Services Division. This individual will serve as a central point of contact for fire prevention matters.

f. The person appointed Building Manager above (3-2) will be responsible for assuring that trash and debris are removed from the job site daily and the proper disposal of these materials is accomplished at the end of each day; good housekeeping will be observed at all times.

g. Each contractor is responsible for furnishing fire extinguishers, special fire protection equipment and any installed special fire protection equipment that in the opinion of the Fire Chief are necessary for the protection of life and government property involved in the operation.

h. In buildings equipped with automatic fire alarms or automatic sprinklers, alteration to the building will not begin until the work request for the sprinkler or alarm work has been approved and the work order issued.

i. Self-help projects will follow the same fire protection criteria as other construction.

j. Any interior finish material installed as part of the change, alteration, or modernization projects and movable partitions will be in accordance with the military handbook or other publication criteria. Fire retardant chemicals listed by recognized testing laboratories might be considered for treatment of existing interior materials.

#### 4-2. LINE SAFETY

##### a. Public Assembly and Recreation

(1) These include clubs, theaters, exchanges, concessions, chapels, restaurants and/or cafeterias, hobby shops, golf courses, gymnasiums, sales stores, and other places where people may congregate for entertainment or recreation. The potential for life and high property loss in these occupancies requires that extraordinary actions be taken to prevent fire.

(2) Managers of these facilities are responsible for posting written instructions that state the responsibilities of all employees. Supervisors will make sure that every employee understands his/hers responsibility regarding fire prevention and receives training in proper building evacuation and proper application of fire protection equipment at least annually.

(3) Managers will notify the Fire Prevention Branch, 967-7323, when planning events involving temporary decorations, exceptionally large crowds, or any unusual arrangements.

(4) Managers will adhere strictly to building and room occupant capacities.

##### b. Exits.

(1) Exits will be arranged in full compliance with the National Fire Protection Association codes (NFPA) No. 101. Exits will not be blocked or locked in any manner to prevent occupants from exiting the building.

(2) Restrictive hardware, such as padlocks and hasps, throw-bolts, and crossbars will not be installed on any exit door except as permitted by NFPA No. 101. Where either physical or classified security is a major concern, judicious use of a two (top and bottom) latching panic hardware, without exterior door operating hardware, is an effective measure. Such doors, particularly when not normally under direct observation by operating personnel, may also have simple and effective door alarm devices as an additional control measure.

(3) Knockout or kick-out panels or emergency escape panels of any kind are not permitted in lieu of standard exit facilities as required by NFPA No. 101. Wherever it is necessary to block, obstruct, or rearrange any existing exit in a manner which destroys or reduces its function, an additional exit or exits designed, located, and arranged in strict conformance with NFPA No. 101 must be provided.

(4) Padlocks and/or hasp are not permitted on interior/exterior doors, except for storage or industrial occupancies. Occupants of these types of building/rooms should be able to unlock doors from the inside without using a key.

c. Exit Illuminations and Markings. Illuminations and markings will comply with NFPA 101.

d. Stairs and Stairways. Stairs and stairways will comply with NFPA No. 101 with particular attention given to the following:

(1) Do not use stairway enclosures for storage or for any purpose other than a stairway.

(2) Protect openings to stairway enclosures by self-closing doors. Do not hold stairway doors open by wedging or blocking or by any other device, including fire extinguishers, which prevents the doors closing automatically unless specifically permitted by NFPA No. 101.

e. Family Quarters. This applies specifically for fire prevention for family quarters occupants only. Other provisions within this regulation apply as well.

(1) Personnel assigned to family quarters will receive a fire prevention briefing by a qualified Public Fire and Life Safety Educator. The class is conducted every Tuesday at 0900 hours at Building 7924.

(2) Family sponsors are responsible for fire prevention in their quarters. Each sponsor is urged to develop and instruct their family members in a fire plan for their quarters. As a minimum, instructions will include how to evacuate their quarters and how to report a fire.

(3) Sponsors of family housing units will conduct a monthly test of all smoke detectors installed in their quarters. Testing will include:

(a) A visual inspection for damage or abuse and the security of the mounting.

(b) A check of the unit power light to ensure that the unit has power.

(c) An operational test of the detector to ensure the audible alarm functions.

(d) Report any faults or malfunctions to Emergency Work Order for All Star for corrective actions by calling 964-8844.

(4) Unattended cooking is a major cause of damage in family quarters. A responsible person will keep cooking of any type under visual supervision at all times.

(5) Grease fires in the kitchen can be safely controlled by remaining calm. Fires in skillets, broilers, and deep-fry devices can usually be extinguished by covering with a lid, not necessarily tight-fitting. A lid should be kept conveniently available for this purpose. If boil-over has occurred, a handful of baking soda or a wet cloth (towel) thrown over the burning area will usually extinguish it. DO NOT attempt to move any type of container of burning materials. DIAL 911.

(6) Contact paper, common combustibles, plastic brick, and other materials made of plastic must not be placed on walls, ceilings, or cabinet surfaces near cooking appliances. These materials will increase the chance of the fire spreading and create a heavy concentration of smoke that has toxic vapors.

(7) Each individual smoker is responsible for safe disposal of all smoking materials, including matches and lighters.

(a) Under no circumstances will smoking materials be disposed of in wastebaskets or any container that is composed of combustible materials, unless the materials are thoroughly wet prior to placing them in the container.

(b) Matches, lighters, and other flame-producing devices must be kept out of reach of all small children.

(8) Flammable and combustible liquids commercially packaged for household use (cleaning material, paste wax, etc.) and labeled "Combustible Mixture" are acceptable for use in family quarters providing instructions on the label are followed while in use:

(a) Gasoline, kerosene, thinners, oil, oil base paint, lacquers, and similar materials will be kept outside of quarters and out of reach of children.

(b) Gasoline motor driven vehicles or machinery will not be stored, repaired, or operated inside family quarters.

(c) Tires will not be stored inside family quarters.

(9) Storage of any type will not be permitted in mechanical rooms (furnace) or attics.

(10) In areas (basements, garages, and utility rooms) containing furnaces and water heaters, a minimum of 36 inches of clearance will be maintained around these appliances.

f. Furnishing and Decorations.

(1) Furnishing and decorations in building occupancies such as health care, penal, day care, and place of assembly will be in compliance with the requirements in NFPA No. 101.

(2) Burning scented or decorative candles and similar open-flame devices in the barracks, BOQ, and similar sleeping occupancies is prohibited.

#### 4-3. CARE OF BUILDING.

##### a. Rubbish and Debris. Personnel will:

(1) Clean workspaces, storage areas, construction sites, and repair areas regularly to reduce fire hazards.

(2) Remove rubbish from the building at the close of the normal workday and take it to locations approved for rubbish disposal or for temporary storage. Keep work areas free of combustible debris accumulation. Use only metal containers or nonmetallic containers that are approved by a nationally recognized testing laboratory for disposal of combustible trash or rubbish inside buildings. Ordinary plastic containers are generally combustible, produce toxic gases when burned, and will not confine a fire involving the contents.

(3) Place dumpster units and other central trash disposal units at least 15 feet from any building. Dumpster lids shall be kept closed, except when refuse is being loaded.

(4) Soiled rags used in connection with repair shops, painting, or other such operations, will be removed from the building or placed in a metal container with tight-fitting, self-closing cover.

(5) Store steel wool separately in covered metal containers.

##### b. Personnel Service Rooms.

(1) Metal or testing-laboratory – listed plastic trash receptacles with self-closing lids will be used in all restrooms or latrines and in other areas where paper towels or disposable paper or plastic cups are used.

(2) Clothing lockers will be adequately ventilated and kept in a clean and orderly condition. Materials will not be stored on top of or underneath lockers. Work clothing in lockers should be regularly aired and cleaned.

(3) Flammable liquids, chemicals, paints, paint soaked rags, and similar materials will not be kept in clothing lockers.

(4) Combustible materials will not be placed on radiators, heaters, or steam pipes.

c. Attics and concealed spaces will be kept clean. Attics without sprinkler systems in other than family quarters will not be used for storage of combustible materials.

d. Securing buildings at the close of each workday.

