

FIRE FIGHTER ADVISORY COMMITTEE AGENDA

September 5, 2013, 9:00 A.M.

1701 N. Congress Avenue, William B. Travis Building, Room 1-104, Austin, Texas

The Fire Fighter Advisory Committee will convene in open session to deliberate and possibly take formal action on any of the following agenda items:

1. Roll call – 9:00 a.m.
2. Adoption of the May 31, 2013 Fire Fighter Advisory Committee meeting minutes.
3. Report from the Curriculum and Testing Committee with discussion and possible action on recommendations regarding changes to the Certification Curriculum Manual, including but not limited to the following:
 - a. Basic Fire Suppression Curriculum, Firefighter I
 - b. Basic Fire Suppression Curriculum, Firefighter II
 - c. Basic Fire Suppression Curriculum outlines
 - d. Basic Fire Suppression Curriculum reference list
4. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 421, Standards For Certification, including but not limited to, §421.1, Procedures for Meetings, §421.3, Minimum Standards Set by the Commission, §421.5, Definitions, §421.9, Designation of Fire Protection Duties, §421.11, Requirement To Be Certified Within One Year, §421.13, Individual Certificate Holders, §421.15, Extension of Training Period, and §421.17, Requirement to Maintain Certification.
5. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 427, Training Facilities, Subchapter C, Training Programs for On-Site and Distance Training Providers, including but not limited to, §427.301, General Provisions for Training Programs--On-Site and Distance Training Providers, §427.303, Training Approval process for On-Site and Distance Training Providers, §427.305, Procedures for Testing Conducted by On-Site and Distance Training Providers, and §427.307, On-Site and Distance Training Provider Staff Requirements.
6. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 431, Fire Investigation, Subchapter A, Minimum Standards for Arson Investigator Certification, including but not limited to, §431.1, Minimum Standards for Arson Investigation Personnel, §431.3, Minimum Standards for Basic Arson Investigator Certification, §431.5, Minimum Standards for Intermediate Arson Investigator Certification, §431.7, Minimum Standards for Advanced Arson Investigator Certification, §431.9, Minimum Standards for Master Arson Investigator Certification, §431.11, Minimum Standards for Arson Investigator Certification for Law Enforcement Personnel, and §431.13, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, §431.201, Minimum Standards for Fire Investigation Personnel, §431.203, Minimum Standards for Fire Investigator Certification, §431.205, Minimum Standards for Intermediate Fire Investigator Certification, §431.207, Minimum Standards for Advanced Fire Investigator Certification, §431.209, Minimum Standards for Master Fire Investigator Certification, and §431.211, International Fire Service Accreditation Congress (IFSAC Seal)—Fire Investigator.
7. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 437, Fees, including but not limited to, §437.1, Purpose and Scope, §437.3, Certification Fees, §437.5, Renewal Fees, §437.7, Standards Manual and Certification Curriculum Manual Fees, §437.11, Copying Fees, and §437.13, Processing Fees for Test Application, §437.15, International Fire Service Accreditation Congress (IFSAC) Seal Fees, and §437.17, Records Review Fees.
8. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 449, Head Of A Fire Department, including but not limited to, §449.1, Minimum Standards for the Head of a Fire Department, §449.3, Minimum Standards for Certification as Head of a Suppression Fire Department, and §449.5, Minimum Standards for Certification as Head of a Prevention Only Department.

9. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 457, Incident Safety Officer, including but not limited to, §457.1, Incident Safety Officer Certification, §457.3, Minimum Standards for Incident Safety Officer Certification, and §457.5, Examination Requirements.
10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - a. Title 37, Chapter 423, Fire Suppression, Subchapter A, Minimum Standards for Structure Fire Protection Personnel Certification, §423.1, Minimum Standards for Structure Fire Protection Personnel, §423.3, Minimum Standards for Basic Structure Fire Protection Personnel Certification, §423.5, Minimum Standards for Intermediate Structure Fire Protection Personnel Certification, §423.7, Minimum Standards for Advanced Structure Fire Protection Personnel Certification, §423.9, Minimum Standards for Master Structure Fire Protection Personnel Certification, §423.11, Higher Levels of Certification, and §423.13, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §423.201, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §423.203, Minimum Standards for Basic Aircraft Rescue Fire Fighting Personnel Certification, §423.205, Minimum Standards for Intermediate Aircraft Rescue Fire Fighting Personnel Certification, §423.207, Minimum Standards for Advanced Aircraft Rescue Fire Fighting Personnel Certification, §423.209, Minimum Standards for Master Aircraft Rescue Fire Fighting Personnel Certifications, and §423.211, International Fire Service Accreditation Congress (IFSAC) Seal.
 - b. Title 37 TAC, Chapter 425, Fire Service Instructors, including but not limited to, §425.1, Minimum Standards for Fire Service Instructor Certification, §425.3, Minimum Standards for Fire Service Instructor I Certification, §425.5, Minimum Standards for Fire Service Instructor II Certification, §425.7, Minimum Standards for Fire Service Instructor III Certification, §425.9, Minimum Standards for Master Fire Service Instructor III Certification, and §425.11, International Fire Service Accreditation Congress (IFSAC) Seal.
 - c. Title 37 TAC, Chapter 429, Minimum Standards for Fire Inspectors, Subchapter B, Minimum Standards for Fire Inspector Certification, §429.201, Minimum Standards for Fire Inspector Personnel, §429.203, Minimum Standards for Basic Fire Inspector Certification, §429.205, Minimum Standards for Intermediate Fire Inspector Certification, §429.207, Minimum Standards for Advanced Fire Inspector Certification, and §429.211, International Fire Service Accreditation Congress (IFSAC) Seal.
 - d. Title 37 TAC, Chapter 433, Minimum Standards for Driver/Operator-Pumper, §433.1, Driver/Operator-Pumper Certification, §433.3, Minimum Standards for Driver/Operator-Pumper Certification, §433.5, Examination Requirements, and §433.7, International Fire Service Accreditation Congress (IFSAC) Seal.
 - e. Title 37 TAC, Chapter 439, Examinations For Certification, Subchapter A, Examinations For On-Site Delivery Training, §439.1, Requirements—General, §439.3 Definitions, §439.5, Procedures, §439.7, Eligibility, §439.9, Grading, §439.11, Commission-Designated Performance Skill Evaluations, §439.13, Special Accommodations for Testing, and §439.19, Number of Test Questions, Subchapter B, Examinations For Distance Training, §439.201 Requirements—General, §439.203, Procedures, and §439.205 Performance Skill Evaluation.
 - f. Title 37 TAC, Chapter 451, Fire Officer, Subchapter A, Minimum Standards for Fire Officer I, §451.1 Fire Officer I Certification, §451.3, Minimum Standards for Fire Officer I Certification, §451.5, Examination Requirements, and §451.7, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, Minimum Standards For Fire Officer II, §451.201, Fire Officer II Certification, §451.203, Minimum Standards for Fire Officer II Certification, §451.205, Examination Requirements, and §451.207 International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter C, Minimum Standards For Fire Officer III, §451.302, Fire Officer III Certification, §451.303, Minimum Standards for Fire Officer III Certification, and §451.305, Examination Requirements, Subchapter D, Minimum Standards For Fire Officer IV, §451.401 Fire Officer IV Certification, §451.403, Minimum Standards for Fire Officer IV Certification, and §451.405, Examination Requirements.

g. Title 37 TAC, Chapter 453, Subchapter A, Minimum Standards for Hazardous Materials Technician, §453.1, Hazardous Materials Technician Certification, §453.3, Minimum Standards for Hazardous Materials Technician Certification, §453.5, Examination Requirements, and §453.7, International Fire Service Accreditation Congress (IFSAC) Seal. Subchapter B, Minimum Standards for Hazardous Materials Incident Commander, §453.201, Hazardous Materials Incident Commander Certification, §453.203, Minimum Standards for Hazardous Materials Incident Commander, and §453.205, Examination Requirements.

