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Facilities Engineering

FIRE PREVENTION PROTECTION PROGRAM

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CHAPTER 1

GENERAL

1-1. PURPOSE. To implement AR Reg 420-1, chap 25 (Facilities Engineering Army Facilities Management), by establishing an effective fire prevention and protection program to prevent, detect, control and report fires or hazardous conditions or practices that may result in a fire.

1-2. REFERENCES. Required and related publications and prescribed and referenced forms are listed in appendix A.

1-3. SUGGESTED IMPROVEMENTS. The proponent of this regulation is Fire Protection and Prevention of the Directorate of Emergency Services (DES). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms), directly to Fire Protection and Prevention, ATTN: IMWE-RLY-ESF, 5000 Normandy Dr., Fort Riley, Kansas 66442.

1-4. EXPLANATION OF ABBREVIATIONS AND TERMS. Abbreviations and special terms used in this regulation are explained in the glossary.

1-5. APPLICABILITY. This regulation applies to all military personnel, civilian employees, unit organizations, activities, contractors, and dependents on the Fort Riley installation, and to all Fort Riley units when training or on other missions off of this installation. When located on another installation, the regulations of that installation will pertain.

1-6 RESPONSIBILITIES. To implement the Fire Protection and Prevention Program, the following actions will be:

a. As defined in para1-5, personnel should be aware of the regulations and their contents (see appendix A). If any of the regulations in appendix A are violated, it may result in penalties.

b. All personnel falling within the purview of this regulation are responsible for taking either direct action to correct or report fire hazards to the Fort Riley Fire and Emergency Service.

c. Anyone who has knowledge that will assist in determining the cause of or responsibility for a fire will furnish such information to the Fort Riley Fire Marshal immediately.

1-7. POLICY.

a. Cause of Fire. Fires are caused by lack of knowledge, carelessness and direct violations of the two basic principles of fire prevention. They are:

(1) The elimination of the source(s) of ignition.

(2) The removal of the means of supporting combustion. Personnel assigned quarters are responsible for compliance with these regulations by members of their families, guests and domestic employees and are pecuniary liable for any property damage resulting from the acts of failure to act where evidence establishes that the occupant, under the circumstances, failed to exercise due care.

b. Responsibility. Fires are preventable unless caused by an act of God. In all cases where competent investigation reveals that a fire was the result of any degree of negligence or failure to exercise normal prudence on the part of an individual or individuals, or is indirectly due to supervisory failure, disciplinary measures, if appropriate, will be imposed and action will be initiated to recover loss from the person responsible.

CHAPTER 2

ORGANIZATION AND RESPONSIBILITIES FOR FIRE PROTECTION AND PREVENTION.

2-1. APPLICABILITY. Applicable to subordinate commands and staff sections, including Class II, tenant, satellite activities, and United States Army Reserve Claims Service (USARCS).

2-2. FIRE MARSHAL. The Fire Chief of Fire Protection and Prevention is the Installation Fire Marshal, and is assigned full responsibility for all fire protection and prevention activities. In all matters pertaining to these activities, the Fire Chief will act for and be responsible to the Installation Commander.

2-3. ORGANIZATION. The organization for fire prevention and protection will be functional in accordance with Table 2-1. The persons identified by job titles are to ensure that the designated staff member is qualified to carry out the duties during normal duty hours.

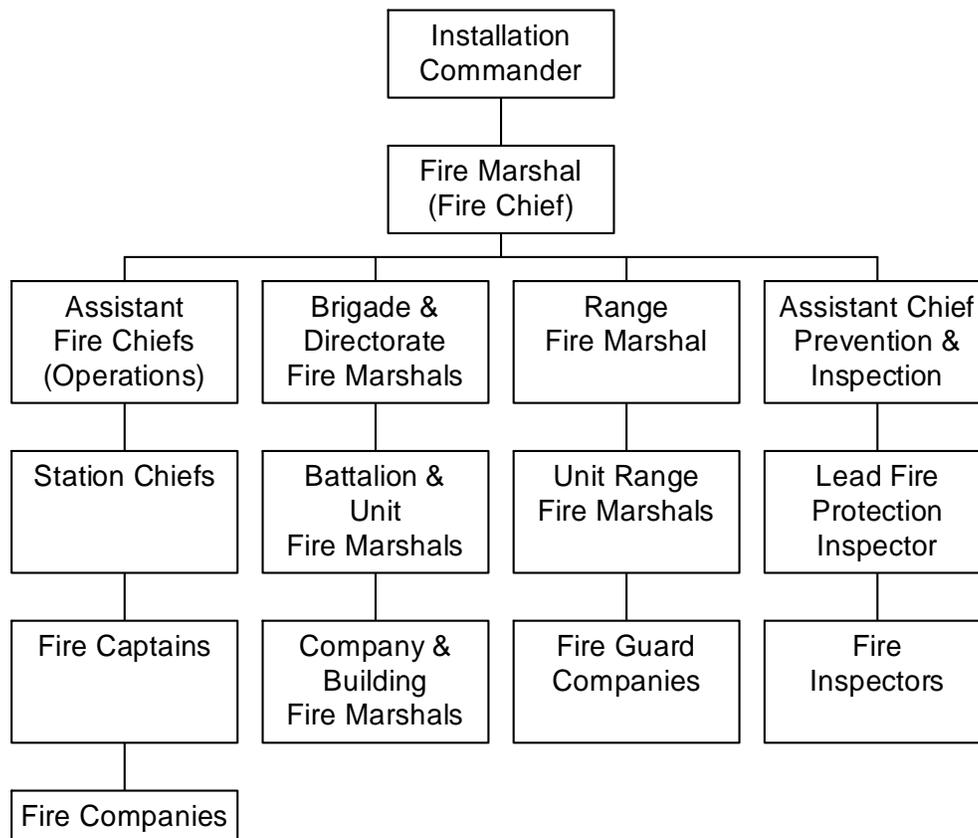


Table 2-1

2-4. RESPONSIBILITIES.

a. Fire Marshal. In addition to the duties stipulated in AR 420-1, the Fire Marshal will:

(1) Be responsible for the promulgation and enforcement of such fire prevention and protection regulations as are necessary to safeguard life and to protect any and all property on the installation from loss or damage by fire.

(2) Designate areas of responsibility for Brigade/Directorate Fire Marshals in the cantonment area. The ranking officer in each fire area will appoint a senior officer as Brigade/Directorate Fire Marshal and will notify Fire Protection and Prevention in writing of the appointment and any subsequent changes.

(3) In case of fire, assume jurisdiction over all personnel on the installation to the extent he deems necessary to overcome the emergency.

(4) Be responsible for conducting technical investigations of fires for determination of cause, reasons for conditions giving rise to the cause, corrective action necessary, and for submission of recommendations concerning liability of persons, in his judgment, responsible for the fire and for disciplinary action if warranted by the circumstances.

(5) Arrange with the Occupational Health Officer for necessary physical examination for firefighters and coordinate the schedule for the examination.

(6) Establish requirements for electrical means of communications for fire reporting and control, including priority for use by installation elements using the facilities, through liaison with the Directorate of Information Management (DOIM).

(7) Be responsible for preparation of agreements for mutual aid for the signature of the Installation Commander.

b. Fire Chief. In addition to the duties stipulated in AR 420-1, the Fire Chief will:

(1) Be in complete charge of all firefighting operations. The Fire Chief will not be interfered with in any manner. However, the Fire Chief may be relieved by the Installation Commander or Fire Marshal, when it's the opinion of either that the person is incompetent to handle the firefighting operations.

(2) Be responsible for recognizing need for changes, deletions or additions to this regulation and preparing necessary amendments for approval of the Fire Marshal.

(3) Furnish technical assistance to the Battalion/Unit Fire Marshals and Company/Building Fire Marshals.

(4) Review fire plans for adequacy and practicality.

(5) Coordinate plans for firefighting and control with other installation elements concerned, recording operations agreed upon in memoranda of agreement.

(6) Plan and supervise training to ensure physical fitness of fire department personnel.

(7) Not later than September 1st of each year, submit to the Fire Marshal a general program, chronologically arranged, of Fire Prevention activities for the coming fiscal year.

(8) Begin the investigation of fires and carry on until arrival of the Fire Marshal, and prepare the necessary preliminary reports.

(9) Be prepared to appear as a technical expert before any boards of investigating authorities.

(10) Prepare and submit to the Fire Marshal, not later than October 30th of each year, a resume of the operations and activities of the Fort Riley Fire Department, from the preceding fiscal year.

(11) Be responsible for notifying supervisors of activities where cleanup of premises or facilities is necessary after a fire.

c. Brigade/Directorate Fire Marshals. In addition to the duties stipulated in AR 420-1, the Brigade/Directorate Fire Marshals (see FR Pam 420-1 ((Fire Marshal Responsibilities)) will:

(1) Appoint the number of Battalion/Unit Fire Marshals deemed necessary.

(2) Be responsible for proper discharge of the duties assigned the Battalion/Unit Fire Marshals in the individual's area, for coordination of their activities and liaison with higher levels of command.

(3) Be responsible for posting guards for security and fire watch after each fire. The guard service will be continued until terminated by the Fire Marshal.

(4) Establish a schedule for fire drills.

(5) Make a monthly written report on the hazards found and corrected in his or her area of responsibility to satisfy requirements of Fire Protection and Prevention. Records of reports will be kept on file.

d. Battalion/Unit. The Battalion/Unit Fire Marshal will:

(1) Appoint the number of Company/Building Fire Marshals deemed necessary.

(2) Coordinate the activities of the Company/Building Fire Marshals and furnish liaison with higher levels of command.

(3) Maintain a record of fire inspections on buildings assigned to his unit.

(4) Prepare a Unit Fire Plan.

(5) Hold fire drills at intervals established by the Company/Building Fire Marshal for testing planned operations and maintain a record of such drills.

(6) Contact Fire Protection and Prevention at 239-4257, and schedule a fire drill with the Fire Inspection Office at least one week before drill. Company/Building Fire Marshal will call 24-hours in advance to confirm fire drill.

e. Company/Building Fire Marshals. In addition to the duties stipulated in AR 420-1, the Company/Building Fire Marshals will:

(1) Make a monthly fire inspection of assigned buildings for fire discrepancies. Upon completion of the inspection, they will complete a DA Form 5381 (Building - Fire Risk Management Survey), for the building and maintain it for a one-year period.

(2) Prepare a Building Fire Plan Standard Operating Procedure (SOP).

(3) Prepare building fire plans evacuation diagram and post in an area frequented by personnel (bulletin boards). In a jointly occupied building, two or more plans may be required. Small buildings with clear visual exits will not require a diagram.

(4) Instruct all occupants in the use and location of fire alarm facilities and regulations applicable to the individual's activities.

(5) Post on the main door of the building, FR Form 670 (In Case of Emergency), bearing the names of two or more responsible personnel, with their ranks, or civilian grades, and phone numbers, who can be contacted in case of an emergency. For buildings that are not normally open during working hours, this form will be used to list designated person(s) in charge of the keys and an after-hours phone number.

(6) Enforce all fire prevention regulations.

(7) Make monthly inspections of fire extinguishers.

f. Fort Riley Police will be responsible for traffic control and security, and will assist the investigating officer upon request. He or she will arrange for automatic response of sufficient police personnel to:

(1) Clear the route to the fire, stop all traffic in the fire area, limit entry to the fire area to fire department apparatus and vehicles, the Installation Commander and deputy, ambulances and utility trucks until notified by the Fire Marshal or Senior Fire Officer that the emergency is over.

(2) Provide security of the building involved and of any contents remaining in it until directed by the Fire Chief or Senior Fire Officer on the scene (Incident Commander).

(3) Assume charge of the investigation of any fire when he/she or the investigating officers suspect arson or incendiaries.

(4) Assist the investigating officer, on request, in handling, holding, segregating and interrogating witnesses (including use of polygraph when advisable and authorized).

(5) Designate, mark and keep clear fire lanes for access to buildings, fire hydrants or fire areas as requested by the Fire Marshal.

(6) Arrange for training of police personnel in the use of first aid fire extinguishers.

g. Directorate of Information Management (DOIM). This directorate will assist the Fire Marshal in planning fire reporting communications systems; provide, install and maintain the signal facilities authorized, and coordinate with commercial communications companies as required to assist expeditious handling of fire reporting and traffic control.

h. Range Fire Marshal.

(1) The Range Officer will appoint a Range Fire Marshal for the duties listed in chap 20. The Range Fire Marshal, unless the duty is definitely assigned elsewhere by the Installation Commander, as an exception hereto, will be responsible for all fire prevention and protection activities in all portions of the reservation outside the cantonment area. Areas included in this person's responsibility are those required for

maneuvers, field exercises, bivouacs on range firing, and also any areas outside of the reservation in use for field exercises of any type other than large scale named maneuvers.

(2) Be responsible for preparing and keeping current, accurate maps of impact area. Reservation Boundary Maps (Basic Information Series) will be utilized for this purpose.

i. Contractors and Concessionaires. Each contractor and/or concessionaire is responsible for complying with these regulations as applicable, for furnishing any special fire protection facilities, which in the opinion of the Fire Marshal, Fort Riley, are necessary for protection of government property involved in his operation or exposed to possible damage from the operation.

j. Responsibilities of all individuals. All individuals on the Fort Riley installation, military and civilian, are responsible for the following:

(1) Reporting Fires. Any person discovering a fire or a potential fire from the spilling of inflammable liquids or finding evidence that a fire has occurred will report the incident to Fire Protection and Prevention without delay unless he has positive knowledge that the report has been previously made.

(2) Personal Acts. Each individual will exercise normal prudence and judgment in his/her acts and duties. Lack of specific instructions concerning conditions, practices, or materials commonly recognized as hazards does not excuse lack of prudence or judgment.

(3) Acts of Others.

(a) Individuals, when in a supervisory capacity, are directly responsible for maintaining the area in which their employees operate in accordance with these regulations. For instructing employees in safe operating practices and advising those of applicable portions of these and other pertinent fire regulations, and for recognizing hazardous conditions not specifically covered in regulations and removing or reducing the danger.

(b) Personnel assigned quarters are responsible for compliance with these regulations by members of their families, guests and domestic employees and are liable for any property damage resulting from their acts or failures to act unless it can be shown that reasonable control and discipline were exercised.

(4) Recognition of and reporting hazardous conditions or procedures:

(a) Each individual is expected to be alert and able to recognize, within his/her capability, hazardous conditions or acts within his/her environment and to take action to eliminate them.

(b) Individuals will, upon receipt of a written or verbal notice of a hazardous condition from Fire Protection and Prevention, make the correction required or deliver the notice to a person authorized to take corrective action. If correction cannot be initiated within 24 hours, or it is believed the directive is unreasonable or impractical, a request for additional time or a reclaim in writing will be made to the Fort Riley Fire Marshal within that time. Once started, corrective work will be diligently carried out.

(5) Review and Revision. Personnel directly concerned with fire prevention and protection activities are specifically charged with continuing review of these regulations for improvement, clarification, and expansion. All other personnel are encouraged to submit suggestions for improvement.

(6) Training. Conduct of the instruction and training is the duty of the supervisor, who may request assistance from Fire Protection and Prevention in preparation of his training program. In all cases where personnel work in a building outside normal working hours, the individual arranging for or providing the service will be deemed responsible for any incidents which may occur. Each supervisor will ensure that each person under his supervision is:

(a) Thoroughly instructed and trained in methods and facilities for turning in alarms of fire. Practice alarms may be turned in, only if the prior approval of Fort Riley Fire Chief has been secured.

(b) Instructed and trained in use of first aid fire equipment.

(c) Instructed on action to be taken upon sounding of any alarm or warning device, such as water flow alarm gongs or low air pressure alarms.

(d) Instructed concerning potential danger spots in the building or buildings and is required to check such locations upon entering and prior to leaving.

(7) Reporting Violations. After hours personnel will report to their supervisors any violations of regulations. The supervisors will report these violations, either by telephone or penciled memorandum, directly to Fire Protection and Prevention. These will include, but are not limited to:

(a) Unextinguished smoking material.

- (b) Electrical appliances left in operation.
- (c) Fire doors left open.
- (d) Open or partly closed containers for hazardous materials.

CHAPTER 3

ACTION IN EVENT OF FIRE

3-1. PURPOSE. To establish procedures for reporting fires and alerting personnel in the event of an actual fire.

3-2. ALARM OF FIRE.

a. Personnel responsibility. A person discovering a fire, regardless of type or size, will immediately alert or cause to be alerted all personnel in the building and will report the fire to Fire Protection and Prevention by the quickest available means.

b. Action in Event of Fire. All fires, including grass, vehicle and appliance fires, will be reported, including those extinguished on discovery and those burned out prior to discovery. Supervisory personnel, on being advised or learning that a fire has occurred, will, in the absence of positive knowledge that Fire Protection and Prevention has been notified, immediately report the incident to Fire Protection and Prevention. All personnel are responsible for knowing all available means of giving a fire alarm. Lack of this knowledge is not acceptable as a reason or excuse for delayed alarm.

3-3. ACCIDENTS INVOLVING FLAMMABLE LIQUIDS AND GASES. Any accident involving the release or spillage of 1 gallon or more of a flammable liquid or gas will be reported immediately to Fire Protection and Prevention.

3-4. METHODS OF REPORTING.

a. Telephone. Dial 911; then say, "I want to report a fire." Remain on the line until released by the person receiving the call. Answer all questions and carry out immediately any instructions given by the operator.

b. Local Alarms. Many of these boxes do not transmit an alarm to the fire department. They are only for evacuation of the building in which they are located. After pulling this type box, follow guidance in 3-4(a) for calling the fire department.

c. Automatic Transmitted Fire Alarm Systems. When it is known by the occupants that a building is equipped with this type system (includes sprinklers) and the system has activated, dial 911 and report the conditions known. Take action as necessary in case of fire.

d. Radio. Any radio net having a base station with telephone communication may be utilized for the reporting of fires. Included are the Fort Riley Police, motor pool, Directorate of Public Works (DPW) and Range Command radio.

e. Messenger. If none of the above facilities are available, a messenger will proceed to the nearest telephone or to the nearest Fort Riley Fire Station, whichever is quicker, to report the fire.

3-5. ACTION AFTER GIVING FIRE ALARM. When possible and safe to do so:

a. Action After Discovery of Fire. Alert all personnel in the involved and adjoining buildings, if not already done; have all doors and windows closed; and shut off all fans and electric circuits. Doors and windows will not be reopened until after Fire Protection and Prevention has departed, except by specific instructions from the Fort Riley Fire Chief. Building lights need to be shut off.

b. Extinguishment of Fire. During the time the alarm is being turned in or immediately afterward, available personnel will exert every effort to extinguish the fire with first aid firefighting equipment, except as provided in para 3-5(c).

c. Safety Consideration. If the fire is in a closed or locked building, room, or compartment, no attempt will be made to enter or open the area except for rescue of trapped personnel. Personal safety should not be jeopardized other than to rescue trapped personnel.

3-6. EVACUATION.

a. Evacuation From Danger Area. Persons discovering fires will take immediate action to ensure that the danger area is vacated by persons, giving special attention to sleeping or incapacitated persons and children. Definite assembly points will be established for head count to ensure that persons are out of the building.

b. Travel Route. The primary route for evacuation should provide exit from the building with the least amount of travel.

c. Secondary Travel Route. The secondary route should be easily accessible from the area being evacuated and accessible from any point on the primary route without backtracking. When possible, route monitors will be stationed at strategic points to direct and regulate traffic.

d. Evacuation routes should be:

(1) Of sufficient capacity to allow orderly and continuous movement of the number of persons expected to use it. Capacity of the second route will be equal to that required for the primary route.

(2) As nearly as possible, those routes normally followed in entering and leaving the building. Stepladder type exterior fire escapes should be used only as a last resort.

(3) Adequate lighting.

e. Hospital Evacuation Plans. Hospital evacuation plans should include the order of rescue. The necessary equipment for handling the patients should be provided and receiving facilities established.

f. Nursery Evacuation Plans. Nursery evacuation plans will ensure that:

(1) Maximum use can be made of facilities for movement of the children; for example, several children placed in a crib equipped with rollers and moved by one attendant.

(2) Attendants know the number of children and can account for the total number in the event of emergency evacuation.

g. Confinement Procedures. In confinement areas, such as stockades and psychiatric or detention wards, the attendant will be prepared in the event of fire to release the prisoners and patients under his care and will not leave his post until properly relieved.

3-7. FALSE ALARMS. Any person maliciously or knowingly transmitting a false fire alarm to Fire Protection and Prevention by any means or for any purpose will be subject to punishment to the full extent which regulations or laws allow. Alarms arising from honest errors or transmitted in the belief that there is or may be a fire are not false alarms under this provision.

3-8. TRAFFIC. Vehicles meeting or being overtaken by emergency equipment showing a blinking red light or with siren sounding will immediately clear street intersections, pull to the nearest side of the road, stop, and remain stopped until the emergency vehicle have passed unless instructed to move by a responsible officer or by the Fort Riley Police. Under no circumstances will unauthorized vehicles or persons follow fire apparatus at less than 500 feet or enter the fire area for any reason.

3-9. ENTRY TO THE FIRE AREA. During the firefighting operations, including overhaul and investigations, entry to the fire area is restricted to firefighting forces and those having duties in connection with the operation. All other personnel will remain well outside the zone of activity. Any action, other than that necessary for the preservation of life or prevention of injury, may be considered interference with the operation.

CHAPTER 4

REVIEW AND APPROVAL OF FINAL AND PRELIMINARY FIRE REPORTS

4-1. PURPOSE. This chapter establishes procedures for review and approval of Fire Reports, (National Fire Incident Reporting System – NFIRS report per AR 420-1, Section XIV.)

4-2. PROCEDURES. Command support of the fire prevention and protection program is essential if the desired results are to be obtained. The procedures herein are for the purpose of providing FORSCOM and DA with record evidence of this support.

a. Reportable Fires. A fire discovered in progress, discovered following extinguishment, or detected later during an inspection that results in damage of \$1.00 or more or that causes loss of life or injury.

b. Reviewing Officers. NFIRS report will be prepared by the Installation Fire Chief in close coordination with the Installation Safety Office. These reports will be reviewed by the Installation Fire Marshal and approved by the installation commander or authorized representative.

c. National Fire Incident Reporting System (NFIRS). This report shall be submitted within 14 working days of the fire, when applicable.

d. Reports of Survey. Reports of survey or authorized substitutes for survey actions, that are mainly concerned with financial responsibility, are not acceptable substitutes for reports of technical investigations. MACOM Commanders will set up procedures for processing the technical investigation report so that one copy will be sent to HQDA, ATTN: DAEN-ZCF-B, Washington, D.C. 20314, within 30 work days of the fire incident.

CHAPTER 5

INVESTIGATION OF FIRES

5-1. PURPOSE. To establish procedures and requirement for investigation of fire and minimum standards for the scope of the investigation.

5-2. REQUIRED INVESTIGATIONS.

a. Fire Marshal Responsibilities. The Fire Marshal or the authorized representative will investigate each fire for determination of the cause of the fire, the underlying reasons for the existence of the cause, the amount of the loss, the person(s) immediately responsible for the fire, violations of existing regulations, supervisory laxity at any levels, and action required to prevent occurrence of fires from similar causes. In cases where privately owned property is damaged or destroyed, possibility of a claim against the Army will be determined.

b. Vehicle Fires.

(1) Investigations of equipment fires will determine if the fire was caused by a preventable equipment malfunction and if so found, to determine the individual responsible for allowing the condition to exist.

(2) Procedures for investigation of vehicular fires require an investigation of each incident by qualified maintenance personnel in order to determine the immediate cause or most probable cause of the fire. A background investigation will be conducted to determine if the indicated operator or maintenance personnel and the chain of responsibility may be at fault and the cause of the vehicular fire.

(3) Provisions will be made to ensure that the Director of the Maintenance Division, Directorate of Logistics, will make competent personnel available for assisting in the investigation of vehicle fires, and ensure timely preparation and submission of the report of the investigation to the Fire Marshal. Report will include a statement as to cause, or most probable cause, and a dollar estimate of damage. Report will be submitted with the original and six copies.

5-3. INVESTIGATIVE AUTHORITY. For the purpose of conducting technical investigations of fires, the Fire Marshal or the authorized representative will:

a. Authority for Gathering Evidence. Be authorized to assume custody of any property considered of value as evidence of the cause of the fire or the identity of the person(s) responsible for the fire.

b. Interrogation Procedures. Receive assistance from the Fort Riley Police for interrogation of witnesses. The Fort Riley Police will arrange for any support required by the Criminal Investigation Division (CID).

c. Authority to Summon Witnesses. Have authority to summon any person on the installation for the purpose of obtaining information or evidence concerning the fire. Such summons will be honored without delay except in cases of physical incapacitation.

d. Photographic Services. On request, be furnished photographic service by Visual Information, Directorate of Information Management (DOIM). In cases where a death or injury occurs, photographs will be made prior to removal of victim if possible.

e. Determination for Investigation. In coordination with the Garrison Commander, determine the need for a Board of Officers or independent investigation officer and when appropriate, furnish the Adjutant General with the information required for preparation of necessary orders. The appointment of a Board of Officers does not in any way relieve the Fire Marshal of responsibility for completion of the technical investigation.