(1) All doors, including fire doors and windows, will be secured properly at the close of working hours unless excepted in writing by the Installation Commander or authorized representative.

(2) The person in charge will shut off heating devices not required during the night at the close of work hours. Portable electric appliances will be unplugged.

(3) Exit doors will not be secured in any manner which will prevent their use as an exit at any time the building is occupied.

(4) Mops, cleaning gear, and other materials subject to spontaneous ignition will be kept outside of buildings or stored in metal containers with tight-fitting metal covers.

(5) Unused paints, brushes, drop cloths, rags, and like items will be removed from buildings at the close of the workday. An exception is in paint shops where full precautions are taken daily to store paints and related supplies. Any material left at the job site will be placed in an approved flammable storage container. Trash and other waste material will be removed daily.

e. Fire doors and shutters. Personnel will not lock open, block, or otherwise obstruct the normal operation of fire doors or fire shutters.

f. Vacant Buildings

(1) Vacant buildings will be secured against unauthorized trespass. Doors will be locked and windows barred with wood or fixed shutters to prevent access, where necessary.

(2) Electrical power to vacant buildings that are schedule to be destroyed shall have incoming power lines disconnected. Temporarily vacant building shall have their electrical power shut down at distribution breakers. Power for security, fire alarm systems, and heating and support of sprinkler systems will be maintained as needed.

(3) Fuel inlet valves will be closed and sealed on furnaces, boilers, and other means of heating in vacant buildings where the heat is not required to prevent freezing of the sprinkler systems or the plumbing.

(4) The Fire and Emergency Services Division will be notified whenever a building becomes vacant and when it is again occupied.

g. Pump houses, generator buildings, transformer stations, furnace rooms, electrical equipment, and mechanical equipment rooms will not be used for other than their designed purposes. Storage is prohibited in these areas. These areas will be secured to prohibit unauthorized entry.

#### 4-4. USE OF BUILDINGS.

##### a. Sleeping areas.

(1) Using buildings or portions of buildings other than approved barracks or quarters as sleeping facilities is prohibited, except upon written approval by the Installation Chief of Fire Prevention or authorized representative. Reserve center buildings are exempt from this requirement provided the sleeping areas comply with the requirements of NFPA No. 101 and adequate smoke detectors are provided for early warning.

(2) Using attic space in any building, including quarters, as a sleeping area without the written approval of the Chief of Fire Prevention is prohibited. All sleeping areas must be in compliance with requirements contained in NFPA No. 101.

(3) Regardless of whether or not the area is constructed for bedrooms, using third floor or higher areas in quarters as a sleeping area is prohibited unless exit facilities complying with NFPA No. 101.

(4) Using a space in any building accessible only by scuttle, hatch, trap door, or served by anything other than a standard stairway as a sleeping area is prohibited. The use of below-grade basement areas for living and sleeping is only permitted when there is a second means of escape in compliance with NFPA No.101.

(5) Use of sleeping areas for storage of or repair of gas-powered equipment is prohibited.

b. When a change of occupancy or use of a building occurs, the Chief of Fire Prevention will review changes to ensure life safety and fire protection requirements are met.

c. Special occupancies, nurseries, kindergartens, day care centers or first grade occupancies will not be located in a basement or above the first floor, except under

special conditions where approval is granted by the Fire Chief. Full compliance with NFPA No. 101 and AR 608-10 is required.

#### 4-5. COMMON HAZARDS

##### a. Heat.

(1) All building heating equipment will be labeled and/or listed by the American Gas Association, "Underwriters" Laboratories, Inc (UL), or Factory Mutual Laboratories and will be installed, maintained, and operated under the approval listing, manufacturer's operating instructions, and the National Fire Codes.

(2) There will be a 3-foot clearance between heating equipment and combustible material. Clearances for listed equipment will not be less than the minimum given in the listings. Existing unlisted equipment will be governed by the clearances indicated in the National Fire Codes.

(3) The use of un-vented hydrocarbon-fueled heating appliances inside buildings is prohibited. Hydrocarbon fuels include natural gas, gasoline, fuel oil, alcohol and petroleum based oils, and kerosene. Duct-type portable gasoline-fired heaters (e.g., Herman Nelson or similar models) are not authorized for heating any building unless prior approval is obtained from the Fire Chief and only if the use is temporary and held to a minimum. These types of heaters are designed for outside operation and are intended primarily for field uses such as heating large tents, maintenance shelters, operator's compartments for tactical vehicles, and preheating aircraft engines or keeping them warm during idle periods.

(4) Using open flame heating devices is prohibited in areas subject to accumulation of flammable vapors such as gasoline stations, garages, paint shops, and aircraft hangers. Exceptions are the installation of suspended oil furnaces and gas-fired unit heaters when the use, location, and installation of such equipment is permitted by specific provisions of pertinent sections of the National Fire Codes and the unit is specifically listed and/or approved for such installation.

(5) Covered metal containers will be provided for ashes where solid fuels are used.

(6) Portable electric heaters are prohibited, unless individually approved by the Chief of Fire Prevention. If additional heating is required, radiant oil heating units should be considered before electric. Approval for electric heaters may be granted for a specified area and period of time. When permitted, heaters shall be UL-labeled or listed and shall be of a type in which the electrical circuitry will automatically shut off if the unit is tipped over. Power supply cords and plugs will be in good condition and electrical supply will be adequate for safe use.

(7) Lint traps for domestic type clothes dryers will be cleaned after each use of the dryer. Properly vent dryers to the outside of the building. Avoid excessive length or vertical runs of vent pipe to reduce lint accumulation in piping.

b. Electricity.

(1) The current edition of NFPA No. 70 (National Fire Code) will be the minimum standard for all electrical wiring and equipment. Only authorized electricians will install, repair, and change electrical wiring, fittings or attachments.

(2) Defective electrical equipment will be reported to the work order section of Public Works for repair or removal by authorized electricians.

(3) Use only electrical appliances and devices that bear the UL-label or those listed by other approved testing agencies. Appliances or devices that do not have the UL-label or other approved listing (e.g., decorative lamps and small electrical appliances acquired in Europe and the Orient) should not be connected to a power source unless continuously under observation. Such items are prone to electrical breakdown under limited usage, and cord insulation is often inadequate for safety. Extension cords are not to be used to replace permanent wiring.

(4) All electrical wiring equipment and devices, including electrically operated vending machines, water coolers, and clocks installed and operated in aircraft hangers, automotive repair, paint shops, and other occupancies where flammable vapors, gases, or dusts may be present, will be UL-listed for the particular hazardous areas.

(5) Soldering irons, coffee makers, office machines, and other non-fixed electrical devices will be disconnected from outlets when not in use. There will be adequate clearance between all heat-producing electrical devices and combustible materials. The use of automatic timers to control power supplies is prohibited.

(6) Ground – fault-circuit interrupters shall be provided for receptacles in damp or outside locations, bathrooms, kitchens, and garages.

(7) Devices, which will interfere with the normal operation of a circuit breaker or fuse will not be installed. Whenever a circuit has been interrupted by a tripped breaker or blown fuse, the source of the disturbance will be located and eliminated before restoring power to the interrupted circuit. Circuit breakers are not to be used as switches, unless the breaker is specifically designed for switching.

(8) Electric panels, circuit breakers, fuses, and power panels will be labeled correctly to indicate the circuits or devices they control. A continuously clear access of 36" will be maintained around all panels.

(9) Lamp fixtures in damp or hazardous locations and in areas subject to grease accumulation (such as under hoods over cooking ranges/fryers) will be of types specifically approved for such locations.

(10) All domestic-type washing machines, clothes dryers, vending machines, portable electrical tools, lights, and extension cords intended for use with them, will be electrically grounded in accordance with NFPA No. 70 (National Electrical Code), unless otherwise protected by a system of double insulation or equivalent and appropriately identified.

c. Smoking.

(1) Smoking will be permitted in accordance with Fort Lewis Regulation 1-4

(2) Smoking will be prohibited in hazardous areas as determined by the Fire Prevention Office.