11. Discussion and possible action on future meeting dates, locations and agenda items.

12. Adjourn meeting.

1. Roll call--9:00 a.m.

2. Adoption of the May 31, 2013 Fire Fighter Advisory Committee meeting minutes.

TEXAS COMMISSION ON FIRE PROTECTION

Presiding Officer Jim Reidy called the May, 31, 2013 meeting of the Fire Fighter Advisory Committee to order at 8:00 a.m. at the William B. Travis Building, 1701 N. Congress Ave., Room 1-104, in Austin, Texas.

Attending Jim Reidy Michael Wisko Tommy Anderson* Amado Cano, Jr. Ken Swindle
Jason Collier Daniel DeYear J. P. Steelman Michael Jones

*absent entire meeting

**absent part of meeting

Staff Tim Rutland Deborah Cowan Mollie Clakley Paul Maldonado Mark Roughton
Andrew Lutostanski, Assistant Attorney General

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1. Roll call Secretary J. P. Steelman called roll and a quorum was present. Presiding Officer, Jim Reidy welcomed the newest member to the committee Ken Swindle.
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2. Adoption of Minutes A motion was made by J. P. Steelman and seconded by Mike Jones to approve the minutes of the March 21, 2013, fire fighter advisory committee meeting as discussed. The motion carried.
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3. Report from Curriculum & Testing Committee
- Grace Wilson staff liaison gave a brief overview of the committee's recommendations from its last meeting.
- a. A motion was made by Mike Jones and seconded by Jason Collier to recommend to the commission changes to the Fire Investigator Curriculum outline and phase outline. The motion carried.
- b. A motion was made by Daniel DeYear and seconded by Michael Wisko to recommend to the commission changes to the Instructor I Curriculum and outline and reference lists. The motion carried.
- A motion was made by Amado Cano, Jr. and seconded by J. P. Steelman to recommend to the commission changes to the Instructor II Curriculum, outline and reference lists. The motion carried.
- A motion was made by Amado Cano, Jr. and seconded by Jason Collier to recommend to the commission changes to the Instructor III Curriculum, outline and reference lists. The motion carried.
- c. A motion was made by J. P. Steelman and seconded by Daniel DeYear to recommend to the commission changes to the Fire Officer III and Fire Officer IV reference lists. The motion carried.
- d. A motion was made by Daniel DeYear and seconded by Michael Wisko to recommend to the commission changes to the Basic Wildland Fire Fighter Curriculum reference list. The motion carried.
- e. A motion was made by Tommy Anderson and seconded by Mike Jones to table the Intermediate Wildland Fire Fighter Curriculum, outline, reference list and skill sheets for further review. The motion carried.
- After review, a motion was made by Tommy Anderson and seconded by Mike Jones to recommend to the commission changes to the Intermediate Wildland Fire Fighter Curriculum, outline, reference list, and skill sheets. The motion carried.
- f. A motion was made by J. P. Steelman and seconded by Amado Cano, Jr. to recommend to the commission changes to the Haz-Mat Operations Mission-Specific Competencies, Haz-Mat Technician and Haz-Mat Incident Commander reference lists as discussed. The motion carried.

Item re-opened for discussion on recommendations from the Curriculum and Testing Committee regarding applicants for the Head of Department Ad-Hoc Advisory Committee.

A motion was made by Michael Jones and seconded by Mike Wisko to recommend to the commission to add Brian Davis, Fire Chief, Freeport Fire Department to the list of recommended applicants for the Head of Department Ad-Hoc Advisory Committee. The motion carried.

A motion was made by Mike Jones and seconded by Amado Cano, Jr. to make a negative recommendation to the commission of Scott Kerwood, Fire Chief, Hutto Fire and Rescue to the Head of Department Ad-Hoc Advisory Committee. The motion carried.

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| 4. 37 TAC,
Chapter 421 | A motion was made by Tommy Anderson and seconded by Daniel DeYear, to approve for recommendation to the commission amendments to 37 TAC, Chapter 421, §421.5. The motion carried. |
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| 5. 37 TAC,
Chapter 423 | A motion was made by Tommy Anderson and seconded by Amado Cano, Jr. to approve for recommendation to the commission amendments to 37 TAC, Chapter 423, Subchapter A, §423.3. The motion carried. |
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| 6. 37 TAC,
Chapter 455 | A motion was made by Tommy Anderson, and seconded by Michael Wisko to approve for recommendation to the commission amendments to 37 TAC, Chapter 455, §455.3, §455.5. The motion carried. |
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| 7. NFPA 1981 &
NFPA 1982 | After discussion, no action necessary. |
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| 8. Fire Fighter
Injury data
collection | After discussion, no action necessary. |
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| 9. Future meeting
dates, locations
agenda items | The committee scheduled its next meeting for September 5, 2013 at 9:00 a.m. |
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| 10. Adjournment | A motion was made by Tommy Anderson and seconded by Mike Jones to adjourn the meeting. The motion carried. |
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Jim Reidy
 Presiding Officer

3. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations regarding changes to the Certification Curriculum Manual, including but not limited to the following:**
 - a. **Basic Fire Suppression Curriculum, Firefighter I**
 - b. **Basic Fire Suppression Curriculum, Firefighter II**
 - c. **Basic Fire Suppression Curriculum outlines**
 - d. **Basic Fire Suppression Curriculum reference list**

SECTION 101

BASIC FIRE SUPPRESSION – FIREFIGHTER I

A Basic Structure Fire Protection Personnel is a fire fighter who has met all the job performance requirements (JPRs) of Fire Fighter I and Fire Fighter II as defined in NFPA 1001, *Standard for Fire Fighter Professional Qualifications*. In order to satisfactorily meet these requirements, the fire fighter trainee must meet all the JPRs and demonstrate mastery of all the knowledge, skills and ability requirements of the following components of the Texas Commission on Fire Protection Curriculum Manual:

- Chapter 1, Section 101 – 5 Basic Fire Suppression – Firefighter I
- Chapter 1, Section 102 – 6 Basic Fire Suppression – Firefighter II
- Chapter 6, Section 601 – 4 Hazardous Materials Awareness
- Chapter 6, Section 602 – 5 Hazardous Materials Operations
- Chapter 6, Section 603 – 6.2 Hazardous Materials Operations – Mission Specific Competencies – Using Personal Protective Equipment
- Chapter 6, Section 603 – 6.6 Hazardous Materials Operations – Mission Specific Competencies – Product Control

101-5.1 General

101-5.1.1 General Knowledge Requirements

The organization of the fire department; the role of the Fire Fighter I in the organization; the mission of fire service; the fire department's standard operating procedures (SOPs) and rules and regulations as they apply to the Fire Fighter I; **the value of life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities**; the role of other agencies as they relate to the fire department; aspects of the fire department's member assistance program; the importance of physical fitness and a healthy lifestyle to the performance of the duties of a fire fighter; the critical aspects of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, as they apply to the Fire Fighter I; ~~knot types and usage; the difference between life safety and utility rope; reasons for placing rope out of service; the types of knots to use for given tools, ropes, or situations; hoisting methods for tools and equipment; and using rope to support response activities.~~