5-4. INVESTIGATION BY BOARD OF OFFICERS. Investigation by a Board of Officers is not required as a portion of the fire report when the technical investigation is complete and conclusive. If a board is convened, the proceedings should in all cases include a detailed review of the Report of Technical Investigation.

5-5. REPORT OF SURVEY. Surveying officers will be furnished a complete copy of the Preliminary Fire Report and Report of Technical Investigation for consideration and guidance.

5-6. ASSISTANCE FROM OTHERS. Any element of this command, on request, will furnish such assistance and facilities as may be available. Any person having knowledge which might assist in determining the cause of or responsibility for the fire is charged with the duty of furnishing such information to the Fire Marshal without delay, whether or not requested.

5-7. REPORTS OF TECHNICAL INVESTIGATIONS. Reports of technical investigations will include the following:

a. Cause of Fire. The cause of the fire, or if a cause cannot be definitely determined, a statement giving the most probable cause.

b. Reasons. The reasons for existence of the cause, such as inadequate training, improper facilities or defective equipment.

c. Amount of Loss and Accountable Person(s). The amount of the loss and the person(s) accountable for the property.

d. Identity. The identity of the person(s) responsible for the fire. Where any individual under 21 years of age is involved, the correct age will be given.

e. Information Concerning Conditions and Circumstances. Any information concerning conditions or circumstances tending to mitigate the offense or reduce the penalties.

f. Violation of Regulations. A stipulation of any installation or Army regulation violated in commission of the act or violated by allowing existence of conditions causing the fire or contributing to the extent of the loss. A summation statement as to whether or not the fire was preventable is required.

g. Statement Recommending Action. A statement recommending action necessary for preventing fires from similar causes. Ensure completion of a staff action and include preparation of the implementing papers in final form, with necessary concurrence.

h. Evidence. Evidence pertinent to and supporting each of the conclusions or required actions above. Photographs, laboratory reports, statements, property list and similar data will be included as applicable.

i. Relief From Liability. Recommendation concerning relief from liability of the person(s) accountable and for disciplinary action, if appropriate.

j. Statement Concerning Operation of Installation. A statement concerning any reduction in normal operation of the installation due to the fire, such as impaired electric supply, vehicle maintenance reduced or troop training impaired.

k. Report of Criminal Investigation. Copies of the Report of Criminal Investigation, if applicable.

l. Reports of Technical Investigations. Reports of Technical Investigations will be prepared in sufficient number to allow inclusion as a part of each required copy of the fire report, either incorporated in the Fire Report, or as a supporting document.

5-8. ACTION AND STAFFING, REPORTS OF TECHNICAL FIRE INVESTIGATION.

a. Action for Fixing Liability and Disciplinary Measures. The Fire Marshal will inform the appropriate authority concerned of the findings on the technical investigation, afford an opportunity to consider the supporting evidence, and request action for fixing liability and disciplinary measures as warranted by the circumstances. In cases where disciplinary action has not been taken, the appropriate authority will prepare the necessary explanatory document, obtain the appropriate approval and signature, and

deliver it to the Fire Marshal within two working days following the receipt of notice of the findings unless granted additional time by the Fire Marshal.

b. Responsibility for Disciplinary Action. The immediate commander is responsible for action necessary for taking disciplinary action, if warranted by the circumstances, and for advising the Fire Marshal concerning final action.

CHAPTER 6

FIRE PREVENTION INSPECTION

6-1. PURPOSE. To establish procedures and responsibilities for fire prevention inspection.

6-2. ACTIVE BUILDINGS.

a. Fire Protection and Prevention.

(1) Inspection Frequency. Occupied buildings within the physical boundaries of Fort Riley will be inspected every 6 months.

(a) Exception to 6-2(a)(1). Family housing quarters shall be inspected when requested or needed.

(b) Child Care Centers will be inspected monthly and buildings of public assembly shall be inspected monthly or more frequently if conditions warrant.

(c) Records of these inspections will be recorded on DA Form 5382.

(2) Whenever practicable, the Battalion or Company Fire Marshal will accompany Fire Protection and Prevention personnel to assist and to facilitate any corrective action required.

(3) When buildings are locked during working hours, the name, address and telephone number of the key custodian will be entered on the building's placard. When keys are requested by Fire Protection and Prevention, prompt delivery will be made.

b. Building Fire Marshals. Building Fire Marshals or other responsible assigned persons are required to conduct the following inspections and closing procedures. Other occupants are responsible for reporting any observed violations or hazardous conditions to them.

(1) The Building Fire Marshal or other assigned responsible person(s) shall conduct inspections as outlined in chap 2.

(2) FR PAM 420-1 (Fire Marshal Responsibilities) details the duties and responsibilities of Unit and Building Fire Marshals. Appendix B of this pamphlet establishes the procedures for closing fire inspections, and recording the inspections of public assembly buildings. National Fire Codes define the meaning of public assembly buildings. Person(s) closing a public assembly building are responsible for making a fire safety inspection.

6-3. INACTIVE BUILDINGS.

a. Vacant and Secured Buildings. All buildings that are vacant and secured within the physical boundaries of Fort Riley shall be inspected annually.

b. Exception to 6-3(a). Buildings that show evidence of trespass or unauthorized entry shall have a complete fire inspection prior to being re-secured.

c. General Visual Inspection of Buildings. Fire Protection and Prevention or the Building Fire Marshal will make a general visual inspection of vacant and secured buildings every 6 months or more frequently if conditions warrant. The condition findings are recorded on DA Form 5382.

d. Building Fire Extinguishers. Building Fire Marshal will be responsible for the building's fire extinguishers. Fire extinguishers shall remain in the buildings unless the buildings are to remain closed for long periods of time (one year or more) or are to be demolished.

e. Removal of Fire Extinguishers by Fire Protection and Prevention. Fire extinguishers removed by Fire Protection and Prevention and returned to stock shall have the proper paperwork processed to clear outstanding hand receipts.

f. Exception to 6-3(d), Removal of Building Fire Extinguishers. When security reasons dictate, building fire extinguishers may be removed and returned to stock or secured at locations deemed appropriate. Records of these changes will be made and hand receipt holders notified when appropriate.

6-4. SUPPORTED ACTIVITIES/SUB-INSTALLATIONS AND UNITED STATES ARMY RESERVE (USAR) CENTERS.

a. Support Activities/sub-installations and USAR Centers. Sub-installations and USAR Centers receiving support from Public Works shall be inspected at least annually.

b. Inspections Fire Protection and Prevention. Fire inspections by local government fire departments may be used in lieu of Fort Riley fire inspections when it is deemed appropriate by the Fort Riley Fire Marshal. DA Form 5382 will be distributed to these agencies and copies will be forwarded to Fire Protection and Prevention.

c. Operating Instructions for USAR Centers. The "Letter for Guidance", Directorate of Public Works (DPW) gives operating instructions for the USAR Centers' Fire Prevention Program.

d. DA Form 5382 will be used for the Army fire inspection of USAR sites. The original copy will be retained by Fire Protection and Prevention and a copy by the USAR Center's Commander.

CHAPTER 7

FIRE PLANS

7-1. PURPOSE. To establish requirements for and to provide objectives for building fire plans.

7-2. APPLICABILITY. A fire plan is required for each building normally housing 10 or more persons, for those housing hazardous operations or occupancies, and for those housing wholly or partially incapacitated persons (other than private quarters). Fire plans have as their primary and governing objective the safety of the building occupants. Preservation of property is secondary. No element of the plan will require any action, which may involve risk, injury or loss of life. The exception being persons who have other human beings in their custody, such as confinement officers, stockade guards, ward masters in psychiatric or detention wards, and attendants with non-ambulatory patients, will give first consideration to the safety of their charges. Details of fire plans will vary with the individual buildings, but each plan will provide for the elements listed in the following paragraphs. Fire plans will be posted above fire extinguishers or near exit accesses.

7-3. METHOD OF ALARM.

a. Fire Protection and Prevention. Provision will be made to ensure training of all personnel in the use of each of the facilities available for notifying Fire Protection and Prevention (see chap 3).

b. Building Occupants. The method for alerting the building occupants will:

(1) Provide for alternate means of alerting occupants in addition to automatic or electrical systems which might fail under fire conditions.

(2) Be easily audible or visible over normal and ordinary noises or obstructions.

(3) Be of a type that will alert the occupants, but not cause panic. For places of public assembly, hospitals and places of confinement, the alarm can be preceded by a pre-warning type that will alert the attendants prior to sending the general alarm and allow time for organization of the evacuation of the building. Buzzers, lights and code words over a public address or nurses call system can be used for the pre-warning.

7-4. EVACUATION OF THE BUILDING.

a. Primary Route. The primary route will provide egress from the building with the least amount of travel over or through normal facilities.

b. Secondary or Alternate Route. The secondary or alternate route will be easily accessible from the area being evacuated and will be accessible from any point on the primary route without backtracking.

c. Route Capacity. Routes will be of sufficient capacity to allow orderly and continuous movement of the number of persons expected to use it. Overcrowding may cause stoppage of the traffic flow, and such stoppages, even momentarily, may develop panic. Capacity of secondary routes will be equal to that required for the primary route.

d. Normal Routes. Routes will be, as nearly as possible, those normally followed in entering and leaving the building.

e. Adequacy of Lighting. All routes will be adequately lighted. Stepladder-type exterior fire escapes should be used only as a last resort.

f. Route Monitors. Where personnel are available, route monitors will be stationed at strategic points to direct and regulate traffic. These monitors will leave the building behind the last evacuee.

g. Assistance to Partially Incapacitated Persons. Personnel will be assigned to assist, as necessary, any partially incapacitated person normally in the building.

h. Evacuation Plan for Hospitals. In hospitals, the plan will include the order of rescue since all patients probably cannot be moved at once. The necessary equipment for handling the patients will be provided and facilities for receiving them established.

7-5. ACCOUNTING FOR OCCUPANTS.

a. Assembly Points for Evacuees. Definite assembly points for evacuees will be established to allow a head count to ensure all persons are out of the building.

b. Building Search for Evacuees. Designated personnel will do a search of their area to ensure that all personnel have evacuated the building. A head count will be established to ensure that all personnel are accounted for.

7-6. COORDINATION WITH THE FORT RILEY FIRE DEPARTMENT.

a. Designation of Personnel - Fire Prevention Inspections. One individual and an alternate, who are competent and authorized to make decisions for and commit the activity, will be designated to assist in fire prevention inspections.

b. Procedures in the Event of a Fire. In the event of a fire, an individual will be designated to meet the responding fire fighters and furnish them information as to the location of the fire, any unusual conditions in the fire area, or any special precautions

required for safe entry to the fire area. He will be stationed along the response route, and any reports of missing personnel or information of value to the fire department will be channeled through him.

7-7. PRESERVATION OF PROPERTY. If time allows and there are physically-able persons present, effort will be made to protect property from damage by fire or water.

a. Records. Irreplaceable records not in fire resistive containers will be removed from the building.

b. Office Machines. Machines, office and production, will be disconnected and covered.

c. Securing for Fire Safety. Safe and vault doors will be closed and locked. File and desk drawers and storage cabinet doors will be closed. Papers and current work should be removed from desk tops and baskets and placed in desks.

7-8. FIREFIGHTING. Teams will be trained in the use and limitations of the first aid extinguishing equipment available. Extinguishment will be attempted only where the fire is small and under the direction of the Building Fire Marshal. Teams will be trained to watch each other and to withdraw at the first sign of distress by any member. Fires produce large quantities of one or more deadly gases, some of which are odorless and difficult to detect. For this reason, extensive firefighting by other than professionals will be held to a minimum.

7-9. CLEANUP. Provisions will be made for presence of responsible personnel during the cleaning of the premises after the fire.

a. Examination of Contents. Contents of desks and cabinets will be examined and any documents or papers dried.

b. Preventive Measures. Machines of all types will be examined, dried and oiled.

c. Electrical Equipment. Electrical equipment will not be connected or used until examined and released by a competent electrician.

d. Temporary Removal of Property. Arrangements will be made for temporary custody of property removed to prevent further damage or pilferage.

e. Computer Equipment. Computer equipment will not be connected or used until examined or released by a competent computer technician.

7-10. FIRE WATCH PROGRAM. The implementation of a Fire Watch Program is a critical step to the preservation of life and property in the absence or abuse of installed fire alarm systems. Fire Protection and Prevention is responsible for

determining the need to activate or terminate as well as the required number of personnel necessary to establish and enforce an effective fire watch program. The affected unit is responsible for providing the required Fire Guards and to manage all aspects of the program. The program will not be terminated until the affected unit has undergone and documented some type of fire education coordinated by the unit's Fire Marshal and Fire Protection and Prevention.

a. Fire Guard Duties. The duties and responsibilities of a Fire Guard will be that of a sentinel on guard duty. Fire Guards shall not be permitted to perform other duties in addition to their fire watch responsibilities. The duties of a Fire Guard will:

(1) Patrol assigned routes.

(2) Prevent unauthorized entry to the designated areas.

(3) Become the primary source for alerting and notifying personnel in the immediate area of any danger. Initiate the evacuation process. Immediately notify Fire Protection and Prevention in the event of fire and/or emergency situation.

(4) Will not perform any other duties during their tours as Fire Guards.

(5) Will remain awake and alert during their tour of duty.

(6) Will make rounds of the assigned area at 15 minute intervals. Where special conditions exist, such as the presence of exceptional hazards, additional personnel or rounds may be required. During rounds the fire guard will make a thorough inspection of all buildings and spaces.

b. Routes to be Patrolled/Monitored. Each route to be patrolled shall be designated by the fire department and will include all common areas of the building and all floors. The fire guard assigned to each route shall be provided with instructions, details regarding the route, and actions to be carried out in covering the route.

c. Emergencies on Duty. Fire guards will not leave their assigned areas except in an emergency. In such cases, they will notify their immediate chain of command. Should any other emergency arise, (fire, smoke, etc.) immediately evacuate the area and the structure involved and notify Fire Protection and Prevention. Fire guards will promptly report conditions needing immediate attention such as:

(1) Sprinkler system valve closed.

(2) Potential damage caused by freezing.

(3) Process or service equipment that is believed to be faulty.

(4) Other site-specific matters that would affect the operation or security or safety of personnel and or facility.

d. Incident/Daily Reports. Fire Guards will maintain a continuously updated directory of names, telephone numbers, and other information to assist in making emergency calls. This information will be kept at the security control center. This directory shall include the telephone numbers of key management personnel to be notified in an emergency, fire and police and emergency medical service departments, and other agencies needed in an emergency. The daily reports will be maintained for recording and will reflect everything that occurred during their tour of duty, from beginning to end. These reports will cover:

- (1) Who — the identity of the person(s).
- (2) What — the act or thing done.
- (3) When — the exact time.
- (4) Where — the exact location.
- (5) How — the method by which an act was done.
- (6) Why — the reason.

e. Information Release. Fire Guards will not release any information without the approval of their chain of command. Details of their assignments will not be released except to authorized personnel.

f. Training and Education. Units will establish an initial training program for Fire Guards to meet their assigned duties and functions. Units will also ensure Fire Guards have site-specific knowledge and the procedures to follow, in the event of recognition and reporting of an emergency, such as:

- (1) All buildings, occupancies, and hazards.
- (2) Fixed and or portable fire protection systems.
- (3) Manual and automatic detection and alarm systems.
- (4) Emergency shutdown procedures for equipment they are responsible for.
- (5) The facility emergency action plan.
- (6) How to notify the fire department and other emergency response organizations.

(7) Personnel to be contacted.

g. Communication. Units will ensure that Fire Guards are familiar with and know how to use radio equipment, and telephone, to summon aid. They will be provided with a means of communication that has a constantly attended location. Units must ensure that:

(1) Fire Guards are not permitted to change route schedules unless instructed by management.

(2) The property manager or the manager's responsible designee, such as the fire loss prevention manager does the changing and review of time record charts.

(3) Time record charts of fire watch are promptly reviewed.

(4) Representatives of any authority having jurisdiction maintains files for review.

(5) All irregularities are investigated, recorded, and corrective action is taken.

CHAPTER 8

BUILDING AND SPACE USE

8-1. PURPOSE. To establish applicability and criteria for use of buildings.

8-2. APPLICABILITY. Applicable to all buildings on the installation, including those owned or utilized by contractor or concessionaires. Excluded are vans or temporary structures used exclusively as tool sheds or fabrication facilities in connection with construction work.

8-3. GENERAL.

a. **Stored Materials.** All stored materials will be arranged neatly and kept in an orderly manner.

b. **Exterior Storage.** Exterior storage locations will be selected for maximum protection of the items from thrown or windborne sources of ignition.

c. **Segregated Storage.** Storage areas, except in private quarters, will be segregated to the maximum extent from all other parts of the building and used for no other purpose.

d. **Storage of Flammable Materials.** Storage of flammable liquid containers in motor pools may be in the vehicle racks or in designated, marked and segregated areas in accordance with the National Fire Codes. All containers used for storage, issue and transport of flammables shall be clearly marked to indicate the nature of the contents. Closing or sealing devices must be in good operating condition. Empty flammable containers shall be purged and vented 24 hours before they are stored inside a building. Empty flammable containers will be stored with the closing lids off. The containers will be stored on shelves or racks designed so that the container opening is the lowest point of the container. They shall not be stored in buildings with open flame heating equipment or in areas where heat producing equipment or devices are used. Smoking will not be allowed in the storage area. Flammable liquids will not be stored in any place or public assembly, club, barracks, bachelor officer's quarters, or building which is normally used as a sleeping quarters. Combustible liquids will be stored in closed metal containers having an individual capacity of not more than 5 gallons. The use of glass or plastic containers other than listed safety cans is prohibited.

e. **Individual Storage Facilities.** Where individually assigned storage facilities, including carports and garages, are provided in connection with quarters and the occupant has sole access to the area, the occupant is responsible for prevention of unauthorized entry and control of any children using it as a play area.

f. Gasoline Powered or Fueled Equipment. Storage of gasoline powered or fueled equipment (see para 8-5).

g. Common Storage. Where common storage is provided in connection with quarters and various individuals have access to the area, the senior officer or NCO sharing the use is automatically designated Building Fire Marshal.

h. Company Supply Rooms. In company supply rooms and similar facilities where combustibles, such as laundry bundles, may be delivered for storage of any duration, positive measures will be taken to prevent stacking against or within 3 ft of heating equipment, automatic or manually controlled. This may be accomplished by use of barricades or painted clear areas on the floor.

8-4. HOUSEKEEPING.

a. Responsibility. Performance of housekeeping activities is the responsibility of the using service.

b. Trash and Litter. Trash and litter will not be permitted to accumulate in appreciable quantities on floors. Large quantities will be placed in completely enclosed covered metal containers. All trash and refuse, including salvageable material, will be removed from the building at the close of each day's work. Outdoor trash receptacles will be located at a safe distance from combustible structures. The minimum distance for safety is 15 ft, but may be increased if deemed necessary by the Fire Marshal.

c. Building Vicinity. At no time will cut grass, trash, litter, rubbish, packing materials, or other combustible materials be stored or allowed to accumulate against, under, or within 40 ft of any building or structure one story in height or within 60 ft of any multistory structure. Crated machinery or other packaged material may be stored temporarily between buildings, provided that they have not been breached and do not contain flammables. Small quantities of lumber with nails removed may be stored at least 15 ft from buildings, provided that quantity is not excessive and material is neatly stacked. Larger quantities must be stored in designated storage areas. Tents or temporary structures will not be less than 20 ft from any building or structure.

d. General Cleanliness. A high degree of general cleanliness and order is required at all times in arrangement of stored material, working stock, or completed work awaiting delivery.

e. Housekeeping Supplies and Equipment:

(1) Floor sweeping compounds will comply with Federal Specification P-S-863F/30 Aug 96. Under this specification, compounds capable of flash at ordinary temperatures or after prolonged heating are not acceptable. Testing may

consist of passing an open flame across a small amount of the material in a shallow open container. If any flash occurs, the material is classed as flammable, and is unacceptable for use.

(2) Only water type wax is authorized for general use. Issue and use of spirit type wax will be in full compliance with TM 5-609, 2.2.4.1 (Military Custodial Services Manual).

(3) Brooms or mops will be stored in racks or hung, preferably outside the building, with the broom or mop end free from contact with combustible materials and in a manner allowing free air circulation on all sides. Closets, when used for such storage, will be adequately ventilated (1 sq ft of free opening at or near the floor line and at the ceiling), if locked, key must be immediately and conveniently available, with its location posted on the door. Storage is limited to janitorial supplies and/or equipment.

(4) Dust collection bags, prior to storage, will be emptied, and turned inside out. When stored, they will be hung in a well-ventilated area.

(5) Used dust cloths, steel wool felt buffing pads, and similar supplies will be kept in metal containers with close-fitting lids.

(6) Detergents and other powdered cleaning compounds will be kept in a dry place and protected from accidental wetting. If accidentally wet, the detergent will be removed from the building. Biodegradable may be placed in dumpster. Non-biodegradable will be handled through the Environmental Branch of DPW by phoning 239-8619.

(7) Use of flammable liquids for cleaning floors, walls, or building parts is prohibited.

8-5. STORAGE OF EQUIPMENT USING FLAMMABLE FUELS.

a. General.

(1) Included in equipment using flammable fuels are gasoline powered vehicles of all types, gasoline-driven generators, pumps and all similar devices using integral liquid fuel-powered drive units. Also included are devices using any flammable liquid as fuel for production of heat or light, including field range fire units, immersion heaters, and similar devices, when the fuel tank is an integral part of the unit. Storage, as used herein, covers any period of time during which the equipment is inside a building or not being used, handled, transported or serviced outdoors.

(2) The primary hazard involved in storage of vehicles and devices of this type, in addition to leakage, is the generation and escape of flammable vapor from the fuel tanks, frequently accelerated by the higher ambient temperature inside the building. These vapors travel long distances and form explosive or easily ignitable mixtures with the air.

(3) Other than recognizing the tendency of the vapor to flow to the lowest level and collect in such low areas, there is no practical method of determining the direction of flow or points where an explosive mixture may develop. Drafts induced by open doors, heating equipment, air moving equipment and wind may move the vapor in any direction. Since the path of vapor travel cannot be accurately predicted, all parts of the building at or below the level of the storage will be considered a hazardous area, unless in the opinion of the Fire Marshal, the quantity and arrangement of the storage are such that this classification is unnecessary.

b. Vehicle Storage or Parking.

(1) Vehicles in the cantonment area will be stored or parked only where the exhaust parts are well clear of any combustible materials (grass, brush, or fuel spills) and where all combustible vehicle parts are clear of possible contact with ignition sources.

(2) Vehicles in the containment area (motor pools or buildings) will be parked or stored as to maintain a 20 ft distance between vehicles and buildings for Fire Department equipment and access. If concertina wire is used for security, a 20 ft access for entire circumference will be utilized.

c. Precautions Required for Indoor Storage.

(1) Storage in buildings other than garages, flammable liquid warehouses, motor repair shops, and other buildings specifically designed and designed for such occupancy is prohibited. Adherence to para 8-5(c)(1) will be carried out, unless there is specific approval given by the Fire Marshal and is stated in this regulation.

(2) Where operational requirements or lack of facilities preclude storage as in para 8-5(c)(1) above, the following precautions are mandatory:

(a) A storage area will be selected that will allow a minimum of 10 ft separation between the devices and any other storage in the same room.

(b) Where possible, natural ventilation will be provided that will allow a flow of air at floor level and across the storage area to the building's exterior.

(c) All electrical equipment within 1 ft - 6 in of the floor, that isn't approved for use in all Class I, Group 2 locations, will be positively de-energized either at the panel or by disconnecting and removing the receptacle.

(d) The building will be carefully surveyed to eliminate any source of ignition within 1 ft - 6 in of the floor in area subject to permeation by the vapors. Any open flame devices (water heaters or space heaters) will be disconnected and the fuel supply line capped.

(e) All fuel tank fill caps will be in place and tight. *NOTE: This will not prevent escape of vapors-via overflow lines provided in some types of tanks.*

(f) Where provided, valves in fuel lines to carburetors or burners will not be closed.

(g) Unless emergency requirements exist, fuel tanks will not be filled immediately prior to indoor storage.

(h) Storage will be arranged, including racks or barriers, if required, to preclude possible mechanical damage to the equipment from outside sources or by falls, or by overturning or dislodging the equipment.

(i) Smoking, without exception, will be IAW AR 385-55 (Prevention of Motor Vehicle Accidents).

(j) Equipment will not be fueled, defueled, or operated inside the building. Operation includes hand cranking or any operation of the motor.

(k) Where storage may be for periods longer than overnight or over weekends, the batteries will be disconnected and the cables secured to prevent accidental contact with the battery terminals.