(3) The Chief of Fire Prevention has determined smoking in attics, lofts, under structures, sheds, fuel storage areas, flammable liquid, chemical handling, explosives storage and handling areas, piers, wharf's, loading ramps, and open spaces where combustible are stored constitutes a fire hazard and smoking shall not be permitted.

(4) Smoking is prohibited within 50 feet of gasoline dispensing operations, bulk oxygen storage facilities, areas where bituminous or plastic coating are being applied, flammable liquid or gas storage areas, and aircraft parking areas.

(5) Smoking is prohibited within 200 feet of a boat engaged in a gasoline transfer.

(6) Restrictions on smoking in motor pools are in AR 385-55.

(7) An adequate number of suitable receptacles for discarding smoking materials will be provided in areas where smoking is permitted. Such receptacles will not be used as wastebaskets.

(8) Discarding lighted matches, cigarettes, and other smoking materials from vehicles to other than suitable receptacles is prohibited.

d. Air Conditioning and Air Handling.

(1) Air conditioning and air handling equipment rooms, including boiler and furnace rooms, will not be used for storage. Secure rooms from unauthorized entry.

(2) Electrical circuitry supplying power to air conditioning units will be in conformance with NFPA No. 70 (National Electrical Code).

## 4-6. SPECIAL HAZARDS

a. Flammable and combustible liquids. All flammable and combustible liquid stored will be in conformance with the requirements of NFPA No. 30. Flammable liquids are defined as any liquid with the flash point below 100 degrees Fahrenheit (37.8 degrees Centigrade). Flammable liquids include gasoline, alcohol, naphtha, lacquers paints, and thinners. Combustible liquids are defined as any liquid, which will burn, but has a flash point in excess of 100 degrees Fahrenheit. Combustible liquids include those such as kerosene, mineral spirits, or diesel fuel. (See Appendix K, Classification of Flammable Liquids).

- (1) As a general rule flammable and combustible liquids will be stored in approved flammable storage cabinets.
- (2) Flammable liquids will not be used to clean equipment. Gasoline will only be used as a fuel; other uses are prohibited.
- (3) Flammable liquid containers will be kept closed when not in actual use. At no time will flammable liquids be stored in open containers. Glass or plastic containers, other than listed safety cans, are prohibited for storage. Individual capacity of the containers shall not exceed five (5) gallons.
- (4) Flammable and combustible liquids will be kept in their original container or in an approved (safety) container labeled as to the contents.
- (5) Flammable and combustible liquids will not be stored in furnace or boiler rooms, under stairways, in stairways or stairwells, utility rooms, mechanical rooms, or basements.
- (6) Flammable and combustible liquids will not be stored in any place of public assemble, club, or any building used for sleeping.
- (7) Flammable and combustible liquids will not be stored or displayed within 25 feet of any exit door.
- (8) Administrative areas (office, educational, and institutional) requiring the use of flammable and combustible liquids for the operation of equipment and maintenance shall be limited to one (1) gallon of liquid to be stored outside of storage cabinet for daily use. Containers of liquids not exceeding 10 gallons total amount in their original shipping packaging shall be permitted to be stored outside of storage cabinet.
- (9) Sections (Unit Supply) that handle, store, and display liquids in original packaging for issue in containers no greater than five (5) gallon capacity may store Class I, II, & III liquids for a combined limit of 60 gallons.

(10) Vehicle maintenance facilities requiring the use of flammable and combustible liquids for operation of equipment and maintenances shall be limited to ten (10) gallons of Class I & II that may be stored outside of storage cabinets for daily use. Additional quantities, up to 120 gallons, may be stored in cabinets outside of buildings.

(11) Class I liquids shall not be stored or handled within a facility having maintenances pits.

(12) Class II & IIIA shall be permitted to be stored and dispensed inside from approved tanks of not more than 120 gallons for each class with a total capacity not to exceed 240 gallons. Crankcase draining (IIIA) shall be considered as part of the total capacity.

(13) The storage of gasoline inside of family quarters is prohibited. The use for power mowers, outboard motors, and similar equipment with fuel tanks will be in an outside storage building, or cabinet, which meets the following conditions:

(a) The aggregate amount in the container or equipment will not exceed twenty-five (25) gallons.

(b) The storage area will not contain and will be remote from any possible source of ignition (e.g., water heaters, furnaces, and electrical appliances).

(c) Adequate ventilation of storage area will be provided to prevent accumulation of flammable vapors. Below-grade basements and cellars are not acceptable storage areas.

(d) Storage area will not be occupied as living space or used as an exit.

(e) All openings from the fuel tank will be tightly closed and the supply line to the engine will be shut off where a valve is provided during non-use.

(f) Gasoline will be stored only in a safety container that is listed by a nationally recognized testing laboratory.

(g) No refueling will be conducted inside or within 10 feet of any building, including garages, basements, or attached right-of-way. Allow all equipment to cool prior to refueling.

(h) The use of gasoline-fueled field ranges inside buildings is prohibited, except where special approval is granted in writing by the Fire Prevention Office. When approval is granted for use inside the building, all fueling and proof firing of unit must be conducted outside of the building immediately prior to use of the burner inside the building. If fuel is to be stored in the building, a flammable liquid storage room in accordance with criteria contained in NFPA No. 30 is required.

b. Fueling Operations.

(1) Only authorized and properly trained personnel will be permitted to operate major fueling equipment. Knowledge of the equipment hazards involved and the regulations for handling flammable liquid will be required. The operator must be familiar with the nearest telephone and/or fire alarm pull station, how to call the fire department, and the location and operation of first-aid firefighting equipment.

(2) Self-service gasoline stations open to the public will have a fully qualified attendant in the immediate vicinity of gasoline dispensing operations during all periods that the facility is open for use.

(3) Operators of vehicles and mobile equipment will turn off engine, lights, and radio transmitters before taking on fuel.

(4) Vehicle operators, attendants, or others will not smoke or light a match or lighter during fueling and there will be no open flame in the vicinity.

(5) Latching or locking devices, which restrict or impede the ability to automatically stop the flow of fuel, will not be permitted on any gasoline or other flammable liquid dispensing nozzle. This does not preclude the use of listed and approved automatic nozzles.

(6) Operating any vehicle leaking fuel is prohibited until the necessary repairs have been made.

(7) Flammable liquid containers found to be leaking will be moved to a safe location, and the contents will be transferred to serviceable containers. Leaking containers will be disposed of properly.

(8) Glass or plastic containers other than plastic containers listed by UL or Factory Mutual Engineering Corporation will not be used for gasoline. Service station operators are prohibited from dispensing gasoline into containers other than approved containers, even for emergency purposes.

(9) Vehicles transporting explosives will not be refueled with gasoline while explosives are in the vehicle, except in an emergency, then, only with the engine stopped, all lights and radios off, and static grounding devices properly connected.

(10) Defective or leaking fuel dispensing equipment (e.g., nozzles and hose pumps) will not be operated until restored to proper operational condition.

(11) Makeshift fuel dispensing or de-fueling arrangements are prohibited. Fuel dispensing, storage locations, arrangements, and equipment will be in conformance with the pertinent requirements of the National Fire Code or applicable Army Technical Manuals. De-fueling into open containers is prohibited.

(12) Automotive vehicles and other spark-producing equipment will not be operated within 50 feet of any fuel spill involving gasoline or fuels of similar characteristics until the spill has been cleaned up and all flammable vapors have dissipated.

(13) The storage of LP-gas within any residential building including basements and attached garages shall be prohibited. Cylinders will be limited to outside storage and stored to minimize exposure to excessive temperature and physical damage. The quantity shall not exceed 2 (two), 5 gal. containers. Empty cylinders shall be considered as full.

(14) Only qualified personnel meeting the provision of NFPA 58 shall conduct liquefied petroleum gas (LP-Gas) transfer operations.

c. Parking of flammable liquid transports vehicles. Tank vehicles used for transporting flammable or class II combustible liquids may be parked in-groups of not more than three with a 50-foot separation between groups. Parking locations will be selected so that the vehicles are accessible from all sides for firefighting operations and so that any of the tank vehicles can be moved (either under their own power or towed) from their location without moving another vehicle.

d. Hazardous Chemicals.