1. Organization of the fire department
 - a. History
 - b. Organizational structure
2. The role of the Fire Fighter I

3. Mission of the fire service
 - a. Emergency activities
 - b. Non-emergency activities
4. **The value of life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities**
 - a. **Courage To Be Safe So Everyone Goes Home**
5. Role of other agencies as they relate to the fire department
 - a. Private entities
 - b. Local
 - c. Regional
 - d. State
 - e. Federal
6. Aspects of the fire department's member assistance program
 - a. Critical Incident Stress Management (CISM)
 - b. Member Assistance Programs (MAP)
7. Importance of physical fitness and a healthy lifestyle to the performance of duties of a fire fighter
8. The critical aspects of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
9. The combustion process and key terms associated with fire science
 - a. The four products of combustion commonly found in structural fires that create a life hazard
 - i. Flame
 - ii. Heat
 - iii. Smoke
 - iv. Gases and irritants
 - b. Key terms
 - i. Fire
 - ii. Flash point
 - iii. Ignition temperature
 - iv. Fire point
 - v. Flammable or explosive range
 - a) LEL
 - b) UEL
 - vi. Boiling point
 - vii. Oxidation

- viii. Pyrolysis
- ix. Reducing agent
- x. Vaporization
- xi. Combustion
- xii. Vapor density
- xiii. Specific gravity
- xiv. Thermal layering/heat stratification/thermal balance

10. Fire theory

- a. Key terms
 - i. Fire triangle
 - ii. Fire tetrahedron
- b. Describe the relationship of the concentration of oxygen to combustibility and life safety

11. Identify and describe heat energy sources

- a. Chemical heat energy
- b. Electrical heat energy
- c. Mechanical heat energy
- d. Nuclear heat energy

12. The stages of a fire and describe the appropriate action to be taken for extinguishment

- a. Conditions and associated hazards and the appropriate actions to be taken for extinguishment
 - i. Ignition
 - ii. Growth
 - iii. Flashover
 - iv. Fully developed/fully involved
 - v. Decay
- b. Special conditions that occur during a fire's growth
 - i. Flameover/rollover
 - ii. Thermal layering
 - iii. Backdraft
- c. Methods of heat transfer
 - i. Conduction
 - ii. Convection
 - iii. Radiation
 - iv. Direct flame impingement

13. Physical states of matter in which fuels are commonly found

- a. Define and describe three types of fuel
 - i. Solid fuel
 - ii. Liquid fuel

- iii. Gaseous fuel
- b. Define and describe the chemical and physical properties of fuels
 - i. Specific gravity
 - ii. Vapor density
 - iii. The theory of surface to mass ratio as it relates to the combustion process

14. Identify and describe chemical by-products of combustion

- a. Poisonous gases and irritants common in smoke
 - i. Carbon dioxide
 - ii. Carbon monoxide
 - iii. Hydrogen cyanide

15. Identify and describe the units of heat measurement

- a. British thermal unit (BTU)
- b. Fahrenheit (°F)
- c. Celsius (°C)
- d. Calorie (C)

16. Identify and describe the fire extinguishment theory

- a. Describe the fire extinguishment theory
- b. Identify and describe four methods of extinguishment
 - i. Temperature reduction
 - ii. Fuel removal
 - iii. Oxygen exclusion
 - iv. Inhibiting chemical reaction

17. Identify and describe the characteristic of water as it relates to its fire extinguishing potential

- a. Identify and describe the physical characteristics of water
- b. Identify and describe the Law of Specific Heat
- c. Identify and describe the Law of Latent heat
- d. Identify and describe the advantages and disadvantages of water as an extinguishing agent
- e. Identify and describe the Law of Heat Flow

~~18. Ropes and knots~~

- ~~a. Knot types and use Etc. (relocated to 5.3.20)~~

101-5.1.2 General Skill Requirements

The ability to don personal protective clothing within 1 minute, doff personal protective clothing and prepare for reuse, hoist tools and

equipment using ropes and the correct knot, and locate information in departmental documents and standard or code materials.

1. Types of personal protective equipment (PPE) ensembles
 - a. Station/work uniforms
 - b. Structural firefighting
 - c. Wildland firefighting
 - d. Emergency medical service (EMS)
 - e. Specialized ensembles (i.e. ARFF, technical rescue)
2. Donning
3. Doffing/preparing for re-use
4. Care and maintenance
 - a. Basic inspection
 - b. Advanced inspection
 - c. Record keeping
 - d. **Familiarization with NFPA 1851**

101-5.2 **Fire Department Communications**

This duty shall involve initiating responses, receiving telephone calls, and using fire department communications equipment to correctly relay verbal or written information, according to the JPRs in 5.2.1 through ~~5.2.3~~ **5.2.4**.

- 101-5.2.1 Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.
- 101-A.5.2.1 The Fire Fighter I should be able to receive and accurately process information received at the station. Fire Fighters used as telecommunicators (dispatchers) should meet the requirements of NFPA 1061, Standard for Professional Qualifications for Public Safety Telecommunicator, for qualification standards and JPRs.

Requisite Knowledge. Procedures for reporting an emergency; departmental SOPs for taking and receiving alarms, radio codes, or procedures; and information needs of dispatch center.

1. Procedures for reporting an emergency
 - a. Conventional phone
 - b. Cellular phone

- c. Call box
 - d. Telecommunication Devices for the Deaf (TDD)
 - e. Still alarms or walk-ins
 - f. Automatic alarms
2. Departmental SOPs for taking and receiving alarms
 - a. Nature of emergency
 - b. Location of emergency
 - c. Caller information
 - d. Responding units
 - e. Call back number
 3. Radio codes or procedures
 - a. Clear speech – plain English
 - b. Emergency communications
 - i. Emergency communications per AHJ
 - ii. Mayday
 - iii. Evacuation order
 4. Information needs of dispatch center
 - a. Nature of emergency
 - b. Location of emergency
 - c. Caller information
 - d. Responding units
 - e. Call back number

Requisite Skills. The ability to operate fire department communications equipment, relay information, and record information.

- 101-5.2.2 Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed.

Requisite Knowledge. Fire department procedures for answering nonemergency telephone calls.

1. Departmental standard operating procedures (SOPs)
2. Phone etiquette

Requisite Skills. The ability to operate fire station telephone and intercom equipment.

101-5.2.3 Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

Requisite Knowledge. Departmental radio procedures and etiquette for routine traffic, emergency traffic, and emergency evacuation signals.

1. Departmental radio procedures and etiquette for routine traffic
2. Departmental radio procedures and etiquette for emergency traffic
3. Departmental radio procedures and etiquette for emergency evacuation procedures

Requisite Skills. The ability to operate radio equipment and discriminate between routine and emergency traffic.

101-5.2.4 Activate an emergency call for assistance, given vision-obscured conditions, PPE, and department SOPs, so that the fire fighter can be located and rescued.

101-A.5.2.4 An emergency call for assistance can be initiated by the use of a radio, pass device, or other means to alert others to a fire fighter's need of emergency assistance. This should also include the term *mayday, fire fighter down*, or such other terminology as determined by the AHJ.

Requisite Knowledge. Personnel accountability systems, emergency communication procedures, and emergency evacuation methods.

1. **Personnel accountability systems**
 - a. **Passport**
 - b. **Tag system**
 - c. **Electronic system**
2. **Emergency communication procedures**
 - a. **Radio**
 - b. **Face-to-face**
 - c. **Tagline**
 - d. **Evacuation signal**
3. **Emergency evacuation methods**
 - a. **Roof escape**

- b. **Balcony escape**
- c. **Self rescue**
- d. **Ladder escape**
- e. **Room escape**

Requisite Skills. The ability to initiate an emergency call for assistance in accordance with the AHJ's procedures, the ability to use other methods of emergency calls for assistance.