(l) Draining of fuel tanks prior to short-term storage is not required, nor will draining be considered grounds for waiver to any of the precautions herein unless the tank is completely purged in accordance with chap 12.

(m) Inspections of the area will be scheduled for the last hour of the working day to ensure compliance with the above requirements and to ensure prompt detection of any leaks. Equipment developing minor leaks will be immediately removed from the building to a safe outdoor location and the building will be thoroughly ventilated. In the event of a large leak, evacuation will be performed under the supervision of Fire Protection and Prevention. The daily inspection will be done by a responsible person and will be recorded on the building inspection record.

8-6. SLEEPING QUARTERS. No individual or group of individuals will be quartered or allowed to sleep in any building not designed for quarters or in which the prime occupancy is other than housing except as specified herein. Guard Houses, requiring 24-hour duty personnel on standby are accepted, for duty personnel only. Specific exceptions may be granted by the Fire Marshal, where the building is fully protected by an automatic sprinkler system, and after investigation of the installation of any required safety devices and the establishment of necessary precautionary measures, they are subject to the following:

(1) Requests for exception will be written to the attention of the Fire Marshal and will state the number of persons, building number, and location within the building.

(2) Where exceptions are granted, the number of occupants will not be increased and/or sleeping areas will not be changed without prior approval of the Fire Marshal.

(3) Approved exceptions will be valid for a period not in excess of six months and subject to cancellation at any time by the Fire Marshal.

(4) Exceptions, when granted, do not constitute authority for altering the building or its components or for adding to its facilities in any way.

(5) Security of the building will not be considered as justifying an exception unless the persons quartered are to maintain 24-hour guard or patrol service.

CHAPTER 9

BUILDING COMPONENTS

9-1. PURPOSE. To establish and set forth safety requirements for occupants of buildings.

9-2. ELECTRIC WIRING.

a. The definition for electric wiring is in the Glossary, Section III Special Terms and Abbreviations.

b. Electrical Wiring in all Buildings. No one will install, repair, or alter any part of the electrical wiring systems in any building unless there is an approved Work Order Request, DPW. The work is to be accomplished by a licensed electrician.

c. Extension Cords. Extension cords will not be used to serve appliances or fixtures outside the room where the fixed convenience outlet or fixture outlets are located, nor will they be attached to the building by tacks, staples, or clips of any kind. Unserviceable government-owned extension cords will be removed and turned in for repair or replacement. Extension cords are temporary wiring only and must be disconnected when not in service.

d National Electrical Code. Connection cords and extension cords for appliances, lamps and other electrical devices are subject to Article 300, National Electrical Code, pertinent parts of which are extracted as follows:

(1) Extension cords and connection cords are prohibited as a substitute for permanently installed fixed wiring in conduit or flexible conduit. Extension or connection cords, when used:

(a) Will not be passed through holes in walls, ceilings or floors.

(b) Will not be passed through doorways, windows, or similar openings.

(c) Will not be attached to building surfaces.

(d) Will not be concealed behind building walls, ceilings or floors.

(e) Will not be spliced or taped.

(f) Will not be used to power two, three, or four-way plugs unless combined amperage of all connected appliances meet the requirements of attached table of the initial extension cord.

(g) Will not be used for hanging or supporting any items, or be placed under tension in any other way; e.g., removal from the wall receptacle by pulling the cord.

(2) Unless approved for a specific purpose by the Fire Marshal, connection and extension cord wires will not be smaller than, wire gage (AWG) 18. Amperage carried generally may be found on the nameplate of the appliance being connected to the extension cord.

d. Fuses or Circuit Breakers in Branch Circuits. Fuses or circuit breakers in branch circuits will not exceed 20-ampere capacity unless DPW specifically authorizes their use above this capacity and the fuse box is so labeled. Over capacity and bridged fuses will be removed and a written report submitted to the Fire Marshal.

e. Electric Conduit. Electric conduit used for wiring and electrical fixtures will not be used under any circumstances for temporary or permanent support of any other devices or material.

9-3. HEATING EQUIPMENT.

a. Operation of Heating Equipment. Heating equipment will be operated according to current instructions and within the temperature limits specified.

b. Setting of Automatic Controls. No one except authorized employees will tamper with or change the setting of automatic controls installed on heating equipment in other than private quarters.

c. Malfunction of Heating Equipment. Heating equipment that is not functioning properly or to the satisfaction of using personnel will be turned off or firing stopped and the condition reported at once to the DPW. Lighting of pilots on gas fired equipment will be the responsibility of the DPW (approved self-help items excluded).

d. Determination of Serviceability. Inspectors of the DPW may order discontinuance of use of any heating equipment deemed unsafe. Such equipment shall not be returned to service until repaired or replaced, re-inspected, and approved by the DPW.

e. Liquid Fuels. Liquid fuels must be handled with care all spills carefully and immediately wiped up. Where saturation has occurred, the floor will be scrubbed daily with strong soap or detergent until all trace of the spill is removed. Flammable cleaners will not be used. Fireplace and cooking fuels when stored outdoors will not be stored within 15 ft of any building or combustible structure.

f. Space Heaters and Cooking Appliances. Space heaters and cooking appliances will be located to provide a minimum clearance of 18 in, which may be

reduced to 4 in when a noncombustible shield with a 1-in airspace is permanently installed between the device and the combustible material. A noncombustible shield must extend 6 in beyond the device in all directions. Use of space heaters indoors must be approved, in writing, by Fire Protection and Prevention.

g. **Improvised Heating Equipment.** Improvised heating equipment is prohibited without exception in the cantonment areas. This precludes use of field-type heating equipment of all types, regardless of type of fuel Underwriters Laboratories Inc. (UL) approved. Portable electric heaters may be used where electrical service is adequate for the load, if emergency warrants.

h. **Clearances.** The clearances necessary between combustibles and cooking equipment are listed below. This regulation is applicable to both domestic and restaurant-type equipment. Portable appliances with totally enclosed heating elements are excepted.

(1) Clearances above the cooking surface are as follows:

(a) Appliances with no exposed flame, such as grills and deep fat fryers and not less than 30 in.

(b) Exposed charcoal and charcoal-type fires, not less than 4 ft. Charcoal or charcoal type grills will not be placed under any overhang.

(c) Exposed fires other than in (b) above, not less than 42 in.

(2) Clearance from sides, front and back of unlisted appliances will not be less than 18 in.

(3) For outdoor cooking appliances, such as barbecue grills, refer to chap 13.

i. **Light Combustibles.** No beds, clothing, furniture, curtains, drapery or any other light combustible material will be placed less than 30 in from any heating device other than steam or hot water radiators. A clearance of 4 in is required between light combustibles and steam and hot water heaters.

9-4. EMERGENCY EXITS.

a. Exit facilities will be arranged for full compliance with National Fire Protection Association (NFPA) 101 (Life Safety Code Handbook).

b. Exits shall be so located and be so arranged that exits are readily accessible at all times.

c. Locking of Exits. All required emergency exits will be capable of being opened from the inside without a key, when the building is occupied. Bars, hasps, chains and locking devices are prohibited, except that hasps may be used when padlocking an unoccupied building.

d. Obstruction of Exits. Obstructions of any kind are prohibited both inside and outside of exits. Drapes, decorations or anything tending to disguise, mask or prevent easy recognition of the exit opening or interfere with its use are obstructions.

e. Decorations. Decorations, other than noncombustible types, are prohibited within 10 ft of any exit.

f. Exit Lights. Exit lights, when provided, will be kept burning at all times that the building is occupied. Illumination and marking will comply with NFPA 101.

g. Exit and Access Facilities. Exit and access facilities for buildings provided with security devices are explained as follows:

(1) Security devices are defined as steel bars or steel mesh security and permanently installed over windows, doors or other openings, drop-bars across doors, padlocks and hasps, metal doors or other cylinder locks, security-type metal windows and similar installations.

(2) Where either physical or classified security is a major concern, judicious use of a two-point (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 be provided with simple and effective door alarm devices as an additional control measure.

(3) The requirement for security of any building or part of any building does not relieve the requirement of life safety for provision of adequate exits.

(4) Where panic hardware is required, doors may be locked only by use of approved devices by manufacturer of the hardware.

9-5. AUXILIARY KITCHEN EQUIPMENT. Cleaning intervals of grease ducts, exhaust fans, grease filters and range hoods will be cleaned at sufficiently frequent intervals to prevent any noticeable accumulation of grease. Special care will be taken where charcoal broilers and similar devices are used. Cleaning contract will be annually.

9-6. AUTOMATIC SPRINKLER OR BUILDING ALARM SYSTEM. Any of the following conditions will be reported immediately to Fire Protection and Prevention: damage to the systems; warning devices (bells, sirens) in operation; use of piping, hangers, or wiring as support for materials other than the parts of the system.

CHAPTER 10

SMOKING

10-1. PURPOSE. To define and establish safety precautions for smoking on the Fort Riley Military Reservation and on satellite facilities.

10-2. GENERAL.

a. No Smoking Areas. Smoking is prohibited without exception in areas in which NO SMOKING signs are posted.

b. No Smoking In Bed.

c. Smoking is prohibited in all buildings and areas, except in specifically designated smoking areas.

(1) Smoking is prohibited within:

(a) 50 ft of any warehouse or exterior storage stack.

(b) Flammable Liquid Areas. These areas extend 50 ft in all directions from any flammable liquid loading, unloading, or transfer point to storage area. Included are filling station driveways, points at which gasoline fired devices are filled, Petroleum, Oil and Lubricants (POL) storage (any amount), and other points where vapors from flammable liquids may be free in the atmosphere. Restrictions on smoking in motor pools is covered in AR 385-55.

(c) Any area, or location where, in the opinion of the supervisor or any fire prevention official, use of smoking material may entail danger to life or possible destruction of property by fire or explosion. Posting of NO SMOKING signs will designate such areas, whether specifically covered by these or other regulations.

(d) Fifty ft of any stopped or parked vehicle hauling flammable liquid cargo.

10-3. DISPOSAL OF SMOKING MATERIAL. Each individual smoker is responsible for safe disposal of used smoking material.

a. Ashtrays will be of a type that do not allow burning out cigarettes to fall outside the container and will be protected from air movements which might blow the material from the containers. Ashtrays will not be placed where accidental dislodgment will result in dumping or spilling the contents on light combustibles.

b. Disposition of Smoking Material. Under no circumstances will smoking material be disposed of in wastebaskets or any container that is combustible or contains combustible material, unless the smoking material is thoroughly wetted prior to placing in the container.

c. Use of Disposable Smoking Devices. Ashtrays, sand pails and other devices for smoking material disposal will not be used for disposal of combustibles of any type.

d. Disposition of Smoking Material from Vehicles/Buildings. Smoking material will not be thrown or dropped from any vehicle or from any window or any part of any building.

10-4. BUTT CANS. Butt cans normally will not be attached to a combustible building. Where the only feasible place to attach them is to a combustible surface, attachment will be by means of a noncombustible bracket, which will provide not less than 1 in clear space between the can and the supporting surface. In addition, a noncombustible shield (which may be part of the bracket) will be provided above the top of the can, parallel to and 1 in from the supporting surface. The width of the shield will be not less than the diameter of the can, and the shield will extend from 1 in below to not less than 6 in above the top of the can when in place to the bracket. Butt cans will not be located in "No Smoking Areas".

10-5. RESPONSIBILITY OF SMOKERS. Any individual sufficiently mature to smoke is automatically considered capable of exercising ordinary prudence in the use and disposal of smoking materials, including matches and lighters. In the absence of extraordinary circumstances clearly beyond the individual's control, the individual may be held liable for any damage arising from or connected with smoking.

10-6. NO SMOKING IN BED. Fort Riley Poster 2, "NO SMOKING IN BED" and in sleeping rooms sign shall be displayed on the permanent section of bulletin boards in troop housing and Bachelor Enlisted Quarter (BEQ) and Bachelor Officer Quarter (BOQ) billets. This information should also be stressed at unit formations with other safety information.

CHAPTER 11**FLAMMABLE AND COMBUSTIBLE LIQUIDS AND MATERIALS**

11-1. PURPOSE. To define and establish criteria for the use, handling and storage of flammable and combustible liquids and materials.

11-2. DEFINITION.

a. Flammable Liquids. Flammable liquids are defined as any liquid with a flash point below 100° F. (37.8° C). Chemicals that are solids at 100° F or above are classified as solids. However, they will be treated as flammable liquids, of similar flash point when stored at temperatures where they give off vapors.

b. Combustible Liquids. Combustible liquids are defined as any liquid with a flash point above 100° F (37.8° C). They are further divided as follows:

(1) Class II Liquids, flash point at or above 100° F and below 140° F.

(2) Class III A Liquids, flash point at or above 140° F and below 200° F.

11-3. USE. Supervisory personnel at all levels will be held accountable in all cases of fire or accidents arising from or involving use of flammable. If there is a violation of any published regulation or failure to exercise prudence can be demonstrated or reasonably inferred, responsible personnel may be subjected to disciplinary action or held pecuniary liable, or both. Use FR Regulation 420-4 for information on this subject, further questions may be referred to Fire Protection and Prevention, Directorate of Emergency Services (DES).

11-4. STORAGE.

a. Storage of Flammable and Combustible Liquids. Flammable and combustible liquid storage shall conform to the requirements of the National Fire Codes, and will be IAW AR 420-1, chap 25 (Fire and Emergency Services).

b. Storage Area. The area for storage will not be in the direct area of exit, nor will it be near open flame, heat, or spark producing equipment. FR Poster 1, NO SMOKING sign and a FLAMMABLE sign will be posted. Amount of storage will normally not be over a total of 5 gal of flammable liquids.

c. Combustible Liquids Used in Motor Vehicles Repair Shops. Combustible liquids, such as oil or grease used in motor vehicle repair shops will be kept to a minimum. Normally one, 55-gal drum of each type will be allowed. Shops will not be used for storage of excessive oil supplies. Winter conditions will be considered for increased storage of these items.

d. Storage During Freezing Weather. Freezing weather periods will be taken in consideration for the temporary storage of paint and products that could be damaged by freezing.

e. Storage of Flammables in Occupied Buildings. Where occupancy of any building requires storage of flammable office-type cleaners, such as ditto fluid and laboratory reagents that are frequently used in small quantities, the total quantity on hand will be kept to the minimum consistent with the time required for normal supply. The portion not in desk or table containers will be stored in the original shipping containers if it can be resealed; kept in a cabinet or closet ventilated to the outside, and where practical, plainly labeled "Flammable". Only one container for each type of material may be broached at a time. Desk or table containers may not exceed 8 fl oz in volume. GSA Catalog, flammable storage cabinets are recommended.

f. Storage of Flammable and Combustible Liquids — Family Housing.

(1) Flammable and combustible liquid storage in Fort Riley family housing units will be IAW AR 420-1. When requirements of this regulation are followed, authority from the Installation Fire Marshal is not necessary for storage of flammable and combustible liquids. Unusual or special conditions will require approval.

(2) Gasoline storage in family quarters is prohibited unless specifically authorized by the Installation Fire Marshal. The storage of fuel in containers or in power mowers, outboard motors and similar equipment with fuel tanks should generally be in an outside building, approved cabinet, or such storage. *NOTE: Occupant will be held liable for losses by fire that is caused by negligence in storing or using flammable materials.*

g. Liquid Petroleum (LP) Gas in Quarters. LP gas as used in quarters, is defined as liquefied petroleum gases (LPG, LP gas, bottled gas) that contain any of the following hydrocarbons: propane, propylene, butanes and butylenes.

(1) Portable equipment such as camp stoves and lighting equipment using LP gas may be stored in quarters subject to compliance with all the following conditions. Under no condition will the devices be fired or operated inside the building.

(a) Gas containers, where possible, will be disconnected from the devices and checked for leaks (by immersion in water) prior to storage. Leaking containers will be placed outdoors at a location safe from ignition until they can be disposed of safely.

(b) Storage will be at a location that will minimize exposure to excessive temperature changes, physical damage or tampering by unauthorized persons, particularly children. The site will also be remote from exits, stairways or areas normally used for or intended for use as safe exits.

(c) Storage in basements or other below grade areas may be allowed only when no other reasonable secure area is available and the location and method of storage has been approved by the Fire Marshal.

(2) Any gas container which has been dropped or subjected to heavy impact (whether visibly damaged or not) or has been subject to other than minor abrasion will be returned to the supplier for certification of its safe condition prior to being stored.

11-5. ISSUE. All dispensing or withdrawal of flammable liquids from containers exceeding a 5 gal capacity will be by pump, except that gravity dispensing may be utilized in troop field operations.

11-6. HANDLING.

a. Use of Containers. Use of standard safety cans for transportation, storage and use of flammable liquids is mandatory for quantities in excess of eight ounces. For quantities 8 oz or less, used or stored in other than laboratories, unbreakable containers capable of being tightly closed may be used when specifically approved by the supervisor. Glass reagent bottles may be used in authorized laboratories. Flammables will not be brought into any building (except where specifically authorized by Fire Protection and Prevention) in other than standard safety cans.

b. Filling Tactical Containers. Filling tactical containers while in the bed of vehicles is prohibited in the cantonment area.

c. Fueling of Aircraft. Fueling of aircraft will be in strict accord with NFPA 407 (Standard For Aircraft Fuel Servicing).

d. Use of Liquid Fuel Equipment. Use of liquid fuel equipment, such as, ranges, ovens, immersion heaters, lanterns, and similar devices in any building in the cantonment area (other than in authorized repair shops) is prohibited for all purposes and under all circumstances. Cleaning, emptying, or filling of tanks or burner assemblies inside of or within 50 ft of any building or tent is prohibited. Where this type of work is being done, smoking will be prohibited and reasonable care will taken to prevent vapor travel to an ignition source. Refer to chap 8 for storage of this equipment.

e. Draining Flammable Liquid Tanks. The procedure for draining flammable liquid tanks is applicable to fuel tanks on vehicles, skid or trailer-mounted equipment, such as generators or pumps, heating equipment, and lighting equipment. The tank may be an integral part of the equipment or portable.

(1) Draining Fuels From Tanks. Draining fuels from tanks will be accomplished outdoors, except as permitted in chap 11-6(e)(7) below. Site selection will be 50 ft or more from any vehicle, road or building with terrain of such nature that any vapors

generated can be rapidly dissipated. Smoking, use of any flame or spark-producing devices and vehicle movement (under its own power) will be prohibited 50 ft in all directions during the draining operation and for a minimum of 30 min after receiving vessel has been securely closed.

(2) The following procedures will be followed without exception (as used herein, "tank" refers to the vessel being drained). Prior to beginning the operation, all parts of the vehicle or device will be cooled to a degree which will allow firm grasping by the bare hand without discomfort. All electrical equipment will be de-energized. Batteries will be disconnected and removed to a point 50 ft or more from the tank being drained. The receiving vessel will be grounded and firmly bonded to the tank being drained. This bonding connection will be made prior to opening the drains and will remain in place until the draining has been completed and all openings in the tank and the receiving vessel have been sealed. Drainage will not be allowed to discharge on the ground.

(3) The receiving vessel will be of a type capable of being closed or sealed vapor-tight, for example, a standard safety can or a 55-gal drum.

(4) On completion of the draining operation, spills on any part of the equipment, including the receiving vessel, will be wiped up and the equipment allowed to dry not less than 30 min prior to any further work.

(5) After equipment is dry, the receiving vessel will be disconnected and moved at least 50 ft from the worksite.

(6) After completion of the above, work on the tank or vehicle may proceed. Hot work, or any work involving cutting, abrading, grinding, or filing on fuel tanks will begin only after complete purging (see chap 12)

(7) Draining may be accomplished inside shops or other buildings where vehicle size or condition precludes movement to the outdoors for the operation, subject to the approval of the Fire Marshal and full compliance with such precautionary measures as he may deem necessary. In such cases, provisions of all possible natural ventilation (regardless of weather conditions) are mandatory.

11-7. TRANSPORTATION. Fuel tankers for transportation of flammable liquids will comply with the following:

a. Automatic Emergency Shutoff Valve. Each compartment will be equipped with an automatic emergency shutoff valve inside the tank with control remote from fill openings and discharge faucets (NFPA 385). Each driver will be familiar with the operation of these valves.

b. Pump Engine. The pump engine will be shielded from spillage of leakage.

c. Drag Chains/Bonding. Drag chains are not required. Bonding is required when unloading into aboveground tanks or other vehicles; this includes commercial contract delivery vehicles doing business on the Fort Riley installation.

d. Fuel Loads in Excess of 55 gallons. Fuel tankers, semi-trailers, fuel servicing trailers and containers with capacities in excess of 55 gal will be loaded only at loading racks. This restriction is applicable to loading all types of fuels and petroleum base solvents. As directed by FM 10-67-1, (Concepts and Equipment of Petroleum Operations), all precautions for preparation, loading or unloading will be strictly observed. In the absence of standard loading facilities, vehicle service facilities may be used, provided that the following additional mandatory precautions are observed:

(1) All bonding and grounding devices required for standard loading racks, or their equivalent, will be provided.

(2) The filling nozzle will be of a type provided by the user which must be held open by the operator. Nozzles with hold-open devices of any type will be used only after permanent modification has been made to eliminate the holding device fitted to it. Approved hose provided by the user will be of sufficient length to extend to the bottom, or nearly to the bottom of the tank when the nozzle is held at a comfortable working height and position outside the dome.

(3) Vehicle movements or parking within 50 ft of the fill point is prohibited. All personnel not directly concerned in the loading operation will be excluded from the area. This exclusion area will be clearly delineated by barricades, signs on stanchions or other effective marking devices.

(4) The fuel tankers or prime mover will not be started for any reason during the operation, nor will any electrical device or engine on the vehicle be activated. The operational period is the time when any valve is open, dome covers are unsecured and spills are present.

(5) The individual operating the filling nozzle will position himself upward as far as possible from the dome or fill opening and will be in a position where minimum fatigue will result during the period required for loading. Breathing of fumes should be avoided.

e. Motors. All motors of fuel tankers or tractors will be shut down when making or breaking hose connections.

f. Loading and Unloading Operations.

(1) The driver or attendant will not leave the truck during loading or unloading operations.

(2) Refer to NFPA 385, 6-3.1 (Overflows and Drains For Asphalt Tank Vehicles) for specific guidance. Each tank vehicle shall be provided with at least one portable fire extinguisher having at least a 20-B,C rating or, when more than one is provided, each extinguisher shall have at least a 10-B, C rating. Each tank vehicle manufactured after 1 January 1980 shall be provided with at least one portable fire extinguisher having at least a 2-A, 20-B, C rating.

(3) Tactical refueling operations will follow FM 10-71 (Petroleum Tank Vehicle Operations) guidelines for fire safety requirements.

(a) Keep a fire extinguisher manned and ready for use during all petroleum tank vehicle operations.

(b) Keep all sources of vapor ignition away during tank operations.

g. Leaking Transport Trucks. Leaking transport trucks may be unloaded at the intended delivery point if, in the opinion of the Fire Marshal, the unloading can be safely accomplished. If the vehicle cannot be safely unloaded at the intended delivery point, government vehicles will be removed to a point where unloading or transfer can be accomplished with maximum possible safety. In cases involving non-government equipment, precautionary measures for safe movement of the vehicle will be employed to effect removal of the vehicle from the reservation.

11-8. PURGING FLAMMABLE LIQUID TANKS AND CONTAINERS. Purging will be accomplished in strict accordance with American Petroleum Institute (API) recommended procedures and publications API Publication 2015, (Cleaning Petroleum Storage Tanks) and API publication 1604, (Closure of Underground Petroleum Storage Tanks). Contact the Directorate of Environment and Safety of Fort Riley for more information.

a. Use of Flammable Liquids for Cleaning. Use of flammable liquids, especially gasoline for any type of cleaning is prohibited except:

(1) Where the Fire Marshal has issued written approval covering specific operations, locations and conditions of use.

(2) Where small amounts (2 oz or less) are used by the operator for cleaning typewriters and similar office equipment.

(3) Where used in laboratories, pharmacies and similar occupancies for cleaning and drying glassware and laboratory equipment.

(4) Where training manuals and other Department of the Army publications permit and recommend use of flammable solvents for cleaning internal combustion powered equipment and in other processes. However, the requirements for observance of fire prevention and safety regulations and practices are not reduced, nor are the need eliminated for exercise of reasonable precautions and prudence by supervisory and using personnel.

b. Flammable Solvents. Flammable solvents will be used only where the grease or foreign material cannot be removed by soap or detergents and water or other nonflammable agents, and then only in the minimum quantity necessary for removal of the deposit.

(1) For cleaning parts removed from vehicles or small size items by washing, standard safety dip cans are required. When the quantity exceeds the capacity of dip cans, a vat meeting the following requirements will be used:

(a) Location of the vat will be at a point where natural ventilation will move any fumes directly to the outside and away from possible sources of ignition or to where safe mechanical ventilation is provided.

(b) Construction will be all metal, including supports.

(c) An automatic, self-closing lid will be provided.