(1) Personnel shall be properly instructed in the potential hazards of handling all chemicals and characteristics of the material involved. In addition, personnel must be duly authorized to perform such work.

(2) Hazardous/flammable pesticides will be identified, handled, and stored in accordance with NFPA 434, TIM No. 16, and TM 5-632.

e. Compressed gas will be stored and handled IAW NFPA 55.

f. Explosives, Blasting Agents, Pyrotechnics

(1) The F&ES Dispatch Center will have an area map showing all explosives areas and locations on the installation. Personnel in charge of explosive operations will notify the department when there is a change in type of explosives, which would require a change of fire or chemical symbols.

(2) Fire symbols are not required on the exterior of the facility, providing the building (location) has 1000 rounds or less of small arms ammunition (.50 caliber or less). Round count will be the combined total of military and civilian ammunition.

(3) Fire symbols shall be placed on entrances to arms rooms, or any container where explosives are stored (half-size symbols shall be used).

(4) Symbols will be removed, covered, or reversed if the explosives or chemical agents are removed from a facility or location. The person in charge of the operation will post the symbols and notify the fire department.

(5) Explosives, blasting agents, and similar materials, other than military explosives, will be stored, handled, and used in compliance with NFPA No. 495 (Code for Explosive Materials) and DA PAM 385-64 (Ammunition and Explosives Safety Standards).

(6) Military explosives and pyrotechnics will be stored, handled, used, and transported in compliance with AR 385-64 and FL Reg. 700-20.

(7) No explosives, blasting agents, or pyrotechnics will be transported by any person on the installation without the full knowledge and approval of the Installation Fire Chief. Authorized transportation of items such as military ammunition or explosives are excluded from this requirement.

(8) Sale, storage, possession, or use of consumer fireworks of any description on this reservation or property, including housing areas, is prohibited. Displays will be conducted only by qualified operator's meeting the standards of NFPA 1123 and 1126. The sponsors detailing the event will advise the Fire Prevention Office of all displays two weeks before the event.

(9) Rockets, signal flares, and similar pyrotechnic device that are officially used by the Army will be handled and stored under current pertinent directives.

(10) The Installation Commander may authorize public pyrotechnic displays. Public displays must be conducted by an experienced and state licensed private contractors and compliance with TRADOC/FORSCOM Supplement I to AR 385-10 is required.

(11) Identification of inert ammunition and ammunition components shall comply with DA PAM 385-64.

(12) Residential ammunition storage and reloading will comply with NFPA 495, Chapter 11. The Installation Fire Chief will be advised of the location and quantity of powder and primers kept in storage.

g. Hazardous Cargo. The Fire Dispatch Center will be notified of all other than routine proposed bulk transfers of explosives, oil, gasoline, or other hazardous materials. Such transfers will be subject to applicable regulations, installation instructions, and orders. All fire precautions will be observed. A fire watch, approved by the Fire Chief, will be posted and proper fire extinguishing equipment will be provided. Under special or unusual conditions, firefighters and apparatus may be required for stand-by.

#### h. Tar Pots and Kettles.

(1) Kettles for heating tar, asphalt, and similar materials will be equipped with proper heat controls and means of agitation to assure controlled uniform temperatures throughout the contents to prevent spot heating.

(2) Materials will not be heated above the temperature necessary to produce workable fluidity and in no case above its flash point.

(3) Tar pots and kettles will not be operated inside, on the roof, or within 25 feet of any building and must be attended by a competent operator. A minimum of two dry chemical extinguishers with a rating of not less than 20BC will be provided at the tar pot and at the area of tar application.

(4) When the material is applied within buildings or enclosed areas, the atmosphere must be free of dust and adequate ventilation must be provided to completely remove all smoke and fumes.

(5) All smoking, open flames devices, and/or other sources of ignition will be prohibited in or near the area of application. Mops, brushes, or other applicators will be stored in an area approved by the Fire Prevention Office.

(6) Cylinders used to store heat-producing gas will meet all required standards.

#### i. Welding and cutting.

(1) All welding, cutting, sweating of copper piping, or burning operations will be under the supervision and control of a competent supervisor who will ensure compliance with NFPA 51B. (See Appendix I).

(2) Oxygen, acetylene, and other fuel gases will be handled carefully. Cylinders will be secured by being strapped, chained, or clamped in an upright position. Cylinders will be capped during storage or while being transported. These cylinders must meet all required standards.

(3) Oxygen cylinders will be kept free of oil and grease at all times. (A high-pressure leak from an oxygen cylinder may cause sufficiently rapid oxidation to ignite gasoline oil, grease, alcohol, or organic material and result in fire or explosion.)

(4) Oxygen and fuel gas systems in use frequently will be inspected for evidence of leaks in hoses, couplings, valve stems and fittings, and other points in the system.

(5) Qualified fire prevention personnel will specifically approve all welding or cutting performed in any confined space to include vehicles.

(6) Acetylene and oxygen valves at the cylinders will be closed and purged whenever the equipment is left unattended or when work is stopped for more than 15 minutes.

(7) Operators of electric welding equipment needing to leave or stop work for any appreciable time, will turn off the power supply switch to the equipment and disconnect the power.

(8) The Fire and Emergency Services Division will be notified whenever any structural cutting or welding is to be performed. A qualified fire and emergency services representative will inspect the work site before starting the operation to determine that all necessary precautions are taken, except in approved facilities.

(9) A properly instructed (See Appendix I) fire watch equipped with fire extinguishers of the proper type will be provided.

(10) If the operation is deemed safe, a Hot-Work Permit will be issued to the operator and to the supervisor.

(11) To preclude delays in commencing the operation, the initial permit request should be made well in advance (24 hours) of the projected starting time of the operation.

i. Cooking.

1) Cooking is permitted only in properly arranged and equipped locations.

(2) No cooking or use of hot plates, electric frying pans, and similar small electrical appliances is permitted in private rooms of bachelor enlisted/officer quarters, and similar buildings unless such rooms or areas are provided with kitchens. Microwave ovens may be authorized in BEQ/BOQ facilities without kitchens, provided the PW Electrical Shop has determined the electrical power supply is adequate.

(3) The hood systems protective cover (not to include ductwork) over cooking surfaces will be cleaned daily to prevent excess grease accumulations. Snack bars and similar locations where cooking operations result in the production of substantial amounts of grease-laden vapors will require cleaning more frequently than other cooking areas will.

(4) Exhaust systems over cooking surfaces where smoke or grease-laden vapors are produced will have removable noncombustible baffles or listed grease extractors. Cooking will not be done unless all baffles are in place.

(5) Hoods, filters, baffles, and associated duct systems over commercial type cooking equipment where grease-laden vapors are produced such as clubs, snack bars, cafeterias, and other large food preparation facilities will be protected and serviced, in accordance with NFPA No. 96.

(6) Standard fire extinguishers listed for Class BC and K will be provided at all locations where commercial type cooking is conducted. Fire extinguishers are not supplied for cooking facilities in family quarters, but may be privately bought by occupants.

(7) Barbecue devices will be under close supervision of an adult from the time of initial firing until the fire is completely extinguished. Barbecue grills or other open flame devices are prohibited on any balcony and/or within fifteen (15) feet of any structural wall or flammable material. In no case will such devices be left unattended. Children should not be allowed near gas-fired barbecues during use or non-use.

k. Painting.

(1) Paint, flammable solvents, thinners, or flammable cleaners will not be used without first removing all potential sources of ignition in the immediate area. Adequate ventilation natural or mechanical must be provided at all times when painting.

(2) Flammable thinners, solvents, and cleaners will be handled, stored, dispensed, and used only in accordance with the regulations pertaining to flammable liquids contained in "Special Hazards."

(3) Tarpaulins and drop cloths used with oil based painting operations will not be stored within buildings. They will be folded and stored in metal lockers that are detached at least 15 feet from any building.

(4) Minor touch-up involving the use of small aerosol or pressurized spray cans may be conducted outside of a painting standard spray booth, providing all precautions such as elimination of ignition sources and provision of adequate ventilation are observed. Such operations will be very limited in scope.

