

**BY ORDER OF THE COMMANDER
GRAND FORKS AIR FORCE BASE**

**GRAND FORKS AIR FORCE BASE
INSTRUCTION 32-2001**



7 AUGUST 2012

Civil Engineering

**FIRE AND EMERGENCY SERVICES
PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 319 CES/CEFP

Certified by: 319 CES/CC
(Lt Col Sara B. Deaver)

Pages: 69

This instruction implements AFD 32-20, *Fire Emergency Services*; DoDI 6055.06 *DoD Fire and Emergency Services Program*; AFI 32-2001 *Fire Emergency Service Program*. Ensure that all records created as a result of processes prescribed in this publication are maintained In Accordance With (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Information Management System (AFRIMS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command.

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1. Administration.

1.1. **Policies.** This instruction is designed to provide basic fire prevention guidance; to minimize the loss of life, property and the severity of injuries and/or damage should a fire occur. This instruction is applicable to all military personnel, civilians, contractors, and concessionaires located on or conducting business within the confines of property owned, governed, controlled by and/or under the jurisdiction of the Commander, 319th Air Base Wing.

1.2. **Objective.** To provide a professional and comprehensive fire protection/ prevention program in order to prevent the loss of life and/or property and to minimize the impact/loss to personnel and property in the event of a fire, disaster, etc. This program is based on AFI, DoDI, OSHA, NFPA, UL and other applicable national consensus standards.

1.2.1. For a more complete listing of guidance referenced in the development of this instruction; see the glossary.

1.3. **Applicability.** This instruction applies to all personnel, organizations and activities within the 319 ABW, including tenant units, active duty personnel, contractors, concessionaires, dependents, and guests while on property controlled by the 319 ABW.

1.3.1. When applicable, and to the maximum extent possible, this instruction shall apply to all new and existing facilities located on property controlled by the 319 ABW; whether acquired or leased, by appropriated or non-appropriated funds; or occupied by other DoD components; AFRES, ANG; or third party financed and constructed.

1.3.2. This instruction is not intended to supersede any legally mandated or contractual requirements.

1.3.3. This instruction has been developed to afford a minimum level of fire protection and life safety.

1.3.4. It is the responsibility of all 319 ABW personnel to conduct themselves in a manner which does not pose an unnecessary risk of fire or injury to themselves or others and to abide by the contents of this instruction.

1.3.5. The goal of the fire prevention section is to prevent fires by educating the base populace in fire prevention procedures, and by conducting a thorough fire prevention visit (facility inspection) program. Our secondary goal is to minimize the loss of property and the number/severity of injuries to personnel should a fire occur. All personnel are empowered to prevent fire by practicing sound fire prevention practices and adhering to this instruction. Fire safety is everyone's responsibility.

1.3.6. Enforcement authority granted by DoDI 6055.6, AFI 32-2001, NFPA 1.

2. Responsibilities & Procedures.

2.1. Installation Commander.

2.1.1. Establishes installation fire protection and prevention programs; The 319 ABW/CC is the authority having jurisdiction for the approval of short term deviations from established fire protection guidance (not to exceed 18 months) per AFI 32-2001 Section 2.11.1.

2.2. Commanders, Functional Managers (Unit Commanders), Supervisors.

2.2.1. Definition of “Functional Manager” (The senior operating official at all levels exercising managerial control of an activity or operation. This individual usually can acquire and commit resources for the abatement of occupational safety and health hazards. Functional managers are designated by MAJCOM or installation commanders). For active duty AF personnel the term “Functional Manager” normally refers to the unit’s commander.

2.2.2. Unit commanders/functional managers shall accomplish the following:

2.2.2.1. Shall be responsible for administering the fire and emergency services program within their respective functional areas/facilities and for initiating corrective actions for fire hazards and fire safety deficiencies.

2.2.2.2. Shall ensure personnel are provided a fire safe workplace and shall ensure facility managers conduct periodic self-inspections for hazards and deficiencies (daily for assembly occupancies, monthly for all other occupancies).

2.2.2.3. Shall ensure that supervisors understand and enforce the contents of this instruction.

2.2.2.4. Shall initiate administrative or disciplinary actions, as they deem appropriate, when there is misconduct or negligence resulting in fire damage to government property.

2.2.2.5. Shall take disciplinary action as they deem appropriate, when there is malicious activation of, damage to, or tampering with any fire protection device, system or equipment.

2.2.2.6. Shall ensure supervisors establish procedures for employees/members to follow in the event of a fire; subjects include, emergency action plan, fire reaction plan, fire evacuation plan, fire reporting, use of fire extinguishers, fire safety training for special situations, processes, conditions specific to their facility/area.

2.2.2.7. If needed, contact the fire prevention office for assistance with developing plans and conducting fire safety training.

2.2.2.8. Shall take prompt action/s to eliminate or reduce hazards to an acceptable level.

2.2.2.9. Shall ensure that corrective actions are promptly initiated, properly documented and monitored until corrected.

2.2.3. All personnel are responsible for reporting hazards they’ve discovered to their respective supervisor/s and/or the proper authorities; i.e. Fire Department, Safety, Bio-Environmental, CES Help Desk, etc.

2.3. Fire Marshal.

2.3.1. Commands/Supervises the fire protection flight.

2.4. Fire Chief.

2.4.1. Is responsible to the Base Fire Marshal for establishing and carrying out effective fire protection and prevention programs.

2.4.2. IAW National Incident Management System (NIMS), the Fire Chief or Senior Fire Officer (SFO) in charge at the scene of an emergency may commandeer available military vehicles, equipment, materials, and personnel considered necessary to promptly control and extinguish fires or rescue personnel and may also activate mutual aid agreements and/or solicit voluntary civilian assistance if deemed necessary to mitigate the hazard and control the situation.

2.4.2.1. Responsible for providing fire suppression for local off-base federal activities during periods when local fire departments are on strike, are unable to respond, or as indicated in mutual aid agreements.

2.4.3. Serves as an Incident Commander when warranted/appropriate.

2.5. Incident Commander.

2.5.1. See 319 ABW Comprehensive Emergency Management Plan (CEMP) 10-2.

2.6. **Facility Managers/Supervisors.**

2.6.1. Facility managers/supervisors at all levels shall ensure newly assigned personnel receive a fire safety briefing within 30 days of being assigned.

2.6.2. The briefing shall include the location and operation of fire extinguishers, the location/purpose and operating instructions to installed manually activated fire protection systems, the emergency evacuation route, the evacuation assembly points, accountability procedures, personal responsibilities as outlined in the fire reaction or emergency action plan, etc.

2.6.2.1. Shall ensure all exit and emergency lights installed in facilities under their control operate as designed, and are inspected and tested monthly for 30 seconds and annually for 30 minutes. The testing log shall be properly filled out and filed in the facility manager's binder.

2.6.2.2. Shall ensure that all fire extinguishers in facilities/vehicles/areas under their control are in an operable condition and are inspected monthly. The monthly inspection shall be documented on a monthly fire extinguisher inspection tag or logged in a computer generated tracking sheet.

2.6.2.3. Develop a fire reaction and/or emergency action plan applicable to the facility. Exercise the plans to ensure they meet requirements, work as intended, and that all personnel understand and can perform their duties as assigned under the plan.

2.6.2.4. Develop an emergency evacuation plan. Post a map of the route in all facilities occupied by more than 10 people. Post the plans in prominent locations throughout the facility.

2.6.2.5. Develop a daily opening and closing inspection checklist and maintain records of the inspections in the facility manager's binder.

2.6.2.6. Ensure discrepancies discovered during the daily inspections are promptly called in to the CES help desk and programmed for corrective action. Follow up on open discrepancies monthly until completed.

2.6.2.7. Answer AF Form 1487s in a timely manner and ensure proper corrective actions are initiated.

2.7. Facility Manager's Binder. The binder shall at a minimum include the following documentation:

2.7.1. A copy of the latest version of this instruction (ABWI 32-2001).

2.7.2. A copy of the previously issued AF Form 1487 fire prevention visit hazard discrepancy reports and/or inspection letters (maintain for two years).

2.7.3. A copy of all open work orders, job orders, and projects related to fire prevention/fire safety.

2.7.4. A copy of all fire safety related training, i.e. fire extinguisher training, fire prevention system training, etc.

2.7.5. A copy of the previous two year's worth of fire evacuation exercise forms.

2.7.6. A copy of the fire extinguisher list.

2.7.7. A copy of the monthly emergency lighting testing log.

2.7.8. A copy of any fire prevention variances/ORMs/waivers/deviations.

2.7.9. A copy of any corrective action plans (CAP).

2.8. Emergency Planning.

2.8.1. Develop a written fire evacuation plan for all routinely occupied facilities.

2.8.1.1. For facilities with extreme hazards, high occupant loads, complex interior arrangements, Child Development Centers, Youth Centers, assembly occupancies, dormitories, lodging and facilities occupied by more than 10 people, the plan shall be posted in conspicuous locations such as the entrances to stairwells, and every 100 ft. along the common paths of travel.

2.8.1.2. The plan shall consist of a diagram of the facility (floor plan) with directional arrows indicating the egress routes and exits.

2.8.2. Develop written emergency action plan and/or fire reaction plans for all facilities/areas under their control. Fire action Emergency Action Plans (EAPs) shall reflect the most current conditions, hazards and operations associated with the facility.

2.8.3. To develop the plan refer to the guidance contained in AFOSH STANDARD 91-501, Chapter 6, 6.14, 6.15, 6.16, OSHA 1910.33 – 1910.39; OSHA 1910.165 and include the following:

2.8.3.1. First aid firefighting procedures, including fire extinguishers and specialized systems or equipment.

2.8.3.2. A list all major fire hazards.

2.8.3.3. Proper handling and storage procedures for hazardous materials.

- 2.8.3.4. Potential ignition sources and their control.
- 2.8.3.5. Procedures to control accumulations of flammable and combustible materials.
- 2.8.3.6. Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials.
- 2.8.3.7. Any special procedures or conditions associated with the facility, operation, area, equipment etc. Examples include: procedures for opening hangar doors or removing aircraft from inside a hangar, procedures for protecting high value and/or classified documents & equipment, procedures for dealing with fuel spills and procedures for working with dangerous equipment/materials/operations.
- 2.8.3.8. Procedures to be followed by personnel who must remain inside a facility or area during an emergency in order to continue operations (i.e. command post).
- 2.8.3.9. Procedures to account for all personnel after evacuation.
 - 2.8.3.9.1. Accountability for “all personnel” is defined as follows:
 - 2.8.3.9.2. In order to have 100% accountability you must account for “All” assigned personnel, whether on leave, at lunch, at an appointment, on break, TDY, on or off duty.
 - 2.8.3.9.3. There shall be a process in place to locate and account for all assigned personnel; i.e. If there are 100 people assigned to a given workplace, then in the event of an exercise or emergency, the process shall account for all 100 people.
- 2.8.4. The plan shall indicate a designated assembly point at least 75 ft. or 1.5x the height of the structure, away from the building where personnel assemble for accountability. Plans shall include at least one primary and one secondary location in case the primary is compromised.
- 2.8.5. The fire reaction plan shall include procedures to be followed by personnel performing rescue or medical duties, clearing the facility, closing doors, assisting physically impaired personnel, etc.
- 2.8.6. Facility managers/supervisors shall designate and train employees to assist in a safe and orderly evacuation of all assigned personnel (except those personnel designated to remain behind to perform certain mission critical tasks, i.e. Command Post Personnel).
- 2.8.7. If personnel with physical or mental impairments/conditions reside, work in or regularly visit the facility the plan shall include special instructions, training, and equipment to assist them and ensure they can be safely and expeditiously evacuated. The plan shall designate individuals to assist physically/mentally impaired personnel.
- 2.8.8. Facility Managers shall ensure that all physically or mentally impaired personnel assigned to facilities under their control that are known to require the assistance of fire dept. personnel in order to safely evacuate a facility shall immediately be reported to the fire prevention office 747-4442/4174 and/or the GFAFB Dispatch Center 747-6304 immediately on assignment to the work center/facility/area.

2.8.8.1. Once reported, this information shall be updated at least annually, more often if the mobility impaired person's location and or condition changes for better or worse.

2.9. Fire Prevention Office.

2.9.1. Is responsible to the fire chief for developing and administering an effective fire prevention program.

2.9.1.1. The Assistant Chief of Fire Prevention ensures facility fire prevention visits are performed I.A.W. AFI and as determined by the fire chief.

2.9.1.2. The Assistant Chief of Fire Prevention ensures that the base population has access to adequate training for the following subjects: fire prevention techniques and procedures, fire reporting procedures, fire evacuation techniques/procedures, the use of portable fire extinguishers, and the use of installed fire protection systems.

2.9.1.3. The Assistant Chief of Fire Prevention provides a cursory review of projects that have fire prevention concerns, i.e. projects involving new construction, demolition, renovation, etc. The primary concern (as dictated by AFI) is to ensure the inclusion of a proper fire protection system.

2.10. Fire Inspectors.

2.10.1. Fire Inspectors are responsible for performing fire prevention visits on facilities, sites, and areas, for documenting fire safety discrepancies and ensuring adequate corrective action/s are initiated by the facility managers/supervisors.

2.10.2. The fire prevention section is responsible for ensuring the wing populace has access to adequate fire prevention education/training materials in order to ensure personnel are instructed in the latest fire prevention/safety techniques and practices, fire evacuation procedures, specialized fire protection systems, equipment, etc.

2.10.3. Fire Prevention Inspectors ensure that facilities/areas/operations are in compliance with applicable Air Force, Department of Defense Instructions, Federal Law, and other applicable National Consensus Standards. For guidance concerning precedence and enforcement of criteria for military construction projects please see Chapter 1 of UFC 3-600-01 or its most recent edition.

2.10.4. Fire Prevention Inspectors ensure that all installation members have access to training in the following subjects:

2.10.4.1. Fire reporting procedures.

2.10.4.2. Fire evacuation procedures.

2.10.4.3. Basic fire extinguisher use and first aid firefighting procedures.

2.10.4.4. Manually activated fire protection systems/equipment.

2.10.4.4.1. Such systems include all manually activated fire suppression systems, i.e. the wet chemical systems in the commercial cooking facilities, the water based AFFF or high expansion foam systems in the hangars, the 150 lb. wheeled halon 1211 flightline fire extinguishers, etc.

2.10.5. In order to assess the effectiveness of fire safety training provided to base personnel, the fire prevention section shall randomly pose various fire safety, fire reporting type questions to facility occupants, (usually during the annual fire prevention visit). Fire prevention inspectors shall also present "Customers" with an ICE survey card, the form will be used for quality control and to assess program effectiveness.

2.11. Fire Hazard/Fire Safety Deficiency Abatement Program.

2.11.1. This program is outlined in AFI 91-301, *Air Force Occupational and Environmental Safety*, Ref. AFI 91-301 Chapter 2, 2.1, & Attachment 8.

2.11.2. Fire hazards are conditions that can cause a fire. Fire hazards create an imminent danger situation and require immediate actions to eliminate or reduce the hazard.

2.11.3. Fire safety deficiencies (FSD) are conditions that reduce fire safety below an acceptable level, including noncompliance with standards, but by themselves cannot cause a fire to occur. These hazards follow the normal abatement process.

2.11.4. Imminent Danger Situations. If a hazard presents an imminent danger, it will be brought to the attention of the supervisor in charge. Supervisors take prompt action to eliminate or reduce the hazard or cease operations and withdraw exposed personnel. If corrective action is not taken, the Fire Chief, Fire Marshal, Chief of Safety, Bioenvironmental Engineer, and Commander will personally observe or review the operation and determine methods to eliminate or reduce the hazard (ORM). If discussions with these individuals fail to resolve the problem, the Installation Commander may be notified and asked to determine if the operation is to continue or be terminated.

2.12. Fire Prevention Visits (Inspections).

2.12.1. The following guidance is used to assess facilities, areas, operations, equipment, and practices during fire prevention visits: AFOSH Standards, Air Force Instructions (AFI), Department of Defense Instructions (DoDI), Office of Safety and Health Regulations (OSHA), Code of Federal Regulations (CFR), Department of Transportation Regulations (DOT), National Fire Protection Association (Fire Codes/Standards), Underwriters Laboratories (UL), American National Standards Institute (ANSI), Uniform Facilities Criteria (UFC), Uniform Building Code (UBC), Engineering and Technical Letters (ETL), and other applicable AF, Architectural Barriers Act (ABA), Department of Defense (DoD), or nationally recognized consensus standards.

2.12.2. Order of precedence is ETL, UFC, AFI, DoDI, OSHA, NFPA, and other applicable national consensus standards.

2.12.3. The fire prevention visit is the quality control element of the 319 ABW fire prevention program, and the AF Form 1487 is the quality control tool for documenting hazards/discrepancies noted during the fire prevention visit and programming them for corrective action.