(d) The vat will be located so that there is no danger of accidental upset during filling, draining or cleaning operations or from movement of vehicles or material handling. If located at a point subject to possible overturning, the vat will be securely anchored to the floor or building frame.

(e) All electrical wiring outside, fixtures and devices immediately above the tank and within a space of 3 ft around its perimeter and all outlets within 20 ft of the tank and lower than its top of the tank, will be an explosion-proof type approved for such use.

(f) Vat drains will be of a type that must be held in the open position manually and will be secured in the open position at any time. Drains may be locked in the closed position.

(g) Storage of flammable will be limited to 5 gal in the building or where the largest vat capacity exceeds 5 gal to one charge in the vats and one charge per vat in standard safety containers. Waste or used chargers will be drained from the tank into approved containers and taken immediately from the building for disposal in a manner approved by the Environmental Division of PW and the Fort Riley Fire Marshal.

(2) When cleaning vehicles, no work will be done on the electrical system of a vehicle where a low flashpoint solvent has been used on that vehicle or any other within 50 ft of it until the solvent has thoroughly dried and all traces of the vapor have disappeared. In some cases, this may take as long as an hour.

(a) Flammable solvents will not be used for cleaning any part of a vehicle until all parts, including the exhaust manifold, are cool enough to allow gripping with the bare hand without discomfort.

(b) Where cleaning or other operations require use of flammables inside the hull or engine compartment of a vehicle:

(1) The entire electrical system will be de-energized by disconnecting first the ground side and then the ungrounded side of the battery or batteries.

(2) The disconnected battery will be removed or protected from accidental metallic contact across the terminals by replacing the cover or by securing in place a temporary cover of wood or other insulating material.

(c) Extension cords, trouble lights, or other electrical equipment in use in or within 20 ft of the vehicle will be of a type approved for use in atmospheres containing flammable vapors.

(d) Two persons will be present at all times during the operation. Only one person may enter or be in the vehicle at any one time; the second person will remain outside to render assistance, if required, and to ensure that all precautionary measures are observed.

11-9. Jet Propulsion (JP) FUEL. This fuel is in the gasoline-kerosene family. Precautions contained in FM 10-67-1 are applicable and mandatory. JP fuels frequently develop explosive vapor air mixtures in partially filled tanks and containers. Excessive agitation and excessive velocity in pipelines develop heavy static charges in the liquid and arcing from the liquid surface to the tank body is possible. These characteristics increase the importance of rigid compliance with all safety measures.

11-10. PAINT AND MASTIC. Painting of rooms and the application of asphaltic mastic to floors can generate explosive atmospheric conditions. Whenever rooms are being painted or asphaltic mastic is being applied to floors, the rooms must be ventilated by opening all windows to dissipate the fumes. All pilot lights within the room must be extinguished. Smoking in the rooms is prohibited. All sources of ignition, such as turning on and off light switches, plugging in or disconnecting extension cords, and the use of matches or cigarette lighters must be avoided.

11-11. PARKING OF FUEL TANKERS. Parking of fuel tankers will comply with the following conditions:

(1) Fuel tankers may be parked in groups of not more than three, with a 50 ft separation between groups (see fig 11-1).

(2) Parking locations will be selected so that the vehicles are accessible from all sides for firefighting operation, and so that any of the tank vehicles can be moved (under its own power or towed) from the vicinity without moving another vehicle.

(3) Vehicles will be parked where practical on a level surface and where spillage will not run into storm drains (see fig 11-1).

(4) All fuel tankers will be grounded.

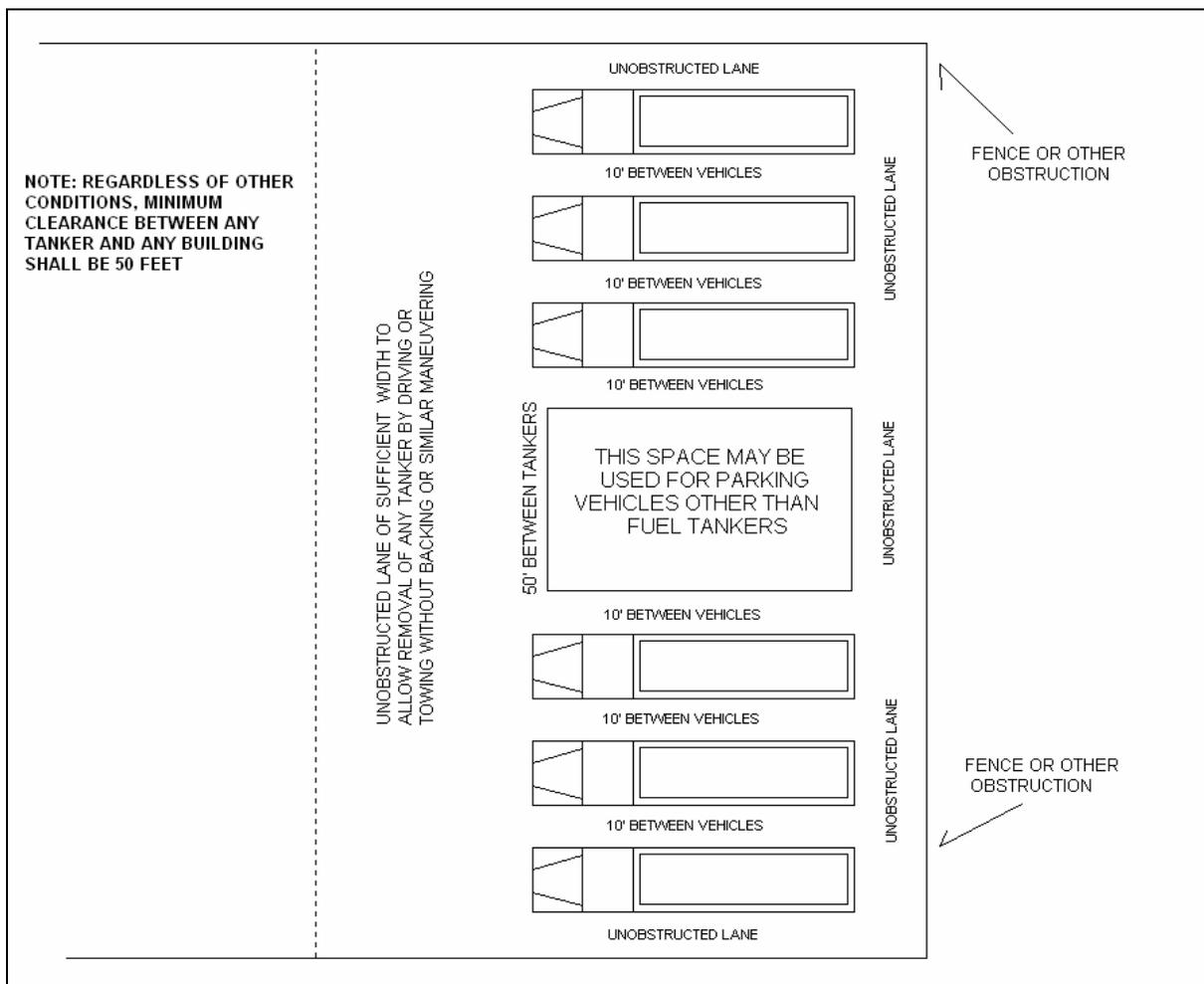


Figure 11-1. Parking For Fuel Tank Trucks

CHAPTER 12

HEAT-PRODUCING APPLIANCES

12-1. PURPOSE. To establish and set forth safety precautions for the use of heat producing appliances.

12-2. PROTECTION OF COMBUSTIBLES. Persons using devices capable of producing heat, flame, sparks, or embers will exercise care necessary to prevent ignition of any combustible material in the vicinity.

a. Clearances from Light Bulbs. Combustible material will not be placed in contact with or within 18 in of any light bulb, nor so placed that accidental movement of either or both can result in contact or a separation of less than 18 in.

b. Clearances from Electrical Equipment. Combustible material will not be placed or stacked in any location where rolling or upset of the stack will allow contact with electrical equipment, heating device, moving belt, or heat vent.

c. Clearances from Heating Devices. No beds, clothing, furniture, curtains, drapery, or any other light combustible material will be placed less than 30 in from any heating device other than steam or hot water radiators. Clearance of 4 in is required between light combustibles and steam or hot water heaters.

d. Clearances from Radio and TV. Reasonable clearance will be provided between radio and television cabinets and light combustible material. In no case will light combustible material be stacked on or draped over the cabinets.

12-3. ELECTRICAL APPLIANCES. Appliances using electrical energy are permitted subject to the following:

a. Approval Label. Each must bear an approval label, such as the Underwriters Label (UL). For more information, see chap 1-1(3)(b).

b. Approval for Use of the Appliance. Use of the appliance has been approved by the unit commander or section chief (not applicable to portable appliances in private quarters).

c. Pecuniary Liability. Pecuniary liability may be imposed for loss or damage to Government property caused by negligence of the user of electrical appliances.

d. Approval by Public Works inspectors. The appliance is deemed safe by PW inspectors. Unsafe appliances will be disconnected and not used until tested and approved by a PW electrician. Users are responsible for arranging for and securing the required tests.

e. Lamps in Lighting Appliances. Lamps in lighting appliances shall be adequately protected from accidental contact with combustibles or flammables.

f. Seasonal Decorations. Seasonal decorations wired for illumination will be constructed of noncombustible materials only and will bear an approval label (see 12-3(a)). Such decoration will not be provided with any type switch between the convenience outlet and the device and shall be plugged in only during such time as a responsible adult is present on the premises. Decorations other than noncombustible types such as Christmas trees, are prohibited within 10 ft of any exit.

g. Radios and Televisions. Radios and televisions will not be left on at any time when the building is unoccupied.

12-4. HEAT OR FLAME (HOT WORK) PRODUCING DEVICES. Hot Work covers open flame and arc welding or cutting, using of blow torches, plumber's firepots, and any device producing heat or an open flame used at any location, except cooking and space heating appliances, water heaters, heating devices customarily used in laboratories, electric soldering, and devices normally used in hobby or craft work providing fuel on hand is kept to a minimum and properly stored in a safety container and equipment is in good condition. Persons using flame-producing equipment for hobby work in quarters assume responsibility for any damage to the building resulting from this cause.

a. Hot Work in Cantonment Areas. No Hot Work will be done in cantonment areas other than approved shops except as provided in 12-4(c).

b. Use of Buildings for Shop Operations. No building or portion of a building will be used for shop operation involving hot work without express approval by the Fire Marshal, after verification of the adequacy of fire prevention and safety facilities. Approved Hot Work areas will not be changed or expanded, or the type of Hot Work changed from that for which the area was originally approved without re-approval by the Fire Marshal.

c. Hot Work Permit. A Hot Work permit is required prior to commencing any Hot Work outside an approved shop area.

(1) Permits will be issued by Fire Protection and Prevention of DES and after inspection or knowledge of the area and the operator ensures that all necessary precautions have been taken, such as protection of combustible material, wetting down, and positioning of first aid extinguishing equipment. Preparation and protection for the area is the responsibility of the shop agency or contractor accomplishing the work. In all cases where Hot Work has been done under permit, an inspection will be made of the area by the authority issuing the permit not less than 30 min or more than one hour after work has stopped for the day. The permit holder is responsible for calling for the

inspection and will not leave the area for any period in excess of 30 min until the inspection has been conducted by Fire Protection and Prevention personnel. Hot Work permits may be revoked at any time by Fire Protection and Prevention for cause.

(2) At his discretion, the Fire Marshal may issue continuing permits to organizations having recurring requirements for performance of Hot Work outside approved shop areas and having qualified supervision and competent operating personnel to accomplish the work safely.

d. Welding and Cutting Equipment. Only authorized personnel will permit operation of welding and cutting equipment.

(1) The permit will be given only after the individual has demonstrated knowledge and understanding of the safety and fire prevention rules, the individual's qualifications have been certified by the supervisor, and the certification recorded on the individual's personnel record. Supervisors will verify operator qualifications by frequent checks of actual operations and will rescind or withdraw the operator's authorization in cases where flagrant or habitual disregard of the rules are found. Trainees will work only under the direct supervision of authorized personnel.

(2) Each operator will be responsible for checking all elements of the equipment prior to each day's use. The check will include, but not be limited to the condition of the hoses and connections, grounds, regulators, and first aid extinguishing equipment. Operability of all valves, including tank valves, regulator controls, and adjusting valves on the torch will be given special attention. Supervisors will make frequent spot checks to ensure observance of this requirement. In shops where more than one operator may use the equipment, a definite assignment for the daily check will be made and tags or some similar device will be used to inform other operators that the check has been made.

(3) Machine or arc welding equipment conform to the National Electrical Safety Code and National Electrical Code. Frames of electrically driven welding machines, portable or stationary, will be positively grounded, and the ground connections will be protected from mechanical injury by guards designed to permit easy visual inspection and testing of the grounding system will be accomplished each 30 days.

e. Storage of Hot Work. Hot Work equipment may be stored in the building where used if definite storage areas are clearly designated and portable equipment is returned to these areas at the close of each day's work. Supervisory personnel will institute a system for a pre-closing inspection of the area to ensure closure of all supply valves. Working supplies of oxidizing and flammable gases may be stored together in these areas.

f. Accomplishing Hot Work on Containers for Flammable Liquids. Contact Fire Protection and Prevention, if there are any questions as to tank size that can be worked on. In accomplishing Hot Work on containers for flammable liquids, no welding or cutting or other work involving use of heat or generation of sparks will be done on containers that have held a flammable substance either by DA civilian personnel or by troops in the field until the following have been complied with:

(1) The barrel, drum, or tank will be thoroughly purged of flammable solids, liquids, or vapors or of any substance that will produce toxic vapors when heated, in the following manner:

(a) Emptying or cleaning of vessels will be done in the open in location where the vapors will be safely dispersed or in a building designed, equipped, and approved for operations, involving contamination of the atmosphere with flammable gases, and vapors.

(b) The vessel will be cleaned by filling it with a hot solution consisting of six oz of tri-sodium phosphate or sodium silicate per gal of water. Where steam is available, it will be bubbled through the solution to heat it. In any case, the solution will be used as hot as safety in handling permits. The solution in the vessel will be thoroughly agitated either by stirring, steaming, or shaking for a minimum of 30 min. The vessel will then be rinsed at least twice with clear water to prevent corrosion by the cleaning solution.

(c) After thorough cleansing and prior to commencing any Hot Work, the vessel will be filled with water and placed in a position where the water level can be maintained within a few inches of the point where the work is to be done, care being taken to provide a vent for escape of heated air or steam.

(d) Under no circumstances will engine exhaust gas be used for inserting flammable liquid containers preparatory to accomplishing Hot Work. Carbon monoxide is not an inert gas, and ignition by hot carbon particles is highly probable.

(2) Hot Work on vessels that have contained leaded gasoline or other toxic materials will be done only in locations having positive ventilation sufficient to conduct any possible fumes away from the workers and to a point of safe dispersal.

g. Design of Welding and Gas Cutting Equipment. Manufacturers of welding and gas cutting equipment have incorporated in their design all elements necessary for mechanically safe devices and as a result, fires and actions from mechanical failure are rare. Investigations of fire and accidents with this equipment will be conducted.

CHAPTER 13

QUARTERS

13-1. PURPOSE. To provide instructions for maximum fire safety in quarters with minimum intrusion and invasion of privacy.

13-2. APPLICABILITY. Applicable to quarters, to include bachelor officer quarters, bachelor enlisted quarters, nurses quarters, guest houses, family quarters, and comparable occupancies.

13-3. GENERAL. Fires in private quarters generally do not result in large direct losses to the government, but in nearly all cases result in loss to the occupants. The monetary loss is the less serious of the risks-involved. The major risk is that of injury to or death of the occupants, particularly children. In the interest of allowing occupants maximum privacy, supervision of fire prevention measures by post officials is held to a minimum, which places the burden and responsibility for effective fire prevention on the head of the household. It is expected and required that adult occupants will exercise ordinary prudence in their own conduct and will impose reasonable control of minors in their households. Prevention of fires is the paramount objective. Pertinent portions of other chapters to this regulation are summarized below and in appendix D.

13-4. RESPONSIBILITIES OF ALL INDIVIDUALS — MILITARY AND CIVILIAN.

a. Reporting Fires. Any person discovering a fire or a potential fire from the spilling of flammable liquids or finding evidence that a fire has occurred will report the incident to Fire Protection and Prevention without delay, unless he or she has positive knowledge that the report has been previously made.

b. Personal Acts. Each individual will exercise normal prudence and judgment in his acts and duties. Lack of specific instructions concerning conditions, practices, or materials commonly recognized as hazards does not excuse lack of prudence or judgment.

c. Acts of Others. Personnel assigned quarters are responsible for compliance with these regulations by members of their families, guests, and domestic employees and are liable for any property damage resulting from their acts or failure to act unless it can be shown that reasonable control and discipline were exercised.

d. Recognition of and Reporting Hazardous Conditions or Procedures.

(1) Each individual is expected to be alert and recognize, within a person's capability, hazardous conditions or acts within this person's environment and to take action to eliminate them.

(2) Individuals will, upon receipt of a written or verbal notice of a hazardous condition from the Fire Protection and Prevention inspectors, make the correction required. If corrections cannot be begun or made in 24 hours, or it is believed the directive is unreasonable or impractical, a request for additional time or a reclaim in writing will be made to the Fire Marshal, within that time. Once started, corrective work will be diligently carried out.

13-5. FIRE PLAN. Individuals in other than private quarters are required to know their assignments in the building fire plan. Heads of households are urged to develop and instruct their family members in a fire plan for their quarters. Appendix D explains the plan elements.

13-6. ACTION IN EVENT OF FIRE. Except for minor or incipient fires, quarters occupants are not expected to attempt to extinguish fires. Firefighting is a highly hazardous undertaking involving many unpredictable developments. Misguided attempts by laymen to put out fires frequently result in injuries to the individual and more often than not actually aid the fire and increase the extent of the loss. Appendix E further explains the action to be taken in event of a fire. Call 911 if you have a fire or smell smoke.

13-7. REQUIRED INVESTIGATIONS.

a. All fires will be investigated by the Fire Marshal, to determine the cause of the fire, the underlying reasons for the existence of the cause, the amount of the loss, the person(s) immediately responsible for the fire, violations, if any, of existing regulations, supervisory laxity at any level, and action required to prevent recurrence of fires from similar causes. In cases where privately owned property is damaged or destroyed, possibility of a claim against the Army will be determined. For the purpose of conducting technical investigations of fires, the Fire Marshal is authorized to:

(1) Administer oaths and take sworn testimony, when appointed Summary Court Officer.

(2) Assume custody of any property considered of value as evidence of the cause of the fire or the identity of the person(s) responsible for the fire.

(3) Summon any person on the Reservation for the purpose of obtaining information or evidence concerning the fire. Such summons will be honored without delay, except in cases of physical incapacitation.

b. Any person having knowledge which might assist in determining the cause of the fire is charged with the duty of furnishing such information to the Fire Marshal, without delay, whether or not requested.

13-8. FIRE PREVENTION INSPECTIONS. Fire Protection and Prevention will make fire inspections when requested or needed.

13-9. STORAGE. Refer to appendix F.

13-10. ELECTRIC WIRING. No one will install, repair, or alter any part of the electrical system in controlled quarters unless an approved Job Order Request has been obtained from Public Works and the work is to be accomplished by a licensed electrician or the specific item was covered in the Self-Help Program instructions.

13-11. HEATING EQUIPMENT.

a. Quarters heating equipment that is not functioning properly or to the satisfaction of using personnel will be turned off and the condition reported at once to Public Works.

b. Occupant-owned heating equipment for example, UL-approved-portable-electric heaters, may be used where electrical service is adequate for the load, if emergency warrants.

c. Clearances necessary between combustibles and heating equipment are listed below. Portable appliances with totally enclosed heating elements are expected.

(1) Clearances above the cooking surface are as follows:

(a) Appliances with no exposed flame, such as grills or deep fat-fryers require clearance that is not less than 30 in.

(b) Exposed charcoal and charcoal-type fires, not less than 54 in.

(2) Cooking appliances will be located to provide a minimum clearance of 18 in, which may be reduced to 4 in when a noncombustible shield with a 1 in airspace is permanently installed between the device and the combustible material. Noncombustible shields must extend 6 in beyond the device in all directions.

(3) No beds, clothing, furniture, curtains, drapery, or any other light combustible material will be placed less than 30 in from any heating device other than steam or hot water radiators. A clearance of 4 in is required between light combustibles and steam or hot water radiators.

13-12. AUXILIARY KITCHEN EQUIPMENT. Exhaust fans and range hoods will be cleaned at sufficiently frequent intervals to prevent any noticeable accumulation of grease. Special care will be taken where charcoal broilers and similar devices are used.

13-13. SMOKING.

a. Responsibility of Smokers. Any individual sufficiently mature to smoke is automatically considered capable of exercising ordinary prudence in the use and disposal of smoking materials, including matches and lighters. In the absence of extraordinary circumstances clearly beyond an individual's control, the individual will be held liable for any damage arising from or connected with smoking.

b. Smoking in Bed. Smoking while in a reclining position in bed is prohibited.

c. Thrown or Dropped Smoking Material. Smoking material will not be thrown or dropped from any window or any part of any building.

d. Disposal of Smoking Material. Each individual smoker is responsible for safe disposal of used smoking material.

(1) Ashtrays will be of a type which does not allow burning out cigarettes to fall outside the container and will be protected from air movements which might blow the material from the container. Ashtrays will not be placed where accidental dislodgment will result in dumping or spilling the contents on light combustibles.

(2) Under no circumstances will smoking material be disposed of in waste baskets or any container that is composed of combustible materials, unless the smoking material is thoroughly wetted prior to placing in the container.

(3) Ashtrays, sand pails, and other devices for smoking material disposal will not be used for disposal of combustibles of any other type.

13-14. HEAT-PRODUCING APPLIANCES.

a. Protection of Combustibles. Persons using devices capable of producing heat, flame, sparks, or embers will exercise care necessary to prevent ignition of any combustible materials in the vicinity.

(1) Combustible materials will not be placed in contact with or within 18 in of any light bulb, nor so placed that accidental movement of either or both can result in contact or a separation of less than 18 in.

(2) Combustible materials will not be placed or stacked in any location where rolling or upset of the stack will allow contact with electrical equipment, heating device, or heat vent.

(3) Reasonable clearance will be provided between radio and television cabinets and light combustible materials. In no case will light combustible material be stacked on or draped over the cabinets.

b. Electrical Appliances. Appliances using electrical energy are permitted subject to the following:

(1) Each must bear an approved label, such as the Underwriters' Label (UL).

(2) Pecuniary liability may be imposed for loss or damage to government property caused by negligence of the user of electrical appliances.

(3) Lamps in lighting appliances shall be adequately protected from accidental contact with combustibles or flammables.

(4) Seasonal decorations wired for illumination will be constructed of noncombustible and nonmetallic materials only and will bear an approved label. Such decorations will not be provided with any type of switch between the convenience outlet and the device and shall be plugged in only during such times as a responsible adult is present on the premises. Decorations other than noncombustible types, such as Christmas trees, are prohibited within 10 ft of any exit.

(5) Radio and television receivers will not be left on at any time the building is unoccupied. The openings in radio and television cabinets for release of the heat will not be obstructed to any degree.

(6) Coffee pots, urns and all hotplates will:

(a) Bear the Underwriters Label, or approved equal.

(b) Be in good state of repair.

(c) Be located a minimum of 18 in from combustible material or have a metal or glass shield providing free airspace of not less than 1 in between the shield and the combustible material.

(d) Be disconnected whenever the building is unoccupied.

(e) Occupant owned air conditioners will be connected to PW approved circuits only.

c. Cooking in BOQs and BEQs. Cooking in quarters of all types will be limited to kitchen areas and outside grills. In BOQs, BEQs, nurses' quarters, and dormitory type guest houses, the preparation of food in rooms other than kitchens will be limited to

those items which may be heated in domestic type coffeepots, teapots or microwaves, without the use of external heating devices. Microwaves must meet industry and safety guidelines. They must have their own dedicated electric circuit and be approved through the energy officer. The presence of unpackaged cooking appliances other than coffee pots and teapots in rooms of BOQs, BEQs, nurses' quarters, and dormitory type guest houses is prohibited.

13-15. HOUSEKEEPING. At no time will cut grass, trash, litter, rubbish, packing materials, or other combustible material be stored or allowed to accumulate against, under, or within 10 ft of any building or structure. Outdoor trash containers must be a distance of at least 10 ft from the building.

a. Trash cans shall be of noncombustible construction and provided with a noncombustible cover.

b. Open top wastebaskets shall be of metal or other noncombustible material.

13-16. FIREWORKS. Fireworks are prohibited without exception. Unauthorized fireworks found on the reservation will be seized by the Fire Marshal or the Fort Riley Police and retained in whole or in part for evidence.