(5) Spray paint operations will not be conducted unless standard spray booths or rooms constructed and arranged in accordance with NFPA No. 33 are provided for this purpose.

(6) Smoking is not permitted in any area where painting involving the use of flammable thinners, solvents, or a cleaner is being done.

(7) Painting in aircraft hangers not designed, arranged, and equipped, as an aircraft finishing facility will be limited to minor touch-up, including re-lettering.

Such painting will be done only in hangers which are completely protected by a deluge sprinkler system in full operating condition and will be subject to additional restrictions as follows:

(a) No other aircraft will be located within 50 feet of the aircraft undergoing touch-up painting.

(b) Hangar doors will be open to provide adequate, natural, and cross-ventilation to disperse vapors.

(c) The areas within 50 feet of the aircraft undergoing touch-up painting will be roped off to prohibit all traffic through the area except by personnel engaged in the painting operation.

(d) No compressor, generator, or other spark producing device or source of ignition will be permitted within the 50-foot restricted area surrounding the aircraft undergoing touch-up painting.

(e) Respirators will be used as required.

(f) Before refinishing floors, eliminate all sources of ignition including pilot lights for water heaters and appliances.

1. Open Fires.

(1) No open fires will be permitted on the installation inside the cantonment at any time without the express approval and permission of Fire Prevention Office.

(2) Controlled burning of areas such as brush or grasslands, will be done only with the consent and approval of the Forestry Division, 967-5914, and then only when all precautions required by the Forestry Division have been taken. Compliance with all Local, State, and Federal air pollution regulations is required.

(3) Burnishing of wood by use of a heat or flame producing device is prohibited within any building.

(4) The use of open flame devices for removing paint from any structure is prohibited.

(5) Demolition of buildings by controlled burning is not permitted as a matter of general policy. Under some circumstances such controlled burning may be conducted for firefighter training.

m. Fire prevention for tentage and heating in cantonment style tent communities.

(1) Tents shall be positioned a minimum of 10 feet between stake lines. Double rows of tents shall be separated by a minimum of 30 feet to allow easy access for firefighting equipment.

(2) Tents shall not be located within a 50 feet minimum from any building.

(3) Excessive weeds and dead vegetation will be removed from within 10 feet of any tent stake line.

(4) Barbed and or concertina wire shall be so arranged as to not jeopardize egress from a tent or building or to interfere with access to.

(5) Heating, a nonstandard or a locally purchased heater, will not be used in lieu of approved army equipment.

(6) Heaters, shall be placed in a constructed box of 2x4 frame with ¼ inch plywood bottom. The dimensions will be of a minimum to allow for 12 inch space around the heater. Sand shall be free of foreign matter and changed if and when it becomes contaminated.

(7) Heaters with a stovepipe shall be secured with tie downs and extended above the peak of the tent roof a minimum of 18 inches. Overheating of stack pipes will be monitored to insure tentage does not ignite.

(8) A fire watch will be on duty in areas where solid or liquid fueled heaters are used. The watch will be briefed on watch procedures, and trained on fire fighting with appropriate fire extinguisher. The watch will insure sufficient ventilation of fresh air is able to enter the tent at all times.

(9) Heaters will not be operated unattended. Fuel shall be stored outside of tents a minimum of 20 feet from tentage.

(10) As a minimum a 2 ½ gallon water extinguisher should be provided for tentage with a minimum travel distances of 75 feet.

CHAPTER 5  
FIRE PROTECTION EQUIPMENT

5-1 TAMPERING WITH

a. No person shall willfully tamper, molest, or break any fire alarm apparatus emergency phone, or firefighting equipment.

b. No person without reasonable grounds for believing a fire exists will send, give, transmit, or sound any false alarm of fire by shouting fire or activating a fire alarm system.

c. Any person responsible for the transmission of a false alarm or damage to the function of fire detection or protection equipment shall be reported to their commander or supervisors for appropriate action. (See Appendix J).

5-2 FIRE HYDRANTS

a. Parking of vehicles and/or equipment will not be permitted within 15 feet of any fire hydrant.

b. Fire hydrants will be used only for their intended purposes and will be operated only by authorized personnel using only standard hydrant wrenches.

c. When no other source of water is available at construction sites and water is required for construction purposes, permission may be granted by the Fire and Emergency Services Division to use a hydrant as a source of water. In such cases, immediate written notice will be given to the Fire and Emergency Services Division and the usage will be subject to the following limitations:

(1) Only one connection will be permitted per hydrant

(2) Each connection will be by a gated or valve connection to a single 2 ½ inch outlet of a hydrant. Flow will not be throttled by means of the main hydrant valve which, when in use, will be fully opened.

(3) The fire department will not furnish hose, valves, etc.

d. Any fire hydrant found to be leaking, damaged, or defective will be reported to the Fire Dispatch Center immediately at 967-5859, so that proper repair may be started.

e. Whenever any fire hydrant is placed out-of-service for any reason, the installation F&ES Dispatch Center will be notified immediately. Out-of-service hydrants will be either covered with a plastic bag and secured or marked with a disc. The disc will be approximately 9 inches in diameter painted a conspicuous color and

attached to the hydrant by means of a hole in the center of the disc which will fit over the hydrant outlet and be held in place by the outlet cap. The Fire Dispatch Center will be notified immediately whenever an out-of-service hydrant is restored to service.

#### 5-3. FIRE HOSE CABINETS.

a. Fire hose cabinets and standpipe hose are for use by building occupants for firefighting only. Use for any purpose other than testing or firefighting is prohibited.

b. The hose cabinets should be visually inspected for damage and to make sure that the hose is properly ranked in the cabinet with the nozzle attached.

#### 5-4. FIRE LANES/ACCESS AISLES.

a. No vehicle, equipment, or storage will obstruct a prescribed fire lane. Likewise, no vehicle shall be parked within 15 feet of any building edge.

b. Prescribed access aisle or exterior fire lanes to a structure will be identified by the Fire Prevention Section and clearly marked.

c. Established fire lanes must be at least 20 feet wide for emergency vehicle access and must be kept clear at all times.

#### 5-5. SPRINKLER EQUIPMENT.

a. Required sprinkler equipment shall be installed, tested, and maintained in accordance with NFPA 13, Installation of Sprinkler Systems; NFPA 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems; and Fort Lewis Public Works design standards, Division 13.

b. Do not shut off sprinkler systems which operate during an actual fire except upon direction of the Fire Chief, Assistant Chief, or other fire service officer in charge of firefighting.

c. Sprinkler systems which operate due to mechanical injury, breakage, or other non-fire related causes will be shut off as soon as it is determined that no fire exists. Fire Dispatch Center will be notified immediately at 967-5859 of the sprinkler systems being out of service.

d. Only properly authorized personnel will maintain and test sprinkler systems.

e. Whenever a sprinkler system is withdrawn from service, for any reason, the Fire Dispatch Center will be notified immediately.

f. Storage will be kept at least 18 inches below all sprinkler piping throughout all storage areas.

g. In buildings with sprinkler systems, sprinklers will be installed beneath any deck, mezzanine, or platform more than 48 inches wide, regardless of whether the deck is slatted, open grating, or solid.

h. All building modification projects in buildings with sprinkler systems will include provisions for rearranging the sprinkler system as necessary for compliance with NFPA 13.

**FIRE ALARM SYSTEMS.**

a. A fire alarm system required for life safety shall be installed, tested, and maintained in accordance with applicable requirements of NFPA 70, National Electric Code; NFPA 72, National Fire Alarm Code; and Fort Lewis Public Works design standards, Division 13. All systems shall provide at least the same performance and protection as designed. Public Works shall be responsible for maintaining the systems and keeping the system in good working order. Documentation of all maintenance performed shall be annotated and maintained by the Fire Alarm Maintenance Section. A copy of maintenance records shall be forwarded to Fire and Emergency Services Division, Fire Prevention Branch.

b. Fire alarm systems installation wiring or other transmission paths shall be monitored for integrity in accordance with NFPA Standards.

c. Fire alarm system shutdown. No fire alarm system shall be shutdown without prior approval of the Post Fire Chief, Assistant Chief, or other Fire Service Officer. The Fire Dispatch Center will be notified immediately at 967-5859 if any fire alarm system is out of service. The Fire Dispatch Center will be notified when a required fire alarm system is out of service for more than four (4) hours in a 24-hour period. The building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service.

d. Each manual fire alarm station on a system shall be accessible, unobstructed, and visible.

e. Upon fire alarm activation (see Fire Reporting Procedures C-1), all occupants will initiate emergency procedures and evacuate the facility in an orderly manner as conducted in practiced fire exit drills. (Ref. NFPA 101, 2-7 and NFPA 72, 3-8.4.1.2).

f. Fire and Emergency Services personnel will assume control of any facility were a fire alarm system has been activated. The senior fire officer will maintain control until he deems the situation safe for the occupants to return to the facility. (Ref. NFPA 1201, 10).