101-5.3 **Fireground Operations**

This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 5.3.1 through 5.3.19.

- 101-5.3.1 Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other personal protective equipment, so that the SCBA is correctly donned and activated within 1 minute, the SCBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

- 101-A.5.3.1 The Fire Fighter I should already be wearing full protective clothing prior to the beginning of the SCBA-donning procedure. In addition to fully donning and activating the SCBA, the Fire Fighter I should also replace any personal protective clothing (i.e., gloves, protective hood, helmet, etc.) displaced during the donning procedure and activate the personal alert safety system (PASS) device.

Requisite Knowledge. Conditions that require respiratory protection, uses and limitations of SCBA, components of SCBA, donning procedures, breathing techniques, indications for and emergency procedures used with SCBA, and physical requirements of the SCBA wearer.

1. Conditions that require respiratory protection
 - a. Oxygen deficiency
 - b. Elevated temperatures
 - c. Toxic environments
 - d. Smoke (by-products of combustion)
2. Uses and limitations of SCBA
 - a. Wearer
 - i. Facial and long hair
 - ii. Protective clothing

- iii. Donning
 - a) Properly donned ~~and activated in 1-minute time~~
 - b) SCBA correctly worn
 - iv. Eyeglasses or contact lenses
 - v. Use in high or low temperatures
 - vi. Accidental submersion
 - vii. Communication
 - viii. Working in teams
 - ix. Personal alert safety system (PASS)
 - x. Doffing
 - xi. Physical conditioning
- b. Equipment
 - c. Air supply
3. Types of SCBA
- a. Open circuit
 - b. Closed circuit
 - c. Supplied air respirators (SARs)
4. Components of SCBA
- a. Backpack and harness assembly
 - b. Air cylinder assembly
 - c. Regulator assembly
 - d. Face piece assembly
 - e. PASS device
 - f. Rapid Intervention Crew/Universal Air Connection (RIC/UAC)
5. Donning and doffing procedures
- a. Over-the-head method
 - b. Coat method
 - c. Seat mounted
 - d. Compartment mounted
6. Breathing techniques
- a. Controlled breathing
 - b. Buddy breathing
7. Indications for and emergency procedures used with SCBA
- a. Use of emergency by-pass or purge valve
 - b. Rapid Intervention Crew/Universal Air Connection (RIC/UAC)
 - c. Conservation of air
8. Physical requirements of the SCBA wearer
- a. Cardiovascular conditioning

- b. Respiratory conditioning
- c. Psychological/emotional stability

- 9. Maintenance and inspections
 - a. Replacing a cylinder
 - b. Refilling a cylinder
 - c. Cleaning
 - d. Inspections
 - i. Daily
 - ii. Monthly
 - iii. Annually

Requisite Skills. The ability to control breathing, replace SCBA air cylinders, use SCBA to exit through restricted passages, initiate and complete emergency procedures in the event of SCBA failure or air depletion, and complete donning procedures.

101-5.3.2 Respond on apparatus to an emergency scene, given personal protective clothing and other necessary personal protective equipment, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.

101-A.5.3.2 Other personal protective equipment might include hearing protection in cabs that have a noise level in excess of 90 dBa, eye protection for fire fighters riding in jump seats that are not fully enclosed, and SCBAs for those departments that require fire fighters to don SCBAs while en route to the emergency.

Requisite Knowledge. Mounting and dismounting procedures for riding fire apparatus, hazards and ways to avoid hazards associated with riding apparatus, prohibited practices, and types of department personal protective equipment and the means for usage.

- 1. Mounting procedures for riding fire apparatus
 - a. Hand grip
 - b. Footing
 - c. Seatbelt
- 2. Dismounting procedures for riding fire apparatus
- 3. Hazards associated with riding fire apparatus
- 4. Ways to avoid hazards associated with riding fire apparatus

- a. Seated and utilizing safety restraints
 - b. Hearing protection, if required
 - c. Secure loose objects in cab
5. Prohibited practices
- a. Donning PPE while in motion
 - b. Riding on the tailboard/sideboards
6. Types of departmental personal protective equipment (PPE) and the means for usage
- a. Safety bars/gates
 - b. Safety chains

Requisite Skills. The ability to use each piece of provided safety equipment.

101-5.3.3 Establish and operate in work areas at emergency scenes, given protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards and downed electrical wires, an assignment, and SOPs, so that procedures are followed, protective equipment is worn, protected work areas are established as directed using traffic and scene control devices, and the fire fighter performs assigned tasks only in established, protected work areas.

101-A.5.3.3 The safety of responders operating at an emergency scene is a key concern and one of the primary skills that the fire fighter must develop. Operations on roads and highways, on scenes where visibility is restricted, or where utilities can be unstable present a significant risk to the fire fighter as they dismount from apparatus and initiate emergency operations. Special protective equipment and constant attention to potential hazards is essential.

Fire fighters can be assigned to direct the movement of traffic at the scene or set up flare or cone lines either independently or in conjunction with law/traffic enforcement officers. A fire fighter assigned to this duty (either briefly or until the incident is under control) should understand the proper techniques to control traffic and the appropriate use of protective clothing and signaling equipment.

Federal law requires that fire department SOPs when operating on the roadway be in compliance with the US Department of Transportation publication *Manual on Uniform Traffic Control Devices*.

Requisite Knowledge. Potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions; proper procedures for dismounting apparatus in traffic; procedures for safe operation at emergency scenes; and the protective equipment available for members' safety on emergency scenes and work zone designations.

1. Potential hazards involved in operating on emergency scenes
 - a. Vehicle traffic
 - b. Utilities
 - c. Environmental conditions
2. Proper procedures for dismounting apparatus in traffic
3. Procedures for safe operation at emergency scenes
4. Protective equipment available for members' safety on emergency scenes
5. Protective equipment available for members' safety work zone designations

Requisite Skills. The ability to use personal protective clothing, deploy traffic and scene control devices, dismount apparatus, and operate in the protected work areas as directed.

101-5.3.4 Force entry into a structure, given personal protective equipment, tools, and an assignment, so that the tools are used as designed, the barrier is removed, and the opening is in a safe condition and ready for entry.

101-A.5.3.4 The Fire Fighter I should be able to force entry through wood, glass, and metal doors that open in and out, overhead doors, and windows common to the community or service area.

Requisite Knowledge. Basic construction of typical doors, windows, and walls within the department's community or service area; operation of doors, windows, and locks; and the dangers associated with forcing entry through doors, windows, and walls.

1. Basic construction types within the department's community or service area
 - a. Doors
 - i. Swinging doors
 - a) Inward opening

- b) Outward opening
 - c) Double swing
 - ii. Wooden doors
 - iii. Metal doors
 - iv. Tempered plate glass doors
 - v. Revolving doors
 - vi. Sliding doors
 - vii. Overhead doors
 - viii. Fire doors
 - b. Windows
 - i. Checkrail windows (double-hung)
 - ii. Casement windows (hinged)
 - iii. Projected windows (factory)
 - iv. Awning and jalousie windows
 - v. Plastic windows (high security)
 - vi. Screened or barred windows
 - c. Walls
 - i. Masonry and veneered walls
 - ii. Metal walls
 - iii. Wood frame walls
 - iv. Partition walls
2. Operation
- a. Doors
 - b. Windows
 - c. Locks
3. Dangers associated with forcing entry
- a. Through doors
 - b. Through windows
 - c. Through walls
4. Tools
- a. Cutting tools
 - b. Prying tools
 - c. Pushing/pulling tools
 - d. Striking tools
5. Maintenance of tools
- a. Axe heads and cutting edges
 - b. Wooden handles
 - c. Fiberglass handles
 - d. Unprotected metal surfaces
 - e. Power equipment

Requisite Skills. The ability to transport and operate hand and power tools and to force entry through doors, windows, and walls using assorted methods and tools.