13-17. OPEN FIRES. Open fires, including open flame lighting and burning of grass, leaves, debris, and dry lawns. The burning of lawn grasses has no beneficial effect and is also a highly dangerous practice, which is strictly prohibited on the reservation except:

a. Fires are permitted in fireplaces if properly protected by screens.

b. Barbecue devices will be under close supervision of an adult from the time of initial firing until the fire is dead out. Barbecue grills, chimeneas, fire pits or other open flame devices are prohibited on any balcony, porch, deck, overhang, garage, carport and/or within 25 ft of structural walls or flammable materials. In no case will such devices, used in approved areas, be left unattended. Caution will be exercised in the use of candles. Use of open flame torches, such as gasoline, propane, alcohol, in pursuit of hobbies is at the occupant's risk.

c. Votive candles and candles used for table lighting in quarters, chapels, in small party rooms seating less than 100 persons, and in areas in clubs specifically approved by the Fire Marshal are permitted. The use of candles for any purpose, or the burning of incense, is prohibited in barracks, apartments, administrative buildings, tents, offices, and places of public assembly unless approved in writing by the Fire Marshal. Persons placing or causing decorative votive candles to be placed will be responsible for ensuring adequate clearance from combustible materials and will be attended to at all time while lit.

13-18. PRECAUTIONS. Ordinary prudence would call for observance of the following precautions:

- a. Take positive measures to keep matches, cigarette lighters, and all types of flame-initiating devices inaccessible to children, exercising special care if a child has a history of playing with fire.
- b. Aerosol cans of all kinds must be used, handled and stored carefully to avoid exposure of cans to heat or incineration which may cause rupture of the container from over-pressure. Use of contents near flame or flame-producing devices can also produce a flash-fire if the contents are flammable.
- c. Keep flammable liquids in safe containers, away from sources of ignition, and safe from tampering by children. This includes lighter fluid (cigarette or charcoal), paint thinners, solvents, gasoline, and kerosene. Liquid fuels must be handled with care and all spills carefully and immediately wiped up. Where saturation has occurred, the floor will be scrubbed daily with strong soap or detergent until all trace of the spill is removed. Flammable cleaners will not be used for cleaning, including the so called safe solvents. Small quantities (one pint or less) may be kept in metal containers capable of being securely closed. Larger quantities must be kept in standards self-closing safety cans.
- d. When painting with other than water emulsion paints, turn off pilots and other sources of ignition. Do not wash floors with solvents when cleaning up. Use of drop cloths or newspaper will eliminate most cleaning.
- e. Do not permit persons taking medications intended to induce sleep to use open flame heating devices, including kitchen equipment, without the presence of a responsible second party. Such individuals should not smoke when alone.
- f. Provide means for prompt removal of any incapacitated members of the family. Request Family Housing to affix invalid markers to the quarters. Do not leave invalids in the house without an attendant capable of handling them unless such aid is available within a reasonable distance.
- g. Never leave children under the age of 12 alone in the house for more than a few minutes at a time. In as little as 3 minutes, a small fire can gain sufficient headway to cause death by asphyxiation.
- h. Clean up promptly after parties, with particular attention to ashtrays, upholstered furniture, and waste containers. The extra fatigue is less than that resulting from cleaning up after a fire.
- i. Select babysitters with care. Be sure the sitter knows where to reach you, how to call Fire Protection and Prevention, and how to reach your doctor. If

you will be out of contact with a telephone, give the babysitter the telephone number of an adult capable of making emergency decisions.

j. Check smoke detectors monthly and if inoperable, notify your contractor for repairs or replacement as soon as possible. Smoke detectors will save your life, if operable. Learn not to burn.

k. Have an exit plan available and make sure your family is aware of the designated meeting area and what to do. Plan ahead and save you and your families life.

l. Practice fire drills in your quarters, with your entire family.

m. Make sure everyone in your quarters understands what to do if their clothes catch on fire, STOP, DROP, and ROLL.

n. For fire and emergency services any time of day, dial 911.

CHAPTER 14

FIRE PREVENTION FOR VEHICLES

14-1. PURPOSE. To provide guidance in the prevention of fires in all vehicles, including armored and self-propelled combat vehicles.

14-2. GENERAL.

a. Loss or disablement of a combat vehicle by fire represents the same diminution of striking power as loss due to enemy action.

b. Fires in combat vehicles are generally due to one or more of the following avoidable conditions:

(1) Overfilling the fuel tanks.

(2) Spillage due to excessive filling rates.

(3) Leakage into engine compartments from defective fueling equipment.

(4) Operation of vehicles with leaking fuel, lubrication, and/or exhaust systems.

(5) Operation with appreciable accumulation of fuels, lubricants, and extraneous combustible materials in engine compartments.

(6) Fueling or parking with hull drains closed, allowing leakage accumulations in the vehicle.

(7) Failure of crews to initiate adequate emergency measures for control of fires.

14-3. FIRE PREVENTION AND CONTROL.

a. Fueling.

(1) Drivers of the receiving vehicles will exercise extreme caution in fueling to prevent overfilling and spillage and will not allow use of refueling equipment that is leaking or otherwise in an unsafe condition.

(2) Drivers will position fuel supply vehicles so that refueling hoses do not cross engine compartments or hatches, using extra lengths of hose if necessary.

(3) Drivers of fueling vehicles will ensure that static control devices, such as grounding and bonding connections, are made in proper sequence prior to fuel transfer.

Lock-open devices will be modified to positively prevent use of the devices.

(4) Drivers of the receiving vehicles will open all hull drains prior to and during refueling operations and at any time the vehicle is inoperative overnight or longer. When hull drains are opened, and during fueling operations, the vehicle commander will check carefully for leakage of lubricants or fuel.

(5) Drivers will check carefully for and promptly report any fuel or lubricant leaks when performing before-operation, at-halt, and after-operation inspections. Fire extinguishing equipment will be checked during the before-operation inspection.

(6) Technical manuals require removal of the engines of most combat vehicles as part of the semiannual maintenance services when there is evidence of fuel or oil leakage. This requirement does not preclude removal of the engine at any time leaks are discovered or debris in the engine compartment is sufficient to be considered a fire hazard.

b. Vehicle Maintenance.

(1) Serviceability of all fire extinguisher equipment will be ensured before any maintenance will be undertaken within the hull of an armored vehicle. Operation mechanism for built-in extinguishers will be tested. Adequate precautions will be exercised to prevent discharge of the unit.

(2) Engine compartments will be cleaned whenever there is evidence of excessive accumulation of combustible matter, or fuel or lubricant leaks, removing the power-plant if necessary. The vehicle inspector will deadline the vehicle pending cleaning or repairs if a fire hazard exists.

(3) Procedures for clearing hydrostatic locks will include measures for prevention of ignition of the expelled fuel.

c. Control of Fires. Commanders will schedule periodic fire drills for combat and fueling vehicle crews to ensure thorough familiarity with fire extinguishing methods and capability for application. Drills will include de-energizing of electrical systems, manipulating hull drain valves, simulated activation of installed and hand-operated extinguishers and rescue of incapacitated crew members. Higher echelon commanders should call unannounced fire drills, both in the motor pools and during field operations.

d. Cargo. Cargo will not be left in trucks or other vehicles overnight, nor will trucks hauling cargo be left unattended.

e. Repairs. When required by technical manuals, vehicle batteries will be removed prior to starting work on any of the fuel lines of the vehicle. When not required

by technical manuals, vehicle batteries will be disconnected and covered with a nonconductive blanket prior to starting work on the fuel lines of the vehicle. Ground cables will be disconnected first and will be reconnected last. In the event of an electrical short circuit or an electrical fire in a vehicle, batteries must be disconnected immediately.

CHAPTER 15

MISCELLANEOUS HAZARDS

15-1. OPEN FIRES. Open fires, including open-flame lighting, and burning of grass, leaves, debris and lawns are strictly prohibited on the reservation. Also prohibited is the burning of classified defense information and material. Burning as a means of destruction of Classified Defense Information or materials, under normal peacetime conditions, is strictly prohibited. The usage of "burn barrels" is not authorized for destruction purposes unless specific approval is obtained from the Fire Protection and Prevention inspectors for each individual occurrence. Open burning on Fort Riley is a violation of both safety and environmental directives. Only GSA approved destruction devices will be utilized for destruction purposes. Authorized exceptions are:

a. Votive candles and candles used for table lighting in quarters, chapels, in small party rooms seating less than 100 persons, and in areas in clubs specifically approved by the Fire Marshal are permitted. The use of candles for any purpose, or the burning of incense, is prohibited in barracks, apartments, administrative buildings, tents, offices, and places of public assembly unless approved in writing by the Fire Marshal. Persons placing or causing decorative or votive candles to be placed will be responsible for ensuring adequate clearance from combustible materials and will be attended to at all times while lit.

b. Fires in shops (where fires are a normal and accepted part of the process being accomplished).

15-2. FIREWORKS. Fireworks are prohibited without exception. Unauthorized fireworks found on the reservation will be seized by Fire Protection and Prevention or the Fort Riley Police and retained in whole or in part for evidence.

15-3. AEROSOL CANS. Aerosol cans of all kinds must be used, handled, and stored carefully to avoid exposure of cans to heat or incineration which may cause rupture of the container from over pressure. Use of contents near flame of flame-producing devices can also produce a flash fire if the contents are flammable.

15-4. COMPRESSED GAS CYLINDERS. Storage and handling of compressed gas cylinders will conform to the following:

a. Oxygen cylinders will be stored at least 20 ft from fuel cylinders or be separated by a fire wall 5 ft high with a 1 hour rated firewall except when one cylinder of each gas is located in a cart or paired for use in welding or cutting operations.

b. Full cylinders of all types will be protected from the direct rays of the sun while in storage.

c. Full cylinders will be stored separately from empty containers.

d. Cylinders in shops will be secured to a wall or a building member by means of a noncombustible strap or chain.

e. Safety caps will be affixed to all cylinders that are not in use or connected to a pressure regulator.

15-5. HOBBIES AND CRAFTS. Persons engaged in hobby and craft activities will observe all fire prevention practices pertaining to the materials with which they are working. These materials consist, in part, of ceramic welding, brazing, soldering, use of adhesives, maintenance of vehicles, flammable film, chemicals, and wood-burning equipment.

15-6. PRIVATELY OWNED VEHICLES. Many fires occur each year involving private vehicles. Most of these fires are due to carelessness and can be prevented by observing the following precautions:

a. Do not attempt to start a vehicle when fuel leakage or spillage has occurred.

b. Do not operate a vehicle without the carburetor air cleaner and filter element in place.

c. Ensure that smoking materials are not allowed to fall into seats, floor mats, or upholstery.

d. Remove battery prior to making repairs to fuel system.

e. Do not use gasoline or other flammables for cleaning purposes.

f. Should an electrical short or flash occur, disconnect the battery immediately until repairs can be accomplished.

g. When removing or disconnecting the battery, always disconnect the ground cable first and, after repairs are completed, connect the ground cable last.

15-7. MELTING PASTE WAX. Persons will not melt paste wax or any combustible material, inside any building.

CHAPTER 16

FIRE HYDRANTS AND FIRE LANES

16-1. PURPOSE. To ensure that water distribution for firefighting purposes is not restricted by unauthorized use of hydrants, or by illegal parking of motor vehicles, and that free, unobstructed access to all buildings and structures is available to Fire Prevention and Prevention.

16-2. FIRE HYDRANTS. Fire hydrants will not be obstructed by fences, trees, barriers, or dirt fills, nor will they be used for other than firefighting or fire drills, except when specifically approved by the Fire Marshal. Fire Protection and Prevention will remove, confiscate, and report to the Fire Marshal any unapproved devices attached to fire hydrants. Approval for special use will include the following conditions.

- a. Availability of a standard hydrant wrench for operating the hydrant; no other type wrench may be used.
- b. Constant attendance during the time the devices are in use by someone equipped to promptly remove any devices attached to the hydrant, and devices installed on a hydrant wrench on the valve stem.
- c. All caps and gaskets to be replaced promptly when hose or other devices are removed from the outlets.
- d. Use is such that the 4-1/2 in and 2-1/2 in outlets are available for use by Fire Protection and Prevention.
- e. Discharge from the connection to the hydrant is controlled by a valve independent of the hydrant valve.
- f. Hydrant valve is fully opened while in use.

16-3. PARKING OF VEHICLES.

a. Parking Restrictions. No vehicle will be parked within 15 ft of a fire hydrant in any direction, except that parking is not restricted where hydrants are located on islands and the parking does not reduce accessibility of the pumper connection. The Fort Riley Police will enforce this in accordance with their procedures and the State of Kansas Statutes. Any long term parking of POVs within concertina wired areas will be at least 20 ft away from fire hydrants.

b. Fire Lanes. Where use of streets or access roads for vehicle parking will interfere with movement of firefighting apparatus, or require extra maneuvering to reach an operating position, or interfere with use or placement of firefighting devices, such as

hoses or ladders. These locations will be marked by painting the curbing red or by erecting suitable signs reading: "Fire Lane No Parking Any Time." Where temporary street blockages are unavoidable, such as unloading vans, the prime mover shall not be uncoupled and the vehicle shall be positioned so that it can be removed promptly in event of an emergency. The driver shall remain with the vehicle at all times and be prepared to move it promptly when so instructed by Fire Protection and Prevention or the Fort Riley Police. The person in charge of receiving or delivering cargo will be responsible for informing drivers of this requirement and its enforcement. Fire lanes must be at least 20 ft wide for Fire Protection and Prevention access, and maintained clear.

16-4. **BLOCKAGE OF STREETS OR FIRE LANES.** Should a street, roadway, or fire lane be blocked by any cause that would prevent or slow down response of fire apparatus, immediate notification will be made to the Fire Chief by calling 239-4553. Inform the Fire Chief of the exact location and cause, if known, so that responding equipment can be rerouted as necessary.

CHAPTER 17

FIRST AID FIREFIGHTING EQUIPMENT

17-1. SCOPE. Included are all types of portable fire extinguishers, sand pails, dry powder containers, standpipe and hose lines, water barrels and pails, built-in extinguishing systems on vehicles, and local extinguishing systems.

17-2. USE. First aid firefighting equipment will be used only for fire extinguishment or training and will be removed from the mounting or rack only for those purposes or for inspection, testing, or recharging by authorized personnel.

17-3. INSPECTION AND MAINTENANCE.

a. In buildings, the Building Fire Marshal is responsible for inspection of the equipment, for notifying Fire Protection and Prevention of any deficiencies, and for instructing the occupants in the use of the equipment.

b. Unit commanders of units utilizing vehicles are responsible for ensuring that:

(1) All vehicles will have required fire extinguishers.

(2) All fire extinguishers are in good operating condition. Fire extinguishers should be checked monthly to ensure that the extinguisher will work properly.

(3) All drivers, permanently or temporarily assigned, are familiar with requirements for checking of all extinguishing equipment.

(4) Inspection of carbon dioxide (CO²) extinguishers will include ensuring that the seal is intact and that the safety disk has not ruptured from exposure to excessive heat. NOTE: CO² extinguishers should not be allowed to be exposed to the direct rays of the sun for extended periods since excessive temperature will cause rupture of the safety disk, discharging the entire contents of the cylinder.

(5) For transporting flammables, explosives or other dangerous materials an extinguisher having a 10B:C rating or greater will be required.

17-4. RECHARGING AND REPAIR.

a. The Maintenance Division of DOL, 8100 1st Division Rd, will be responsible for recharging and repair of all extinguishing equipment. For more information, call 239-4154.

b. In all cases where recharging is required on other than the annual recharge date, the request for recharge will be accompanied by a memorandum that's signed by the unit commander setting forth the reasons for the request, and bring both to the Maintenance Div.

c. Commanders of satellite installations will arrange for recharging of extinguishers at off-post facilities, utilizing local purchase where the service is available in order to reduce the period during which the equipment is out of service, unless the fire extinguishers can be taken to Maintenance Div without undue delay and returned promptly to the building to be protected.

CHAPTER 18

FIREFIGHTING TRAINING, FORT RILEY POLICE

18-1. SCOPE. Applicable to all Fort Riley police, including Class II activities with assigned personnel. Also applicable to activities maintaining civilian motorized patrols on portions of the reservations.

18-2. GENERAL. The Fort Riley police, in the course of their normal functions, including patrol activities and response to emergencies, are frequently the first persons to discover a fire, particularly in buildings unoccupied outside normal working hours. It is very probable that building fires may have been burning sometime prior to discovery, or in the case of vehicle accidents, that trapped victims may be endangered. In either case, prompt and appropriate action by the discoverer is of paramount importance.

18-3. ACTION.

a. A continuing program for training all of the Fort Riley Police is required. Direction and development of the program are assigned to the Fire Marshal, who will coordinate with Fire Protection and Prevention, and any other activities maintaining civilian motorized patrols on portions of the reservation.

b. Initial training for newly assigned personnel will consist of classroom instruction in, but not limited to: methods of initiating a fire alarm, actions to be taken and precautions to observe when a fire is discovered, information concerning various types of fire, control of the situation until arrival of Fire Protection and Prevention, and review of the Fort Riley police responsibilities during firefighting operations.

c. The second portion of the training, approximately one hour, will cover the use of first aid firefighting equipment by each individual on various types of fires.

d. All training of newly assigned personnel will be accomplished within two weeks after assignment and prior to detail to patrol duty, except in company with an individual who has received the training.

e. The program will provide for a two-hour refresher course semiannually.

CHAPTER 19

FIRE PROTECTION, AIRCRAFT

19-1. SCOPE. This chapter contains fire prevention and protection policies pertaining to aircraft operation and maintenance activities at Marshal United States Army Airfield and other areas on the reservation where aircraft are operated or maintained.

19-2. MAINTENANCE AND SERVICING. The following precautions will be observed during maintenance and servicing of aircraft:

a. Refueling. Refueling procedures will be in strict compliance with the provisions outlined in FM 10-67-1, (Concepts and Equipment of Petroleum Operations), and other applicable regulations. Care will be taken to avoid fuel spillage during refueling. Spillage will be reported without delay to Fire Protection and Prevention by making a 911 call so that fuel may be cleaned up and/or neutralized without delay.

b. Oxygen Servicing. Re-servicing of aircraft oxygen tanks will not be accomplished while refueling, oil servicing, or maintenance of any kind is being performed. Care will be taken to avoid contact of oxygen with any petroleum products during the transfer operations.

c. Oil Spillage. Oil spillage on the flight line apron or in hangars will be disposed of either by covering spill area with an absorbent material or dry sand. In either case, the oil-soaked material will be placed in a suitable container and removed to a disposal area after absorption has taken place. Use of water to wash down oil spills will be avoided since this increases the size of the spill area, creating a slipping or skidding hazard to personnel and vehicles.

d. Power Units. When auxiliary power units are connected to aircraft for use during maintenance, the unit will be positioned upwind to the maximum length of the attaching cable. Power units will be shutdown immediately if fuel spillage occurs.

e. Explosive ordnance. Loading or unloading of explosive ordnance or other high explosives on or from aircraft will be accomplished only in areas designated by the Airfield Commander, in keeping with quantity-distance tables for explosives. Fire Protection and Prevention will be notified in advance of impending operations of this type so that fire protection may be afforded during landing, takeoff, loading, or unloading and fire protection personnel will be fully aware of the hazards involved.

f. Static Grounds. Static grounds will be affixed to aircraft while being refueled. Ground cables will be connected from refueling truck to aircraft, aircraft to ground, and refueling truck to ground. Aircraft undergoing maintenance on the flight line apron or in hangars also will be grounded. Ground rods will be tested on initial installation and after any damages, repair, or replacement work to ensure a maximum resistance of 10,000 ohms.

g. Portable Fire Extinguishers. Portable fire extinguishers will be positioned in an accessible location near aircraft undergoing refueling, oxygen servicing, oil servicing maintenance operations or engine starts. Extinguishers will be given a visual inspection prior to these operations to ensure that they are sealed and in good state of repair.

h. Aircraft Crashes. All personnel not specifically responsible for duties in connection with aircraft accidents are admonished to stay clear of crash sites. Military aircraft often carry bombs and ammunition on routine flights to and from gunnery or bombing ranges. It will be assumed, unless information to the contrary is available from a competent source, that bomber aircraft are carrying bombs and that fighter-type aircraft carry ammunition. In some cases, fighter aircraft carry bombs in internal bays not readily visible from the outside. The above assumptions will guide the Fort Riley Police in their actions controlling traffic crowds.

i. Aircraft Facilities (Hangars). Aircraft Facilities (Hangars) will not be used for other than their intended purpose without being in full compliance with NFPA Codes.

CHAPTER 20

RANGE, MANEUVER, AND BIVOUAC AREA FIRE REGULATIONS

20-1. PURPOSE. This chapter implements the provisions to ensure prompt detection, reporting, and control of fires outside the cantonment areas of the Fort Riley Military Reservation.

20-2. SCOPE. This chapter applies to:

a. All activities using non-cantonment range, maneuver, and bivouac areas within the limits of the Fort Riley Military Reservation, including elements of other commands temporarily assigned to this area for training or for other purposes.

b. Organizations responsible for providing firefighting companies and/or an engineer task force.

20-3. RESPONSIBILITIES. All organizations will follow Range Training Safety, FR Reg 385-12, para 5-26.

a. The Fire Marshal will:

(1) Exercise overall staff supervision of fire prevention, protection, and fire suppression activities on ranges, maneuver, and bivouac areas, providing suitable and graduated response of Fire Protection and Prevention's motorized equipment for control and suppression of range fires.

(2) Provide specialized engineer equipment and operators as necessary to cope with range fires anywhere on the reservation, according to magnitude and prevailing weather conditions.

(3) Perform other responsibilities of the Fire Marshal as noted elsewhere in this regulation.

b. The Fire Chief will:

(1) Assure that all supervisory personnel of Fire Protection and Prevention are familiar with the provisions of this chapter.

(2) Dispatch suitable motorized fire apparatus with crews, under supervision of an assistant fire chief or acting assistant fire chief, to fires in range, maneuver, and bivouac areas.

(3) Coordinate with G-3 Range Control Officer, Range Control, to determine the status of firing prior to entry of motorized fire apparatus and initial force into active firing ranges. Responding personnel and equipment may be dispatched to a point where entry to the range in question is normally made from an unrestricted location, such as a highway or range camp and then be instructed by radio or telephone to proceed after clearance has been obtained and/or aerial reconnaissance has been accomplished, if deemed necessary. Response will be coordinated with that of the initial force from Range Control when applicable.

(4) Assure that responding crews are provided with up-to-date maps indicating access routes, water locations, exclusion (artillery dud) areas, and range boundaries.

(5) Advise Range Control officer, Range Control, of any fires reported in range areas.

c. The Range Control Officer, Range Control, will perform the following functions for the non-cantonment range areas except during maneuvers:

(1) Appoint a Range Area Fire Marshal. Subordinate Range Area Fire Marshals may be appointed for portions of the range area and/or bivouac areas as deemed appropriate. Unit Fire Marshals of Fort Riley units will retain responsibilities for area occupied in field bivouac.

(a) Provide building fire inspection of buildings during his control.

(b) Submit a monthly written report to the Fire Marshal by the 15th of the month following, of fire hazards found in his area of responsibility.

(2) Provide surveillance of the range areas to detect, locate, and report grass, brush, or forest fires.

(3) Close the appropriate ranges prior to allowing firefighting personnel and equipment into downrange areas to control grass, brush, and/or forest fires.

(4) Provide the Fire Marshal with maps delineating the range impact and artillery dud areas.

(5) Initiate a fire investigation of grassland fires over 25 acres or where property damage occurs from fires. Fires in designated impact areas need not be investigated.

(6) Call the Fire Protection and Prevention alarm room operator at 5000 Normandy Dr, 239-4257 or dial the emergency number, 911 of the following:

(a) The existence of range fires (except when notification is received from Fire Protection and Prevention).

(b) Of the status of grass, brush, and/or forest fires which occur on the range areas.

(7) Prepare a Standing Operating Procedure to implement this chapter.

d. The Airfield Commander will provide helicopter support for aerial observance when requested by the Fire Marshal or his or her representative.

NOTE: Upon reporting to the scene of the fire, operational control of the firefighting forces passes from the unit/EOC to the Post Fire Marshal or his authorized on-site representative.

e. The Chief of Police will coordinate with civilian police agencies and provide necessary escort to expedite the movement of firefighting forces and engineer equipment to the area where the range fire exists.

20-4. ADMINISTRATION.

a. The decision to combat fires in the range areas will normally be made by the Range Control officer, Range Control, using the following guidelines:

(1) Fires in artillery dud areas will be allowed to burn out.