**FIRE EXTINGUISHERS.**

- a. All fire extinguishers will be brought in annually for servicing to the Fire Extinguisher Shop.
- b. Fire extinguishers and cabinets will not be supplied as part of construction projects.
- c. Whenever any fire extinguisher is discharged or partially discharged for any reason, or shows signs of damage it will immediately be returned to the Fire Extinguisher Shop for servicing or repair.
- d. Fire extinguishers will not be relocated or removed from their assigned locations without the approval from the Chief of Fire Prevention.
- e. Extinguishers shall only be used for firefighting, not as doorstops, toys or props.
- f. Monthly inspections will include
  - (1) Location in designated place.
  - (2) No obstruction to access or visibility.
  - (3) Safety seal and pin not broken or missing.
  - (4) Examination of obvious physical damage to include nozzle and hose.
  - (5) Pressure gage reading or indicator in operable range or position
  - (6) Any extinguisher not meeting the above criteria must be serviced.

CHAPTER 6  
PRE-FIRE PLANNING

6-1 EVACUATION PLANS AND PROCEDURES.

a. A written pre-fire plan in the form of a standard operating procedure (SOP) will be established by the building manager, kept current, and readily available to all personnel throughout major areas and facilities. Persons living or working in a building must be thoroughly familiar with the established plans and exit routes. The SOP instruction will include fire-reporting procedures, a firefighting plan, the closing of doors or windows or special features pertinent to the respective unit or activity area, turning off ventilation systems, and securing classified documents or equipment.

b. The SOP will also require complete evacuation of a facility when a fire alarm system is activated or a fire condition is announced. Personnel or positions exempted from evacuation must be identified in the SOP. All SOPs must be approved by the Installation Fire Chief and must receive an annual review.

c. Building evacuation plans (floor plan) are required only in complex facilities where normal exits are not obvious or in facilities deemed necessary by the Fire Prevention Office. Details of the plans will vary with each individual facility.

d. Evacuation plans will be posted in Child Care Centers, FCC Homes, windowless buildings, and Youth Centers regardless of the obvious avenues of egress.

e. Where fire plans are required, plans must provide the following information

- (1) Fire reporting procedures
- (2) Procedures to alert occupants.
- (3) Building floor plan and evacuation routes.
- (4) Fire extinguisher locations.
- (5) Designated assembly points for evacuees.

6-2. FIRE DRILLS.

a. Building Managers having the responsibility for housing troops shall prepare an adequate plan to ensure sleeping personnel are promptly awakened and evacuated in case of fire.

- (1) Fire exit drills shall be held with sufficient frequency (a minimum of one per year) to familiarize occupants with procedures.

(2) Procedures will include simulated use of fire alarm systems and notification by dialing 911.

(3) Fire emergency vehicles and personnel will not respond to fire drills.

(4) Timed evacuation is essential, but not critical, training is the objective to insure the pre-fire plan works. Timing will commence when fire notification is announced and end when the last individual exits the facility. Normally one minute per floor is acceptable. A head count will be conducted and a walk-through inspection accomplished by supervisory personnel to insure complete evacuation of the facility has been accomplished.

(5) Public assembly, explosive storage areas, and aircraft maintenance facilities will conduct fire exit drills at least semi-annually. Facility managers will document date and time of each drill.

(6) Fire exit drills are not required in general administrative facilities where avenues of egress are obvious and normally occupied with 20 or less personnel.

### 6-3 FIRE REPORTING PROCEDURES

a. Any person discovering a fire, regardless of size, is responsible for reporting it immediately to the post Fire Dispatch Center. All fires, even if they have self-extinguished, will be reported. This includes tent fires or mobile field equipment while on training exercises.

b. Off post sub-installations will report emergencies to the neighboring fire department using their area procedures. The Fort Lewis Fire Prevention Office will be notified after the emergency to conduct an investigation.

c. During fire emergencies, the Fire Dispatch Center will be notified by dialing 911

d. Mobile radios: Vehicles that are radio equipped and personnel operating in the field with portable radios, will contact their respective control center to report a fire. The control center in turn will relay the message to the Fire Dispatch Center.

e. Anyone discovering a fire will initiate the following actions:

(1) Sound the alarm.

(2) Use "Break Glass" or "Fire Alarm Pull Station" near an exit if so equipped.

(3) Notify the Fire Dispatch Center by telephone using 911, even though building alarm has been activated. Insure everyone is out of the facility.

(4) You will be asked: Name, Building Number, Room Number, Location and Nature of Fire.

(5) Do not hang up the phone until told to do so or unless fire and/or smoke conditions warrant immediate evacuation.

(6) Never re-enter a burning or smoke-filled structure.

f. A fire reporting telephone number decal will be affixed on each telephone instrument base (not on the earpiece). Mark the decal with the building number.

(AFZH-PWF, 967-7323)

  
ROGER L. BRAUTIGAN  
Major General, USA  
Deputy Commanding General/  
Chief of Staff

DISTRIBUTION:  
A, B, C, D

### Required Publications

#### References:

AR 385-64, Ammunition and Explosive Safety Standards.  
AR 420-90, Fire Protection, 25 Sep 97.  
AR 608-10, Child Development Services.  
DA Pamphlet, Ammunition and Explosives Safety Standards.  
MIL-HDBK-1008C, Military Handbook, Fire Protection for Facilities Engineering, Design, and Construction.  
TIM No. 16, Pesticide Fires: Prevention, Control, and Clean up.  
TIM No. 17, Pest Control Facilities.  
TM 5-695, Maintenance of Fire Protection Systems.  
TM 5-632, Entomology Operational Handbook.  
TRADOC/FORSCOM, Army Safety Program.

### Related Publications

Underwriters Laboratories Product Directories.  
American Gas Association Directory.  
Architectural and Engineering Instructions.  
Fire Protection Handbook.  
International Fire Service Training Association (IFSTA) Manual  
Uniform Building Code.

01 June 2001

FL Reg 420-30

APPENDIX A

DEPARTMENT OF THE ARMY  
YOUR  
MAILING ADDRESS  
HERE

(OFFICE SYMBOL)

DATE

MEMORANDUM FOR Public Works, ATTN: AFZH-PWF-MS 17 (Chief Fire Prevention),  
Fort Lewis, WA 98433-9500

SUBJECT: Appointment of Evacuation Coordinator

The following individual(s) has been appointed as the Building Manager and/or  
Evacuation Coordinator:

NAME	RANK	UNIT	BUILDING NUMBER	PHONE NUMBER
------	------	------	-----------------	--------------

Signature Block  
Commanding Officer

CF:  
1-AFZH-PWF-MS-17  
1-Unit Appointment File  
1-Individual

01 June 2001

FL Reg 420-30

APPENDIX B

DEPARTMENT OF THE ARMY  
YOUR  
MAILING ADDRESS  
HERE

(AFZH-CO)

DATE

MEMORANDUM FOR Public Works, Fire and Emergency Services,  
ATTN: AFZH-PWF-MS. 17 (Chief Fire Prevention), Fort Lewis, WA 98433-9500

SUBJECT: Monthly Fire Inspection of Buildings 3052 & 3063

I conducted a building and fire extinguisher inspection for the month of October and November 1998. I have found several faults. The two fire extinguishing systems for hazard material and waste storage area are due annual inspection; all flight line extinguishers are due their annual inspection. Also request your assistance in the repair of a pull station and a smoke detector which are loose from their mounting!