101-5.3.5 Exit a hazardous area as a team, given vision-obscured conditions, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.

101-A.5.3.5 When training exercises are intended to simulate emergency conditions, smoke-generating devices that do not create a hazard are required. Several accidents have occurred when smoke bombs or other smoke-generating devices that produce a toxic atmosphere have been used for training exercises. All exercises should be conducted in accordance with the requirements of NFPA 1404, Standard for Fire Service Respiratory Protection Training.

Requisite Knowledge. Personnel accountability systems, communication procedures, emergency evacuation methods, what constitutes a safe haven, elements that create or indicate a hazard, and emergency procedures for loss of air supply.

1. Personnel accountability systems
 - a. Passport
 - b. Tag system
 - c. Electronic system
2. Communication procedures
 - a. Radio
 - b. Face-to-face
 - c. Tagline
 - d. Evacuation signal
3. Emergency evacuation methods
 - a. Roof escape
 - b. Balcony escape
 - c. Self rescue
 - d. Ladder escape
 - e. Room escape
4. What constitutes a safe haven/refuge
 - a. Absence of immediately dangerous to life and health (IDLH) hazard
 - b. Area outside of collapse zone

5. Elements that indicate or create a hazard
6. Emergency procedures for loss of air supply
 - a. Stay calm/don't panic
 - b. Activate PASS device
 - c. Declare Mayday

Requisite Skills. The ability to operate as a team member in vision-obscured conditions, locate and follow a guideline, conserve air supply, and evaluate areas for hazards and identify a safe haven.

101-5.3.6 Set up ground ladders, given single and extension ladders, an assignment, and team members if needed, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the necessary height with the fly locked, the top is placed against a reliable structural component, and the assignment is accomplished.

101-A.5.3.6 The fire fighter should be able to accomplish this task with each type and length of ground ladder carried by the department.

Requisite Knowledge. Parts of a ladder, hazards associated with setting up ladders, what constitutes a stable foundation for ladder placement, different angles for various tasks, safety limits to the degree of angulation, and what constitutes a reliable structural component for top placement.

1. Parts of a ladder
 - a. Beam
 - b. Bed section
 - c. Butt
 - d. Butt spur
 - e. Fly section
 - f. Guides
 - g. Halyard
 - h. Heat sensor label
 - i. Hooks
 - j. Pawls (dogs)
 - k. Protection plates
 - l. Pulley
 - m. Rail
 - n. Rung
 - o. Staypole
 - p. Stops

- q. Tie rod
 - r. Tip
2. Hazards associated with setting up ladders
 - a. Overhead obstruction (energized power lines)
 - b. Lifting and moving
 - c. Uneven terrain
 - d. Soft spots
 - e. High traffic areas (doorways)
 - f. Exposure to flame or heat
 3. What constitutes a stable foundation for ladder placement
 - a. Flat, stable surface
 - b. Non-skid surface
 4. Different angles for various tasks
 - a. Roof
 - b. Window
 - i. Entry
 - ii. Ventilation or working
 - iii. Rescue set
 5. Safety limits to the degree of angulation
 6. What constitutes a reliable structural component for top placement

Requisite Skills. The ability to carry ladders, raise ladders, extend ladders and lock flies, determine that a wall and roof will support the ladder, judge extension ladder height requirements, and place the ladder to avoid obvious hazards.

101-5.3.7 Attack a passenger vehicle fire operating as a member of a team, given personal protective equipment, attack line, and hand tools, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are overhauled, and the fire is extinguished.

101-A.5.3.7 Passenger vehicles include automobiles, light trucks, and vans.

Requisite Knowledge. Principles of fire streams as they relate to fighting automobile fires; precautions to be followed when advancing hose lines toward a automobile; observable results that a fire stream has been properly applied; identifying alternative fuels and the hazards associated with them; dangerous conditions created during an automobile fire;

common types of accidents or injuries related to fighting automobile fires and how to avoid them; how to access locked passenger, trunk, and engine compartments; and methods for overhauling an automobile.

1. Principles of fire streams as they relate to vehicle fires
 - a. Straight stream
 - b. Full fog
 - c. Power cone
2. Precautions to be followed when advancing hose lines toward a vehicle
 - a. Uphill
 - b. Upwind
 - c. 45 degree angle approach
3. Observable results that a fire stream has been properly applied
4. Identifying alternative fuels and the hazards associated with them
 - a. Compressed Natural Gas (CNG)
 - b. Liquefied Petroleum Gas (LPG)
 - c. Ethanol
 - d. High voltage electrical power
5. Dangerous conditions created during a vehicle fire
 - a. Energy absorbing bumpers
 - b. Hydraulic pistons (supports)
 - i. Hatchbacks
 - ii. Trunks
 - iii. Tailgates
 - iv. Hoods
 - c. Shock absorbers/struts
 - d. Toxic by-products of combustion
 - e. Supplemental Restraint System (SRS)
 - f. Side Impact Protection System (SIPS)
 - g. Batteries
 - h. Combustible metals
6. Common types of accidents or injuries related to fighting vehicle fires and how to avoid them
 - a. Traffic hazards
 - b. Injuries
 - c. Respiratory
7. Access compartments

- a. Passenger
- b. Trunk
- c. Engine

- 8. Methods for overhauling a vehicle
 - a. Chock wheels
 - b. Disable battery
 - c. Apply water thoroughly
 - d. Confirm no leaking fluids or fuels

Requisite Skills. The ability to identify automobile fuel type; assess and control fuel leaks; open, close, and adjust the flow and pattern on nozzles; apply water for maximum effectiveness while maintaining flash fire protection; advance 38 mm (1½ in.) or larger diameter attack lines; and expose hidden fires by opening all automobile compartments.

101-5.3.8 Extinguish fires in exterior Class A materials, given fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior, attack lines, hand tools and master stream devices, and an assignment, so that exposures are protected, the spread of fire is stopped, collapse hazards are avoided, water application is effective, the fire is extinguished, and signs of the origin area(s) and arson are preserved.

101-A.5.3.8 The Fire Fighter I should be able to extinguish fires in stacked or piled materials such as hay bales, pallets, lumber, piles of mulch, sawdust, other bulk Class A materials, or small unattached structures that are attacked from the exterior. The tactics for extinguishing each of these types of fires are similar enough to be included in one JPR.

Live fire evolutions should be conducted in accordance with the requirements of NFPA 1403, Standard on Live Fire Training Evolutions. It is further recommended that prior to involvement in live fire evolutions, the fire fighter demonstrate the use of SCBA in smoke and elevated temperature conditions.

In areas where environmental or other concerns restrict the use of Class A fuels for training evolutions, properly installed and monitored gas-fueled fire simulators might be substituted.

Requisite Knowledge. Types of attack lines and water streams appropriate for attacking stacked, piled materials and outdoor fires; dangers — such as collapse — associated with stacked and piled materials; various extinguishing agents and their effect on different

material configurations; tools and methods to use in breaking up various types of materials; the difficulties related to complete extinguishment of stacked and piled materials; water application methods for exposure protection and fire extinguishment; dangers such as exposure to toxic or hazardous materials associated with storage building and container fires; obvious signs of origin and cause; and techniques for the preservation of fire cause evidence.