2.12.4. Fire prevention visits are conducted in accordance with AFOSH STD 91-301.

2.12.5. The Fire Chief determines which facilities will be visited. Frequency is determined by DoDI, AFI, NFPA, and local needs. Facilities are inspected at least annually.

2.12.6. The fire inspector shall attempt to schedule the visit with the facility manager or designated representative, but in the event the facility manager cannot be contacted or one has not been assigned the fire inspector shall coordinate with a supervisor, the Commander, or real property to gain access and perform the inspection. Inspections are not required to be scheduled, they can be performed “No Notice.”

2.12.7. Facility Managers, supervisors or contractors or a designated representative shall accompany the fire inspector during fire prevention visits.

2.12.8. If a hazard is discovered that presents an imminently dangerous situation it shall be brought to the attention of the supervisor who shall take immediate action to either eliminate the hazard, reduce the hazard to an acceptable level or shall halt the operation and withdraw exposed personnel until such time that the operation can be performed safely.

2.12.9. After completing the visit, the Fire Inspector shall inform facility managers/supervisors/commanders of fire hazards and deficiencies.

2.12.10. The fire inspector shall assist facility managers and/or supervisors with completing AF Form 332 (Base Civil Engineer Work Request), for correction of fire safety deficiencies and hazards.

2.12.11. The AF Form 1487, *Fire Prevention Visit Report*. Serves as quality control for the fire prevention visit.

2.12.11.1. The AF Form 1487 is used to identify any discrepancies noted and as a reference document to initiate any required corrective action/s.

2.12.11.2. AF Form 1487: Provides the recipient with the necessary information to better understand the hazard or deficiency, the reference/s justifying the hazard, and the recommended corrective action.

2.12.11.3. An AF Form 1487 shall be used to document all discrepancies discovered during the course of a fire prevention visit.

2.12.11.4. The Facility Manager shall submit AF Form 332s required to correct deficiencies identified on the AF Form 1487. A copy of the AF Form 1487 shall be submitted with the AF Form 332 for reference.

2.13. **AF Form 1487**

2.13.1. The reports tracking/ID number is listed in block 1.

2.13.2. The facility number is listed in block 2.

2.13.3. The date and time the fire prevention visit was performed are listed in block 3.

2.13.4. The date necessary corrective actions must be initiated by is listed in block 4.

2.13.5. The suspense date is listed in block 5; the fire prevention office normally gives a suspense date of 10 working days from report completion. This can be extended based on need but extensions must be coordinated with the fire inspector who issued the report.

2.13.6. The person to whom the form is addressed and from is listed in blocks 6 & 7.

2.13.7. The inspection frequency is indicated in block 8.

- 2.13.8. Hazards/Discrepancies are listed in block 9.
- 2.13.9. The severity of hazards/discrepancies are listed in blocks 10 & 11.
- 2.13.10. References for hazards/discrepancies and the recommended corrective action/s are listed in block 12.
- 2.13.11. Blocks 13 thru 18 are self-explanatory.
- 2.13.12. Block 19 is completed by the facility manager. In column A indicate the hazard/discrepancy, in column B indicate the date the corrective action was initiated, in column C if the hazard/discrepancy (RAC) could not be corrected within 30 days indicate the date it was entered into the Hazard Abatement Plan. Use column D to indicate the action that was taken to correct the hazard/ discrepancy. (i.e. w/o XXXX was submitted to initiate the necessary corrective action; the discrepancy was corrected on the spot by maintenance; J/O XXXXX was called in to the CES Help Desk, etc).
- 2.13.13. Blocks 20/21/22 are completed by the "Functional Manager". Once the report has been fully answered and has been signed by the functional manager, please return it to the fire prevention inspector who wrote it.
- 2.13.14. Facility Managers shall maintain their copy of the AF Form 1487, *Fire Prevention Visit Report* in the facility manager's binder for a minimum of 2 years or until all identified items have been corrected.
- 2.13.15. Periodically (at least annually) review all open discrepancies and determine their status. Contact the CE customer service desk; place updated information concerning the status of open fire/safety related work orders, job orders, and/or projects with the original AF Form 1487 in the facility manager's binder.
- 2.13.16. Failure to provide adequate and timely answers, to sign and return the AF Form 1487 to the fire prevention office by the suspense date may result in involving higher authorities, i.e. the 319 ABW Fire Chief, the 319 CES/CC (Fire Marshal), 319 MSG/CC or the 319 ABW/CC .

2.14. Fire Reporting Procedures.

- 2.14.1. The fire reporting number is 9-1-1; it is not necessary to dial a prefix.
- 2.14.2. When dialing 9-1-1 on GFAFB, you will reach the downtown Grand Forks Dispatch Center. Ensure that you inform the operator that you are calling from GFAFB and need to speak to the GFAFB emergency dispatch center. The call will then be forwarded to an on base dispatcher and the operator will dispatch the necessary emergency responders. Fast and accurate reporting of fires/emergencies is essential to minimize damage to property and injury to personnel.
- 2.14.3. Always report fires/emergencies by dialing 911, even if a facility is equipped with an automatic fire detection system that reports into the dispatch center; doing so functions as a failsafe and insures that the emergency responders are notified.
- 2.14.4. Falsely reporting fire alarms (Prank Calls) and/or falsely activating fire alarm pull stations when no emergency conditions exist, tampering with or compromising installed fire protection system/s, or use of fire extinguishers for anything other than extinguishing an actual fire is punishable under the UCMJ and civil law.

2.15. Fire Reaction Procedures.

2.15.1. Should a fire occur, implement and emergency action/fire reaction plan and take the following actions:

2.15.1.1. Notify facility occupants, verbally and by activating the fire alarm system.

2.15.1.2. Always dial 911 to report an emergency. Dialing 911 acts as a back up to the facility alarm system and ensures emergency responders are notified.

2.15.1.3. If the facility is equipped with portable fire extinguishers use them to attempt to extinguish the fire.

2.15.1.4. If the facility is equipped with a manually activated fire suppression system that covers the area where the fire is located, activate it. Follow your fire reaction or emergency action plan.

2.15.1.5. When evacuating the facility for a bomb threat “DO NOT” activate the fire alarm system. Use runners and clear the facility room by room.

2.15.1.6. When the dispatch center operator answers your call remain calm; speak clearly, answer the operator’s questions; provide the number for the phone you’re calling from (callback number); provide your building/house/apartment number and street address; give the operator the location, type and size of the fire (i.e. what is burning, how long has it been burning, where is the fire located, is anyone injured, if yes, what injuries have they suffered; provide any other relevant information that might be useful to the emergency responders, and “Do Not” end the phone call until directed to do so by the dispatcher.

2.15.1.7. Close the doors and windows in the fire area if time permits and if you can do so without placing yourself in undue danger prior to exiting the building.

2.15.1.8. Evacuate all personnel to a predetermined location at least 75 ft. (or 1 ½ x height of the structure) from the facility and take an immediate count (roll call) of all assigned personnel for accountability.

2.15.1.9. Report the number of personnel both present and unaccounted for to the Senior Fire Officer (SFO), include the last known location of each person you cannot account for; the importance of having an accurate accountability list for all assigned personnel is critical to search and rescue operations; account for personnel on leave, at lunch, at appointments, in meetings, etc.

2.15.1.10. Designate one individual to be the liaison and communicate with the senior fire officer to prevent the SFO from receiving conflicting information.

2.15.1.11. The “**SPEED**” system shall be used during emergencies. “**SPEED**” utilizes the following sequence of actions:

S--Sound the Alarm.

P--Phone the Fire Department.

E--Ensure Evacuation.

E--Extinguish if Possible.

D--Direct the Fire Department.

2.16. First Aid Firefighting.

2.16.1. If you encounter that does not constitute an immediate threat to your life, use the assigned hand held portable fire extinguisher and/or installed fire suppression system/equipment and attempt to control and/or extinguish the fire. If at any time you become injured, if the fire or smoke becomes life threatening, or your first aid firefighting efforts are ineffective, evacuate and report to the facility manager/supervisor/commander.

2.16.1.1. Only attempt to extinguish the fire after initiating the facility evacuation process and notifying the fire alarm communications center.

2.16.1.2. Do not attempt to extinguish a large or fast moving fire.

2.16.1.3. Never place yourself in danger trying to control a fire.

2.16.1.4. Evacuate the facility/area upon alarm activation or verbal notification.

2.16.1.5. Ensure an exit is always accessible and maintained in the event the fire gets out of control.

2.16.1.6. When using a hand held portable fire extinguisher, utilize the P.A.S.S. method:

P-Pull the safety pin.

A-Aim the nozzle at the base of the fire.

S-Squeeze the discharge handle/lever.

S- Sweep the nozzle back and forth at the base of the fire; continue until the fire is out.

2.16.1.7. Use the correct type of fire extinguishing agent, i.e. water for class "A" fires (wood, paper, ordinary combustible solids), ABC or BC class "B" extinguishers for burning liquid fires (hydrocarbons, alcohols). Dry chemical, Co₂, Halon are examples of extinguishing agents rated for ABC or BC type fires.

2.16.2. All fires shall be reported, even if the fire has burned itself out or has already been extinguished.

2.17. Fire Drill Procedures.

2.17.1. Fire evacuation exercises shall be coordinated with the fire department.

2.17.2. All personnel shall participate in fire evacuation exercises.

2.17.3. The use of a fire detection/notification system is mandatory during fire evacuation exercises. If special conditions exist where activating the fire notification system would be detrimental to the mission (i.e. Bomb Threat) use runners, etc.

- 2.17.3.1. Operation of the system shall only be under the supervision of fire protection or alarm maintenance personnel.
- 2.17.3.2. Prior to activating a fire notification system ensure you have access to the room/area containing the fire alarm control panel and access to the panel.
- 2.17.4. Emphasis shall be placed on an orderly evacuation rather than speed, speed is a secondary concern, safety is first! A good time for an orderly evacuation is “Less than 2 Min.” for most facilities.
- 2.17.5. Evacuees shall assemble at a pre-designated location away from the fire area. Minimum withdrawal distance is 75 ft., or 1 ½ x the height of the structure.
- 2.17.6. A single designated representative shall be appointed to communicate with the fire department senior fire officer at the scene.
- 2.17.6.1. Provide the SFO with a report detailing the number of people that evacuated, the number and last known location of any unaccounted for personnel, the nature and/or location of the emergency, and any other information pertinent to the situation.
- 2.17.7. Total evacuation is mandatory during any alarm activation unless otherwise directed by fire department personnel, per pre-existing agreement and/or mission requirements (Command Post).
- 2.17.7.1. At the time of this writing the only recognized exception to that rule is the command post. C.P. operators will remain in-place unless or until the situation actually becomes life threatening at which time they will follow their E.A.P. and react accordingly.
- 2.17.8. Pre-planning shall identify mobility impaired members/occupants; the evacuation plan shall identify those occupants and shall designate personnel to assist them.
- 2.17.9. Units having classified material or equipment must ensure prior arrangements are made to secure those items during an evacuation.
- 2.17.10. Use/possession of classified items/equipment does not exempt personnel from evacuating.
- 2.17.11. Fire evacuation exercises shall be conducted for the following occupancy types and at the following frequencies:
- 2.17.11.1. Assembly occupancies: “Recommended” Annually.
- 2.17.11.2. Business occupancies: “Recommended” Annually.
- 2.17.11.3. Daycare occupancies: Monthly. Child Development Center fire drills are conducted on a monthly basis with supervisory staff personnel and children participating. Reference AFI 34-248, *Child Development Programs*.
- 2.17.11.4. Youth Center: Monthly with all personnel participating. Reference AFI 34-249, *Youth Programs*.
- 2.17.11.5. Dormitories: “Recommended” Annually.
- 2.17.11.6. Educational occupancies: Monthly.

2.17.11.7. Healthcare occupancies: Quarterly

2.17.11.8. Mercantile occupancies: "Recommended" Annually.

2.17.11.9. Munitions storage area: Semi-Annually.

2.17.12. Fire evacuation exercises may either require the facility occupants to evacuate or stay in place as deemed appropriate by the fire department representative conducting the exercise.

2.17.13. Evacuation exercises that are rated as marginal or unsatisfactory shall be re-accomplished as many times as necessary until the exercise is deemed satisfactory.

2.17.14. Evacuation exercises during inclement weather shall not require evacuation, but rather shall be conducted internally unless pre-designated evacuation areas provide shelter (warming house).

2.17.15. Facility managers/supervisors may request an evacuation exercise be conducted for any facility/area by contacting the fire prevention office at 747-4442/4174.

2.17.16. All fire evacuation exercises shall be documented and maintained by the facility manager.

2.18. **Fire Safety Training.**

2.18.1. Commanders, functional managers, and supervisors at all levels are responsible for ensuring that personnel assigned to their unit are trained in fire prevention practices.

2.18.2. Training shall be conducted in accordance with AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention, and Health AFOSH Program* and OSHA 1910.37/38/39.

2.18.3. The fire prevention office when requested can provide fire prevention briefings, fire extinguisher training and fire suppression system training.

2.18.4. Food services personnel shall receive fire prevention training initially as part of their orientation and quarterly thereafter from their supervisor. Personnel occupying facilities with manually activated fire protection systems shall receive annual training on the system/s.

2.18.5. Fire prevention training for the workplace shall include the following:

2.18.5.1. The fire reporting number (911).

2.18.5.2. The location and capabilities of, and the operating instructions for installed fire detection/notification/suppression systems

2.18.5.3. If the facility/area is not equipped with a fire prevention/notification system the supervisor shall brief the employee on the manual or verbal procedures for fire evacuation.

2.18.5.4. The location of facility fire extinguishers and instructions for their inspection and use.

2.18.5.5. The location, capabilities and procedures for using specialized fire protection systems/equipment.

- 2.18.5.6. The location and operation of circuit breakers, and emergency power shut off switches.
 - 2.18.5.7. Types of fire extinguishers, i.e. pressurized water (A), stored pressure dry or wet chemical (ABC, BC or K), dry powder (D).
 - 2.18.5.8. Classes of fire, i.e. A, B, C, D, K.
 - 2.18.5.9. Location of emergency exits.
 - 2.18.5.10. The location of the emergency evacuation assembly point.
 - 2.18.5.11. Procedures for ensuring all assigned personnel are accounted for.
 - 2.18.5.12. Procedures for identifying and evacuating employees requiring special assistance (i.e. physically or mentally impaired persons).
 - 2.18.5.13. Procedures and locations for sheltering in place.
 - 2.18.5.14. Local conditions and/or special hazards.
- 2.18.6. A record of the training shall be maintained in the facility manager's binder.
- 2.18.7. Supervisors shall provide newly assigned personnel with a fire prevention briefing tailored to their work area within 30 days of starting work. Refresher training shall be accomplished as often as determined necessary by the supervisor, but not less than annually.
- 2.18.8. Special fire prevention training is required for personnel who work in areas of high hazard or which have installed fire extinguishing systems i.e. paint booths, commercial cooking facilities, aircraft hangars with water/foam systems, cryogenics storage facilities/areas, compressed gas storage facilities/areas, munitions storage or maintenance facilities/areas, fuels storage facilities/areas, refueling vehicle maintenance facilities, fuels labs, combustible metals processing/machining facilities, or any other location that presents an unusually high hazard and requires special fire safety instructions or guidance, special fire suppression systems, etc.
- 2.18.8.1. All personnel are required annual fire extinguisher training I.A.W. OSHA 1910 Subpart L. If the employer provides fire extinguishers/fire suppression systems for employee use, then the employer must ensure the employees are trained how to use the assigned extinguishers/systems.
- 2.18.9. Supervisors shall ensure all assigned personnel are briefed on established emergency action plans (EAPs), fire reaction plans, fire evacuation plans, the location and use of fire extinguishers, fire protection features, fire protection systems, and/or any special hazards in their facility/area.
- 2.18.10. Fire safety training for Air Force personnel shall be annotated on the AF Form 55, Employee Safety and Health Record (or equivalent). The fire prevention office requires that a copy of fire/safety related training reports/rosters be maintained in the facility managers facility manager's binder.
- 2.18.11. Document all fire prevention/fire safety training on the AF Form 1085 (or equivalent).

2.18.12. The facility manager shall file a copy of the completed AF Form 1085 (or equivalent) in the facility manager's binder.

2.19. Emergency Responses.

2.19.1. Emergency vehicles displaying visible and audible emergency signals (lights and sirens) shall be given right-of-way while responding to emergency incidents. All other vehicles shall pull over and allow the responding emergency vehicles to pass.

2.19.1.1. Per the U.S. D.O.T. emergency responders may only exceed the posted speed limit by 10 mph.

2.19.2. Initially, during emergency incidents, the senior fire officer (SFO); i.e. the ranking fire department member at the scene) will be the incident commander (IC).

2.19.3. No one shall obstruct, disrupt or otherwise interfere with the actions of emergency personnel.

2.19.4. If an incident is of a size or duration to warrant formal reporting, the senior fire officer on scene shall contact the MSG/CC directly for EOC activation.