(2) Fires which present a danger to personnel/equipment or threaten to spread beyond the reservation boundaries will be fought.

b. The composition of the additional firefighting force that may be necessary to combat the fire will be determined by the Fire Chief or his representative. Elements of the firefighting force will be organized through the Emergency Operations Center.

c. Termination of firefighting requirements will be determined by the Fire Chief or his representative.

d. The Assistant Fire Chief or Acting Assistant Fire Chief in charge of range firefighting operations will keep the Fire Marshal informed as to the progress of the fire or of containment operations.

e. Fire Protection and Prevention will keep the Emergency Operations Center (EOC) of G-3 informed as to the progress of the fire or of containment operations.

f. Units on maneuvers or bivouac will perform the following should a fire occur:

(1) If a fire begins in a training area or range area, Range Control will be notified by calling 239-4200/5466/4516. The person reporting will give his name, rank,

organization, location of the fire and approximate extent of the fire. He will then station a guide at the nearest main road to direct the firefighting apparatus to the scene. The location of this guide will be reported to Range Control.

(2) Immediately initiate firefighting operations with available unit resources.

(3) Fire beaters will be obtained from Range Control or Unit Supply, before going into the field.

20-5. WILDLAND/URBAN INTERMIX ANALYSIS. This analysis is required to determine the type of activities and pyrotechnics that can be utilized in the different environments with the intent to eliminate and or minimize hazardous conditions.

a. Wildland Hazard Rating. The Hazard Rating is calculated by multiplying the fuel hazards rating by the slope hazard rating, adding the structural hazard rating to the subtotal, and then adding or subtracting the additional factor rating from the total.

b. Wildland/Urban Intermix Analysis Procedures:

Slope Hazard Rating

- Mild (0-5%)
- Moderate (6-20%)
- Steep (21-40%)
- Extreme (41%+)

Fuel Hazard Rating

Small Fuels	1	2	3	4
Medium Fuels	2	4	6	8
Large Fuels	3	6	9	12

Plus Structural Rating:

- Classified roof and noncombustible siding materials = +1
- Classified roof and combustible siding materials = +3
- Unclassified roof and noncombustible siding materials = +7
- Unclassified roof and combustible siding materials = +12

Plus or minus additional factors rating:

Rough topography that contains several steep canyons = +2

Special protection: telephone & gas lines and endangered species = +3

Areas having a history of higher fire occurrence than surrounding areas due to special situations such as heavy lightning, railroads, debris burning, arson, etc.= +3, and areas that are periodically exposed to unusually severe fire and weather, such as strong winds. Wind Velocity:

a. 0-5 mph	+4
b. 6-10	+8
c. 11-15	+12
d. 16-20	+20
e. 20-26	+26
f. >26	+30

Prescribed burns after school hours or weekends = +4

Calculated Risk Reduction:

Back burn -5

Constructed fire breaks -10

Hay Cutting within 100 meters of a structure -2

Areas where fuel modification or fuel breaks provide usable fire control points or protection for structures = -3

Areas where local facilities such as developed water systems fire trucks, dozers, or local organizations provide additional protection for structures or wild land = -3

Prescribed burns during school hours = -5

a. Wild land Intermix Planning Priorities.

1. The relative wild land intermix hazard of each area shall be rated from the highest to the lowest

2. Fuel modification shall be the primary mitigation measure for fuel hazards and special hazard conditions.

(a) Comprehensive assessment of fuel hazards shall use these factors:

- (1) Fuel Type Identification
- (2) Fuel Loading (Volume/Moisture)
- (3) Size of Fuel Bed (Acres)
- (4) Slope and Aspect

(b) Control Burning and Pyrotechnics Ban based on the following conditions.

1. Wind Speed (15 mph or more = no go)
2. Wind Direction (Towards troops or structures = no go)
3. Relative humidity 30% or less (With Wind Condition = no go)
4. Forecast (Wind speed, direction, and humidity)
5. Housing areas (Use rating analysis with listed conditions)

(c) Pyrotechnics Ban Calculation Factors.

(1) The National Wildfire Coordinating Group's "Fireline Handbook" utilizes fuel models to determine the rate of burn for vegetation. Contact Fire Protection and Prevention for assistance with pyrotechnics ban calculation factors. As an example, when calculating the rate of burn, the model incorporates factors such as wind, moisture content, height of vegetation, and slope of terrain. A fuel model of 3 (2.5 ft deep, the type that the Fort Riley installation has here) with a 0 degree slope angle, low fuel moisture and 2 mph wind speed the rate of fire spread is approximately 3400 ft per hour (60 ft per minute, or 1 ft per second).

(2) A fuel model which consists of 0 slope angle, low fuel moisture and 12 mph wind speed equates to a flame spread of 32,300 ft per hour (540 ft per minute, or 9 ft per second or 6 mph). Therefore, a soldier must run at least 6 mph to an area where there is no fuel in order to survive. At a 9-feet-per-second flame spread, the flame length will be approximately 30 ft, and one must be able to stay in front of the fire by at least 50 ft.

(3) The degree of slope angle also affects the flame spread rate in that a 30 percent slope with 0 wind speed and low moisture content will produce a burn rate of 1700 ft per hour, 29 ft per minute or ½ ft per second. Increase the wind speed by 2 mph and the burn rate increases 3 fold. If the slope is leeward, it will decrease the burn rate by the same amount.

(4) Therefore it is imperative that careful consideration be given to establishing a pyro ban in the training areas when wind, vegetation, and soldiers training desire to use pyrotechnic devices. Soldier safety is placed above all.

CHAPTER 21

SATELLITE INSTALLATIONS

21-1. SCOPE. Applicable to all activity satellites on Fort Riley, including recruiting facilities, USAR Center, Kansas Army National Guard, and any future units.

21-2. RESPONSIBILITIES.

a. Commanders of installations and headquarters assigned repairs and utilities responsibilities of off-post facilities have command jurisdiction over all elements of responsibility listed in AR 420-90, para 1-5.

b. Fire Protection and Prevention is a repairs and utilities function for facilities and is the responsibility of the supporting repairs and utilities agency.

c. Commanders of off-post facilities or activities are responsible for initiation and administration of all possible measures for prevention of injuries, loss of life, and loss of property through fire within their commands. The exercise of technical and administrative supervision by the parent station in no way relieves the activity commanders of this fundamental and important responsibility.

d. Unit commanders of satellite facilities are responsible for fire prevention and protection actions as directed by the Fire Marshal. In the event of fire, in the absence of specific instructions in conflict, the unit commander is responsible for fighting the fire and safeguarding lives and property until the arrival of civil or military fire department units.

21-3. INVESTIGATION OF FIRES. All fires will be investigated in accordance with chap 5 of this regulation. The parent installation or group commander may initiate and conduct any investigation considered necessary to determine the cause and events resulting in the fire and responsibility therefore. Findings will be forwarded expediently to the Fire Marshal.

21-4. REPORTS OF FIRES. All fires will be reported in accordance with AR 420-1.

21-5. FIREFIGHTING EQUIPMENT AND SERVICES.

a. All firefighting equipment, for instance fire extinguishers or hand tools for brush and grass fires, will be kept in good repair and be available for instant use and will be used for no purpose other than firefighting or training for firefighting.

b. The facility commander will make arrangements for response to calls for aid. If recommendations or requirements of the local authorities exceed or conflict with

existing regulations or directives, the problem will be referred to the Fire Marshal for solution.

c. First aid firefighting equipment will be provided.

21-6. FIRE PREVENTION RECORDS. Commanders will maintain records adequate for demonstrating the existence and operation of a fire prevention program. Records will include but not be limited to:

a. Copies of inspection reports submitted by local civilian authorities, showing complete action taken.

b. Records of the closing inspection will show the date, hour, and deficiencies noted and by whom made. This record may be combined with the security inspection record. This record will be kept in a desk drawer or a desk slide, or some similar location where it will be reasonably safe from destruction by fire.

c. Records of routine inspections, including spot checks by the commander, will be maintained.

d. Copies of fire plans and any directives or data pertinent to fire prevention and protection.

CHAPTER 22

CONTRACTOR AND CONCESSIONAIRE OPERATIONS

22-1. SCOPE. 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 reservation. All provisions of these fire regulations are applicable to these parties.

22-2. RESPONSIBILITY.

a. Each contractor is responsible to the Government for acts of his or her persons rendering service, whether or not the act was directed. Contractors must follow all current editions of NFPA, and UFC.

b. Each contractor is responsible for furnishing any special fire protection equipment and any installed special fire protection facilities that, in the opinion of the Fire Marshal, are necessary for protection of Government property involved in operation or exposed to possible damage from the operation.

c. Buildings assigned to the contractor will be used only for the purposes assigned and will not be used for sleeping or living quarters unless specifically approved for such use.

d. The contractor will be responsible for assuring that trash and debris are removed from the job site daily and that proper disposal of these materials are accomplished at the end of each working day.

e. Food preparation concessionaires will be responsible for ensuring that grease exhaust systems and ventilation equipment in their assigned buildings are kept free of grease accumulation. Grease filters will be cleaned daily.

22-3. EQUIPMENT.

a. All equipment utilizing natural gas, liquefied petroleum gas, fuel oil, electrical energy, or solvents, or any type of toxic or hazardous material will be of a type and model approved for that specific use and in good working order.

b. Boilers operating at gauge pressure of 15 pounds per square in or over will be fired only when covered by a current inspection certificate from a recognized testing service, which must be displayed in the boiler room or at the boiler location.

22-4. CORRECTION OF FIRE HAZARDS. Hazardous conditions will be reported verbally to the contractor and noted on the building record card. Where corrections are not made in a reasonable time, the Fire Marshal may order operations stopped until correction is completed.

22-5. STORAGE OF MATERIALS. The contractor is responsible for maintaining material stocks and construction materials, inside and outside the building in accordance with the requirements of this regulation.

CHAPTER 23

SPECIAL OCCUPANCY REGULATIONS

23-1. PLACES OF PUBLIC ASSEMBLY, GENERAL.

a. Scope. Applicable to any building or part of a building used for a public, restricted or private congregation or for the gathering of 50 or more persons. When more than 50 percent of the floor space of a building, to include kitchens, bars, offices and similar service or associated facilities that are used for assembly, these regulations are applicable to the entire building. All provisions of this paragraph are applicable to each of the occupancies in succeeding paragraphs.

b. Responsibility. The using service will ensure that a person responsible for control of activities in each place of assembly is physically present at all times and that this individual has authority to initiate any action required to ensure the safety of the occupants.

c. Capacity. Every room constituting a place of public assembly and not having fixed seats shall have the occupant load of the room posted in a conspicuous place near the main exit from the room. Approved signs shall be maintained in a legible manner by the manager or his authorized agent. Signs shall be durable and shall indicate the number of occupants permitted for each room's use.

d. Pre-opening Check. Prior to each day's activity, all exit lights, exit passage lighting, emergency house lighting, and all exit doors will be checked for proper operation. *NOTE: Emergency lighting is required in all places of public assembly. Exit doors will be unlocked and remain unlocked (unless provided with emergency lock releases), and left unlocked until closing.* The public will not be admitted until any necessary corrections have been made. No restrictive hardware allowed; padlocks, hasps, and cross-bars will not be permitted on exit door when the building is occupied.

e. After Closing Inspection. An inspection of the entire building will be made immediately prior to final closing for the day, to consist of the following:

(1) All electrical circuits will be de-energized at the panel except circuits required for clocks, alarm or sprinkler systems, automatically controlled heating devices, and other specifically authorized to remain energized overnight.

(2) Remove all trash and waste.

(3) Inspect furniture closely for latent sparks or coal from smoking materials.

(4) Close all windows and doors securely.

(5) Eliminate any other hazards peculiar to the building or operation involved.

f. Exits.

(1) Exits will be provided in accordance with NFPA 101.

(2) Clear aisles with a minimum width of four ft will be provided to each exit from the area it serves. Aisles will be so arranged that travel from any point in the building in any direction to an aisle is not more than 150 ft; 200 ft if covered by automatic sprinkler. Movable equipment, such as tables and other furniture, will be located or secured so that overturning will not block any aisle.

g. Fire Plans and Alarms.

(1) The person in charge of the activities in a place of assembly will prepare a fire plan for the building and is specifically charged with the following responsibilities:

(a) Designation of alternates so that he or she or one of their alternates will be present at all times the building is in use.

(b) Organizing and training all employees and attendants in their duties for prevention of panic in event of fire. Temporary or one-time personnel are not exempted.

(2) Immediately upon discovery or suspicion of fire by an employee, the person in charge will be notified and an alarm transmitted to Fire Protection and Prevention.

(3) As soon as the fire alarm has been sent in, or during that period, the person in charge will, by prearranged signal, order all personnel to their emergency stations, where they will:

(a) Open all exits.

(b) Stand by to ensure orderly passage through them.

(c) Turn on all available lights.

(4) Stop any performance, such as a show or a band, and announce that there is a fire and direct clearing of the house. Panic must be avoided at all cost; the person announcing the fire must show no excitement and exhibit complete self-control and the employees must execute their assignments calmly and efficiently.

23-2. BOWLING ALLEYS.

a. Maintenance. The following requirements, in addition to those in para 23-1, are mandatory.

(1) Alleys will not be waxed, polished, sanded, or varnished during operating hours.

(2) Mops, rags, waxes and varnish containers will be removed upon completion of work, or in all cases, prior to opening.

(3) Refinishing or reconditioning of pins is prohibited unless complete facilities are provided, including dust removal system and spray paint booth, and the working area is segregated by adequate fire separation.

(4) During alley cleaning or refinishing or any other period when flammable volatiles or materials containing flammable volatiles are used in quantities in excess of one gallon per hour, all electrical devices within 1 ft 6 in of the floor in all parts of the building will be positively de-energized until tests with an explosimeter or similar device show that the area is free of flammable vapor. This will preclude the use of sanders or buffers during or immediately after the finish is applied. During this period, air conditioning and heating systems will be shut down. Maximum natural ventilation will be provided. If available, smoke exhausters of a type approved for use in class 1, division 1, atmospheres may be used to accelerate ventilation.

b. Smoking. Smoking in and around the pits is prohibited.

c. Cleaning. Only nonflammable, nontoxic fluids will be used for cleaning balls, pins or spot cleaning of alleys.

23-3. THEATERS.

a. Scope. Scope includes classrooms when provided with blackout curtains for projection of pictures, moving or still.

b. Pertinent Regulations. All theater personnel will be thoroughly familiar with current issues of AR 28-63.

c. Exit Passages. Aisles and exit passages, including those through the foyer, will be kept free of all impediments to free passage, including equipment (books, etc.). No more admissions will be allowed after the seating capacity of the theater has been reached.

d. Smoking. Smoking is prohibited in the theater auditorium, in the foyer and on the stage (except where action of the play requires). NO SMOKING signs will be posted and enforced by theater personnel.

e. Projection Booth Fire Shutters. The projection and observation port shutters will be manually tripped and checked for secure closing. This check will be a part of the pre-opening check of the building.

f. Trash. Trash and waste material will be placed in covered cans. These cans will be emptied as often as necessary during performances and will be emptied or removed from the building prior to closing.

g. Film Fires. In the event of a film fire in the projection booth during the time the theater is occupied, the projectionist will immediately signal for evacuation of the theater prior to attempting to extinguish the fire. In no case will attempts be made to extinguish a fire in the booth unless a second person is stationed immediately outside of the booth.

h. Use Other Than Theater. When theaters are used for other than theatrical presentations, the user or using agency is responsible for compliance with and enforcement of all regulations above concerned with the safety of the occupants and protection of the property during such periods of use. Theater officers, when authorizing use of the building, will ensure that the responsibility is assigned to a specific individual physically present during such periods of use and that the designated individual has been given or has access to detailed instructions covering the extent of his responsibilities.

i. Flameproof Curtains. All theater curtains will be made either of noncombustible materials or will be flame proofed when made of combustible textiles. Procedures for replacement and flame proofing of these curtains will be at intervals prescribed by the Army-Air Force Motion Picture Service.

23-4. CLUBS AND DAYROOMS.

a. Remodeling, Alteration and Decoration. Installation of any type of material which becomes an integral part of the building, such as floor coverings, wall or ceiling paneling and other work intended to enhance the appearance of the facility will not be undertaken until the Fire Marshal has approved the material and method of installation.

b. After Closing Inspection. After closing inspections will include the following:

(1) Examination of all overstuffed furniture for smoking material. Loose cushions should be removed and not replaced until opening time (may be omitted where upholstery covering materials are noncombustible).

(2) Examination of soiled linen hampers.

(3) Check of storerooms and areas where trash accumulates.

(4) Check of bowls, urns, flower boxes and other places where smoking material may have been discarded.

c. Check of Electrical Devices for Disconnection. Check of radios, television sets, record players and other electrical devices to ensure disconnection.

23-5. SHOPS.

a. Applicability. Applicable to all types of shops, including aircraft hangars, garages (storage, servicing or repair of three or more motor vehicles), and to all operations, temporary or permanent, government or contractor operated, where the product is produced or repaired is to be used elsewhere and to similar work in the field.

b. Housekeeping.

(1) All litter, trash, sawdust, scraps and packing material will be kept to a minimum on floors and benches by frequent sweeping during the progress of the work. The entire shop will be swept broom clean prior to closing each day.

(2) Dust and sawdust accumulations on rafters, truss members, automatic sprinkler piping and at other locations will be blown down at least once each week, preferably on the last workday, or more often if considered necessary. In cleaning sprinkler piping, only air could be used to avoid damage to the heads. Machines, work tables and benches will be kept free of accumulations of debris, dust and lint by frequent cleaning.

(3) Buffers and grinders will be provided with dust collecting devices discharging into a container or duct system. Bags or containers will be in locations easily accessible at all times and will be emptied daily. Discharge to the open air or under the building is prohibited. Dust receivers or bags on all sanders and similar equipment will be removed, emptied and turned inside out at the end of each workday. Bags will be racked or hung to permit free air circulation around them. Dust collection systems will be inspected frequently to prevent clogging of the ducts. The collector will be emptied when filled to two-thirds of its capacity. Fans (blades and motors) will be kept clean and free of any appreciable loading.

(4) All motors will be wiped clean of dust and oil not less than twice each week.

(5) All waste and trash will be removed from the building at the close of each day's work.

(6) All spills will be cleaned up immediately. Benches, floors and all equipment will be cleaned of noticeable accumulations of the material.

(7) Accumulations of scrap, usable or for salvage, will be kept to a minimum.

c. Storage.

(1) Shops will not be used for storage of completed items. All completed work will be removed not later than the end of the workday following that on which the work was completed.

(2) Excelsior and similar highly combustible materials will be kept in bales or in metal-lined containers with automatic self-closing lids. Dropped materials will be promptly picked up and returned to the container or placed in a trash receptacle.

(3) Paint and other materials necessary for marking or stenciling may be kept in the shop, provided:

(a) The total quantity does not exceed 5 gal.

(b) Paint is in shipping containers capable of being tightly closed.

(c) Solvents are kept in standard safety cans.

(d) All storage is on an open nonferrous metal-covered shelf reasonably remote from any source of ignition.

(4) Lumber storage will be limited to 3,000 ft, board measure. Stored lumber will be kept stacked in racks well off the floor. Where stock turnover is slow and dust accumulation is noticeable, the material will be removed to the lumber storage shed.

(5) The shop working supply of any one type of cement will be limited to the quantity contained in one shipping container. Bench containers for flammable cement will be metal and limited to 8 ounces and kept well covered. The container closer may be a hinged lid or of leather fastened to the brush. The GSA catalog flammable storage cabinet is preferred.

(6) Working stocks of fabrics and materials will be kept in orderly condition.

d. Painting (General).

(1) All used paint and wiping rags will be kept in tightly covered metal cans. Cans will be emptied at the end of each day's work.

(2) Brushes, unless clean and dry, will be kept in metal-lined or metal cabinets with self-closing top.

(3) Paint solvents, other than those in immediate use, will be limited to one day's supply and kept in standard safety cans.

(4) Painter's clothing will be kept reasonably clean and stored in ventilated metal lockers. All rags will be removed from the pockets before hanging up. The lockers will be left unlocked to facilitate inspections. Clothing will not be allowed to accumulate in these lockers and will be limited to one change.

(5) Open containers of paint will be kept to the minimum required for the operation. Once opened, containers will not be used for storage unless the lid is secure and tight fitting and all excess paint is wiped from the outside of the containers. The GSA catalog flammable storage cabinet is preferred.

(6) Paint mixing benches, tools and apparatus will be provided with nonferrous metal tops and kept clean of spilled materials.

e. Spray Painting.

(1) Spray painting will not be accomplished in any building other than a regulation paint spray room without permission of the Fire Marshal and then only under such restrictions as may apply, except that minor touchup on vehicles and aircraft may be accomplished at any location 20 ft or more from any open flame when the supervisor accepts full responsibility. Minor touchup is work on any vehicle requiring less than 8 ounces of the material sprayed.

(2) All paint spray rooms, paint rooms and equipment will be thoroughly cleaned at the close of each day's work.

(3) Paint spray guns will not be serviced inside buildings other than paint shops.

f. Battery Charging.

(1) Battery charging facilities will be located in areas having good natural or properly engineered mechanical ventilation.

(2) Shelves or benches will be in accordance with Article 480, National Electrical Code (NFPA No. 70).

(3) A supply of absorbent for neutralizing acid spills will be kept available.

(4) The supply of sulfuric acid in the charging area will be limited to one day's supply.

(5) Where gasoline-motor-driven generators are used, the generator unit will be located outside the battery room.

g. Flammable Liquids. Flammable liquids, including solvents, will be used and handled in accordance with chap 11.

h. Heating.

(1) Location of heating units, types of units and types of vents will be in strict accordance with NFPA Codes covering the particular occupancy.

(2) All heaters will be vented.

(3) Improvised heaters will not be used under any circumstances or for any purpose.

i. Ventilation. In buildings where flammable solvents are used and the occupancy involves housing or storage of vehicles or aircraft, natural ventilation will be ensured by installing vents at the floor line on the basis of one square foot of effective ventilation per 10 linear ft of exterior wall.

j. Fueling. Vehicles or aircraft will not be fueled inside a building. Fueling of aircraft will be accomplished in strict accordance with NFPA Code No. 407.

k. Cleaning Floors.

(1) The use of flammable solvents for cleaning floors is prohibited. Prohibited materials include gasoline, naphtha, Stoddard solvents, Varsol and other materials in these classes. Any material not in original containers marked "non-flammable" will be considered flammable.

(2) Supervisory personnel at all levels will be responsible for violations by subordinates.

(3) All purpose detergent and water will ordinarily be used for cleaning. Where heavy grease or oil cannot be removed by this method, a cleaning solution consisting of one-quarter pound of sodium hexametaphosphate and 2 ounces of general purpose detergent to a gallon of water may be used. Application is by mop. The solution is allowed to stand on the floor for at least 3 minutes and then mopped up. Scrubbing with a stiff brush may be necessary for heavy deposits. The solution will attach to painted surfaces, but other than protecting such areas, may be used in the same manner as ordinary detergents. Sodium hexametaphosphate (Graham Salt, FSN 6810-240-2124) is available in 100 lb bags.

(4) Absorbent-type cleaners, such as Drizit, consisting of inert materials, may be used. Sawdust is not an acceptable substitute.

l. Towels. Machine wiping towels, cloth or paper, will not be laundered or cleaned by shop personnel for reuse by dipping or rinsing in any type of petroleum base solvent or in washing machines not approved for use with flammable cleaning agents. This regulation supersedes and rescinds any conflicting directions for use that are packaged with or furnished with the towels and is applicable to paint rags, grease rags, sponges, cotton waste and any other material used for removal of excess or waste flammable substances.

m. Hangars.

(1) All aircraft in hangars, stored or undergoing maintenance, will be effectively grounded (10,000 ohms is the maximum allowable resistance). All grounding connections will be tested in accordance with chap 19.

(2) All hangar operations and services will be conducted in accordance with NFPA 409.

23-6. WAREHOUSES AND STOREROOMS.

a. Scope. Applicable to all storage activities on the installation, except in private quarters. All warehouses, company storerooms, storage facilities in BOQs, Post Exchange (PX) storerooms and utility storage in clubs are included.

b. Regulations. All current warehousing regulations, will be observed. No deviation from the requirements for clearances between stacks and sprinkler equipment will be permitted.

c. Responsibility. Warehouse supervisors are responsible for determining the degree of hazard associated with material to be stored, possible hazards developed from mixed storage of low-hazard materials, and for arranging for storage of high hazard and high-value items in buildings having maximum automatic protection. Where warehouse supervisors are not involved, the person accountable for government property is responsible for compliance with these regulations. Where no government property is involved, the person having overall responsibility for the operation in the building is responsible.

d. Hazard Classification of Materials. For guidance, fire risks are classified as follows:

(1) Hazardous materials which, either by themselves or in combination with their packaging, are highly susceptible to ignition and will add fuel to the intensity or rapid spread of the fire.

(2) Moderately hazardous materials and their packaging, either of which will contribute fuel to the fire.

(3) Low-hazard materials which in themselves will not normally ignite, but which in combination with their packaging, will contribute fuel to the fire.

(4) Noncombustible materials and their packaging which will neither ignite nor support combustion.

e. Special Storage.