1. Types of attack lines and water streams appropriate for attacking stacked, piled materials and outdoor fires
 - a. Types of attack lines
 - i. $\frac{3}{4}$ or 1 inch (booster or reel line)
 - ii. $1\frac{1}{2}$ to $1\frac{3}{4}$ inches
 - iii. 2 to $2\frac{1}{2}$ inches
 - iv. 3 inch or greater
 - b. Water streams
 - i. Low volume (less than 40 GPM)
 - ii. Handline (40 to 350 GPM)
 - iii. Master (350 GPM or greater)
2. Dangers associated with stacked and piled materials
 - a. Collapse
 - b. Energized sources
 - c. Products of combustion
 - d. Increased weight (absorption of water)
 - e. Exposures
3. Various extinguishing agents and their effects on different material configurations
 - a. Water
 - i. Cooling
 - ii. Increased surface tension
 - b. Foam
 - i. Blanketing or smothering
 - ii. Cooling
 - iii. Decreased surface tension
4. Tools and methods to use in breaking up various types of materials
 - a. Tools
 - i. Pike pole
 - ii. Rubbish hook
 - iii. Rake
 - b. Heavy equipment
 - i. Tractor

ii. Dozer

5. Difficulties related to complete extinguishment of stacked and piled materials
 - a. Agent penetration
 - b. Access
 - c. Density of material
 - d. Height and area of pile
6. Water application methods for exposure protection and fire extinguishment
 - a. Direct application
 - b. Indirect application
7. Dangers such as exposure to toxic or hazardous materials associated with storage building and container fires
8. Obvious signs of origin and cause
 - a. Burn pattern
 - b. Charring
 - c. Evidence of accelerants
 - d. Trailers
9. Techniques for the preservation of fire cause evidence
 - a. Protect evidence
 - b. Preserve area
 - c. Limit access

Requisite Skills. The ability to recognize inherent hazards related to the material's configuration, operate handlines or master streams, break up material using hand tools and water streams, evaluate for complete extinguishment, operate hose lines and other water application devices, evaluate and modify water application for maximum penetration, search for and expose hidden fires, assess patterns for origin determination, and evaluate for complete extinguishment.

- 101-5.3.9 Conduct a search and rescue in a structure operating as a member of a team, given an assignment, obscured vision conditions, personal protective equipment, a flashlight, forcible entry tools, hose lines, and ladders when necessary, so that ladders are correctly placed when used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety — including respiratory protection — is not compromised.

101-A.5.3.9 Fire departments and training organizations must use reason and good judgment when training fire fighters to perform fire fighter rescue (rapid intervention) and self-survival evolutions. Training programs should put more emphasis on avoiding being trapped or disoriented in severe fire conditions than they should on getting out of them. While learning practical fire fighter rescue and self-survival skills is important, the particular skills that are taught should not require fire fighters to use tools beyond the limits of their intended use, should not place the fire fighters in an inordinate amount of danger during the training evolutions, and should be techniques that could realistically be required on the fireground. Fire departments and training organizations should balance the risk of injury or death to the fire fighter during training on these evolutions with the actual chance that they would ever need to apply them in real life. There are numerous accounts of fire fighters being injured or killed during rapid intervention and self-survival training of skills that will never, or should never, be performed on the fireground. One example of these questionable techniques is sliding down ground ladders. In the rare event that more than one fire fighter will need to exit the same window in an expedient manner, once the first fire fighter steps down two or three rungs, they are not obstructing the next fire fighter from exiting the window. Yet, numerous fire fighters have been seriously injured or died attempting to perform this task in training.

From NFPA 1001 (2013 Edition) Annex, A.5.3.9(B):

“It is not the intent of the Technical Committee on Fire Fighter Professional Qualifications to prohibit a fire fighter from partially or completely removing the backpack assembly, as an emergency procedure only, to exit through a restricted passage, without removing the face piece or compromising the air supply in any manner.”

Requisite Knowledge. Use of forcible entry tools during rescue operations, ladder operations for rescue, psychological effects of operating in obscured conditions and ways to manage them, methods to determine if an area is tenable, primary and secondary search techniques, team members' roles and goals, methods to use and indicators of finding victims, victim removal methods (including various carries), and considerations related to respiratory protection.

1. Use of forcible entry tools during rescue operations
 - a. Striking
 - b. Prying
 - c. Cutting
 - d. Pulling

2. Ladder operations for rescue
 - a. Conscious victim
 - b. Unconscious victim
 - c. Fire fighter rescue
3. Psychological effects of operating in obscured conditions and ways to manage them
4. Methods to determine if an area is tenable
 - a. Level of heat
 - b. Smoke
 - c. Structural stability
 - d. Risk/benefit analysis
5. Primary and secondary search techniques
 - a. Define the following
 - i. Primary search
 - ii. Secondary search
 - b. Search techniques
 - i. Right hand/left hand
 - ii. Large area/small area considerations
 - iii. Rope assisted, or hose line
 - iv. Tools
6. Team members' roles and goals
 - a. Finding victims
 - b. Obtaining information on the extent of the fire
 - c. Search priorities
 - i. Closest to fire area
 - ii. Remainder of fire floor
 - iii. Floor above
 - iv. Floor below
 - d. Rescue vs. recovery
7. Methods to use and indicators of finding victims
 - a. Probable victim locations
 - i. Behind doors
 - ii. Under windows
 - iii. On/under beds
 - iv. In closets
 - v. In bathtubs
 - b. Additional considerations
 - i. Type of occupancy
 - ii. Time of day

- iii. Building size and arrangement
- iv. Information from neighbors
- v. Occupant indicators
 - a) Vehicles in driveway
 - b) Toys in yard
- c. Call out/listen
- d. Victim sighting through opening (i.e. window/door)

8. Victim removal methods

- a. Types of carries
 - i. Extremity carry
 - ii. Seat carry
 - iii. Chair carry
 - iv. Webbing drag
 - v. Blanket drag
 - vi. Ladder rescue
 - a) Conscious
 - b) Unconscious
- b. Securing of a victim
 - i. Basket
 - ii. Stretcher
 - iii. Long spine board
 - iv. Other devices

9. Considerations related to respiratory protection

- a. Personal use/work time
- b. Emergency procedures
- c. Rescue air/RIT pak
- d. Conditions for use
 - i. Heat
 - ii. Smoke
 - iii. Oxygen deficiency
 - iv. Toxic atmospheres

Requisite Skills. The ability to use SCBA to exit through restricted passages, set up and use different types of ladders for various types of rescue operations, rescue a fire fighter with functioning respiratory protection, rescue a fire fighter whose respiratory protection is not functioning, rescue a person who has no respiratory protection, and assess areas to determine tenability.

- 101-5.3.10 Attack an interior structure fire operating as a member of a team, given an attack line, ladders when needed, personal protective equipment, tools, and an assignment, so that team integrity is maintained, the attack line is

deployed for advancement, ladders are correctly placed when used, access is gained into the fire area, effective water application practices are used, the fire is approached correctly, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are recognized and managed, and the fire is brought under control.

101-A.5.3.10 The Fire Fighter I should be proficient in the various attack approaches for room and contents fires at three different levels (at grade, above grade, and below grade). Maintenance of body posture in the standard refers to staying low during initial attack, protecting oneself from falling objects, and otherwise using common sense given the state of the fire's growth or suppression. Live fire evolutions should be conducted in accordance with the requirements of NFPA 1403, *Standard on Live Fire Training Evolutions*. It is further recommended that prior to involvement in live fire evolutions, the fire fighter demonstrates the use of SCBA in smoke and elevated temperature conditions. In areas where environmental or other concerns restrict the use of Class A fuels for training evolutions, properly installed and monitored gas-fueled fire simulators might be substituted.