2.19.5. The SFO may commandeer any available personnel, vehicles, or equipment deemed necessary to control incidents and/or to affect or assist rescue operations.

2.19.6. Motor vehicle operators shall not drive over fire hose unless directed to do so by fire protection personnel.

2.19.7. Non-emergency response personnel shall not enter an emergency incident scene unless granted permission to do so by the IC.

2.19.8. Keep back 300 feet from the rear of responding vehicles.

2.19.9. Do not attempt to pass an emergency vehicle that is either responding to an emergency or parked at the scene of an emergency unless instructed to do so by a SFS member or a member of the fire department.

3. Construction Projects

3.1. Construction Project Review.

3.1.1. The Fire department fire prevention section takes an active and aggressive interest in all aspects of construction/renovation projects; this includes the entire process from the initial AF Form 332, Civil Engineer Work Request, DD Form 1391, through every stage of the design process, through pre-final inspection and final acceptance. The fire prevention section shall be invited to and involved in the process from start to finish and then throughout the life of a facility.

3.1.2. The fire prevention section requires that a copy of the blueprints/construction plans/shop drawings for all construction projects be submitted for review at all stages of the design process.

3.1.3. The fire prevention section shall participate in all facility pre-final and final acceptance tests, and in order to participate it is crucial that the project manager notify us early in the process for scheduling purposes.

3.1.4. In order to minimize scheduling conflicts and to help ensure attendance, the fire prevention office requires a ten working day notification prior to meetings, inspections, acceptance tests, training and site surveys. Short notice and special requests can only be accommodated as resources allow.

3.1.5. The fire prevention section shall be provided with a copy of the UFC and/or equivalent NFPA acceptance test documentation for each new fire protection system each time a system is tested, repaired, renovated, redesigned, added to or subtracted from; on the day of acceptance, or when the work is complete.

3.1.6. Project managers shall inform and invite a representative from the fire prevention section to attend all pre-construction briefings/performance meetings to coordinate fire prevention requirements for all projects on property controlled by the 319th ABW.

3.1.6.1. This includes all projects whether 3rd party funded, owned, operated or controlled by, USAF, AAFES, FAA, DECA, AFRES, ANG, private contractors.

3.1.7. Project engineers shall notify the fire prevention section of pre-design, pre-construction, performance conferences, board reviews, and modification of projects far enough in advance to allow attendance to be scheduled.

3.1.8. Each contract shall contain a specific section on fire prevention, all fire protection requirements including life safety requirements shall be contained in this section.

3.1.9. When fire hazards or unsafe practices/conditions are noted, a Quality Assurance Evaluator (QAE) or Contract Monitor will be notified. QAE or monitor advises the responsible contractor to take the necessary corrective action/s.

3.1.9.1. In circumstances where a hazard exists of a severity that causes imminent danger to Air Force personnel or property, the fire inspector has the authority to stop the operation and then notify contract management personnel.

3.2. Fire Safety During Construction.

3.2.1. When fire hazards, unsafe practices, or unsafe conditions are found during construction, the Civil Engineer or designated DoD representative contract monitor/project manager shall take immediate corrective actions.

3.2.2. Remove all debris generated by construction, alteration, or repair daily or at completion of the shift. Follow procedures in National Fire Protection Association Standard 241, Construction, Alteration, and Demolition Operations.

3.2.2.1. Proper housekeeping practices shall be strictly enforced.

3.2.3. Prime contractors shall ensure that subcontractors comply with all applicable fire codes, instructions, laws, practices etc.; and that employees are briefed in fire reporting, fire evacuation, and prevention procedures.

3.2.4. Conflicting Guidance. If conflicting guidance for the same subject or issue exists, the order of precedence is ETL, UFC, NFPA, other applicable recognized national consensus standards. Contact the fire prevention office for further guidance.

3.2.5. Waiver or Variance Requests. A request for a waiver or variance to UFC 3-600-01 requirements may be submitted to the MAJCOM Civil Engineer as specified in Chapter 1 of the UFC.

3.2.5.1. Cost savings is not a valid reason for requesting a waiver or variance.

3.2.5.2. The Wing Commander is the AHJ for approving short term (not to exceed 18 months) variances to fire codes.

3.2.6. The most current edition of an applicable codes and or standards available at the time of a project's design shall apply.

3.2.7. When performing hot work operations, contractors shall obtain a permit from the fire prevention office.

3.2.7.1. Do not begin work until approved to do so by the fire prevention office.

3.2.7.2. Contractors shall provide their own fire extinguishers and shall not use extinguishers belonging to the facility/area, a minimum of 2 ea. 10 lb. ABC rated extinguishers are required, or, 2 ea. extinguishers appropriate for the expected class of fire, i.e. ABC rated ext. for class A, B or BC rated for class B etc.

3.2.8. If the facility is equipped with a fire protection system that could be activated by the work, it shall be the contractor's responsibility to coordinate with the CES utilities shop, the emergency dispatch center and the fire prevention office in order to isolate the system prior to beginning the work.

3.2.9. Flow Tests: Contractors shall be responsible for providing flow tests; they shall provide all the necessary equipment and shall ensure coordination with the fire dept. and the CES utilities shop.

3.2.10. Fire Alarm Systems: Contractors/Supervisors of construction projects shall be responsible for coordinating with the fire prevention office and the CES utilities shop prior to beginning work which could cause a fire protection system to activate, or if/when a system has to be disabled/removed/altered.

3.2.10.1. Fire protection systems must remain 100% operational (as designed) during the course of construction, renovation projects. A system outage lasting 2-hours or longer shall require the implementation of a fire watch. The organization responsible for the project shall provide the manpower to conduct the fire watch.

3.2.10.2. A fire watch essentially utilizes human senses to replace the function of a fire protection system. Fire watches shall be coordinated with the fire prevention office and are normally conducted hourly for the duration of the outage. The person/s performing the fire watch shall physically inspect the entire area affected by the system outage and shall then report the condition of the facility/area to the emergency dispatch center. The reporting number for non-emergencies is (701)747-6304. The operator will document the call. If a fire is discovered, immediately report it by dialing 9-1-1.

3.2.10.3. Phased renovation/construction projects shall be coordinated with the fire prevention office. The contractor/SABER/CES performing the work shall coordinate a plan with the fire prevention office detailing how any fire protection systems will be

affected during the project and how they'll be transitioned to the newly renovated area/s.

3.2.11. Smoking is prohibited at construction sites, except in designated areas. The site supervisor shall ensure that an adequate number of smoking areas are designated, that all personnel are briefed, an adequate number of butt cans are provided, that smoking materials are properly disposed of and that all applicable guidance is strictly adhered to. Ref: AFI 40-102; AFOSH STANDARD 91-501 Chapter 6, 6.2.9.1.; NFPA 1 Chapter 10, 10.10; T.O. 00-25-172, 3.9, a; 4.15, c (2).

4. Fire Prevention Requirements

4.1. General.

4.1.1. Every new and existing building or structure shall be constructed, arranged, equipped, maintained, and operated in accordance with this instruction so as to provide a reasonable level of life safety, property protection, and public welfare from the actual and potential hazards created by fire, explosion, and other hazardous conditions.

4.1.2. Every new and existing building, area, operation, etc. shall comply with this instruction to the maximum extent possible.

4.1.3. Buildings shall be accessible to fire department apparatus on at least 3 sides of every new facility by means of access roadways with an all weather driving surface of not less than 20 ft. of unobstructed width and a minimum of 14 ft. of vertical clearance.

4.1.4. All facility construction and/or renovation projects shall comply with applicable fire codes and national consensus standards, AFIs, DoDIs, ETLs, UFC.

4.2. Electrical.

4.2.1. Installation and alteration of electrical wiring shall be accomplished in accordance with National Fire Protection Association (NFPA) 70 (National Electric Code (NEC)), applicable Engineering & Technical Letters, the manufacturer's instructions, and UFC 3-600-01, *Fire Protection for Facilities, Engineering Design, and Construction*.

4.2.1.1. Historically electrical fires have rated #1 or #2 as the top cause of fires in the work place.

4.2.2. Only Underwriters Laboratory (UL) certified and labeled electrical appliances and cords are authorized for use.

4.2.3. Extension cords shall comply with the following:

4.2.3.1. Electrical extension cords are for temporary use only and shall not be substituted for permanent wiring.

4.2.3.2. Extension cords must be of one continuous length without splices, nicks or cuts.

4.2.3.3. No more than one extension cord may be used at a time, they shall not be piggybacked.

4.2.3.4. Extension cords are not to be nailed/stapled to walls, placed under carpets, run through doorways/windows/ partitions/floors or ceilings.

4.2.3.5. Multiple outlet adapters that have been plugged into a duplex outlet are prohibited unless they are equipped with a circuit breaker and the total amperage draw for all devices leading back to a single outlet does not exceed the maximum amperage rating of the outlet or the rating of the cord.

4.2.3.6. All extension cords are labeled with their maximum amperage output rating, personnel who use extension cords shall ensure the cords maximum rating is not exceeded.

4.2.3.7. All electrical appliances are required to be labeled with the maximum amperage or wattage rating. In order to prevent overloading an extension cord, read the UL label and determine the maximum output of each device you intend to plug into the cord then add up all the maximum amperage rating of all the devices.

4.2.3.7.1. Standard outlets are equipped with a 20 amp circuit breaker.

4.2.3.8. Extension cords electrical tools or appliances that are being used in wet locations or those prone to become wet shall be equipped with GFCIs.

4.2.3.9. Interior outlets installed within 6 ft. of a water source shall be equipped with GFCIs.

4.2.3.10. Extension cords used with portable tools and equipment will be designed with three prong plugs. Exceptions: Double insulated tools and low amp devices, such as wall clocks, pencil sharpeners, tape recorders, etchers, lamps.

4.2.3.11. Extension cords shall be secured so that there is no pull on the joints or screws of the plug or socket.

4.2.3.12. The third grounding prong is a safety feature and needs to be checked frequently by the user to ensure the prong's security. The grounding plug shall not be cut off nor will an adapter be used to allow a three-prong plug to fit a two-prong receptacle, since this negates the third wire grounding protection.

4.2.3.13. Plugs/sockets whether molded or clamped, shall be firmly attached to the cord to prevent pulling against the wire connection.

4.2.3.14. Users of extension cords shall frequently inspect them for signs of wear including, fraying, cracking, deteriorated insulation, missing grounding prongs, cuts, kinks, or any other form of damage that could cause short circuiting, to ensure they are of the proper size/rating for the equipment they are serving, and that they are designed for the intended location.

4.2.3.15. Defective, damaged cords shall immediately be taken out of service and either repaired or replaced.

4.2.3.16. Only authorized, qualified personnel shall install, service, or repair electrical equipment or wiring.

4.2.3.17. Cords shall not be walked on nor shall equipment be rolled or driven over them.

4.2.3.18. If cords must be placed in travel lanes they shall be protected by molded housing or bridges.

- 4.2.3.19. Cords shall not be kinked, stretched or bent excessively as this sort of treatment will damage internal wire strands and could lead to short circuiting.
- 4.2.3.20. Cords shall be kept clean, dry and free from contaminants.
- 4.2.3.21. Whenever possible permanent electrical power cords for equipment shall be enclosed in rigid raceways, preferably overhead or otherwise out of travel lanes, common areas etc.
- 4.2.3.22. When disconnecting cords the plug shall be pulled rather than the cord to avoid damaging connections.
- 4.2.3.23. A grommet or some means of clamping approved by the NFPA 70 (National Electric Code) shall be installed where cords pass through equipment housings, to prevent abrasion of the cord insulation. The means used shall hold the cord firmly so there is no pull or strain put on the connecting point.
- 4.2.3.24. When not in use for extended periods of time and at the end of the duty day extension cords shall be disconnected.
- 4.2.3.25. Neither extension cords nor permanent wiring shall be used for hanging decorations, clothes or for any purpose other than that intended by the manufacturer.
- 4.2.4. The use of space heaters on GFAFB is prohibited.
- 4.2.5. All required service, repair, or maintenance for electrical equipment/devices shall be completed in accordance with NFPA 70, National Electric Code (NEC).
- 4.2.6. Circuit breaker boxes, electrical panels, transformers, etc. shall comply with the following:
 - 4.2.6.1. Access to electrical panels, circuit breakers, and fuse boxes shall not be obstructed at any time.
 - 4.2.6.2. A minimum of 36-inches of clearance shall be maintained around electrical circuit breaker boxes, transformers, equipment, at all times.
 - 4.2.6.3. All electrical service panels shall be legibly marked to identify each circuit and the outlet/s and/or equipment/appliances each circuit breaker controls.
 - 4.2.6.4. Each circuit breaker shall clearly indicate whether it is in the open or closed position (on or off).
 - 4.2.6.5. Electrical service panels shall be provided with a properly fitted door. The door shall be kept in the closed position whenever the panel/box is not being accessed.
 - 4.2.6.6. Electrical circuits shall not be overloaded beyond the rated capacity of the fuse or circuit breaker.
 - 4.2.6.7. Only the proper size and type of fuse or breaker shall be used and the maximum allowable size and type shall be stamped or stenciled on all fuse or breaker boxes.
 - 4.2.6.8. Circuit breakers shall not be taped or otherwise locked in the open or "on" position.

- 4.2.7. All electrical equipment, devices, or appliances shall be monitored when in use, and turned off or unplugged when not in use.
- 4.2.8. Electrical motors shall comply with the following:
- 4.2.8.1. Frames of electrical motors shall be grounded.
 - 4.2.8.2. All motor access covers shall be securely fastened.
 - 4.2.8.3. Motor data plates shall be legible and shall not be painted over.
 - 4.2.8.4. Exposed non-current carrying metal parts of fixed equipment that may become energized under abnormal conditions shall be grounded.
- 4.2.9. Electrical outlets, junction boxes, switches etc., shall have cover plates/doors securely installed.
- 4.2.9.1. Missing, cracked or otherwise damaged electrical outlets, cover plates etc. shall immediately replaced or repaired.
 - 4.2.9.2. Cover plates shall be free from cracks or other defects that could cause them to be ineffective.
 - 4.2.9.3. All unused openings (knockouts) in outlets, junction boxes etc., shall be securely covered.
- 4.2.10. Ground Fault Circuit Interrupt type circuit breakers (GFCI) shall be required in the following locations:
- 4.2.10.1. Electrical outlets in areas that either are or could become wet; i.e. outside applications, inside restrooms, kitchens etc.
 - 4.2.10.2. In all new or newly renovated food service facilities.
 - 4.2.10.3. All outlets in areas subject to wash down.
 - 4.2.10.4. All outlets installed within 6-ft. of sinks, basins, water fountains, hose connections, fixed eye wash stations, or other water sources.
 - 4.2.10.5. Recommended on power floor scrubbers, carpet cleaners, steam machines or other portable electrical equipment that either dispense water/steam or which will be used in wet areas that aren't equipped with GFCI.
 - 4.2.10.6. When GFCIs are required for large areas they will be installed in the circuit panel (Breaker Box).
- 4.2.11. Under voltage Protection: Under voltage situations occur when a machine automatically resumes motion after a low voltage situation/power interruption and the operator is exposed to hazardous moving parts.
- 4.2.11.1. Machines, which are adequately safeguarded to protect the worker during under voltage situations, shall have an ongoing under voltage protective device installed.
- 4.2.12. Rigid conduits shall be securely attached to the box; flexible conduits shall be firmly attached by an approved clamping device where the conduit enters the box; this

will help prevent abrasion to the conduit and will not allow a strain to be put on the connecting points.

- 4.2.12.1. All newly installed wiring in facilities or structures shall be installed inside rated conduit.
- 4.2.12.2. No wiring shall be installed through unauthorized openings, holes in walls, windows, doors or similar openings.
- 4.2.13. Supervisors shall ensure work areas are inspected for possible electrical hazards.
 - 4.2.13.1. Wires shall be covered wherever they are joined; i.e. outlets, junction boxes, switches, circuit breaker boxes.
 - 4.2.13.2. Parts of electrical equipment which in ordinary operations produce sparks, arcing etc...shall not be operated or used in class I division I, II, III locations or in close proximity to flammable or combustible materials.
- 4.3. Smoking.
 - 4.3.1. Smokers shall smoke only in authorized areas.
 - 4.3.2. Smoking is authorized only in approved designated locations in munitions storage.
 - 4.3.3. Smoking is prohibited in the following locations:
 - 4.3.3.1. The entire airfield, and within 50 ft. of any portion of the airfield accessible to aircraft; this includes the runway, taxiways, parking ramps, aircraft hangars, wash rack, maintenance areas, etc.
 - 4.3.3.2. Within 50 ft. of liquid oxygen servicing areas/operations.
 - 4.3.3.3. Within 50 ft. of refueling operations. This includes aircraft, motor vehicle, military, government, AAFES, or private fueling operations.
 - 4.3.3.4. Within 50 ft. of open fuel cell repair operations.
 - 4.3.3.5. Most facilities except as indicated in AFI 40-102.
 - 4.3.3.6. Within 50 ft. of hazardous areas. Hazardous areas include but are not limited to the following: munitions storage, munitions maintenance, fuel storage facilities/pipelines, compressed gas storage facilities/areas, hazardous materials storage or processing facilities or areas, etc.
 - 4.3.4. AFI 40-102 prohibits smoking in most facilities, consult AFI 40-102 and contact the HAWC director in for guidance on establishing designated smoking areas.
 - 4.3.4.1. Smoking areas shall be located far enough from the common path of travel, and facility entrances/exits that non-smokers will not be exposed to secondhand smoke. Smoking areas shall be located at least 20 ft. from entrances/exits, HVAC intakes, and common paths of travel so that smoke will not enter a facility or infringe upon the rights of non-smokers.
 - 4.3.4.2. Facility managers are responsible for designating smoking areas.
 - 4.3.5. Butt cans are placed near smoking areas to prevent improper disposal of smoking materials. Butt cans are there strictly for the disposal of smoking materials (butts and

matches). Trash cans are for trash; smoking materials shall not be disposed of in trash containers.