(1) Materials subject to spontaneous heating will be warehoused with special precautions. Wood fiberboards, plastics and canvas products (including tentage) have ignited spontaneously when stored immediately after exposure to hot sunlight or removal from sealed cars in hot weather. The spontaneous heating, if it is to occur, will usually develop in the first three days of storage. Preventive measures during this danger period will include:

(a) Palletization to allow maximum air circulation around each bundle or case and to permit close surveillance for detection of heat generation.

(b) Maximum possible ventilation of the storage area.

(c) Twenty-four hour surveillance when any degree of spontaneous heating occurs.

(2) Materials subject to damage by radar emission.

(3) Cylinders of compressed gases, full or empty, will be stored in accordance with regulations contained in AR 700-68 (Storage and Handling of Compressed Gases and Gas Cylinders). Storage areas may be located in shops for working supplies of gases. Areas selected will be easily accessible for fire-fighting operations.

(4) Cylinders in the storage area will be secured by one of the following methods to prevent overturning or rolling:

(a) On end in racks structurally sufficient, including means for closing the load side, to prevent overturning. No section of the rack should contain over six cylinders.

(b) In unbroached shipping pallets.

(c) On end, secured to a wall or other substantial support by noncombustible strapping.

(d) On their sides in cradles or between chocks permanently fastened to the floor.

(e) In carts or other devices designed for transport of the tanks. In cases involving working supplies, oxidizing and flammable gases need not be stored in separated areas.

(5) Cylinders will not be tested for contents by opening (cracking) the valve. The only permissible method of determining whether a cylinder is full, partially full or empty is by weighing.

(6) Oxygen cylinders will be separated from cylinders containing fuel gases by a distance of 50 ft or by a fire-resistant partition. IAW Occupational Safety and Health Administration, Part 1910.

(7) Oxidizing materials and other dangerous chemicals will be stored in accordance with TM 3-250.

(8) Acids will be stored as follows:

(a) All corrosive acids or oxidizing liquids will be stored and used in conformity with standard safety practices.

(b) The storage areas will be located and diked to minimize the possibility of flows from broken containers reaching other parts of the building.

(c) Where possible, storage areas will be arranged to drain to the outside of the building.

(d) Storage areas will be protected from excessive heat, cold and direct sunlight.

(e) Storage areas will be protected from falling objects or other mechanical injury.

(f) Storage areas will not be established or moved without written notice to the Fire Marshal.

(g) A stock of absorbents or neutralizers will be provided immediately inside the normal approach to the storage area in sufficient quantity to control the amount of acid which would be freed by the rupture of the largest container.

f. Access to Building and Equipment.

(1) Any warehouse door blocked by storage will be marked on the outside by a security affixed sign, BLOCKED. Letters will be red, 4 in high, on a white background. Consecutive doors will not be blocked without written permission of the Fire Marshal.

(2) Where fire extinguisher locations, manual fire alarm boxes and control valve locations are not visible from the center aisle, directional signs with 6-in white letters on a red field will be erected at appropriate locations. When necessary to block access aisles to this equipment, the Fire Chief will be notified and equipment relocated if possible.

g. Alterations to Buildings. In buildings provided with automatic fire alarms or automatic sprinklers, alteration to the buildings will be made only on approval of the Fire Marshal. No alterations will begin until the work request for the sprinkler or alarm work has been approved and the work order issued. All exposed materials will be noncombustible or fire resistive and no construction will be permitted which will lower the fire-resistance classification of the building.

h. Reports of Unusual Hazards. Fire Protection and Prevention will be notified immediately on receipt of unusually large quantities of hazardous materials or of any unusual shipments.

i. Materials Handling Equipment.

(1) Forklifts and other gasoline-powered equipment will not be fueled in the warehouse, but may be fueled on the dock at locations 50 ft or more from any opening to the building and 50 ft or more from any stock or dunnage stacked on the dock.

(2) Gasoline powered equipment may be stored in the warehouse, provided the location is approved by the Fire Marshal and adequate drip pans and other means are provided to prevent great accumulations on the floor.

j. Storage and Display of Paint.

(1) Paint, varnish, lacquer, enamel, shellac and thinners bearing the ICC Red Label (ICC The Compliance Center, Niagara Falls, N.Y.) or designated as flammable in the descriptive matter on the container, will be stored in accordance with appendix B, fig B-5. Floor area of stacks will not exceed 2,000 sq ft and clearance between the stacks and all walls will be 24 in. Displays of flammables in ICC containers of less than 1 gal capacity will include a sign (1 in letters) warning purchasers of the flammable nature of the contents. Display will be kept a safe distance from corrosive or oxidizing materials. Storage and display stacks will be palletized or otherwise arranged to allow prompt detection and removal of leakers.

(2) Water-type paints in unopened containers are not serious fire hazards and may be stored in general-purpose warehouses in conformity with regulations covering storage of materials of moderate combustibility, except that palletization is required.

23-7. OUTSIDE STORAGE.

a. Dock Storage.

(1) Storage on unroofed docks is permitted provided no doors for fire department access to the building are blocked and no part of the storage is within 20 ft of a firewall separating sections of frame in noncombustible buildings.

(2) Storage is not permitted on covered docks unless sprinkler protection is provided and operable under the roof. Any doors necessary for use by Fire Protection and Prevention will not be blocked.

b. Arrangement. Storage stacks or structures and clearances between stacks, covered or uncovered, and buildings will be in accordance with the clearances required between buildings by appendix B. The intent of this requirement is to allow no encroachment on the required fire separation between buildings. Clearance between stacks and stack sizes will be in accordance with appendix B.

23-8. LAUNDRIES AND DRY-CLEANING PLANTS.

a. Scope. Applicable to all laundries, dry-cleaning plants and pressing shops using spotting equipment. NFPA 91 and NFPA 32 contains regulations that all laundry and cleaning plant employees in supervisory grades are required to be thoroughly familiar with the contents thereof.

b. Housekeeping.

(1) Work areas will be kept reasonably clean at all times and clothing in process will be kept out of aisles unless in baskets. In no case will clothing be piled where it can fall against hot pipes, heaters, drive belts or motors.

(2) Lint collecting systems and dryer exhausts will be kept free of any accumulations tending to clog or reduce the area of the ducts. Lint collectors will be thoroughly cleaned when filled to two-thirds capacity.

(3) Lint will be cleaned from building members and sprinkler piping as required.

c. Dry-cleaning Equipment. Dry-cleaning equipment and its installation will be in accordance with the provisions of the current issue of NFPA 32. Dryer exhausts and lint removal systems will be in accordance with the provisions of the current issue of NFPA 91.

d. Fire Plans. Fire plans will include procedures for plant personnel shutting down all steam, fuel and air lines and all electrical equipment.

e. Storage. Garments should never be left in tumblers overnight. Articles removed from tumblers will not be folded and stacked in trucks or baskets until allowed to cool. When a plant is shut down for the day, tumblers should be unloaded. If the load is hot, it should be spread out and aired. Articles removed from the tumblers may be placed in baskets and remain overnight if the articles have been cooled sufficiently so that there is no danger of fire.

f. Grounding of Equipment. Laundry superintendents will make periodic inspections of all equipment where grounding is required and will make annual tests to determine the continuity of bonding and the effectiveness of the ground. Dates of tests, deficiencies found, action for correction and date of correction will be recorded.

23-9. NURSERIES / CHILD CARE CENTERS.

a. Scope. Applicable to buildings or areas for care and housing of infants or children in a public place for periods of 12 hours or less, including kindergarten and day schools for children under 6-years-of-age.

b. Responsibility. When a nursery is operated as an independent activity, the person in charge of the activity is responsible for observance and enforcement of these regulations. When the nursery is operated in connection with a club or similar activity, the person in charge of the sponsoring activity is responsible.

c. Location and Arrangement of Nursery Areas. Nursery areas will:

(1) In all cases be located in the ground floor except in fire resistive buildings, or when specifically approved by the Fire Marshal on the second floor of combustible buildings protected by automatic sprinklers.

(2) Be segregated from the remainder of the building by partitions of not less than one hour construction; any communicating doors through these walls will be Class C, with automatic closures.

(3) Be so arranged that all portions are visible to the attendants or attendant at all times.

(4) Have a minimum of two exits, one of which must be directly to the outside of the building and arranged so that cribs can be rolled through it without necessity for lifting or other means to pass obstructions. Cribs will be equipped with rubber-tired casters at least 3-1/2 inches in diameter. Casters will be checked regularly for proper lubrication and free rolling.

(5) Have cribs and beds in rows of not more than two separated by an aisle not less than 3 ft wide. Cribs and beds will be in locations having unobstructed exits leading directly outside.

d. Fire Prevention.

(1) No open flame heaters or cooking equipment will be permitted in the nursery area. Bottle warmers and other devices necessary for infant feeding will be an approved electrical type.

(2) Smoking is prohibited throughout the nursery area.

(3) Visitors are prohibited, other than mothers at feeding time and persons on official business.

e. Fire Alarm Facilities. Fire alarm facilities will consist of:

(1) An administrative telephone.

(2) A manual fire alarm box coded to Fire Protection and Prevention.

(3) In buildings with sprinklers, an automatic pressure switch will be connected to the automatic sprinkler alarm line as a third actuating station.

f. Evacuation Plan. The nursery evacuation plan will ensure:

(1) That the attendants at all times know the exact number of children in the nursery and are prepared to account for the total number in the event of emergency evacuation.

(2) That sufficient attendants are on hand to evacuate the nursery in not more than 3 minutes. One on-duty attendant and one standby attendant are required for every 25 children.

(3) That maximum use can be made of facilities for movement of the children (several children can be placed in a crib equipped with wheels and moved by one attendant).

(4) That evacuation routes are adequate for movement of the children.

23-10. PLACES OF DETENTION OR CONFINEMENT.

a. Scope. Applicable to any building where any occupant is in any way prevented by physical or mechanical means from leaving at will at any time. Stockades, neuropsychiatric wards and hospital prison wards are included.

b. Fire and Evacuation Plans.

(1) Plans for evacuation of each confinement building will be prepared by the confinement officer, or the person in command of the activity, as applicable. These plans will:

- (a) Detail the action of each person on duty.
- (b) Designate alternates and establish supervision to ensure completion of the actions.
- (c) Provide for automatic transfer of functions in event of incapacitation or absence.
- (d) Establish emergency stations for receiving reports as elements of the plan are completed.

(2) Fire drills will be conducted weekly, and duty personnel will be examined at the beginning of each tour on their assigned functions in the event of a fire IAW AR 190-47 (The Army Corrections System).

c. Attendants or Guards.

(1) Confinement areas or rooms will be under constant surveillance of an attendant posted in the room or corridor on which the door to such area or room(s) opens. The attendant will be prepared and able, in the event of fire, to release the prisoners or patients under his care and will not leave his post for any reason unless properly relieved.

(2) In addition to the attendants required for compliance with 23-10(a), at least one other person will be present in duty status and will have in his possession, or immediately available, a list of all persons under confinement and the guards or attendants on duty and their location in the building and, in event of fire, will check according to prearranged plans with each attendant to ensure evacuation of prisoners.

(3) Untrained personnel will be assigned stations of responsibility only under suitable direct supervision.

d. Fire Alarm Facilities.

(1) A manually operated local alarm system, audible in all portions of the building or compound and at least one point from which aid can be expected, will be provided. This alarm will be sounded only in case of fire and for fire drills.

(2) A manually operated, coded fire alarm box will be provided where connection to the central station alarm system is feasible; otherwise, a fire reporting telephone will be installed. The alarm will be located where personnel are on duty at all times, such as

the stockade office. The alarm will be tested daily, at a fixed time, by duty personnel in accordance with procedures established by the Fire Marshal.

e. Fire Prevention.

(1) Under no circumstances will flammable liquids be permitted or used in any building used for confinement during periods personnel are confined to the building.

(2) A daily check will be made of automatic sprinkler systems for signs of tampering or damage.

Appendix A
References

Section I
Required Publications

API publication 1604
Closure of Underground Petroleum Storage Tanks

API Publication 2015
Cleaning Petroleum Storage Tanks

AR 190-47
The Army Corrections System

AR 385-55
Prevention of Motor Vehicle Accidents

AR 420-70
Buildings and Structures

AR 700-68
Storage and Handling of Compressed Gases and Gas Liquids in Cylinders, and of Cylinders

AR 735-5
Policies and Procedures for Property Accountability

FM 10-67-1
Concepts and Equipment of Petroleum Operations

FR Reg 385-12
Range and Training Safety

FR Pam 420-1
Fire Marshal Responsibilities

TM 5-609, 2.2.4.1
Military Custodial Services Manual

Section II
Related Publications

AR 420-1
Facilities Engineering Army Facilities Management

EM 385-1-1
Safety and Health Requirements

FM 10-71
Petroleum Tank Vehicle Operations

Life Safety Code 101, National Fire Protection Association (NFPA)

NFPA 32
Standard for Dry Cleaning Plants

NFPA 91
Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids

NFPA 385
Standard for Tank Vehicles for Flammable and Combustible Liquids

NFPA 407
Standard For Aircraft Fuel Servicing

TM 3-250
Storage, Shipment Handling and Disposal of Chemical Agents and Hazardous Chemicals

TM 5-609
Military Custodial Services Manual

Section III
Prescribed Forms

DA FM 2028
Recommended Changes to Publications and Blank Forms

DA FM 5381
Building – Fire Risk Management Survey

DA FM 5382
Hazard/Deficiency Inspection Record

FR Form 670
In Case of Emergency

Section IV
Referenced Forms

This section contains no entries.

APPENDIX B**CLEARANCES**

The following listed criteria, consisting of tables and sketches, pertains to clearances to be observed in arranging stacks of supplies of different types in warehouses storerooms, etc. Spaces will be maintained between storage and walls, rafters, electrical fixtures, fire doors, joists, and sprinkler heads as follows:

a. Clearance from Sprinkler Heads:

- 18 in — When stack height is less than 15 ft.
- 36 in — When stack height is more than 15 ft.

b. Clearance from Exits, Rafters, or Beams:

- 18 in — When stack height is less than 15 ft.
- 36 in — When stack height is more than 15 ft.
- 36 in — In non-sprinkler buildings regardless of stack height.

c. Clearance around Light Fixtures — 18 inches in all cases

d. Clearance from Interior Fire walls (see fig 1-5):

- 24 in — When walls are of substandard construction (fire rating less than 4 hours).
- 24 in — When hazardous materials are stored.
- 12 in — When non-hazardous materials are subject to excessive swelling.

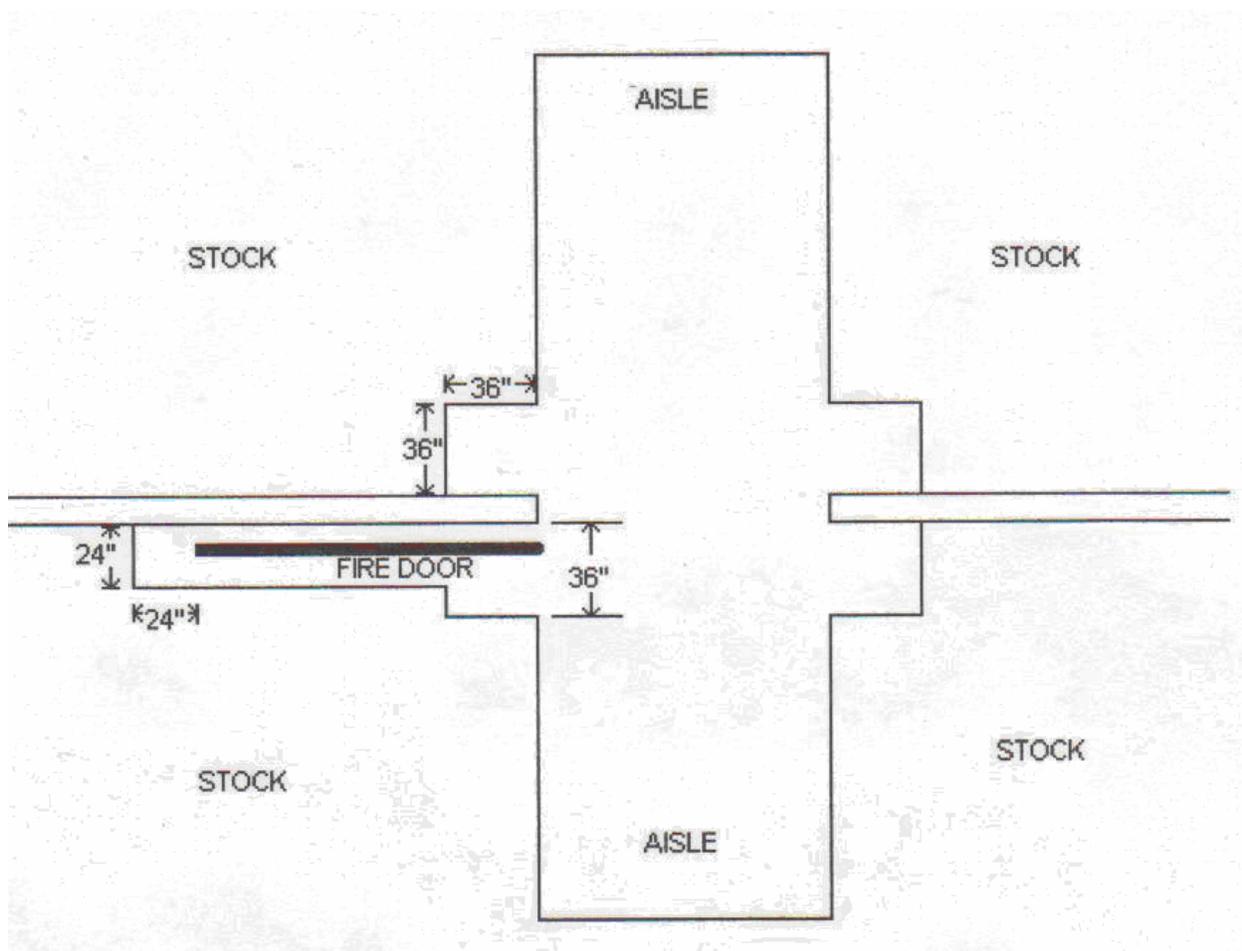
e. Clearance between Stacks:

- 4 ft — When over 2,000 square ft blocks.
- 6 ft — When over 8,000 square ft blocks.

f. Clearance Around Fire Doors (see fig 1-5):

g. Size of Blocks of Supplies:

- Hazardous materials — 2,000 sq ft maximum
- Moderate and low combustibles — 8,000 sq ft maximum
- Noncombustible — No limit



NOTE: Stack clearances shown above are not required where fire doors are protected by permanently installed fire door guards, which will prevent stock interfering with free operation of fire doors.

Figure B-1 – Stack Clearance at standard fire walls and at fire doors (non-hazardous materials).

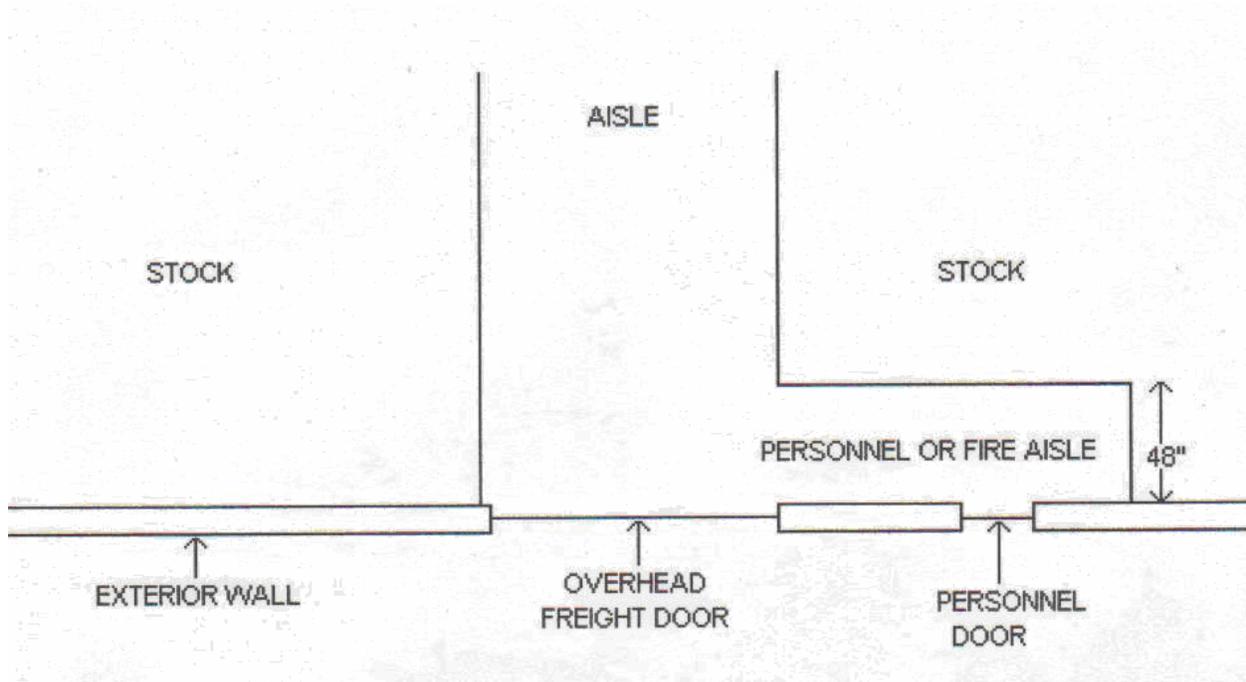
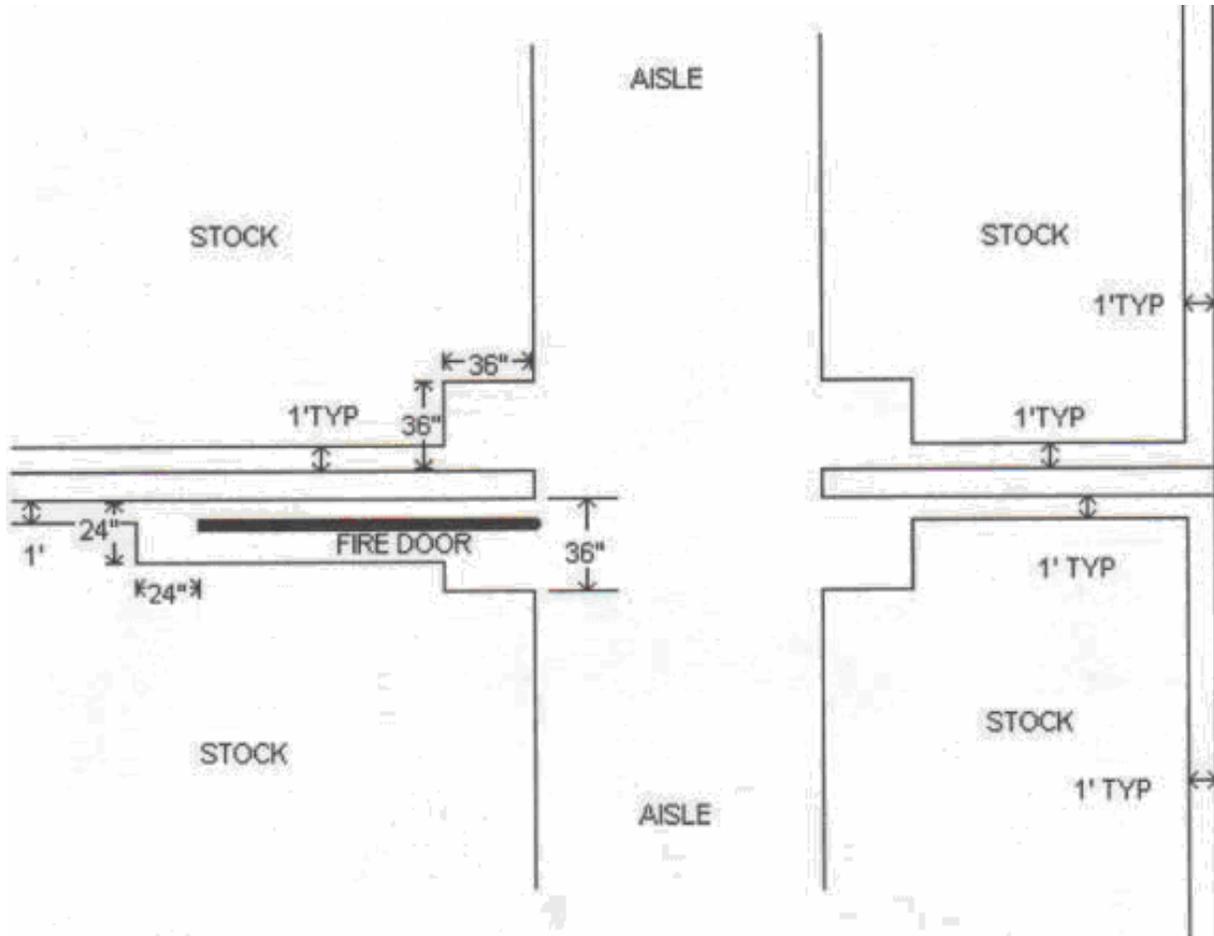


Figure B-2 – Stack clearance at exterior walls (non-hazardous materials)



NOTE: Stack clearances shown above are not required where fire doors are protected by permanently installed fire door guards, which will prevent stock interfering with free operation of fire doors.