Requisite Knowledge. Principles of fire streams; types, design, operation, nozzle pressure effects, and flow capabilities of nozzles; precautions to be followed when advancing hose lines to a fire; observable results that a fire stream has been properly applied; dangerous building conditions created by fire; principles of exposure protection; potential long-term consequences of exposure to products of combustion; physical states of matter in which fuels are found; common types of accidents or injuries and their causes; and the application of each size and type of attack line, the role of the backup team in fire attack situations, attack and control techniques for grade level and above and below grade levels, and exposing hidden fires.

1. Principles of fire streams
 - a. Definitions
 - i. Pressure
 - ii. Friction loss
 - iii. Elevation loss/gain
 - iv. Fire stream
 - v. Vaporization
 - vi. Latent heat vaporization
 - vii. British Thermal Unit (BTU)
 - viii. Water hammer
 - b. Fire streams
 - i. Low-volume stream

- ii. Handline stream
- iii. Master stream
- iv. Cooling/extinguishing properties

2. Types of nozzles

- a. Solid stream
 - i. Types
 - ii. Advantages
 - iii. Disadvantages
 - iv. Flow rate
- b. Fog stream
 - i. Types
 - ii. Advantages
 - iii. Disadvantages
 - iv. Flow rate
 - v. Water flow adjustment
 - a) Manually adjustable
 - b) Automatic (constant-pressure)
 - vi. Stream patterns
 - a) Straight stream
 - b) Narrow fog
 - c) Wide fog
 - vii. Broken stream
 - a) Types
 - b) Advantages
 - c) Disadvantages
 - d) Flow rate
- c. Specialty nozzles
 - i. Types
 - ii. Advantages
 - iii. Disadvantages
 - iv. Flow rate

3. Design of nozzles

- a. Solid stream nozzle
 - i. Components/parts
 - ii. Operating pressure
 - a) 50 psi hand line
 - b) 80 psi master stream
- b. Fog stream nozzle
 - i. Components/parts
 - ii. Operating pressure
 - a) 100 psi hand line
 - b) 50-75 psi low pressure hand line

- c) 100 psi master stream
 - c. Broken stream nozzle
 - i. Components/parts
 - ii. Operating pressure varies by design
- 4. Operation of nozzles
 - a. Operating valves
 - i. Ball valve
 - ii. Slide valve
 - iii. Rotary control valve
 - b. Flow selection
 - i. Automatic
 - ii. Adjustable
 - iii. Fixed
- 5. Nozzle pressure effects
 - a. Reach
 - i. Solid stream
 - ii. Fog stream
 - iii. Broken stream
 - b. Nozzle reaction
 - i. Solid stream
 - ii. Fog stream
 - iii. Broken stream
 - c. Water pattern
 - i. Solid stream
 - ii. Straight stream
 - iii. Narrow fog
 - iv. Wide fog
 - v. Broken stream
- 6. Flow capabilities of nozzles
 - a. Low volume nozzles – 40 GPM or less
 - b. Hand line nozzles – 40-350 GPM
 - c. Master stream nozzles – 350 GPM and above
- 7. Precautions to take when advancing hose lines to a fire
 - a. Into a structure
 - b. Up a stairway
 - c. Down a stairway
 - d. From a standpipe
 - e. Up a ladder
- 8. Observable results that a fire stream has been properly applied

- a. Direct attack
 - i. Smoke
 - ii. Heat
 - iii. Flame
- b. Indirect attack
 - i. Smoke
 - ii. Heat
 - iii. Flame
 - iv. Patterns
 - a) T pattern
 - b) Z pattern
 - c) O pattern
- c. Combination attack
 - i. Smoke
 - ii. Heat
 - iii. Flame
 - iv. Patterns
 - a) T pattern
 - b) Z pattern
 - c) O pattern

9. Dangerous building conditions created by fire

- a. Flashover
- b. Rollover
- c. Backdraft
- d. Smoke explosion
- e. Imminent building collapse
- f. Fire behind, below, or above attack team
- g. Kinks or obstructions to the hose line
- h. Holes, weak stairs, or other fall hazards
- i. Suspended loads on fire-weakened supports
- j. Hazardous or highly flammable commodities likely to spill
- k. Electrical shock hazards

10. Principles of exposure protection

- a. Conduction
- b. Convection
- c. Radiation
- d. Direct flame impingement

11. Potential long-term consequences of exposure to products of combustion

- a. Respiratory diseases
- b. Cardiovascular diseases

- c. Stroke
- d. Cancer
- e. Death

12. Physical states of matter in which fuels are found

- a. Solid
- b. Liquid
- c. Gaseous

13. Common types of accidents or injuries and their causes

- a. Common injuries
- b. Common activities
- c. Common causes
 - i. Slips, trips, falls
 - ii. Failure to wear proper PPE
 - iii. Failure to follow safety procedures

14. Application of each size and type of attack line

- a. 30-350 GPM
- b. 1½" to 3" hose lines
- c. AHJ

15. The role of the backup team in fire attack situations

- a. "Two-in/two-out" rule
- b. Fire fighter rescue
- c. AHJ

16. Attack and control techniques for grade level, above grade level and below grade level

- a. Grade level
 - i. Single story structures
 - ii. Large single story structures
- b. Above grade level
 - i. Multi-story structures
 - ii. Low-rise
 - iii. Mid-rise
 - iv. High-rise
- c. Below grade level
 - i. Basements
 - ii. Vaults

17. Exposing hidden fires

- a. Overhaul techniques
 - i. Opening walls

- ii. Opening floors
- iii. Opening ceilings
- b. Other concealed spaces – special considerations
 - i. Utility chutes/shafts
 - ii. Cocklofts
 - iii. Attics
 - iv. Basement
 - v. Other

Requisite Skills. The ability to prevent water hammers when shutting down nozzles; open, close, and adjust nozzle flow and patterns; apply water using direct, indirect, and combination attacks; advance charged and uncharged 38 mm (1½ in.) diameter or larger hose lines up ladders and up and down interior and exterior stairways; extend hose lines; replace burst hose sections; operate charged hose lines of 38 mm (1½ in.) diameter or larger while secured to a ground ladder; couple and uncouple various handline connections; carry hose; attack fires at grade level and above and below grade levels; and locate and suppress interior wall and subfloor fires.

- 101-5.3.11 Perform horizontal ventilation on a structure operating as part of a team, given an assignment, personal protective equipment, ventilation tools, equipment, and ladders, so that the ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke.

Requisite Knowledge. The principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation; safety considerations when venting a structure; fire behavior in a structure; the products of combustion found in a structure fire; the signs, causes, effects, and prevention of backdrafts; and the relationship of oxygen concentration to life safety and fire growth.

1. Principles, advantages, limitations and effects of horizontal, mechanical and hydraulic ventilation
 - a. Purposes
 - i. Life safety
 - ii. Fire attack and extinguishment
 - iii. Fire spread control
 - iv. Reduce flashover potential
 - v. Reduce backdraft potential
 - vi. Property conservation
 - b. Types of horizontal ventilation

- i. Natural
 - ii. Mechanical
 - a) Positive pressure
 - b) Negative pressure
 - c) Hydraulic
 - c. Advantages
 - i. Natural
 - ii. Mechanical
 - a) Positive pressure
 - b) Negative pressure
 - c) Hydraulic
 - d. Limitations
 - i. Natural
 - ii. Mechanical
 - a) Positive pressure
 - b) Negative pressure
 - c) Hydraulic
 - e. Effects
 - i. Natural
 - ii. Mechanical
 - a) Positive pressure
 - b) Negative pressure
 - c) Hydraulic
- 2. Safety considerations when venting a structure
 - a. Life safety hazards
 - b. Determining the location and extent of the fire
 - c. Identifying building construction features
 - d. Predicting fire travel and growth
- 3. Fire behavior in a structure
 - a. Products of combustion
 - b. Behavior of heat, smoke and fire gases
 - c. Airflow characteristics
- 4. Products of combustion found in a structure fire
 - a. Heat
 - b. Smoke
 - c. Gases and irritants
- 5. Backdrafts
 - a. Signs
 - b. Causes
 - c. Effects

d. Prevention

6. Relationship of oxygen concentration to life safety and fire growth

Requisite Skills. The ability to transport and operate ventilation tools and equipment and ladders, and to use safe procedures for breaking window and door glass and removing obstructions.