4.3.5.1. Butt cans shall be emptied into trash containers at least daily prior to close of business or more often if they become full or become trash repositories.

4.3.5.2. Prior to emptying butt cans into trash containers ensure smoking materials are completely extinguished by wetting the contents in the butt container and thoroughly stirring before discarding into a dumpster.

4.3.6. No smoking signs are not required for non-hazardous areas, however AFVA 30-1 requires "*No Smoking*" signs for hazardous areas.

4.3.7. Removal or destruction of any required "*No Smoking*" sign is prohibited.

4.3.8. Facility managers/supervisors are responsible for ensuring an adequate number of the AF approved type of butt cans are in place in designated smoking areas.

4.3.8.1. The disposal of anything other than smoking materials, in these containers is strictly prohibited.

4.3.8.2. Likewise the disposal of smoking materials on the ground, in bushes, under decks, or anywhere other than in an approved container is strictly prohibited.

4.4. **Cooking.**

4.4.1. Hood and Duct Systems shall comply with the following:

4.4.1.1. Cleaning of grease laden vapor exhaust/extraction systems (hood & duct systems) shall be performed as often as necessary to prevent accumulation of grease. The systems in facilities on GFAFB are presently being cleaned at least semi-annually by service contract; some are being done quarterly. Spare filter sets are needed in kitchens where the high volume and/or type of cooking cause a rapid accumulation of grease.

4.4.1.2. Kitchen range hoods and exhaust ducts are cleaned and installed in accordance with AFOSH Standard 91-501, *Fire Protection and Prevention* and National Fire Protection Association Standard 96, *Ventilation Control and Fire Protection of Commercial Cooking Operations*.

4.4.1.3. After the exhaust system is cleaned to bare metal, it shall not be coated with powder or other substance.

4.4.1.4. The entire exhaust system shall be inspected by a properly trained, qualified, and certified company or person/s acceptable to the AHJ.

4.4.1.5. All portions of a grease laden vapor extraction system; (i.e. hood & duct system) shall be cleaned to bare metal at frequent intervals to prevent them from becoming contaminated with grease or oily sludge.

4.4.1.6. The minimum cleaning frequency will be daily for stoves and hoods (conducted by the occupants/users), weekly for filters and at least semi-annually for ducts and fans or more often if necessary to ensure all equipment is fire safe and sanitary.

- 4.4.1.7. Cooking is not permitted under a range hood without grease filters installed, and not without an operational fire suppression system.
 - 4.4.1.8. Exhaust systems shall be operating properly while cooking.
 - 4.4.1.9. If an exhaust fan motor is shut down or removed for repair or replacement, cooking in the area protected by that fan shall be postponed until the fan is back in operation.
 - 4.4.1.10. The facility manager is responsible for ensuring the hood & duct systems are inspected and cleaned daily by the occupants, weekly, monthly, quarterly, semi-annual, annually (or as often as necessary to ensure cleanliness and proper operation). Cleanings shall be inspected by the fire department. The inspection shall be properly documented, one copy shall be provided to the fire department and the other shall be filed in the facility manager's binder.
 - 4.4.1.11. Facility occupants are responsible for cleaning all visible portions of hood & duct systems, and all exposed surfaces, daily, prior to the close of business.
- 4.4.2. At a minimum, the inspection shall include verification of the following:
- 4.4.2.1. The extinguishing system is charged and the tamper pin/s and seal/s are in place.
 - 4.4.2.2. The manual actuators are unobstructed.
 - 4.4.2.3. The tamper indicators and seals are intact.
 - 4.4.2.4. The annual thermostat test was accomplished and the maintenance tag or certificate is current.
 - 4.4.2.5. No obvious physical damage or condition exists that might prevent operation.
 - 4.4.2.6. The pressure gauge/s, if provided, are in the operable range; i.e. in the green.
 - 4.4.2.7. The nozzle blow off caps are in place and operate as designed.
- 4.4.3. The facility manager shall ensure that the wet chemical fire suppression systems have received the required semi-annual maintenance and inspection by the contractor.
- 4.4.3.1. The certification label shall be affixed to each system in a manner that is easily assessable to any inspection agency.
- 4.4.4. By federal law, deep fat fryers shall be equipped with a primary thermostat set at approx. 400 degrees and a separate high-limit control in addition to the adjustable operating control (thermostat) to shut off fuel or energy when the fat temperature reaches approx. 475°F (246°C) at 1-in. (25.4-mm) below the surface. The using organization shall ensure the adjustable thermostat is calibrated annually, and after any repair; IAW AFOSHSTD 91-300, *Food Service Operations*.
- 4.4.4.1. The facility manager shall file the testing documentation in the continuity book and provide testing information to the fire prevention section.
 - 4.4.4.2. An easily accessible tag showing the last test date shall be attached to the fryer.

4.4.4.3. If the unit fails to function properly it shall immediately be removed from service and repaired or replaced.

4.4.4.4. Certification of the deep fat fryer shall be made available to any inspection agency.

4.4.4.5. The facility manager shall ensure a tight fitting metal or metal-clad cover/lid is either attached to or readily available for each deep fat fryer for immediate use in suppressing a grease fire.

4.4.5. All commercial cooking equipment shall be wired to electrical and gas shunt trip devices that are tied into the fire suppression system. When the fire suppression system activates all power/fuel to the cooking equipment shall be shutoff.

4.4.6. Cooking shall be prohibited in all facilities except those that have been properly designed and are designated & approved for cooking.

4.4.6.1. Dormitory residents shall be allowed to cook within the community/shared kitchen areas provided. Microwaves are the only cooking appliance authorized for use within a dorm room.

4.4.7. Foreman grills hot plates, toaster ovens, rice cookers, crock pots, coffee makers, soup warmers, hot air popcorn makers, convection ovens, electric skillets, electric deep fat fryers and other smoke and/or grease laden vapor producing types of equipment are expressly forbidden for use in dormitories or facilities not expressly designed for commercial cooking operations.

4.4.8. UL has determined that deep fat "Turkey Fryers" are too dangerous for their stamp of approval. These devices can be dangerous, but are authorized for use on GFAFB providing all the following safety precautions are strictly adhered to:

4.4.8.1. Comply with the manufacturer's instructions.

4.4.8.2. The use of a thermostat to gauge and monitor the temperature of the oil is mandatory; do not allow the temperature to surpass 475 degrees F.

4.4.8.3. Turkey fryers should always be used outdoors a safe distance (10 ft.) from buildings/overhangs, combustibles.

4.4.8.4. Do not place turkey fryers on combustible surfaces.

4.4.8.5. Never use turkey fryers on wooden decks, under wooden decks, underneath roof overhangs or inside facilities.

4.4.8.6. Users shall ensure fryers are used on a flat surface to reduce accidental tipping. Fryers shall not be left unattended; they shall be monitored constantly when in use. NEVER leave fryers unattended! It takes just minutes for oil to reach flashover and then fire-point temperature (the point at which the oil spontaneously ignites and then becomes self-sustaining).

4.4.8.7. Never let children or pets near the fryer when in use. Even after use, never allow children or pets near the turkey fryer. The oil inside the cooking pot can remain dangerously hot, hours after use.

4.4.8.8. To avoid oil spillover, do not overfill the fryer.

- 4.4.8.9. Use well-insulated potholders or oven mitts when touching pot or lid handles. If possible, wear safety goggles to protect your eyes from oil splatter
- 4.4.8.10. Ensure the turkey is completely thawed and be careful with marinades. Oil and water don't mix; water agitates hot oil and can easily cause it to boil up and spill over causing a fire or even an explosion hazard.
- 4.4.8.11. The National Turkey Federation recommends refrigerator thawing and to allow approximately 24 hours for every five pounds of bird thawed in the refrigerator.
- 4.4.8.12. Maintain a serviceable all-purpose ABC rated or Class K fire extinguisher nearby. Never use water to extinguish a grease fire. Remember to use your best judgment when attempting to fight a fire. If the fire is manageable, use an all-purpose fire extinguisher. If the fire increases, immediately call 9-1-1 for help.
- 4.4.8.13. Even after use, never allow children or pets near the turkey fryer. The oil inside the cooking pots remains dangerously hot, hours after use.
- 4.4.9. Cooking shall be supervised at all times. Unattended cooking is strictly prohibited. Unattended cooking is the most frequent cause of fires in Air Force Military Family Housing and one of the top causes of fires in commercial food preparation establishments.
- 4.4.10. When cooking with hot oil only use a pot or pan that has a tight fitting lid designed for the particular pot or pan that is being used.
- 4.4.11. Users of cooking equipment shall ensure oven mitts/pads for handling hot appliances, pots, and lids are available.
- 4.4.12. In the event that a pot or pan catches fire notify the Fire Department by calling 9-1-1 at the first available opportunity no matter how small the fire (even if extinguished).
- 4.4.13. Outdoor cooking devices including charcoal grills, gas operated grills, and smokers shall be placed at least 10-ft. from a structure when in use.
- 4.4.13.1. These devices shall not be used inside any structure, under carports, eaves, overhangs, or pavilions, unless the structure is designed for that purpose.
- 4.4.14. All cooking devices shall be constantly attended when in use.
- 4.4.15. Used charcoal shall be thoroughly soaked with water prior to disposal and adequate time shall be allowed for the cooking device to cool before storing it away.
- 4.4.16. Cooking appliances shall not be moved from their designated locations without the prior approval of the fire prevention office. Moving commercial cooking equipment may require alteration to the fire extinguishing system and shall be accomplished prior to moving any equipment protected by a system.
- 4.4.17. Cooking equipment that produces grease laden vapors, such as, but not limited to, deep fat fryers, ranges, griddles, broilers, woks, tilting skillets, and braising pans shall be protected by automatic fire-extinguishing equipment.
- 4.4.18. Residential cooking equipment used in a non-residential setting shall be protected by the following:

4.4.18.1. A UL 300 listed wet chemical type fire suppression system or installed facility fire suppression system.

4.4.19. Cooking equipment used in processes producing smoke or grease-laden vapors shall be equipped with an exhaust system that complies with all the equipment and performance requirements of NFPA 96.

4.4.19.1. All such equipment and performance shall be maintained per NFPA 96 during all periods of operation of the cooking equipment.

4.4.19.2. All equipment shall be maintained in good working condition.

4.5. Environmental Control (Housekeeping).

4.5.1. Poor housekeeping shall not be permitted.

4.5.1.1. Poor housekeeping contributes to the fire load of a facility and can either directly cause a fire or contribute to an existing condition thereby causing or intensifying a fire.

4.5.1.2. Rubbish, trash, waste, and industrial residue are all fuel for fire and should not be allowed to accumulate in any location, except designated trash or hazardous waste accumulation points.

4.5.1.3. Combustible waste or refuse shall be properly stored and disposed of to prevent unsafe conditions. In addition to adding to the fire load, and providing a ready location for a fire to start, failing to empty trash containers on a daily basis is a health hazard, providing a ready food source for insects and rodents.

4.5.2. Facility manager and supervisors shall ensure that all buildings, areas, and grounds under their jurisdiction are clean, free from accumulations of trash, junk, broken items, and maintained in a fire-safe condition.

4.5.3. Soiled rags shall be stored in metal containers with tight fitting lids and shall be marked "*dirty rags*".

4.5.3.1. Oil saturated rags shall be stored in a separate, marked, metal container with self-closing lid.

4.5.4. All steel wool shall be stored in metal containers with self-closing lids and marked appropriately.

4.5.5. All waste containers shall be emptied at the end of the duty day or when required by custodial contract.

4.5.5.1. Any accumulation of trash, waste, broken furniture or equipment items are prohibited; these types of materials shall be removed and properly disposed of immediately.

4.5.5.2. Rubbish containers kept outside of rooms or vaults designed for the purpose of storing trash shall not exceed 40 gallons in capacity. Containers 40 gallons or larger shall be non-combustible and shall be provided with lids. Non-metallic containers shall comply with NFPA 1, Chapter 19, 19.2.1.2.

- 4.5.5.3. Combustible rubbish stored in containers outside noncombustible vaults/rooms shall be removed daily from facilities at least daily; more frequently if required.
- 4.5.6. Dispose of combustible refuse in noncombustible containers.
- 4.5.7. Trash receptacles shall be emptied into dumpsters or designated exterior trash collection areas daily, or more often if necessary to prevent overflow accumulation.
- 4.5.8. Facility managers shall ensure dumpsters are positioned at least 10 ft. from all buildings.
- 4.5.9. Trash containers, recycling bins, boxes/bins of combustible materials shall not be placed in egress routes/common paths of travel/stairwells (i.e. paper, cardboard, records, film, plastic, trash, shredded or pulverized paper, etc.).
- 4.6. Storage.**
- 4.6.1. Incompatible materials shall not be stored together; i.e. flammable liquids with combustible solids, oily rags with clean rags, flammable liquids with tires etc.
- 4.6.2. Storage shall not be allowed to obstruct or block any fire door, fire alarm, device, fire extinguisher, or interfere with any component of a means of egress.
- 4.6.3. Combustibles shall not be stored under stairs, in stairwells, in any portion of a protected means of egress, above false ceilings, or under false floors.
- 4.6.4. Mechanical, HVAC, electrical rooms shall not be used for storage, as office space or for any purpose other than intended by the original design.
- 4.6.4.1. Only items/materials necessary for the day to day operation of the equipment in a particular mechanical room are authorized to be stored therein; i.e. HVAC system air filters, water conditioning chemicals, or similar items.
- 4.6.5. A minimum of 36-inches of clearance shall exist between combustible or stocked storage and heat sources; i.e. furnaces, etc.
- 4.6.6. A minimum clearance of 18-inches shall exist between rack storage and fire suppression system sprinkler heads.
- 4.6.7. For storage and stockpiles over 15-ft. in height, the clearance from the ceiling and fire suppression system sprinkler heads shall be at least 36-inches.
- 4.6.8. A minimum clearance of 44-inches shall exist between rows of stored materials and 24-inches between stock and substandard (combustible) walls.
- 4.6.9. Pressurized gas cylinders shall be stored in accordance with the following:
- 4.6.9.1. Identify compressed gas cylinders by color code and noun in accordance with T.O. 42B5-1-2 and Military Standard 101.
- 4.6.9.2. Storage of compressed gases shall be in compliance with DoDI 41319.19-R-1 and AFOSH STANDARD 91-501, Chapter 22, NFPA 55, and applicable national consensus standards.

4.6.9.3. When stored outside, do not locate propane tanks (or tanks containing other flammable, heavier than air gases) near exits or building openings that lead below grade.

4.6.9.4. Other Liquid Propane applications shall conform to National Fire Protection Association Standard 58, *Storage and Handling of Liquefied Petroleum Gases*.

4.6.9.5. When not in use, a cylinder's protective cap shall be installed and the cylinder shall be secured with either a cable, chain or other device capable of preventing the cylinder from toppling over and becoming damaged.

4.6.9.6. Incompatible cylinders shall not be stored together; i.e. flammable gases with poison gases, corrosives with flammables, oxidizers etc.

4.6.9.7. When two or more compressed gases are stored in a gas cabinet, the gases shall be compatible IAW NFPA 30.

4.6.9.8. Incompatible gases shall be separated by either 20-ft. of space or a 5-ft. high barrier wall having a minimum fire resistance rating of 30 minutes.

4.6.9.9. Flammable/combustible gasses such as propane, butane, etc. shall not be stored inside the same cabinet with flammable liquids, corrosives, solids, or with ordinary combustibles. Flammable/combustible gasses shall be stored in separate cabinets.

4.6.9.10. The floors of storage areas used to store compressed gasses shall be of noncombustible or limited-combustible construction.