Signature Block  
Building Manager

CF:  
1-AFZH-PWF-MS-17  
1-Fire Prevention File

(Note e-mail address Lewis, PW, Fire Preven.)

APPENDIX C

SELF INSPECTION  
CHECK LIST

	<u>YES</u>	<u>NO</u>
1. Are Building Managers and Evacuation Coordinators appointed on orders and have they attended orientation training given by the Fire Prevention Office?	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the unit / activity have an effective Fire Prevention Program to include:		
a. Is there a fire plan developed and prominently displayed in each facility as needed?	<input type="checkbox"/>	<input type="checkbox"/>
b. Are assigned personnel given periodic fire prevention training? Do all personnel in the facility know procedures for reporting a fire?	<input type="checkbox"/>	<input type="checkbox"/>
c. Are records maintained on file to show facility inspections, fire drills and annual training?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do all newly assigned personnel receive a fire safety briefing?	<input type="checkbox"/>	<input type="checkbox"/>
4. Fire extinguishers:		
a. Are fire extinguishers inspected monthly using extinguisher checklists? (IAW Appendix G)	<input type="checkbox"/>	<input type="checkbox"/>
b. Are facility personnel familiar with the operational characteristics of each extinguisher?	<input type="checkbox"/>	<input type="checkbox"/>
c. Are fire extinguishers maintained in good operating condition and recharged as applicable?	<input type="checkbox"/>	<input type="checkbox"/>
d. Are procedures in place to insure fire extinguishers are not removed or relocated from their installed locations except during fires or for servicing?	<input type="checkbox"/>	<input type="checkbox"/>
5. Fire alarm systems: Is there evidence of vandalism?	<input type="checkbox"/>	<input type="checkbox"/>
6. Cooking appliances or equipment:		
a. Cooking in dormitories and transient billets is prohibited except where cooking facilities have been provided. Is unauthorized cooking being done?	<input type="checkbox"/>	<input type="checkbox"/>
b. The use of coffee makers, hot plates etc., is prohibited in all hazardous areas. These appliances may be used in offices and work areas provided the following conditions are met:	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
(1) Item has UL label and in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>
(2) Appliances are on a noncombustible surface with proper air space?	<input type="checkbox"/>	<input type="checkbox"/>
(3) The building manager is responsible for ensuring that items are in good repair and turned off when not in use or at the close of business each day. Does he/she ensure this requirement is meant?	<input type="checkbox"/>	<input type="checkbox"/>
<b>7. Fire Exits:</b>		
a. Do any fire exit doors contain any unauthorized locking devices?	<input type="checkbox"/>	<input type="checkbox"/>
b. Are doors equipped with panic hardware in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>
c. Are exit and emergency lighting in good working order, where provided?	<input type="checkbox"/>	<input type="checkbox"/>
d. Are exits, stairwells, and hallways free of obstructions and are exits properly marked?	<input type="checkbox"/>	<input type="checkbox"/>
<b>8. Electrical Equipment:</b>		
a. Are extension cords that are utilized (UL) approved and in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>
b. Are extension cords continuous and not equipped with more than one male or female adapters or multiple type plugs of any type ?	<input type="checkbox"/>	<input type="checkbox"/>
c. Are extension cords hung over rafters, nails, taped, stapled, or fastened to wood work, walls, or placed under rugs/carpet or used in lieu of permanent wiring?	<input type="checkbox"/>	<input type="checkbox"/>
d. Are unauthorized heating appliances being used?	<input type="checkbox"/>	<input type="checkbox"/>
<b>9. Housekeeping and General Fire Prevention Measures:</b>		
a. Is burning paste wax being utilized to wax floors?	<input type="checkbox"/>	<input type="checkbox"/>
b. Have procedures been established for the storage, handling and use of flammable and combustible liquids within the work area.?	<input type="checkbox"/>	<input type="checkbox"/>
c. Is gasoline being used for cleaning purposes?	<input type="checkbox"/>	<input type="checkbox"/>
d. Are all combustibles kept clear from heating units or other sources of heat?	<input type="checkbox"/>	<input type="checkbox"/>
e. Does all vegetation growing near building get trimmed as needed?	<input type="checkbox"/>	<input type="checkbox"/>
f. Are work areas cleaned on a daily basis, trash removed as needed, are proper receptacles in use?	<input type="checkbox"/>	<input type="checkbox"/>
g. Are dust cloths, steel wool, floor buffing pads, and similar supplies stored in metal containers with self-closing lids?	<input type="checkbox"/>	<input type="checkbox"/>
h. Are boiler/equipment rooms being used for storage?	<input type="checkbox"/>	<input type="checkbox"/>
i. Are vehicles parked within 15 feet of a fire hydrant?	<input type="checkbox"/>	<input type="checkbox"/>
j. Are barbecue grills being used within 15 feet of any building?	<input type="checkbox"/>	<input type="checkbox"/>

- k. Is combustible storage allowed under stairways and in stairwells?
- l. Is lint allowed to accumulate in or around cloths dryer?
- m. Janitor's closets will not be used as trash collection points.  
Closets are to be clean and used for janitor supplies only.

APPENDIX D

VEHICLE REPAIR GARAGES  
SELF INSPECTION

		<b>NO</b>
Is there an emergency action plan established and practiced?	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire extinguishers operational, clearly visible and have clear access to them?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are personnel trained in the use of fire extinguishers?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are all exits within the repair area unobstructed and unlocked?	<input type="checkbox"/>	<input type="checkbox"/>
5. Are aisles established and maintained clear of obstructions to permit orderly evacuation?	<input type="checkbox"/>	<input type="checkbox"/>
6. Floors shall be clean and free of oil and grease!	<input type="checkbox"/>	<input type="checkbox"/>
a. Are only approved water solutions, and detergents used for floor cleaning?		
b. Compounds and absorbents shall be used for cleaning floors?		
7. Are metal receptacles with self-closing covers are provided for the storage or disposal of oil soaked waste and cloths?	<input type="checkbox"/>	<input type="checkbox"/>
8. Smoking only within designated areas outside repair area!	<input type="checkbox"/>	<input type="checkbox"/>
9. Combustible rubbish is placed in covered metal receptacles until disposal, which shall be daily?	<input type="checkbox"/>	<input type="checkbox"/>
10. Are metal lockers provided for repair personnel's oil soaked clothing?	<input type="checkbox"/>	<input type="checkbox"/>
11. Parts cleaning containers will have a self-closing lid, which have a properly rated fusible link, and not held open by other means.	<input type="checkbox"/>	<input type="checkbox"/>
12. Cleaning of parts shall be performed with a non-flammable solvent.	<input type="checkbox"/>	<input type="checkbox"/>
13. Are compressed gas cylinders properly stored, secured, and separated?	<input type="checkbox"/>	<input type="checkbox"/>
14. Are contaminated fuels and oils removed to the outside of facility and placed in containers identified as to their contents?	<input type="checkbox"/>	<input type="checkbox"/>

	<b>YES</b>	<b>NO</b>
15. Are POL products used for maintenance, stored in flammable storage cabinets when not in use? (NOT IN WALL LOCKERS)	<input type="checkbox"/>	<input type="checkbox"/>
16. Flammable storage cabinets may store 60 gallons, of Class I or Class II and 60 gal's of Class III a.	<input type="checkbox"/>	<input type="checkbox"/>
17. Storage outside of cabinets will be limited to 10 gallons, of Class I, Class II and 60 gal's Class III a.	<input type="checkbox"/>	<input type="checkbox"/>
18. Hot work area and adjacent areas will be inspected by individual responsible for authorizing the use of the hot work area. <i>(See Appendix G)</i>	<input type="checkbox"/>	<input type="checkbox"/>
19. Fire watch will be provided during and 30 minutes after operation with a 10 pound BC fire extinguisher and pile of water.	<input type="checkbox"/>	<input type="checkbox"/>
20. A 35 foot precaution area will be maintained around all work!	<input type="checkbox"/>	<input type="checkbox"/>
a. Floors swept clean of combustibles	<input type="checkbox"/>	<input type="checkbox"/>
b. Are combustible materials and/or flammable liquids removed, or protected with covers?	<input type="checkbox"/>	<input type="checkbox"/>
c. Is the cutting and welding equipment in good repair?	<input type="checkbox"/>	<input type="checkbox"/>
d. Actual work area will be clean of all combustibles.	<input type="checkbox"/>	<input type="checkbox"/>
e. Containers will be purged of flammable vapors.	<input type="checkbox"/>	<input type="checkbox"/>
f. Inside cylinder storage will be limited to one day's consumption.	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E  
 SELF INSPECTION  
 CHECK LIST  
 Child Development Center (CDC)