Figure B-3 – Stack clearance at walls for material subject to excessive swelling.

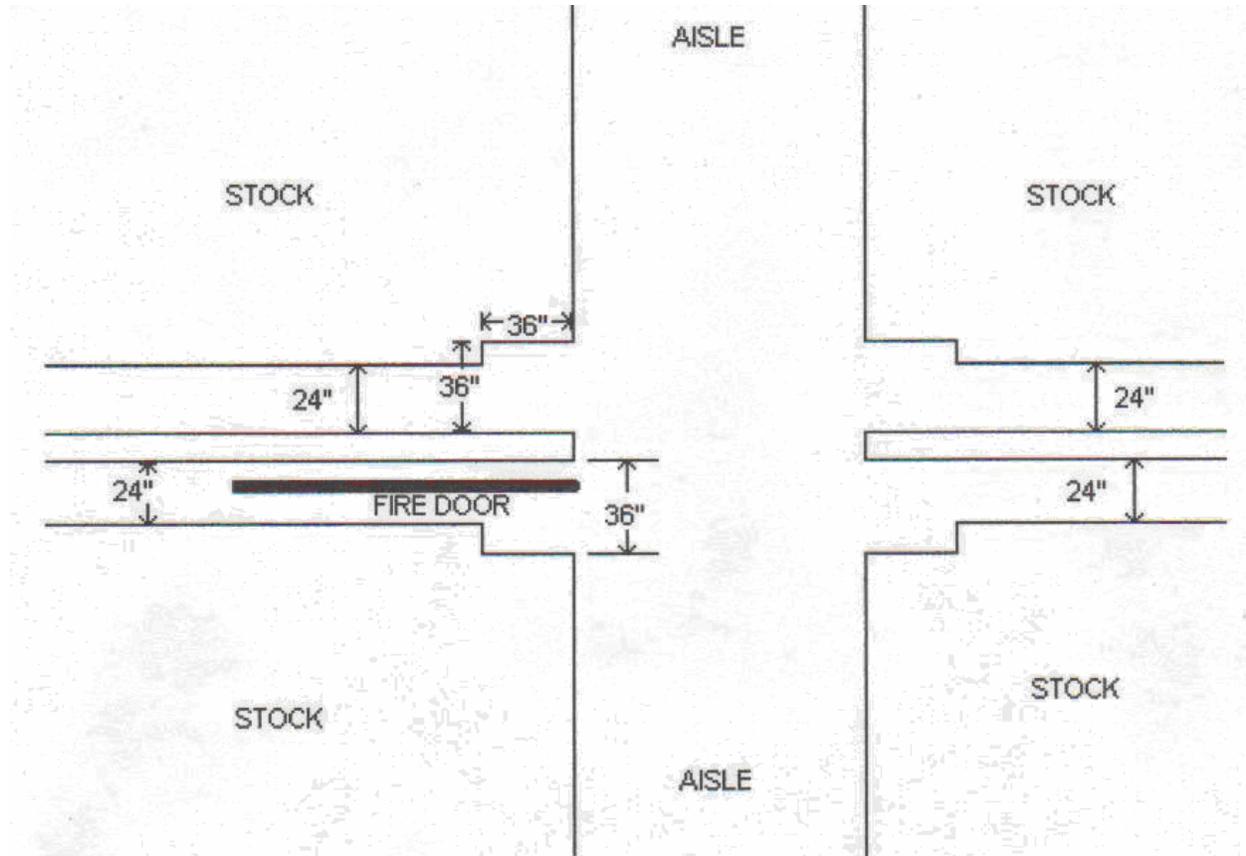
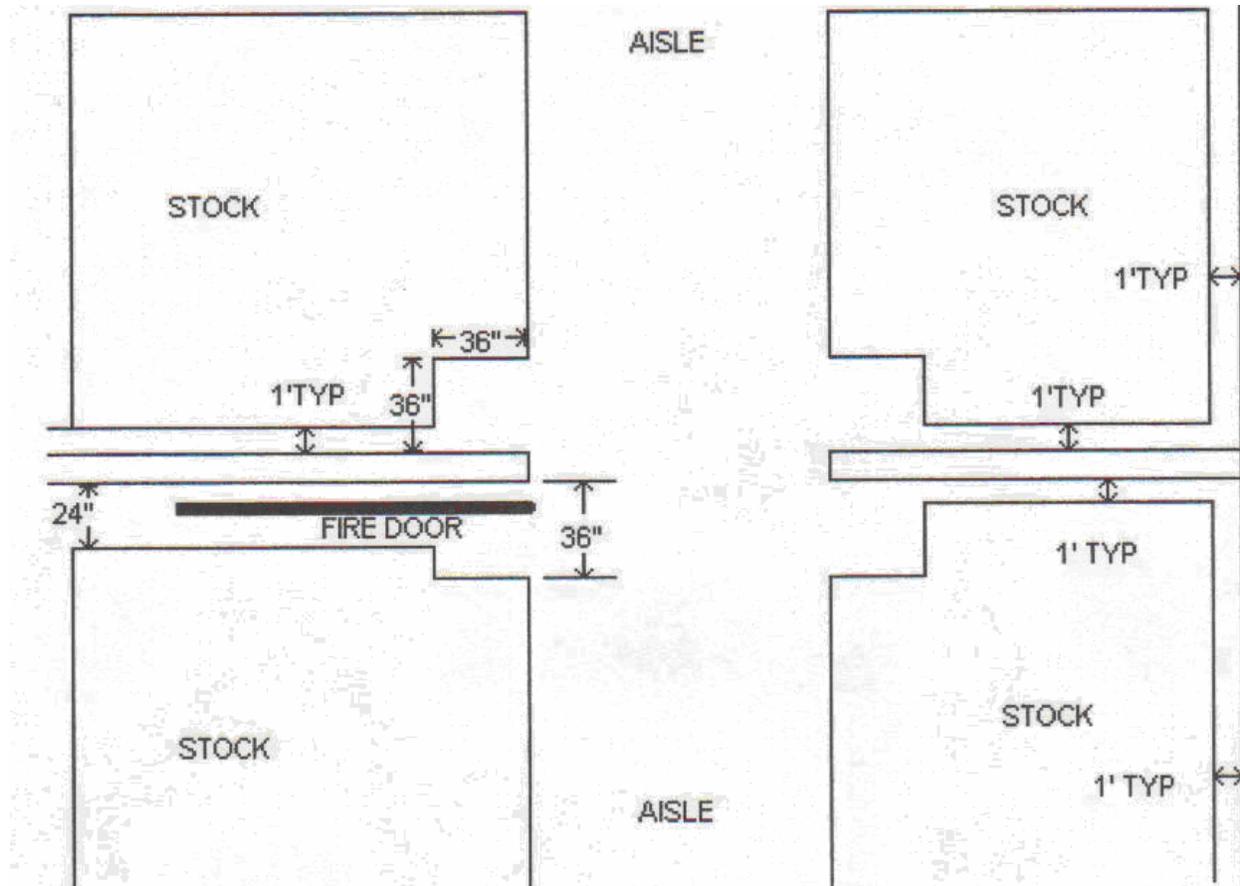


Figure B-4 – Stack clearance at substandard fire walls.



NOTE: Stack clearance shown above are not required where fire doors are protected by permanently installed fire door guards, which prevent stock interfering with free operation of fire doors.

Figure B-5 – Stack clearance for hazardous materials

APPENDIX C

PLACES OF PUBLIC ASSEMBLY

1. DA Form 5381, "Fire Risk Management Survey", will be utilized as both a guide checklist and as an inspection checklist.
2. The employees or attendants of places of public assembly shall be schooled and drilled in the duties they are to perform in case of fire, panic or other emergency in order to be of greatest service in effecting orderly exit of assemblages.
3. All draperies and decorations shall be noncombustible and shall be treated, if necessary, with an effective flame retardant material.
4. An exit door from place of assembly having an exit capacity of 100 or more may be provided with a latch or lock only if it is panic hardware.
5. The means of egress of places of public assembly shall be provided with emergency lighting.
6. Interior finish in all means of egress in buildings of public assembly shall be Class A.
7. Capacities will be determined using Life Safety Code 101 (NFPA).
8. All buildings used for public assembly occupancy with more than 150 persons will have a trained crowd manager on duty. One additional trained Crowd Manager will be provided for each 150 persons. This will be done in accordance with the National Fire Protection Association Standards.

APPENDIX D

QUARTERS FIRE PLAN AND COURSES OF ACTION

1. FIRE PLAN. The dwelling fire plan should be cleared and uncomplicated so that all members, within the limits of their capability, can understand and carry out their assignments. The following principles are essential:

a. Immediately upon discovery of a fire, all personnel should leave or be removed from the building.

b. If possible, telephone (911) the alarm to the Fire Protection and Prevention, but do not risk injury to use your own telephone unless it is in a location from which there is a second exit. Use a neighbor's telephone, if necessary.

c. When leaving the building, close all doors behind you. Do not open closed doors if they are hot or even unusually warm to the touch, as this heat indicates fire on the other side.

2. COURSES OF ACTION.

a. Grease fires in kitchens can be safely controlled at the start. 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 on the burning area will usually extinguish it. Do not attempt to move any type of container containing burning grease.

b. Get away and stay away from flammable liquid fires. Do not attempt to extinguish the fire other than by smothering it; e.g., putting a lid over the burning pan. These fires usually burn out in a few minutes after the supply of fuel is stopped.

c. If clothing is on fire, wrap the victim in anything at hand, or roll the victim on the ground. Attempts to beat out fire with the hands are ineffective and usually result in injury to the would-be rescuer. Handle the victim as little as possible. Do not attempt to treat the burns or remove burned clothing.

d. Natural gas is dangerous; butane, propane, or mixtures are even more dangerous. If at any time you smell gas and cannot locate and stop the flow, call Fire Protection and Prevention. If you can stop the flow, ventilate the house immediately, regardless of weather conditions. If the odor of gas is strong, the following precautions must be taken:

(1) Evacuate all occupants from the house.

(2) Call, or have someone else call Fire Protection and Prevention from a neighbor's telephone. Do not attempt to use a telephone in the gas area. If possible, take the telephone off the hook.

(3) If you can reach the main supply valves of all devices having pilot lights without undue distress due to gas, shut them off.

(4) Do not shut off or turn on any electrical appliances, devices, or lights where the disconnecting device (switch or plug) is inside the house.

e. Test smoke detectors monthly, if inoperable, contact repair persons as soon possible. Smoke detectors will save your life.

APPENDIX E

ACTION IN EVENT OF A FIRE

1. ALARM OF FIRE.

a. Any person discovering a fire, regardless of type or size, will immediately alert or cause to be alerted all personnel in the building and will report the fire to the Fort Riley Fire Department by the quickest available means.

b. All fires, including grass, vehicle, and appliance fires, will be reported, including those extinguished on discovery and those burned out prior to discovery. Supervisory personnel, on being advised on learning that a fire has occurred will, in the absence of positive knowledge that Fire Protection and Prevention has been notified, immediately report the incident to Fire Protection and Prevention. All personnel are responsible for knowing all available means of giving a fire alarm; lack of this knowledge is not acceptable as a reason or excuse for delayed alarm.

2. ACCIDENTS INVOLVING FLAMMABLE LIQUIDS AND GASES. Any accident involving the release or spillage of 1 gal or more of a flammable liquid or gas will be reported immediately to Fire Protection and Prevention.

3. METHODS OF REPORTING.

a. FIRE ALARM SYSTEMS. Fire alarm systems provide direct and reliable means of summoning Fire Protection and Prevention to a fire, thus reducing the interval between the time a fire is detected and the time fire fighting units arrive on the scene. Some types of fire alarm systems automatically detect fires and transmit alarm signals. Other systems are manually operated.

b. LOCAL MANUAL SYSTEMS. Many buildings have local alarm systems that are operated manually only. These systems are designed to alert only the people within the building. The fire must be reported to the Fire Protection and Prevention by dialing 911. Familiarize yourself with the type of fire alarm system in your building.

c. AUTOMATIC SYSTEMS. Automatic fire alarm systems produce signals when actuated by fire detectors. The detectors operate automatically in response to smoke, abnormally high temperatures or rapid rises in temperature in protected spaces. These systems also have supplementary manual fire alarm boxes to permit manual transmission of fire alarm signals to emergency dispatchers.

d. TELEPHONE SYSTEMS. Fire can be reported from any dial phone system on the Fort Riley installation. Telephone number for reporting a fire is 911. The person discovering a fire will immediately call Fire Protection and Prevention and will give the exact location of the fire (including the building number) and the type of fire. The call will not be terminated until the operator repeats this information and secures additional information as required.

e. RADIO. Any radio net having a base station with telephone communication may be utilized for the reporting of fires. Included are the Fort Riley Police, Gate Guards, Public Works, DOIM, Range Maintenance radio nets, etc.

f. MESSENGER. If none of the above facilities are available, a messenger will proceed to the nearest telephone or to Fire Protection and Prevention, whichever is quicker.

4. ACTION AFTER GIVING FIRE ALARM. When possible and safe to do so:

a. Alert all personnel in the involved and adjoining building, if not already done; have all doors and windows closed; and shut off all fans and electric circuits. Doors and windows will not be reopened until after Fire Protection and Prevention has departed, except by specific instructions from the Fire Chief.

b. If the fire is in a closed or locked building, room, or compartment, no attempt will be made to enter or open the fire area except for rescue of trapped personnel.

5. EVACUATION. Persons discovering fires will take immediate action to ensure that the danger area is vacated by all persons, giving special attention to sleeping or incapacitated persons and children. Definite assembly points should be established for head count to ensure that all persons are out of the building. The primary route for evacuation should provide exit from the building with the least amount of travel.

6. FALSE ALARMS. Any person maliciously or knowingly transmitting a false alarm to Fire Protection and Prevention by any means or for any purpose will be subject to punishment to the full extent regulations or laws allow. Alarms arising from honest errors or transmitted in the belief that there is or may be a fire are not false alarms under this provision.

7. TRAFFIC. Vehicles meeting or being overtaken by emergency equipment showing a blinking red light or with siren sounding will immediately clear street intersections, pull to the nearest side of the road, stop and remain stopped until the emergency vehicles have passed unless instructed to move by a responsible officer or by the Fort Riley Police. Under no circumstances will unauthorized vehicles or persons follow fire apparatus at less than 500 ft, or enter the fire area for any reason.

8. ENTRY TO THE FIRE AREA. During the firefighting operations, including overhaul and investigations, entry to the fire area (appendix E) is restricted to firefighting forces and those having duties in connection with the operation. All other personnel will remain well outside the zone of activity. Any action, other than that necessary for preservation of life or prevention of injury, may be considered interference with the operation.

APPENDIX F

QUARTERS STORAGE

1. PROHIBITED STORAGE AREAS. Storage of any type is prohibited in furnace or boiler room. Storage of any type of combustible materials is prohibited in attics except where the attic is served by a stairway with adequate protection in the form of floors or permanently fixed guards are provided to prevent contact between the stored material and wiring and heating equipment vents, and the area is enclosed to prevent trash and debris from being blown or falling into other areas in the attic.

2. STORED MATERIALS. All stored materials will be neatly arranged and kept in an orderly manner.

3. EXTERIOR STORAGE. Exterior storage locations will be selected for maximum protection of the items from thrown or windborne sources of ignition.

4. INDIVIDUAL STORAGE FACILITIES. Where individually assigned storage facilities, including carports and garages, are provided in connection with quarters and the occupant has sole access to the area, the occupant is responsible for prevention of unauthorized entry and control of any children using it as a play area.

5. COMMON STORAGE. Where common storage is provided in connection with quarters and various individuals have access to the area, the senior officer or NCO sharing the use is automatically designated Building Fire Marshal.

6. STORAGE OF GASOLINE-POWERED OR FIELD EQUIPMENT. In cases where no other reasonably secure storage is available, quantities of gasoline and other fuel not in excess of 10 gal total may be stored in quarters in the fuel tank of outboard motors, power mowers, and similar equipment, provided that:

a. All openings to or from the tank are closed vapor-tight. This includes fill openings, vents, pressure connections, and lines to carburetors.

b. The location is such that the device is protected from mechanical injury.

c. The occupant will be held liable for losses by fire which are caused by negligence in storing or using flammable materials.

7. LIQUID PROPANE GAS (LPG) IN QUARTERS. LPG is defined as liquefied petroleum gasses (PGP, L-P gas, bottled gas) which contains any of the following hydrocarbons: Propane, propylene, butanes (normal and iso-), and butylenes. Portable equipment, such as camp stoves and lighting equipment, using L-P gas may be stored in quarters subject to compliance with all the following conditions:

- a. Under no conditions will the devices be fired or operated inside the building.
- b. Gas containers, where possible, will be disconnected from devices and checked for leaks (by immersion in water) prior to storage. Leaking containers will be placed outdoors at a location safe from ignition until they can be disposed of safely.
- c. Storage will be at a location, which will minimize exposure to excessive temperature changes, physical damage, or tampering by unauthorized persons, particularly children. The site will also be remote from exits, stairways, or areas normally used for or intended for use as safe exits.
- d. Storage in basements or other below-grade area is allowed only when no other reasonably secure area is available and the location and method of storage has been approved by the Fire Marshal.
- e. Any gas container, which has been dropped or subjected to heavy impact (whether visibly damaged or not) or has been subjected to other than minor abrasion will be returned to the supplier for certification of its safe condition prior to being stored.

APPENDIX G

UNAUTHORIZED FENCING — CONCERTINA WIRE

1. Reference AR 420-70, para 3-2 b(2).
2. AR 420-70, para 3-2, the use of fencing will be in accordance with DoD 4270.1-m, (Department of Defense Construction Criteria Manual).
3. AR 420-70, para 3-2 b(2). Woven, barbed, or smooth wire fencing will be used where chain link is not authorized. However, the use of barbed wire fencing is prohibited except where installation commanders certify that its use is required for safety, security and/or in the interest of national defense.
4. Fire Protection and Prevention will be notified, well in advance, of any use of concertina wire in the cantonment area, 239-4553.
5. While focusing on the need for concertina wire, it is believed that planning for emergencies must be a priority. Fire Protection and Prevention must have emergency access to buildings and all fire equipment; sprinkler connections, and fire hydrants.
6. Fire exits must be maintained accessible for all building occupants.
7. Life safety cannot be compromised for security reasons in the cantonment area.
8. The use of concertina wire, razor wire, or barbed wire inside of a structure is prohibited without written authorization from the Fire Chief.

GLOSSARY

Section I Abbreviations

BEQ

Bachelor Enlisted Quarter

BOQ

Bachelor Officer Quarter

CID

Criminal Investigation Division

DA

Department of the Army

DHR

Directorate of Human Resources

DOIM

Directorate of Information Management

DPW

Directorate of Public Works

EOC

FORSCOM

Forces Command

HQDA

Headquarters, Department of the Army

MACOM

Major Army Command

POL

Petroleum, Oil and Lubricants

PX

Post Exchange

SOP

Standard Operating Procedure

USAR

United States Army Reserve

VI

Visual Information

Section II

Terms

Section III

Special Abbreviations and Terms

This publication uses the following abbreviations, brevity codes, and acronyms not contained in AR 25-52 (Authorized Abbreviations, Brevity Codes and Acronyms). These include use for ...

AGA

American Gas Association

Act of God

An inevitable accident, such as an extraordinary interruption of the usual course of events that no reasonable foresight or care which might reasonably be expected, could have foreseen or guarded against it, such as lightning, windstorms, earthquakes, and other natural phenomena.

Approved Equipment

Equipment that has been tested and approved by a nationally recognized testing laboratory, such as Underwriters' Laboratories, Inc. (UL); Factory Mutual Engineering Division Laboratories (FM); Factory Insurance Association (FIA); American Gas Association (AGA); National Bureau of Standards; US Bureau of Mines and American Standards Association. The Fire Marshal will make the final determination as to whether other laboratories are recognized. Approved equipment will be used, located and installed in accordance with the stipulations in the listing of the approving laboratory. Listing refers to the inclusion of an item in publications of the laboratory, such as the UL Electrical Equipment List.

Attic

That area of a building, bounded and enclosed by the roof and the ceiling of the top story, or in absence of a ceiling the area above the plane of the top plate line and below the roof.

AWG

American Wire Gage

Basement

A story of a building, having one-half or more of its clear height below the highest exterior grade adjacent to the building.

Clear Height

The distance from the floor to the bottom of the joists, supporting the floor of the story above.

Combustible Material

Any material that can be ignited and once ignited will continue to burn. Noncombustible materials in combustible packages or wrapping are considered combustible. Light combustible materials are those easily ignited by momentary exposure to flame, such as cotton fabrics.

Designated Smoking Area

A specific area set apart for smoking.

Egress

A place or means of going out.

Electrical Wiring System

The system includes any means of conveying current, except extension and appliance cords connected to the power source by means of standard plugs in receptacles provided for the purpose.

Exit

That portion of a means of egress that leads to an exit door.

Exit Access

That portion of a means of escape, that leads to an entrance to exit.

FIA

Factory Insurance Association

Fire Area

The fire area is bound as follows during extinguishing operations:

- a. When the fire is at or near an intersection, the fire area is that area inside the far sides of the next parallel streets to both sides forming the intersection.
- b. When the fire is at or near the center of a block, the fire area is that area inside the far sides of the streets bounding the block.
- c. During overhaul and investigation, the fire area will consist of the building or

part of the building involved and those areas where contents removed from the building are temporarily stored. This area will be established and marked (posted) by the person-in-charge of the overhaul or investigation.

Fire Marshal, Fort Riley

Fire Chief of the Fort Riley Emergency Services is the Installation Fire Marshal, and as such, acts for and is responsible directly and only to the Installation Commander of Fort Riley.

Fireworks

Any combustible or explosive composition or article prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation and include but are not limited to blank cartridges, toy pistols, cannons, canes or guns in which explosives are used, balloons requiring fire for propulsion, firecrackers, torpedoes, skyrockets, roman candles, Day Glow bombs and sparklers. Devices using paper caps manufactured in accordance with U.S. Commerce Commission regulations are not included. Pyrotechnics and other devices used in established training programs and military ceremonies are also excluded

FM

Factory Mutual Engineering Division Laboratories

First Aid Fire Equipment

All types of portable fire extinguishers, sand pails, dry powder containers, standpipes and hose lines, water barrels and pails, built-in extinguishing systems on vehicles, and local extinguishing systems.

Flammable Material

Any material which can be ignited easily and, once ignited, burns with unusual rapidity.

Housekeeping

The maintenance of premises, outdoors or indoors, in a neat, orderly and fire safe condition.

LP

Liquid Petroleum

Listed Equipment

Refer to paragraph 1-7(l)(1b).

Mechanical Equipment Room

Rooms housing refrigeration, air handling equipment, heating equipment, pumping equipment (except sump pumps), filtration and chlorination equipment and compressors where access by other than maintenance personnel is not authorized.

NFIRS

National Fire Incident Reporting System

Parking

A vehicle is parked at any time the motor is shut off or the driver is out of the vehicle.

Posting

Display of a document, sign, or notice at a location likely to attract the notice of persons concerned. Examples: "NO SMOKING" signs should be visible to all occupants; a fire plan may be at a location frequented by employees and those having duties to perform in emergencies; regulations and multi-page documents may be posted, if in marked covers, accessible to all personnel.

Personnel, After Hours

Included are custodial, guards, watchmen, club clean-up crews and any other similar occupations, whose tour-of-duty or parts of their tour-of-duty occur outside normal working hours.

P-S-863F

Sweeping Compound

Reasonable Care

Exercise of precautions and control of action that would be expected of a normally prudent person under similar conditions.

Reasonable Prudence

Experience of judgment, forethought, and precautions expected of a normally intelligent person of equivalent age, training or exercise.

Reasonable Time

Time required to effect correction by diligent and prompt effort and not necessarily suiting the convenience of the occupant or using service. The Fire Marshal will determine the time allowed for corrections, and this determination is final upon delivery of written notification to the parties involved to any of their employees.

Safety Cans

Safety cans for bulk handling of flammable liquids are specially designed portable metal containers with spring-loaded, self closing valve openings containing a flame arrester, capacities 1 pint to 5 gallons.

Safety Waste Cans

Specially designed portable metal cans with self closing hinged covers. They are equipped with a handle to allow carrying in upright position and the bottoms are set up from the floor.

Safety Dip Cans

Specially designed can or tank having a basket for dipping parts and an automatic closing lid.

Safety Bench Cans

Specially designed with a non-automatic lid, which acts as a flame arrester.

Storage

The placement of material in any location where it will remain overnight. Material will be considered in transit (not stored) when it will be moved again prior to the activity closing for the day.

FOR THE COMMANDER:



RICKY D. GIBBS
COL, GS
Chief of Staff

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KENNETH F. STEGGEMAN
Director of Human Resources

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