4.6.9.11. Shelves used for the storage of cylinders shall be of noncombustible construction and designed to support the weight of the cylinders stored.

4.6.9.12. Outdoor storage areas shall have a minimum of twenty five percent of the perimeter open to the atmosphere. This open space shall be permitted to incorporate chain link fence, lattice construction, open block, or similar materials for the full height and width of the opening.

4.6.9.13. Outdoor storage areas shall be kept clear of dry vegetation and combustible materials for a minimum distance of 20-ft. (4.6-m).

4.6.9.14. Cylinders stored outside shall not be placed on the ground (earth) or on surfaces where water can accumulate.

4.6.9.15. Storage areas shall be provided with physical protection from vehicle damage

4.6.9.16. Storage areas shall be permitted to be covered with canopies of noncombustible construction.

4.7. Storage of Combustible & Flammable Liquids, Aerosols & Gases.

4.7.1. This instruction does not apply to quantities of flammable liquids of less than 4-quarts, to fixed tank with a capacity of less than 660 gallons, or to tanks on motor vehicles/equipment.

4.7.2. For guidance on the use and storage of aerosol products see NFPA 30B and AFOSH STANDARD 91-501 Chapter 22.

4.7.3. The incidental storage of combustible or flammable liquids inside facilities not designed and equipped expressly for the purpose of storing combustible or flammable liquids shall comply with the following:

4.7.3.1. Combustible/flammable liquids shall be stored in an authorized and approved storage cabinet designed for this purpose. See NFPA 30, AFOSH STANDARD 91-501 and the prevention office for guidance.

4.7.3.2. Cabinets are required to have a current inventory list.

4.7.3.3. Personnel shall not mix incompatible items in the same cabinet, i.e. do not store combustible solids, flammable gases, munitions, poisons, oxidizers with flammable liquids, for clarification contact the fire prevention office.

4.7.3.4. The number of cabinets is limited to 3 in any single process area without the approval of the fire prevention office.

4.7.3.5. No more than 6-cabinets/lockers shall be placed in any facility, with no more than 3 lockers/cabinets in a group. A minimum distance of at least 100-ft. shall separate groups of 3-cabinets/lockers.

4.7.3.6. The group size of 3 cabinets/lockers may be increased to 6-in a facility protected throughout by an approved, functioning, automatic fire suppression system.

4.7.3.7. The number of cabinets/lockers authorized in a facility is unlimited if the facility is protected throughout by an approved, functioning automatic fire suppression system and if the minimum distance rating of 100-ft. can be maintained between the groups of cabinets/lockers and approval is granted by the fire department.

4.7.3.8. Any single cabinet/locker shall contain no more than 120 U.S. gallons (3194-L) of flammable or combustible liquids and no more than 60 U.S. gallons (227-L) shall be of Class 1A. Cabinet/locker capacity is limited to 120 U.S. gallons of total product.

4.7.3.9. Class 1A container size for incidental interior storage is limited to individual containers of not greater than 2 ½ U.S. gallons.

4.7.3.10. Container size may be increased to 5 U.S. gallons if a "Safety Can" is used.

4.7.3.11. Incidental interior storage of safety cans is limited to 10 U.S. gallons (total); individual containers shall be limited to 2.5 gallons for class 1A products, i.e. a product having a flashpoint below 43 degrees F. (MoGas).

4.7.3.12. Flammable/combustible storage cabinets/lockers shall be labeled as to their contents, and shall be clearly labeled "Flammable, No Smoking w/in 50 ft."

4.7.4. Definitions:

4.7.4.1. Combustible liquid: Flashpoint equal to or greater than 100 degrees F.

4.7.4.2. Flammable liquid: Flashpoint below 100 degrees F.

4.7.4.3. Class 1A flammable liquid: Flashpoint at or 73 degrees F.

4.7.4.4. Flashpoint: the point at which a combustible/flammable liquids vapors will ignite and flash across the surface of a combustible/flammable liquid when subjected to an outside ignition source.

4.7.4.5. Auto Ignition temperature: the point at which a combustible/flammable liquid will ignite and sustain combustion without an external ignition source.

4.7.4.6. Safety Can: Container with a self-closing lid designated and certified as such by UL listing.

4.7.5. Flammable liquids shall not be used as cleaning agents unless specifically designed for that purpose.

4.7.6. Use approved UL approved or D.O.T. approved safety containers designed for transporting and dispensing flammable liquids.

4.7.6.1. Portable tanks shall be color coded to indicate the type of product contained as follows:

Red = Gasoline

Yellow = Diesel Fuel

Blue = Kerosene

4.7.7. Consult the Grand Forks AFB Spill Plan for proper disposal of flammable or combustible liquids.

4.8. **Storage of Small Engine Equipment.**

4.8.1. For specific guidance on the storage of small engines, consult AFOSHSTD 91-501 or the fire prevention office.

4.9. **Storage of Propellants, Ammunition Primers & Model Rocket Motors.**

4.9.1. Prior approval from the housing manager, wing safety, security forces and the fire prevention office is required for the following:

4.9.1.1. When approved, individuals storing materials will provide a sketch of the quarters indicating the exact location and amount of materials to the base fire prevention section IAW AFMAN 91-201, *Explosives Safety Standards*.

4.9.1.2. Up to 1,000 small arms ammunition primers may be stored in military family housing quarters in the original shipping containers approved by the DOT.

4.9.1.3. Up to 10 pounds of smokeless powder, 1 lb. of black powder or pyrodex pellets, and no more than 5 lbs. of model rocket motors may be stored in military family housing quarters in wooden boxes or cabinets that consist of walls at least 1-inch thick.

4.9.1.4. Storage of small arms primers and smokeless powder shall be protected from heat sources and secured from unauthorized personnel.

4.9.1.4.1. Storage of these items is not authorized in dormitories.

4.9.2. The use of model rockets is prohibited on Grand Forks AFB.

4.10. Motor Vehicle Storage, Parking & Fire Lanes.

4.10.1. Vehicles shall comply with the following parking restrictions/guidance:

4.10.1.1. Vehicles shall not be parked in any manner that would limit or obstruct access by emergency response vehicles to all sides of a building.

4.10.1.2. Parking shall be prohibited in fire lanes, within a 15 ft. diameter circle from the centerline of a fire hydrant, fire department sprinkler connection or post indicator valve.

4.10.1.3. Vehicles shall not park within 10 ft. of a noncombustible building.

4.10.1.4. Vehicles shall not park within 20 ft. of a combustible building.

4.10.1.5. Vehicles shall not park within 20 ft. of any exit discharge.

4.10.1.6. Vehicles shall not drive over fire hoses (unless directed to do so by fire department personnel).

4.10.1.7. Parking lots shall have drive-through lanes at least 25 ft. wide to allow access for firefighting apparatus.

4.10.1.8. No vehicle shall park within or obstruct access to a fire lane.

4.10.1.9. Vehicles/equipment having internal combustion engines shall not be parked or stored inside buildings unless the building is designed for that purpose.

4.10.1.10. Vehicles powered by internal combustion engines shall not be operated inside facilities without adequate ventilation.

4.10.1.11. Adequate ventilation consists of, "natural" ventilation via doors & windows, "powered" by means of exhaust extraction systems, fans etc.

4.10.1.12. If vehicle operators or facility occupants begin to feel light headed, develop severe headaches, etc. Immediately stop the operation and evacuate the facility. Appropriate clearance may require Bio Environmental Engineering to perform atmospheric sampling in order to determine the levels of Carbon Monoxide, Oxygen, and other atmospheric gases/particulates.

4.11. Fire Extinguishers.

4.11.1. The 319 CES/CEF is the authority having jurisdiction for all matters concerning fire extinguishers on GFAPB; for guidance concerning fire extinguishers, contact your local fire prevention office. The GFAPB/FD has a maintenance contract that provides maintenance for all facility fire extinguishers, certain emergency vehicles specified high hazard/high risk areas and 150 lb. wheeled halon extinguishers. For any issues related to extinguishers including location, maintenance, inspection tags, new extinguisher purchase or serviceability, contact the fire prevention office.

4.11.2. An internal inspection shall be performed on extinguishers at the following intervals:

4.11.2.1. Annually for stored pressure water extinguishers, dry powder extinguishers and dry chemical with stainless steel shells.

- 4.11.2.2. At 5-year intervals for AFFF, protein foam, Co2 and stored pressure dry powder extinguishers with stainless steel shells.
- 4.11.2.3. At 6-year intervals for stored pressure dry chemical, dry powder extinguishers with mild steel shells and halogenated agent extinguishers.
- 4.11.3. Hydrostatic tests on extinguishers shall be performed at the following intervals:
 - 4.11.3.1. At 5-year intervals for stored pressure water extinguishers, AFFF, FFFP, Dry chemical with stainless steel shells, Co2 and wet chemical.
 - 4.11.3.2. At 12-year intervals for dry chemical with mild steel shells, Halogenated agents and dry powder extinguishers with mild steel shells.
 - 4.11.3.3. Portable fire extinguishers manufactured in 1984 or earlier shall be removed from service and replaced.
- 4.11.4. Per NFPA 10 (2010 Ed.) Chapter 7, 7.2 Facility Managers/Supervisors/Owners shall ensure all fire extinguishers under their control are inspected monthly. The monthly inspection consists of a "Quick Check" of the following:
 - 4.11.4.1. The extinguisher is located in its designated place.
 - 4.11.4.2. There are no obstructions to access or visibility (18" of clearance on all sides).
 - 4.11.4.3. The pressure gauge reading or indicator is in the operable range or position. The gauge should read in the center of the green at 70 degrees F.
 - 4.11.4.4. Fullness shall be determined by weighing or "Hefting" (pick the extinguisher up and feel its weight).
 - 4.11.4.5. Verify the operating instructions, nameplate and pressure gauge face are legible.
 - 4.11.4.6. The safety pin and tamper seals are in place.
 - 4.11.4.7. Examine the extinguisher for physical damage, corrosion, a clogged nozzle, leakage, or any other condition that would prevent it from being successfully operated.
 - 4.11.4.8. The monthly inspection shall be documented by initialing off the inspection tag or making an annotation on the computer generated tracking sheet.
- 4.11.5. Facility managers will maintain the last 12 months of inspection records.
 - 4.11.5.1. Personnel shall not obstruct, remove, cover or render illegible the inspection/ certification labels on fire extinguishers.
 - 4.11.5.2. All portable fire extinguishers are required an annual comprehensive inspection. The inspection shall be performed by a certified extinguisher contractor (or an experienced person who is acceptable to the AHJ).
- 4.11.6. For contract QAE purposes, as well as in order to ensure compliance with AFOSH STANDARD 91-501 and NFPA 10, the fire prevention section performs an annual inspection on all fire extinguishers assigned to Grand Forks AFB facilities. Extinguishers not covered by this instruction are those mounted in or on vehicles (except

as specified by the contract), extinguishers in storage for deployment purposes, etc. However, the inspection/testing/maintenance requirements specified in NFPA 10 apply to all extinguishers.

- 4.11.6.1. In order to receive required service, inspection, testing and maintenance on a hand held portable fire extinguisher not covered under the contract, (vehicle mounted extinguishers, extinguishers intended for deployment, etc) the user must contact a local extinguisher maintenance company and pay for service with unit funds. The inspection/ testing & maintenance requirements of NFPA 10 Chapter 7, 7.2 and AFOSH STD 91-501 Chapter 6, 6.2.4 apply to all fire extinguishers.
- 4.11.7. Fire extinguishers shall only be relocated by fire department personnel or an authorized contractor.
- 4.11.8. When an extinguisher is removed for service it shall be replaced with a suitable loaner until the original is either put back in service or a new extinguisher is purchased and installed.
- 4.11.9. In order to dispose of an extinguisher that's installed in a facility, contact the fire prevention office.
- 4.11.10. Defects or damage to any fire extinguisher covered by the contract shall be reported to the fire prevention office immediately.
- 4.11.11. Flightline extinguishers are not to be removed from the flightline or placed in any area other than those outlined in TO 00-25-172, or as specified by fire prevention.
 - 4.11.11.1. The fire extinguisher contractor inspects the wheeled extinguishers monthly. When responsible organizations fail to ensure extinguishers are in their assigned locations, it causes the contractor undue difficulty trying to inspect, account for and perform maintenance.
 - 4.11.11.2. The wheeled extinguishers shall not be left lying around on the ramp, hidden, stored, or otherwise made inaccessible to the contractor. Extinguishers must be maintained free of snow and ice at all times.
 - 4.11.11.3. If extinguishers have been discharged, register low pressure, have seals broken, are missing the annual inspection tag, have low tire pressure, become damaged or require any other maintenance or inspection contact your local fire prevention office.
- 4.11.12. For all questions concerning fire extinguishers contact the fire prevention office. The fire prevention contact numbers are 747-4442/4174.
- 4.11.13. Do not breathe the smoke or the products of combustion. As soon as the fire is under control, leave the facility/area. This is especially critical when fighting fires with halon. Halon 1211 contains chlorine and breaks down when exposed to high heat (temps of >700 degrees F). The ensuing hydro-cyanic compounds are toxic.
- 4.12. Active Fire Protection Systems & Passive Fire Protection Construction Features.**
 - 4.12.1. Fire protection systems & features shall be installed IAW applicable NFPA, ETL, AFI, UFC, and National Consensus Standards.

4.12.2. Inspection/testing/maintenance of fire protection systems is performed IAW UFC 3-600-02, *Operations and Maintenance: Inspection, Testing, and Maintenance of Fire Protection System*; applicable NFPA standards and the manufactures instructions.

4.12.3. Fire detection systems, suppression systems and or devices shall be maintained in a serviceable condition at all times.

4.12.3.1. If any fire detection or fire suppression system, or component of a system is not required (as determined by the AHJ) it shall be removed.

4.12.3.2. At no time shall access to any portion of fire protection system, device or component be obstructed.

4.12.3.3. A minimum of 18-inches of clearance shall be maintained around all components of a fire protection system.

4.12.4. Willful misuse or negligence involving fire protection systems or ignoring fire prevention policies shall not be tolerated. Such instances include, but are not limited to, malicious activation of fire alarms, false reporting of fire alarms, not reporting actual alarms, tampering with fire protection devices, etc. and are punishable under Article 92 of the UCMJ, as well as under federal statutes.

4.12.5. The testing and maintenance of fire detection/notification systems shall be conducted by certified alarms technicians.

4.12.6. The maintenance, upkeep and proper operation of fire protection devices is of the highest importance.

4.12.6.1. Damage to, or malfunction of, any part of a fire protection system shall be reported to the Fire Alarm Communications Center immediately.

4.12.6.2. The fire suppression system (sprinkler heads) shall not be painted or obstructed.

4.12.6.3. The Fire Alarm Communications Center shall receive prior notification of all tests, alterations and maintenance on fire protection systems.

4.12.6.4. Items not part of the fire protection system will not be attached to its components. (decorations, communications lines, speaker wire, utility lines, etc.)

4.12.6.5. Fire suppression systems shall be protected against corrosion by means of suitable coating appropriate for the location in which the system is installed.

4.12.6.6. Fire protection system controls, panels, valves, risers, etc...shall be located indoors accessible to fire protection emergency responders.

4.12.6.7. All portions of fire protection systems and construction features exposed to the elements (not installed inside climate controlled rooms) shall be of the highest corrosion resistant materials, i.e. stainless steel, powder coating, epoxy coating, or similar, this includes all bolts, nuts, fasteners, braces, couplings, shields, housings, chains, locks, control valves, doors, cabinets, etc.

4.12.6.8. Fire suppression system piping shall be labeled at least every 10 ft. as to direction of flow and contents.

4.13. Fire Hydrants.

4.13.1. Parking or placing anything within a 15 ft. diameter circle from a hydrant is prohibited (Maintain 7.5 ft. of clearance on all sides).

4.13.1.1. The center of a hose outlet shall not be less than 18" and no more than 36" above the level grade or finished surface.

4.13.2. Maintain at least 3 ft. of clearance on all sides of fire protection sprinkler system connections, post indicator valves, backflow preventers and all other components of the water supply and/or fire protection systems.

4.13.2.1. Unmarked or faded "No Parking" lines are not an acceptable excuse for parking next to a hydrant. Security Forces personnel will be contacted and violators will be ticketed or towed at the owners expense. In an emergency situation, if a vehicle is blocking access to hydrant, fire department operations will gain access to the hydrant by whatever means necessary.

4.13.3. Fire hydrants shall not be tampered with or used without first coordinating with the fire department.

4.13.4. Fences, barriers, storage, sheds, temporary buildings, vehicles, trees, bushes, signs, fences, or any other obstacles shall not obstruct access to or conceal a fire hydrant, post indicator valve, fire department sprinkler system connection, or any portion of a fire protection system.

4.13.5. The fire department shall be notified prior to any proposed water outage or usage, which affects hydrants and/or fire protection systems.