	<b>YES</b>	<b>NO</b>
Contingency plan for building evacuation procedures for all age groups?	<input type="checkbox"/>	<input type="checkbox"/>
2. Hallways, entrances, and doorways will not be obstructed by operation during center's operational hours.	<input type="checkbox"/>	<input type="checkbox"/>
3. All doors will be in proper working order to include panic hardware	<input type="checkbox"/>	<input type="checkbox"/>
4. All personnel will be trained in fire evacuation procedures with documentation on file.	<input type="checkbox"/>	<input type="checkbox"/>
5. Are clothes dryers properly vented and cleaned of lint?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are there an adequate number of evacuation cribs provided (not including wood cribs) with 4" wheels?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are evacuation drills conducted in accordance with AR 608-10?	<input type="checkbox"/>	<input type="checkbox"/>
8. Is emergency lighting provided and tested monthly?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the emergency lighting intensity adequate?	<input type="checkbox"/>	<input type="checkbox"/>
10. Are exit signs provided in accordance with AR 608-10 working and tested monthly?	<input type="checkbox"/>	<input type="checkbox"/>
11. Are fire extinguisher provided, properly mounted with seals and pins present?	<input type="checkbox"/>	<input type="checkbox"/>
12. Are maintenance records kept up date on all extinguishers? (IAW Appendix G)	<input type="checkbox"/>	<input type="checkbox"/>
13. Is the staff properly trained in extinguisher use with annual refresher training?	<input type="checkbox"/>	<input type="checkbox"/>
14. Is the staff aware of the operation of the hood fire suppression system?	<input type="checkbox"/>	<input type="checkbox"/>
15. Is the hood fire suppression system properly maintained and cleaned on a regular bases?	<input type="checkbox"/>	<input type="checkbox"/>

- |  | <b>YES</b>               | <b>NO</b>                |
|--|--------------------------|--------------------------|
| 16. Does the wall display material exceed the amount permitted?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Is the facility occupancy load exceeded?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Are extension cord or wiring, hung, nailed, taped, stapled or fastened to walls, ceilings or placed under rugs/carpet or used as permanent wiring? | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Are multiple type electrical adapters in use?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Are unauthorized heating appliances being used?  | <input type="checkbox"/> | <input type="checkbox"/> |



APPENDIX G

WELDING AND CUTTING WORK GUIDE

1. Work area and adjacent areas will be inspected by individual responsible for authorized hot area.
2. Fire Watch;
  - a. Is to be provided during and 30 minutes after operation.
  - b. Suitable fire extinguishers and a pail of water will be on hand
    - (1) 2 ½ gal. Water pressurized extinguisher.
    - (2) 10 lb. BC Extinguisher.
3. Precautions within 35 feet of work area.
  - a. Floors swept clean of combustibles.
  - b. No combustible materials or flammable liquids.
  - c. Protective cover provided for material.
  - d. Containers purged of flammable vapors.
  - e. All protective covers and structural opening or cracks in walls or floors shall be tightly covered.
4. Cutting and welding equipment will be in good repair.
5. Cylinder usage will be limited at the work site to what is being consumed. Additional cylinder storage will be in confined to approve out side storage areas.
6. No hot work shall be conducted in any un-sprinkled facility without the written approval of the fire prevention office.
7. Supervisor will inspect area and post authorizations for hot work.

IAW NFPA 51 B

APPENDIX H

Title 9 RCW: Crimes and Punishments  
Chapter 9.40  
FIRE CRIMES RELATING TO

Sections

9.40.100 Injuring or tampering with fire alarm apparatus or equipment or fire fighting equipment \_\_\_\_\_ Sounding false alarm of fire \_\_\_\_\_ Penalties.

9.40.100 Injuring or tampering with fire alarm apparatus or equipment or fire fighting equipment. Sounding false alarm of fire \_\_\_\_\_ Penalties.

(1) Any person who willfully and without cause tampers with, molests, injures, or breaks any public or private fire alarm apparatus, emergency phone, radio, or other wire or signal, or any fire fighting equipment, or who willfully and without reasonable grounds for believing a fire exists, sends, gives, transmit, or sounds any false alarm of fire, by shouting in a public place or by means of any public or private fire alarm system or signal, or by telephone, is guilty of a misdemeanor. This provision shall not prohibit the testing of fire alarm systems by persons authorized to do so, by a fire department or the director of community development, through the director of fire protection.

(2) Any person who willfully and without cause tampers with, molests, injures, or breaks any public or private fire alarm apparatus, emergency phone, radio, or other wire or signal, or any fire fighting equipment with the intent to commit arson, is guilty of a felony. [1990 c 177 1; 1986 c 266 80; 1967 c. 204 1.]

One (1) year Jail  
\$5000 Fine

## APPENDIX I

**Classification of Liquids**

<b>Flammable Liquid</b>			
	<b>Flash Point</b>	<b>But Less Than</b>	<b>Boiling Point</b>
<b>Class I</b>	<b>&lt;100 F</b>		
<b>Class I A</b>	<b>&lt;73 F</b>		<b>&lt;100 F</b>
<b>Class I B</b>	<b>&lt;73 F</b>		<b>&gt;100 F</b>
<b>Combustible Liquids</b>			
<b>Class II</b>	<b>@&gt;100 F</b>	<b>&lt;140 F</b>	
<b>Class III A</b>	<b>@&gt;140 F</b>	<b>&lt;200 F</b>	
<b>Class III B</b>	<b>@&gt;200 F</b>		

**Typical Flammable and Combustible Liquids Found in Repair Garages**

<b>Liquid</b>	<b>Flash Point (F)</b>	<b>Class</b>	<b>Boiling Point (F)</b>	<b>Min. Ignition Temp. in Air</b>
<b>Antifreeze</b>	<b>230</b>	<b>IIIB</b>	<b>300</b>	
<b>Brake Fluid</b>	<b>300</b>	<b>IIIB</b>	<b>540</b>	
<b>Chassis Crease</b>	<b>400</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;800</b>
<b>Crankcase Draining</b>		<b>IIIB</b>		
<b>Diesel Fuel #1</b>	<b>100</b>	<b>II</b>		
<b>Diesel Fuel #2</b>	<b>125</b>	<b>II</b>		
<b>Diesel Fuel #4</b>	<b>130</b>	<b>II</b>		
<b>Gasoline</b>	<b>-40 to -50</b>	<b>IB</b>	<b>100 to 400</b>	<b>~800</b>
<b>Gear Lubricant</b>	<b>395</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;800</b>
<b>Kerosene(Fuel Oil #1)</b>	<b>100</b>	<b>II</b>	<b>304 to 574</b>	<b>440</b>
<b>Lithium-Moly Grease</b>	<b>380</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;900</b>
	<b>300 to 450</b>	<b>IIIB</b>		
	<b>350</b>	<b>IIIB</b>	<b>&gt;500</b>	
	<b>395</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;800</b>
<b>Type F</b>	<b>380</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;800</b>
<b>White Grease</b>	<b>465</b>	<b>IIIB</b>	<b>&gt;800</b>	<b>&gt;800</b>
<b>Washer Fluid (100% Methanol)</b>	<b>54</b>	<b>IB</b>	<b>148</b>	<b>725</b>
<b>50% Methanol</b>	<b>80</b>	<b>IB</b>		
<b>20% Methanol</b>	<b>118</b>	<b>II</b>		
<b>5% Methanol</b>	<b>206</b>	<b>IIIB</b>		