4.13.6. "Out of Service" signs shall be displayed on all inactive hydrants and shall be removed as soon as the hydrant is returned to service.

4.13.7. Hydrants shall be installed in grid pattern 300' apart or less depending on required water flow and hazard.

4.13.7.1. Hydrants shall not be located more than 250' from any point on a street or road frontage, depending on required water flow and hazard.

4.14. Exits.

4.14.1. Exits shall be readily accessible and clear of obstructions.

4.14.2. Lighted exit signs & emergency lights shall operate as designed and shall be tested monthly; the monthly test shall be documented and that documentation shall be placed in the facility manager's facility manager's binder. Copies will be maintained for two years.

4.14.3. The entire egress path (including the common path of travel) shall be free of obstructions, clutter, and stored combustibles (trash cans, recycling bins, etc). Stairwells in particular shall be considered must remain 100% free of any storage. Nothing shall be placed inside of, or underneath stairs that serve as any portion of a means of egress. Examples include but are not limited to, recycling bins, trash containers, vending machines, bicycles, signage, boxes, etc.

4.14.4. No doors in the egress path will be obstructed or blocked, (either open or closed). Follow the requirements of NFPA 101 Chapter 7.

4.14.5. The minimum clear width for a common path of travel shall not be less than 36 inches.

4.14.6. Ensure that fire or smoke doors without automatic releasing devices are kept closed. The only authorized method for blocking open a fire door is to install a magnetic hold open device that is controlled by the fire alarm system. Upon activation of the fire alarm, power to the magnetic hold-open device is turned off; the door will release and close automatically.

4.14.7. Exits shall be unlocked whenever a building is considered open to the public or is occupied by more than ten persons.

4.14.8. At least two separate exits shall be provided on every story, and shall be accessible from every part of a story and mezzanine (see exceptions in NFPA 101).

4.14.8.1. Fire doors shall not be altered in any way, unless the alteration/addition to the fire door is UL approved, it will void the UL listing and the door must be replaced.

4.14.8.2. Fire doors shall be self-closing.

4.14.8.3. The UL label must be in place and legible.

4.14.9. Exterior walkways will be kept clear of obstacles that block egress paths or present slipping and tripping hazards.

4.14.9.1. Facility managers are responsible for the removal of accumulated snow or ice.

4.14.10. Stairs and ramps will be kept clean, free of obstructions or slippery substances and in good repair at all times.

4.14.10.1. Outside stairways, entrances, sidewalks, loading docks, and ramps will remain clear of snow and ice. It is the responsibility of facility managers to ensure snow clearing operations are conducted in a timely fashion.

4.14.10.2. A proper means of egress allows unobstructed travel at all times. Any type of barrier including snow buildup is an impediment to free movement and a direct threat to those fleeing a structure fire.

4.15. Exit and Emergency Lights.

4.15.1. Exit lights/Emergency lights shall be in working order at all times.

4.15.2. The facility manager shall inspect and test each exit and emergency light monthly.

4.15.2.1. Emergency lighting units require a monthly function test (30 seconds) and an annual duration test (1 ½ hours).

4.15.2.2. The facility manager is responsible for ensuring these tests are conducted and documented.

- 4.15.2.3. The results of the test shall be documented on an emergency lighting monthly inspection/testing checklist. The checklist shall be maintained in the facility manager's binder.
- 4.15.2.4. Exception: Self-testing/self-diagnostic battery-operated emergency lighting equipment that automatically performs a test for not less than 30-seconds and diagnostic routine not less than once every 30 days and indicates failures by a status indicator shall be exempt from the "manual" 30-day functional test.
- 4.15.2.5. In order to determine whether or not exit lights or emergency lights are required for a particular location contact the fire prevention office.
- 4.15.2.6. Per NFPA 101 Chapter 7, 7.9.3; the monthly emergency lighting test shall be conducted not less than 3 and no more than 5 weeks apart.
- 4.15.2.7. The monthly test may be increased if the system reliability can be documented and verified, pending the approval of the AHJ.
- 4.16. Fueling/Service Station Operations.**
- 4.16.1. Service station/fueling operations shall be IAW NFPA 1, NFPA 54, NFPA 30A.
- 4.16.2. Fueling of powered equipment or the dispensing of any flammable liquid shall be conducted outside of all structures (except facilities designed for this purpose).
- 4.16.3. Only UL listed approved containers (gas cans) shall be authorized for use.
- 4.16.4. In order to avoid static discharge and the resulting fire, the filling of portable fuel containers shall only be performed when the container is sitting on the ground.
- 4.16.4.1. Containers shall not be filled while sitting in the back of pick-up truck type vehicles, vans, etc...but shall be placed on the ground, this is critical to prevent the build-up of static electricity.
- 4.16.5. The use of cell-phones, radios and pagers while dispensing fuel is prohibited.
- 4.16.6. Re-entering your vehicle during fueling operations is prohibited; static discharge can result and ignite the fuel vapors.
- 4.16.7. Smoking during fueling operations (including inside your vehicle), or within 50 ft. of fuel pumps is prohibited.
- 4.16.8. Ensure all employees know the location of the emergency switch and how to activate it.
- 4.17. Holiday Fire Safety and Decorations.**
- 4.17.1. Combustible vegetation is not permitted in public buildings on GFafb.
- 4.17.2. Natural Christmas trees (live, potted) are permitted in certain facilities for special events; contact the fire prevention office for further guidance.
- 4.17.3. Only flame retardant artificial Christmas trees and decorations are permitted in public (government/military) facilities, including dormitories on GFafb.
- 4.17.4. Electrical lighting shall not be used on aluminum trees.
- 4.17.5. All lights, decorations, ornaments shall be UL approved.

4.17.5.1. For exterior purposes ensure cords/lights are UL rated for outdoor use.

4.17.6. Do not run electrical cords/Christmas lights through doorways, air vents, etc.

4.17.6.1. Electrical cords/Christmas lights shall not be stapled or nailed to doors, walls, furniture, etc. Use the mounting devices that are specifically designed for this purpose.

4.17.7. All decorative materials shall be labeled or otherwise certified by the manufacturer as being flame resistant.

4.17.8. Neither furnishings, decorations, nor other objects shall obstruct exits, exit access, or any part of a means of egress.

4.18. Open Flames.

4.18.1. The use of open flames, open burning, the burning of trash and/or classified materials on any part of property belonging to the 319th ABW is prohibited.

4.18.1.1. The disposition of classified materials must be done through shredding at GFAFB.

4.18.2. The burning of candles and incense shall only be allowed in places of worship during religious functions and certain functions in the Northern Lights Club.

4.18.3. The fire pit located between dormitories is acceptable for dorm resident use during summer months. Those wishing to use the fire pit must follow all posted rules, ensure a serviceable extinguisher is on hand, maintain an attendant for the duration of the fire and notify the fire department before/after.

4.19. Fireworks/Ground Burst Simulators/Smoke Producing Munitions:

4.19.1. The use of fireworks on GFAFB is strictly prohibited Exception: Approved and or licensed pyrotechnic personnel contracted by the U.S. government or designated base representative who will be conducting displays or training exercises. (i.e. GBS' for air shows). These type events shall be coordinated with the fire prevention office to ensure adequate safety procedures are developed and complied with.

4.19.2. Only trained personnel shall prepare and/or activate these devices.

4.19.2.1. Personnel shall be equipped with a minimum of two ea. 10 lb. ABC rated fire extinguishers, and all recommended PPE to include, eye, ear, hand and foot protection, and an approved metal container to collect and dispose of spent munitions.

4.19.3. Ground burst simulators shall not be detonated within 125 ft. of personnel or vehicles, or within 50 ft. of facilities.

4.20. Welding, Cutting, and Brazing.

4.20.1. The following shall apply to all personnel on GFAFB who are either presently engaged in or will engage in operations involving, welding, cutting, brazing, soldering, grinding, torching, or any other operation involving the heating or melting of metal, open flames, operation of tar kettles or other heat or flame producing. In order to obtain a "Hot Work" permit, the fire prevention office. Personnel who are authorized to conduct

these types of operations shall read and fully understand all reference requirements listed above; i.e. AFOSH 91-5, OSHA 1910.252, NFPA 1, NFPA 51B.

4.20.2. Welding, cutting, brazing, tar kettle operations, grinding, and other hot work producing or utilizing flames/heat/sparks shall not be accomplished until a representative from your respective fire department or fire prevention office has inspected and approved the site/operation and has issued an AF Form 592 hot work permit.

4.20.3. All applicable requirements in NFPA 51B, AFOSH Standard 91-5, NFPA 1, NFPA 51B, and OSHA 29 CFR 1910.252 shall be strictly enforced.

4.20.4. CE Shops that routinely perform welding, cutting, brazing, soldering etc. may be task certified to issue welding permits. The Emergency Communications Center shall be the sole source for issuing the control numbers for hot work permits and for maintaining a record of permits issued to the CE shops. Only those personnel who have attended the fire prevention hot work training class shall be authorized to call for a control number, and issue their own permit. The ECC maintains a list of all authorized personnel.

4.20.4.1. Certification training is provided by appointment and can be scheduled by contacting the fire prevention office.

4.20.4.2. Task certification is valid for a period of one year from date of issue.

4.20.5. Permits are not required for authorized welding shops and work that is being performed therein.

4.20.5.1. The shop foremen shall establish operating instructions for welding, cutting, brazing, soldering and other hot work.

4.20.6. To limit exposure to the products of combustion generated by welding operations, precautions shall be taken including providing adequate ventilation, keeping the work area clean and protecting or removing all combustibles within 35 ft. of an operation.

4.20.7. A 30 minute fire watch shall be required for all hot work including welding, cutting, and brazing, soldering etc.

4.20.7.1. The on scene supervisor shall insure that adequate fire extinguishing equipment is on hand. The minimum shall be at least two fully serviceable 10 lb. ABC rated dry chemical extinguishers.

4.20.7.2. All persons involved in the operation shall be trained and thoroughly familiar with the use of portable extinguishers. They shall be familiar with the procedures of sounding and or reporting an alarm in the event of fire or emergency.

4.21. Heat Producing Appliances and Equipment.

4.21.1. All heat producing appliances and equipment shall be used in accordance with the manufacturer's specifications and shall be maintained in good working order.

4.21.2. A minimum of 18-inches of clearance shall be provided between heat producing appliances and combustibles.

4.21.3. Space heaters in government facilities shall be unauthorized. Exception: In the event an acceptable temperature cannot be maintained and CES HVAC shop is unable to

provide an immediate repair, they may issue a space heater while repairs are underway. The HVAC provided heater is the only space heater authorized in a government facility.

4.21.4. Heat producing appliances shall be UL listed.

4.22. Interior finish.

4.22.1. Furnishings, contents, decorations, and treated finishes in buildings and structures shall meet the requirements of NFPA, DoDI, AFI and other applicable guidance, including NFPA 101 & NFPA 701.

4.22.2. Draperies, curtains, and other similar loosely hanging furnishings and decorations shall be flame resistant as demonstrated by testing in accordance with NFPA 701 *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.

4.22.3. Furnishings or decorations of a highly flammable character shall not be used.

4.22.4. Electric string lights and wiring shall be UL rated for their intended use and shall be in good condition. If they are to be used outside, they shall be rated for outside use and shall be equipped with GFCI.

4.22.5. Interior finish in facilities that lack fire suppression systems shall be limited to Class A materials (as defined by NFPA).

4.22.5.1. In facilities equipped with automatic fire suppression systems protecting 100% of all areas, the type of interior finish can be Type A, B, or C.

4.22.6. Accomplish spray painting in accordance with AFI 91-17, *Interior Spray Finishing* and National Fire Protection Association Standard 33, *Spray Application Using Flammable and Combustible Materials*.

4.23. **Combustible Vegetation.**

4.23.1. Weeds and other vegetation will not be permitted to grow excessively or accumulate in the immediate vicinity of buildings, structures, or hazardous areas.

4.23.2. Vegetation shall not obstruct Fire hydrants, fire protection system risers, post indicator valves, backflow preventers, fire department sprinkler system connections, fuel lines, fuel tanks, utility controls/panels/valves, fire department access to facilities, fire exits, etc.

4.23.3. Combustible vegetation and natural cut Christmas trees shall not be permitted in assembly, educational, day-care, health care, residential board and care, detention and correctional, mercantile, hotel or dormitory occupancies, except for the following:

4.23.3.1. In-home residential day-care.

4.23.3.2. Living trees with roots protected by earth shall be permitted provided they are maintained in a fresh condition and are not allowed to become dry.

4.23.3.3. Trees located in areas protected by an approved automatic sprinkler system.

4.23.4. No combustible vegetation or Christmas tree shall be allowed to obstruct corridors, exits or any portion of a means of egress.

4.23.5. Only listed electrical lights and wiring shall be used on combustible vegetation, Christmas trees, and similar decorations.

4.23.6. Electrical lights shall be prohibited on metal artificial trees.

4.23.7. Open flames such as from candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near combustible vegetation, Christmas trees or other similar combustible materials.

4.23.8. Combustible vegetation and natural cut Christmas trees shall not be located near heating vents or other fixed or portable heating devices that could cause it to dry out prematurely or to be ignited.

4.23.9. In occupancies where natural trees are permitted, the bottom end of the trunk shall have a straight fresh cut of at least ½-inch (13-mm) above the end prior to placing the tree in a stand to allow the tree to absorb water. The tree shall be placed in a suitable stand with adequate water. The water level shall be maintained above the fresh cut and checked at least once daily. The tree shall be removed from the building immediately upon evidence of dryness.

4.23.9.1. In facilities where natural Christmas trees are allowed, they will be placed in a container of water or wet sand and watered daily.

4.23.9.2. When natural trees no longer absorb water or become dry they must be immediately disposed of.

4.23.9.3. Do not rely on self-applied aerosol sprays or chemical treatments to protect trees from fire.

4.23.10. A minimum of 20-ft. of clear area shall be maintained between facilities and combustible brush, or densely wooded areas. The fire prevention office requires that a minimum width of 1 ½ times the height of the tallest fuel will be the standard width of a fire break/fire line NFPA 299: 2-1 “Defensible Space.”

4.24. **Fire Stopping.**

4.24.1. All facilities shall be inherently designed to resist the spread of fire and smoke.

4.24.1.1. Each and every room shall be compartmentalized by properly fire stopping each and every transfer opening in the walls, floors, and ceilings with the proper fire stopping materials and methods as approved by Underwriters Laboratories.

4.24.2. Each and every opening created in a passive fire rated construction feature (fire rated wall, floor, ceiling) created to install utilities such as water lines, sewer lines, communication lines/conduit/fiber optic lines, power lines, HVAC ductwork, etc. shall be sealed using approved UL listed methods/devices/materials in order to maintain the original fire resistance rating of the construction.

4.25. **Warning signs.**

4.25.1. Every sign required shall be so located and of such size, distinctive color, and design that it is readily visible and shall provide contrast with surrounding colors.

4.25.2. No decorations, furnishings, or equipment that impairs or obstructs the visibility of a sign shall be permitted.

4.25.3. No brightly illuminated sign, display, or object, (for other than exit purposes) shall be installed either in or near the line of vision of the required exit sign that could detract attention from the exit sign shall be permitted.

4.26. Permits and Approvals.

4.26.1. The fire department shall be authorized to establish and issue permits, certificates, notices, approvals and or orders pertaining to fire control and fire hazards.

4.26.1.1. The fire department shall be permitted to revoke a permit or approval issued if any violation of this instruction is found or in a case where there have been false statements or misrepresentations submitted in the application or plans for which the permit approval was based.

4.26.1.2. Any attempt to defraud or otherwise deliberately or knowingly design, install, service, maintain, operate, sell, represent for sale, falsify records, reports or applications, or other related activity in violation of the requirements prescribed by this instruction shall be a violation of this instruction and shall be cause for immediate suspension or revocation of any related licenses, certificates, or permits issued by the fire department.

4.26.1.3. The following are examples of but not limited to the types of activities/events/operations which require permits, open flames for disposal of classified materials, campfires, bonfires, hot work permits (welding, cutting, brazing, soldering, grinding, etc.), special events, gatherings, special use of a facility, such as using an aircraft hangar for a change of command ceremony, using a fitness center gymnasium for a contingency hospital, or any other time a facility is used for other than its originally designed purpose.

4.26.1.4. Facility Managers shall maintain a current copy of all fire prevention/fire safety related permits, approvals, certificates, notices of hazard, etc...in the facility manager's binder.

5. Fire Prevention Requirements by Occupancy

5.1. Assembly Occupancies.

5.1.1. Definition: (1) An occupancy used for a gathering of fifty or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.

5.1.2. The following GFAFB facilities are considered public assembly: Bldg 315 Airey Dining Facility, Bldg 316 Liberty Square, Bldg 203 Community Activities Center, Bldg 204 Base Theater, Bldg 124 Sunflower Chapel, Bldg 208 Prairie Rose Chapel, Bldg 118 Northern Lights Club, Bldg 201 Base Library, Bldg 202 Bowling Center, Bldg 523 (east side) PAX Terminal, Bldg 105 Burger King, Bldg 308 Fitness Center, Bldg 811 Golf Course Clubhouse.

5.1.3. Prior to opening and closing the facility, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition.

5.1.4. The facility manager shall file a copy of the daily closing inspection in their facility manager's binder.

5.1.4.1. The facility manager shall be able to produce the record documenting the inspections as requested by authorized persons; i.e. Fire Prevention, IG, Safety.

5.1.5. Rooms or areas constituting a place of assembly shall have a sign installed in each "assembly" type room indicating the maximum occupant load.

5.1.5.1. Occupant load is determined IAW NFPA 101 Table 7.3.1.2.

5.1.5.2. The fire prevention section shall determine the maximum occupant load for the facility and shall present the facility manager with a copy; the facility manager shall file a copy in facility manager's binder.

5.1.5.3. The facility manager will monitor the capacity of the facility at all times to ensure the maximum occupant load is not exceeded.

5.1.6. The fire prevention office shall be notified prior to all major social events and/or special functions where unusual arrangements, temporary seating, or when special or unusual decorations/displays are used. A representative of the fire department shall survey the area prior to the event.

5.1.7. Minimum egress width in new assembly occupancies shall be not less than 36-in.

5.1.7.1. The width of any exit access corridor serving 50-or more persons shall be not less than 44-inches (112-cm).

5.1.7.2. Exits shall be located remotely from each other and shall be arranged to minimize the possibility that they might be blocked by any emergency.

5.1.7.3. Means of egress shall not be permitted through kitchens, storerooms, restrooms, closets, or hazardous areas as described in NFPA 101: 12.2.5.2.

5.1.8. Managers of public assembly and recreational facilities establish and maintain a certification system to ensure employees have been trained and understand their fire prevention responsibilities within the work environment.

5.1.8.1. This certification letter for employees will be documented on an AF Form 2426, *Training Request and Completion*, or equivalent.

5.1.8.2. This certification system includes quarterly drills of employees (no building evacuation) and immediate indoctrination of newly hired employees. Reference: AFOSH Standard 91-501, *Fire Protection and Prevention*, for detailed information.

5.2. Business Occupancies.

5.2.1. Prior to opening and closing the facility, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.2.2. The total capacity of the means of egress shall be sufficient for the occupant load of the facility being evacuated.

5.2.3. The minimum width of any corridor or passageway shall be 44-inches.

5.2.4. The minimum egress access width throughout the entire means of egress (for existing construction) shall not be less than 18-inches for office areas containing 6-or less people and not less than 28-inches for areas containing more than 6-people; i.e. the minimum clear width between all furniture, equipment, doorways, walls etc. For new construction the minimum width shall not be less than 36-inches.

5.3. Child Development Centers.

5.3.1. Prior to opening and closing the facility for business, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.3.2. Decorations in child development centers shall not cover more than 20%-of the existing wall space; i.e. posters, toys, stuffed animals etc.

5.3.3. Draperies, curtains, and other similar furnishings and decorations in day-care occupancies shall be in accordance with the provisions of NFPA 101: 10.3.1.

5.3.4. Fire evacuation exercises shall be performed monthly.

5.3.5. Fire prevention inspections shall be performed semi-annually.

5.4. Dormitories and Lodging Facilities.

5.4.1. Storage of flammable and combustible liquids are not permitted in dormitories/lodging with the exception of the minimal amount used for operation, maintenance, and repair of the dormitory facility and grounds.

5.4.1.1. One 25 Lb. bag of regular charcoal and up to one quart of charcoal starter shall be allowed in a dorm room.

5.4.2. The use of candles or incense in dormitories or lodging facilities is prohibited.

5.4.2.1. Ash or burn marks on an incense holder, melted candles or blackened candle wicks are indications of use and will be treated accordingly.

5.4.3. Storage of small engine equipment (motorcycles, etc.), vehicle batteries or other similar hazardous materials inside dormitory rooms is prohibited.

5.4.4. Items stored in communal storage areas/lockers shall be stored neatly.

5.4.4.1. Hazardous items such as a flammable liquids/gases, corrosives, oxidizers, poisons, automotive type batteries, etc. shall not be placed in storage lockers/areas, nor are these types of materials allowed in individual dormitory rooms, common areas, etc.

5.4.5. Microwave ovens are permitted in dormitories; devices such as Foreman™ grills, electric skillets, deep fat fryers, toaster ovens, rotisserie grills, and similar equipment are prohibited, for further guidance contact the prevention office.

5.4.5.1. Turn off and unplug cooking devices when they're not in use; do not leave cooking devices unattended when in use.

5.4.5.2. Place cooking equipment on a noncombustible surface.

5.4.6. Dormitory personnel shall store all ammunitions and weapons in the armory.

5.4.7. Facility managers are responsible for developing, implementing, and maintaining the fire prevention program once established.

5.4.7.1. Facility managers shall develop a fire reaction plan; the plan shall include the fire reporting procedures, fire evacuation procedures, first aid firefighting procedures, hazards specific to the facility, and other applicable subjects.

5.4.7.1.1. Fire evacuation procedures shall include developing a "Fire Warden" program which designates key individuals to physically knock on every door and notify each resident of an emergency situation ensuring they evacuate the facility in a timely manner. This plan shall be exercised as often as necessary to ensure it works as intended. Each exercise shall be coordinated with the fire prevention section. For more information on developing plans and procedures contact your local fire prevention office.

5.4.7.2. Facility managers shall ensure assigned personnel understand their duties as listed in the fire evacuation/fire reaction/emergency action plan.

5.4.7.3. Facility managers/supervisors shall ensure assigned personnel in facilities under their control adhere to established fire prevention/fire safety practices, fire reporting and evacuation procedures, policies concerning the storage and use of flammable liquids, cooking, as well as the policies and possible consequences of tampering with any portion of a fire detection/suppression system and/or portable fire extinguisher.

5.4.7.4. Fire evacuation plans shall be posted in a visible location in all sleeping rooms.

5.4.8. Newly assigned occupants shall be briefed on fire prevention, fire reporting, evacuation procedures, and responsibilities. That briefing shall be documented and a copy of the documentation shall be filed in the facility manager's binder.

5.4.9. Occupants shall read and understand the fire reaction and evacuation plans for their assigned dormitory.

5.4.10. Proper housekeeping shall be required of all occupants. This shall include common areas as well as each individual's personal room. Clothing, empty food and drink containers, and other trash shall not be left lying about the room, on the floor, on furniture, in lockers, under beds, in closets or restrooms, etc.

5.4.10.1. Trash containers in dorm rooms shall be emptied daily and disposed of in the dumpster provided. Trash containers shall be emptied more frequently if the accumulation exceeds the capacity of the trashcan.

5.4.10.2. Trash in individual rooms shall be placed in an authorized trash container, not in plastic bags, boxes, etc. and/or left lying about the room.

5.4.11. Smoking in dormitory rooms is prohibited.

5.4.11.1. Smoking materials shall be properly disposed of. Cigarette/cigar butts shall be disposed of in ashtrays.

5.4.11.2. Smoking materials shall be disposed of at least daily or more often if accumulations of materials exceed disposal container capacity.

5.4.11.3. Smoking materials shall be thoroughly doused with water prior to disposal to prevent causing a fire in trashcans, dumpsters and/or trash trucks.

5.4.11.4. Smoking materials shall not be placed, dropped, tossed or thrown, in drink containers, on floors, on the ground, in boxes or bags, in bushes or trees, under decks, or anywhere other than in an ashtray or butt can.

5.4.12. Fire detection devices are placed in facilities to notify occupants of a possible life-threatening emergency. These devices shall not be covered, dismantled, removed, relocated, or tampered with in any way.

5.4.12.1. No component, device, conduit, pipe etc. of a fire protection system shall be obstructed or have anything attached to it. This includes but is not limited to clothing, stored items, boxes, furniture, decorations, communications/power or speaker wires etc.

5.5. Educational Occupancies.

5.5.1. Prior to opening and closing the facility for business, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.5.2. The facility manager shall ensure that the number of personnel never exceeds the maximum occupant load for that room/area.

5.5.3. Fire evacuation exercises shall be conducted monthly.

5.5.4. Fire prevention visits shall be conducted semi-annually.

5.6. Industrial Occupancies.

5.6.1. Prior to opening and closing the facility for business, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.6.2. Proper housekeeping shall be conducted daily to prevent the build-up of potentially combustible/flammable/explosive solids, liquids, dusts, gasses and fibers.

5.6.3. Painting/Paint Shops/Paint Booths:

5.6.3.1. Interior spray painting shall be done only where there is adequate ventilation, there are no ignition sources or existing ignitions sources are adequately isolated, only in approved paint spray booths/facilities, and only by personnel wearing the proper P.P.E. to include breathing apparatus or filter.

5.6.3.2. Spray painting operations shall comply with AFI 91-17: *Interior Spray Finishing* and NFPA 33: *Spray Application Using Flammable or Combustible Materials*.

5.6.3.3. The walls and floors of spray booths/facilities may be covered with paper to protect them from paint deposits. This paper shall be removed and destroyed when contaminated. Soap like water soluble materials or coatings which can be stripped or other similar materials that can be easily washed down, may be used to protect the

walls and floors of spray booths from paint accumulation as long as they do not pose or create an environmental pollution problem.

5.6.3.4. Protective paper wall coatings will not be used for dry or dusty painting substances that can be removed from the booths by adequate ventilation or dust collection systems.

5.6.3.5. Automatic sprinkler heads shall be protected from overspray residue by covering them with bags made of polyethylene, paper or cellophane. Bags having a thickness of 0.0003 inches or less or thin paper bags shall be used.

5.6.3.6. Local application dry or wet chemical systems installed in paint booths shall be inspected and certified by a certified inspector on a semi-annual basis.

5.6.3.7. Installed wet or dry chemical fire extinguishing systems in paint booths shall be inspected and serviced on a semi-annual basis.

5.6.3.8. Monthly, the facility manger or supervisor shall perform an owner's inspection on wet and dry chemical fire extinguishing systems. The results of the inspection indicating the condition and serviceability of the system shall be documented on an inspection tag and the tag shall be affixed to the system.

5.6.3.9. Flameproof tarpaulins, drop cloths, or materials of equivalent flame spread characteristics will be used during painting.

5.6.4. Process dip & solvent tanks shall comply with the following:

5.6.4.1. All open process dip tanks which use either combustible or flammable liquids and are under 150-gallon (570-L) capacity or 10-square ft. (1-square meter) in liquid surface area shall be equipped with automatic, self-closing covers or special extinguishing systems.

5.6.4.2. Each tank lid shall be equipped with a fusible link in the hold open device that is designed to melt at a predetermined temperature and allow the lid to automatically close in case of fire.

5.6.4.3. When tanks are not in use, the lids shall be kept closed.

5.6.4.4. Automatic closing process tank covers shall be actuated by approved automatic devices (fusible links) and also shall be arranged for manual operation.

5.6.4.5. Covers shall be substantially constructed of noncombustible materials and shall overlap the sides of the tank by at least 1-in. (25-mm) and have a recess or flange that extends downward around the tank when it is closed.

5.6.4.6. Fusible links designed to melt and release the hold open mechanism for a fire door or a process dip tank shall be inspected by a certified maintenance specialist at least annually and shall be replaced as required.

5.6.5. Battery Shops/Battery Charging Operations shall comply with the following:

5.6.5.1. No more than two batteries shall be charged at any one time in areas other than authorized battery shops.

5.6.5.2. Charging operations shall not be conducted near flammable or combustible materials.

5.6.5.3. Batteries shall not be stored on the ground, or place directly on a concrete floor, they will be stored on an approved non-electrically conductive, corrosion resistant material/surface.

5.6.5.4. Battery charging operations shall be discontinued when facilities are unoccupied.

5.6.5.5. Battery-charging shops shall be equipped with exhaust ventilation systems to ensure the removal of flammable/toxic vapors that could possibly vent from a battery during the charging process.

5.6.5.6. Charging operations shall not be conducted near flammable or combustible materials.

5.6.5.7. All electrical outlets, appliances, devices, cords, etc located inside a dedicated battery charging room/area shall comply with the National Electric Code (NEC), NFPA 70 Articles 500 – 510 *Hazardous Areas*.

5.6.5.8. Battery charging areas shall be conspicuously posted (No Smoking within 50 ft.).

5.6.5.9. Battery shops located in facilities not designed expressly for such operations shall be separated from all other areas of the facility by 2 hour rated fire resistant construction complete with 1 ½ hour fire doors and either an 18 in. high barrier wall or an air curtain between 2 ea. 1 ½ hour fire doors.

5.7. Mercantile Occupancies.

5.7.1. Prior to opening and closing the facility, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.7.2. Aisles leading to each exit shall be required. The aggregate width of such aisles shall be equal to at least the required width of the exit.

5.7.3. In Class A stores, or those with a gross area of more than 30,000-square ft., at least one aisle with a minimum width of 5-ft. shall be required to lead to an exit.

5.7.4. In no case shall any required aisle be less than 28-inches in clear width for existing construction or 36-inches for new construction.

5.7.5. The facility manager shall ensure that any time the facility is considered open for business; all marked and/or required exit doors are unlocked and fully accessible.

5.7.5.1. A facility shall be considered open for business when it is occupied by 10 or more persons, during posted hours, or when a single patron is inside.

5.8. Storage Occupancies.

5.8.1. Prior to opening and closing the facility for business, the facility manager shall conduct an inspection to ensure the facility is in a fire safe condition. Develop an

opening and closing inspection form and use it to document the daily inspections. Maintain a copy of the completed inspection forms in the facility manager's binder.

5.8.2. Incompatible materials shall not be stored together. Refer to NFPA 30, and AFOSH STANDARD 91-501 for specific guidance.

5.8.3. Pressurized gas cylinders shall be properly capped, secured and stored.

5.8.4. Incompatible gases shall be stored separately. The proper separation distance or fire rated barrier shall be maintained at all times, i.e. separate incompatible materials by either 20 ft. of space, or by means of a 5 ft. high, 30 min rated fire barrier.

5.8.5. Combustible/flammable liquids and/or hazardous materials storage areas and or facilities shall be properly vented.

5.8.6. The use of boiler, mechanical air handling, air conditioning, or generator rooms for any type of storage is prohibited and shall be strictly adhered to.

5.8.7. Combustible materials shall not be stored under stairs, in attics, above false ceilings or under false floors in any building unless the facility or area was designed for that purpose, or unless authorization is obtained from the fire prevention section.

5.8.8. No materials or any kind shall be stored within 18-inches of lights or heat sources, or any portion or component of a fire protection system, utility shut off, circuit breaker box/panel, transformer, battery charger etc.

5.8.8.1. No storage of any kind shall be permitted within 36-inches of any fire alarm panel or suppression system riser.

5.8.9. There shall be a minimum clearance of at least 18-inches between the top of stored materials and ceilings. For materials stacked over 15-ft. in height, the clearance shall be at least 36-inches.

5.8.10. A minimum clearance of 24-inches shall be maintained between stock and substandard walls.

5.8.11. A minimum aisle space of 48-inches shall be maintained between rows of stored materials.

5.9. Aircraft and Hangars.

5.9.1. Fire prevention requirements for aircraft are listed in Technical Order (T.O.) 00-25-172, *Aircraft Bonding, Grounding, and Servicing*, T.O. 1-1-3, National Fire Protection Standard 409, *Aircraft Hangars*, ETL 02-15 and 98-8, UFC 3-600-01 *Fire Protection for Facilities, Engineering Design, and Construction*, and AFI 91-100, *Aircraft Flight line Ground Operations and Activities*.

5.9.2. Conduct aircraft welding IAW NFPA 410, *Aircraft Maintenance*, and AFOSHSTD 91-5, *Welding, Cutting and Open Flame Operations*.

5.9.3. Spray painting an entire aircraft is not permitted in hangars unless especially designed and protected for this purpose, or with the prior approval of the fire prevention section. Aircraft touch-up painting is not to exceed the cumulative use of more than four quarts in 8 hours in accordance with T.O. 42A-1-1 requirements.

5.9.4. Open fuel cell repair will not be performed in any hangar on GFafb, unless the facility is compliant with T.O. 1-1-3, the facility is designed expressly for fuel cell maintenance or when approved by the AHJ.

5.9.5. Conducting mechanical maintenance and/or operational tests on powered aerospace ground equipment (AGE) in a hangar or dock area containing an aircraft is prohibited.

5.9.6. Aircraft shall not be fueled inside a hangar unless the facility is specifically designed for such operations.

5.9.7. Hangars are designed so that all electrical devices, appliances and equipment meet the requirements of NEC 70 Article 500 – 510 & 513 hazardous areas.

5.9.8. Supervisors shall ensure that all personnel who work in or near aircraft hangars receive a fire prevention briefing within 30 days of reporting for duty.

5.9.8.1. Ensure all employees receive specialized fire protection training on the capabilities and operating characteristics of any manually activated specialized fire protection systems/equipment (i.e. AFFF foam systems). Training shall include a tour of the facility during which each member shall be shown the locations of the manual fire alarm activation stations, the manual foam system discharge stations and the manual abort stations.

5.9.8.2. Document this training on an AF Form 1085 or equivalent and file a copy in the facility manager's binder.

5.9.9. Airfield operations shall comply with the following:

5.9.9.1. Power units, when hooked into and serving an aircraft, will have a qualified attendant observing the unit at all times while running.

5.9.9.2. At least 1 ea. 10 lb. ABC rated fire extinguisher shall be located within 35 ft. of travel distance when a power unit is operating.

TIMOTHY E. BUSH, Colonel, USAF
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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

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- AFI 32-6002, *Family Housing Planning, Programming, Design, and Construction*, 15 January 2008
- AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, 1 June 1996
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- AFOSHSTD91-38, *Hydrocarbon Fuels—General*, 1 September 1997
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- AFOSHSTD91-68, *Chemical Safety*, 1 October 1997
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- CFR 1910 Sub Part H, *Hazardous Materials*, 11 August 2009
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- CFR 1910 Subpart N, *Materials Handling and Storage*, 3 April 2006
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Prescribed and Adopted Forms

Prescribed Forms: There are no forms prescribed by this publication.

Adopted Forms: AF IMT 847, *Recommendation for Change of Publication*. AF Form 3, *Hazard Abatement Plan*

AF Form 55, *Employee Safety and Health Record*

AF Forms 332, *Base Civil Engineer Work Request*

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AF Form 1085, *Fire Protection Training Report*

AF Form 1118, *Notice of Hazard*

AF Form 1487, *Fire Prevention Visit Report*

AF Form 2519, *All Purpose Checklist*

DD Form 1104, *Closed Valve Warning Tag*

Abbreviations and Acronyms

AAFES—Army, Air Force Exchange Service

AFFF—Aqueous Film Forming Foam

AFMAN—Air Force Manual

AFP—Air Force Pamphlet
AFOSH—Air Force Occupational Safety and Health
AFOSHSTD—Air Force Occupational Safety and Health Standard
AFPD—Air Force Policy Directives
AFRES—Air Force Reserve
AFVA—Air Force Visual Aid
AHJ—Authority Having Jurisdiction
AMC—Air Mobility Command
ANG—Air National Guard
ANSI—American National Standards Institute
ASME—American Society of Mechanical Engineers
BCE—Base Civil Engineer (CES Squadron Commander/Base Fire Marshall)
BOQ—Bachelor Officer Quarters
CE—Civil Engineering
CEO—Civil Engineering Help Desk
CES—Civil Engineering Squadron
CDC—Child Development Center
CFR—Code of Federal Regulations
COMM—Communications
DECA—Department of Defense Commissary Agency
DOD—Department of Defense
DODI—Department of Defense Instruction
DOT—Department of Transportation
ETL—Engineering & Technical Letter
EPA—Environmental Protection Agency
FAA—Federal Aviation Administration
FACC—Fire Alarm Communications Center
FBI—Federal Bureau of Investigations
FDC—Fire Department Connection (sprinkler system connection)
FOD—Foreign Object Damage
FSD—Fire Safety Deficiency
GFCI—Ground Fault Circuit Interrupt

HAZMAT—Hazardous Materials
HVAC—Heating, Ventilation, and Air Conditioning
IAW—In Accordance With
IBC—International Building Code
IC—Incident Commander
IFC—International Fire Code
IG—Inspector General
KPH—Kilometers per Hour
LSC—Life Safety Code
LOX—Liquid Oxygen
MAJCOM—Major Command
MFH—Military Family Housing
MPH—Miles per Hour
MSDS—Material Safety Data Sheet
MSG—Mission Support Group
NAF—Non-Appropriated Funds
NEC—National Electric Code
NFPA—National Fire Protection Association
NICET—National Institute of Certification in Engineering Technologies
NIMS—National Incident Management System
OSC—On Scene Commander
OSHA—Occupational Safety and Health Administration
PPE—Personal Protective Equipment/Ensemble
POL—Petroleum, Oil, and Lubricants
POV—Privately Owned Vehicle
QAE—Quality Assurance Evaluator
RAC—Risk Assessment Code
RCRA—Resource Conservation Recovery Act
SEG—Wing Safety Office
SFS—Security Forces Squadron
SOP—Standard Operating Procedure
TA—Transit Alert

TLF—Temporary Living Facility

TLQ—Temporary Living Quarters

TO—Technical Order

UBC—Uniform Building Code

UCMJ—Uniform Code of Military Justice

UL—Underwriters Laboratories

UFC—United Facilities Criteria

USDA—United States Department of Agriculture

VAQ—Visiting Airman Quarters

VOQ—Visiting Officer Quarters

Terms

Accountable Forms—Forms that the Air Force stringently controls and which cannot be released to unauthorized personnel, since their misuse could jeopardize DOD security or result in fraudulent financial gain or claims against the government.

Administrative Change—Change that does not affect the subject matter content, authority, purpose, application, and/or implementation of the publication (i.e., changing the POC name, office symbol(s), fixing misspellings, etc.).

Approval Authority—Senior leader responsible for contributing to and implementing policies and guidance/procedures pertaining to his/her functional area(s) (i.e., heads of functional two-letter offices).

Authentication—Required element to verify approval of the publication; the approval official applies his/her signature block to authenticate the publication. The signature block includes the official's name, rank, and title (not signature).

Attachment 3

FIRE PREVENTION CHECKLIST

Table A3.1. FIRE PREVENTION CHECKLIST.

Facility Managers Name:				
Organization & Office Symbol:				
Building:				
Yes	No	N/A	Remarks	
				Emergency Action Plans:
				Has a fire reaction plan been developed?
				Has a fire evacuation plan been developed?
				Has an emergency action plan been developed?
				Was the plan developed I.A.W. AFOSH STANDARD 91-501, Chapter 6, and OSHA 1910.34-1910.39?
				Is the fire evacuation plan posted in the required location/s?
				Were the plans coordinated with and approved by the fire prevention section?
				Has a recent fire evacuation exercise (annual) implementing the plan been conducted and documented?
				Did the facility manager properly file a copy of the fire evacuation exercise form?
				Has a certification system been developed for personnel working with commercial cooking equipment?
				Has a written fire reaction plan been developed?
				Does the plan include appropriate staff response to fire emergencies and requirements for education and training?
				Fire Evacuation Exercise (Fire Drill):
				Has a written diagram indicating the evacuation route been posted in facilities occupied by more than 10 persons?
				Has a written fire evacuation plan been developed?

				Have assembly points been determined and briefed to all occupants?
				Have all assigned personnel been trained in the evacuation procedures?
				Are procedures and equipment in place for assisting physically/mentally impaired personnel?
				Have accountability procedures been developed for accounting for all assigned personnel?
				Has an exercise been conducted within the last 12 months?
				If the bldg is equipped with a fire alarm system was it used in to initiate the evacuation?
				If the facility isn't equipped with a fire alarm system has a "Unique" signal been determined?
				Does the fire evacuation plan designate personnel to "Clear" the bldg of personnel
				Does the plan require the person/s who clear the bldg to close interior doors?
				Does the plan designate a person to report pertinent information to 1st responders?
				Does the plan direct personnel to dial 911 and report the fire/exercise?
				Did personnel attempt to utilize fire extinguishers or fire suppression systems?
				Do assigned personnel know their facility number and room number or location?
				Training:
				Have all personnel been briefed on the plan and practiced it?
				Have all occupants/members/employees been briefed on their specific responsibilities?
				Have the occupants/employees been trained in fire prevention procedures?
				Do all personnel know the fire reporting procedures?
				Have the occupants/employees been trained in proper fire evacuation procedures?
				Have all personnel been trained to use portable fire extinguishers?

				Have all personnel been trained to use manually activated fire suppression system/equipment?
				Has the facility manager/supervisor properly filed copies of fire and or safety training reports?
				Have all personnel received initial fire prevention training?
				Is training accomplished per the requirements of AFI 91-301?
				Exits:
				Are exit signs working properly?
				Are emergency lights being tested monthly?
				Are exits clear and unobstructed?
				Are "ALL" marked and required exit doors unlocked?
				Are interior stairwells and staircases completely clear?
				Are all fire doors clear of obstructions, chocks, door stops, etc?
				Are exit doors unlocked and accessible?
				Is the proper aisle space maintained between rows of merchandise, storage racks, piles etc?
				Vehicles & Parking:
				Is there 15 ft. of clearance on all sides of fire hydrants, FDC, PIV, etc?
				Ensure no vehicles are parked within 10 ft. of the facility.
				Are fire lanes clear and unobstructed?
				Flammable & Combustible Liquids:
				Are flammable/combustible liquids properly stored in approved cabinets?
				Are flammable/combustible liquid containers properly labeled as to contents?
				Does the facility manger have an inventory of contents posted on the cabinet?
				Is the amount of flammable/combustible liquids total less than 120 gallons per cabinet?

				Is the amount of class 1A flammable liquid less than 60 gallons per cabinet?
				Are containers for class 1A flammables < 1qt. in capacity?
				Are there 3 or fewer cabinets in a single location?
				Are the containers for class 1A flammable liquids (Gas) limited to 2-1/2 gallons in quantity?
				Are flammable liquids used for cleaning purposes?
				Are hazardous materials stored properly?
				Are incompatible items stored separately?
				Are MSDS' available for all authorized items?
				Fire Doors:
				Are fire doors kept closed?
				Do fire doors automatically close and latch?
				Are the UL labels indicating a fire door and the rating unpainted, undamaged and clearly visible?
				Are fire doors blocked open or equipped/installed with manual hold open devices (door stops)?
				Have fire doors been altered in any way?
				Electrical:
				Are extension cords, devices, equipment of the approved type?
				Are all extension cords equipped with circuit breakers/surge protectors?
				Are extension cords/electrical outlets overloaded?
				Are extension cords being used properly?
				Are there any damaged electrical cords, appliances, outlets, plugs?
				Are all high powered/high amperage/high wattage appliances plugged directly into an outlet?
				Are unnecessary electrical appliances turned off each day prior to COB?
				Housekeeping:

			Are proper housekeeping practices being followed?
			Are rags stored in metal containers with self-closing lids and properly labeled?
			Is used charcoal properly disposed of by thoroughly wetting it before placing it in a trashcan or dumpster?
			Are clothes dryer vents clean, properly vented and free of lint?
			Are dryer vent hoses properly attached and in good working order (No holes, kinks, or excess hose)?
			Is all trash removed from the facility at least daily before COB?
			Are dumpsters placed at least 10 feet from the facility, and are their lids closed?
			Are trash containers being emptied at least daily (more often if necessary)?
			Is the egress path clear, free of obstructions, combustibles (trash containers, recycling bins)?
			Are stairwells clear of everything (storage, recycling bins, trash bins, vending machines)?
			Smoking:
			Has the facility manager designated a smoking area/s?
			Has the smoking area been approved?
			Has the facility manager provided an adequate number of approved containers for the disposal of smoking materials?
			Are butt cans UL approved for the disposal of smoking materials?
			Are smoking materials properly disposed of by thoroughly wetting them before they're placed in trashcans/dumpsters?
			Is smoking being done only in approved areas?
			Are butt cans emptied daily prior to COB (or more often if required)?
			Are ignition sources secured to prevent access by children?
			Heating Appliances:

				Are portable space heaters UL listed?
				Are all space heaters equipped with the automatic tilt shut-off switch?
				Are space plugged directly into an outlet, and is the space heater the only appliance plugged into a single outlet?
				Do all heating devices have an 18 in clearance between them and combustible storage/items?
				Are heating appliances turned off before COB?
				Storage:
				Is there a minimum of 18 inches of clear space between a sprinkler head, smoke/heat detectors and stored items?
				Is there any storage on or under stairs or in stairwells?
				Is small engine equipment stored properly?
				Is there any storage in unauthorized rooms; i.e. mechanical rooms?
				Are storage areas neat and clean?
				Are incompatible items stored separately?
				Cooking Operations & Appliances:
				Are commercial cooking facilities provided with systems to remove smoke/grease-laden vapors?
				Are the systems protected by automatic fire suppression systems?
				Are the filters and hoods cleaned at least daily, with thorough cleaning of hood and exhaust ducts at least semi-annually?
				Did the contractor provide the facility manager with a copy of the cleaning/inspection report?
				Was a copy of the report provided to the fire prevention office?
				Do the occupants empty the grease traps daily?
				Have the wet/dry chemical fire suppression systems received the semi-annual inspection/maintenance?

				Did the contractor provide the facility manager with a copy of the inspection/maintenance report?
				Are hood filters in place while cooking?
				Does the exhaust system fan operate continuously while cooking"?
				Are cooking operations halted whenever exhaust fans are inoperative?
				Are deep fat fryers equipped with a primary thermostat of 400 degrees F and a secondary thermostat of 475 degrees F?
				Is a metal tag indicating the results of the test attached to each fryer?
				Did the contractor provide the facility manager with a copy of the test report?
				Does each fryer have a tight fitting metal cover, either installed or readily available?
				Is each piece of cooking equipment properly positioned under and protected by a fire suppression system nozzle?
				Are all cooking operations/devices constantly monitored when in use?
				Are all residential cooking appliances used in non-residential settings protected in the same manner as commercial appliances?
				Are BBQ grills at least 10 ft. from facilities when in use?
				Is all equipment turned off prior to COB?
				Fire Extinguishers:
				Has the facility manager developed a locator list for all portable fire extinguishers?
				Are all hand held portable fire extinguishers in their assigned locations?
				Are all hand held portable fire extinguishers either properly mounted?
				Are fire extinguishers the proper classification for the operation/hazard involved?
				Are fire extinguishers located within the proper travel distance for the occupancy/hazard?
				Are all hand held portable fire extinguishers clearly

				visible?
				Do all hand held portable fire extinguishers have 18 inches of clearance on all sides?
				Are fire extinguisher visual inspected I.A.W. AFOSHSTD 91-501 Chapter 6, NFPA 10?
				Has a certified fire extinguisher technician inspected and tagged every extinguisher within the last 12 months?
				Has the facility manager or his/her designated representative signed off the monthly inspection tag?
				Has a 150 lb. halon 1211 wheeled fire extinguisher been placed within the distance (75') of the aircraft being protected?
				Is the extinguisher position so that the label/operating instructions/pressure gauge are visible?
				Is the safety pin and seal in place?
				Miscellaneous:
				Does the facility manager ensure that only authorized persons perform work on the facility and/or equipment?
				Has the facility manager filed copies of all work orders in the continuity book?
				Are all openings in fire rated walls, doors, floors, properly sealed?
				Have all self-help projects been reviewed by the Work Order Review Board
				Has the facility manager coordinated with the fire prevention section prior to special functions?
				Are candles used in unapproved facilities?
				Are unapproved types of candles being used in approved locations/areas?
				Are mechanical rooms secured to prevent unauthorized personnel from entering?
				Are sprinkler systems risers, post indicator valves, backflow preventers secured to prevent tampering?
				Are manual activation switches for fire suppression systems clearly marked and accessible?

				Are fire department sprinkler systems connections accessible, clearly marked, and free of dirt, trash?
				Does the facility manager/supervisor perform and document daily opening and closing inspections?
				Does the facility manager/supervisor document the daily opening and closing inspections?
				Are all ceiling tiles in false ceilings in place and do they fit properly?
				Are all phones equipped with 9-1-1 stickers?
				Does the fire department and/or utilities shop have clear access to utility shut off's; i.e. electricity, gas, water.

Attachment 4

FIRE DRILL CHECKLIST

Date: _____

TIME: Activated: _____ Terminated: _____

LOCATION: _____

PARTICIPANTS: _____

OBSERVERS: _____

SCENARIO: _____

1. Was the command and control of the situation adequate? YES ___ NO ___ NA ___

2. Was the fire reported without delay? YES ___ NO ___ NA ___

TIME: Fire alarms pull station activation: _____

Telephone call to 911: _____

3. Did the occupants attempt to extinguish the fire and display knowledge on the use of fire protection equipment? YES ___ NO ___ NA ___

4. Were personnel evacuated to a safe assembly area? YES ___ NO ___ NA ___

5. Was evacuation conducted in an orderly manner? YES ___ NO ___ NA ___

6. Was a sense of urgency shown? YES ___ NO ___ NA ___

7. Was a predetermined meeting place established? YES ___ NO ___ NA ___

8. Did the fire department respond? YES ___ NO ___ NA ___

COMMENTS: _____

FACILITY MANAGER'S SIGNATURE: _____

FACILITY MANAGER PRINTED NAME: _____

FIRE INSPECTOR'S SIGNATURE: _____