- 101-5.3.12 Perform vertical ventilation on a structure as part of a team, given an assignment, personal protective equipment, ground and roof ladders, and tools, so that ladders are positioned for ventilation, a specified opening is created, all ventilation barriers are removed, structural integrity is not compromised, products of combustion are released from the structure, and the team retreats from the area when ventilation is accomplished.

Requisite Knowledge. The methods of heat transfer; the principles of thermal layering within a structure on fire; the techniques and safety precautions for venting flat roofs, pitched roofs, and basements; basic indicators of potential collapse or roof failure; the effects of construction type and elapsed time under fire conditions on structural integrity; and the advantages and disadvantages of vertical and trench/strip ventilation.

1. Methods of heat transfer
 - a. Conduction
 - b. Convection
 - c. Radiation
 - d. Direct flame impingement
2. Principles of thermal layering within a structure on fire
 - a. Definition of thermal layering (i.e. heat stratification, thermal balance)
 - b. Thermal layering as it relates to ventilation
 - c. Thermal layering in relation to life safety/rescue
3. Roof Styles
 - a. Flat
 - b. Pitched
 - i. Hip
 - ii. Gable
 - iii. Mansard
 - iv. Shed
 - v. Butterfly
 - vi. Gambrel

4. Techniques and safety precautions for venting flat roofs
 - a. Weather conditions
 - b. Determining need
 - c. Exposures
 - d. Obstructions/weight on roof
 - e. Maintain structural support integrity during cut
 - f. PPE
 - g. Tools
 - h. Ladder placement
 - i. Sounding roof
 - j. Slips, trips, and falls
 - k. Reduced visibility
 - l. Equipment safety
 - m. Location of vent cut
 - n. Secondary means of escape
 - o. Personnel
 - p. Types of cuts

5. Techniques and safety precautions for venting pitched roofs
 - a. ~~Styles of roofs~~ Angle of pitch
 - i. ~~Hip~~
 - ii. ~~Gable~~
 - iii. ~~Mansard~~
 - iv. ~~Shed~~
 - v. ~~Butterfly~~
 - vi. ~~Gambrel~~
 - b. Weather conditions
 - c. Determining need
 - d. Exposures
 - e. Obstructions/weight on roof
 - f. Maintain structural support integrity during cut
 - g. PPE
 - h. Tools
 - i. Ladder placement
 - j. Sounding roof
 - k. Slips, trips, and falls
 - l. Reduced visibility
 - m. Equipment safety
 - n. Location of vent cut
 - o. Secondary means of escape
 - p. Personnel
 - q. Types of cuts

6. Techniques and safety precautions for venting basements

- a. Determining need
 - b. Exposures
 - c. Obstructions/weight on floor above
 - d. Maintain structural support integrity during cut
 - e. PPE
 - f. Tools
 - g. Slips, trips, and falls
 - h. Reduced visibility
 - i. Equipment safety
 - j. Location of ventilation openings
 - k. Personnel
7. Basic indicators of potential collapse or roof failure
- a. Construction
 - i. Solid beam
 - ii. Light weight trusses
 - b. Size up
 - i. Sagging roof
 - ii. Spongy roof
 - iii. Melting tar
 - iv. Smoke seepage
 - v. Visible fire
 - c. Elapsed time of fire
8. Effects of construction type
- a. Structural integrity
 - b. Fire spread
9. Elapse time under fire conditions on structural integrity
10. Vertical ventilation
- a. Advantages
 - b. Disadvantages
11. Trench/strip ventilation
- a. Advantages
 - b. Disadvantages

Requisite Skills. The ability to transport and operate ventilation tools and equipment; hoist ventilation tools to a roof; cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements; sound a roof for integrity; clear an opening with hand tools; select, carry, deploy, and secure ground ladders for ventilation activities; deploy roof ladders on

pitched roofs while secured to a ground ladder; and carry ventilation-related tools and equipment while ascending and descending ladders.

- 101-5.3.13 Overhaul a fire scene, given personal protective equipment, attack line, hand tools, a flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

Requisite Knowledge. Types of fire attack lines and water application devices most effective for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, obvious signs of area of origin or signs of arson, and reasons for protection of fire scene.

1. Types of fire attack lines and water application devices most effective for overhaul
 - a. Attack lines
 - b. Fire extinguishers
 - c. Buckets and basins
 - d. SOPs per AHJ
2. Water application methods for extinguishment that limit water damage
 - a. Water conservation
 - b. Soaking in buckets and basins
3. Types of tools to expose hidden fire
 - a. Prying and pulling tools
 - b. Cutting tools
 - c. Striking tools
 - d. Power tools
 - e. Thermal imaging camera
4. Methods to expose hidden fires
 - a. Sight
 - b. Touch
 - c. Sound
 - d. Electronic instruments
5. Dangers associated with overhaul
 - a. Toxic atmospheric conditions
 - b. Weakened floors and structural members
 - c. Sharp objects and debris
 - d. Utilities
 - e. Slippery surfaces

6. Obvious signs of area of origin or signs of arson
 - a. Burn patterns
 - b. Smoke markings
 - c. Physical evidence
7. Reasons for protection of fire scene
 - a. Securing the scene
 - b. Preservation of evidence

Requisite Skills. The ability to deploy and operate an attack line; remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity; apply water for maximum effectiveness; expose and extinguish hidden fires in walls, ceilings, and subfloor spaces; recognize and preserve obvious signs of area of origin and arson; and evaluate for complete extinguishment.

- 101-5.3.14 Conserve property as a member of a team, given salvage tools and equipment and an assignment, so that the building and its contents are protected from further damage.

Requisite Knowledge. The purpose of property conservation and its value to the public, methods used to protect property, types of and uses for salvage covers, operations at properties protected with automatic sprinklers, how to stop the flow of water from an automatic sprinkler head, identification of the main control valve on an automatic sprinkler system, and forcible entry issues related to salvage.

1. The purpose of property conservation and its value to the public
2. Methods used to protect property
 - a. Removal of property
 - b. Protection of property in place
3. Types and uses of salvage covers
 - a. Types
 - b. Uses
 - i. Cover property
 - ii. Construct basins, chutes and catchalls
 - iii. Floor runners
 - iv. Debris removal
4. Operations at properties protected with automatic sprinklers

5. How to stop the flow of water from an automatic sprinkler head
 - a. Sprinkler stops and wedges
 - b. Operate main control valves
6. Identification of the main control valve on an automatic sprinkler system
 - a. Sprinkler riser
 - b. Indicating valves
 - i. Outside stem and yoke (OS&Y)
 - ii. Butterfly valve
 - iii. Wall post indicator valve (WPIV)
 - iv. Post indicator valve (PIV)
 - v. Post indicator valve assembly(PIVA)
7. Forcible entry issues related to salvage
 - a. Utilize forcible entry only when necessary
 - b. Try before you pry

Requisite Skills. The ability to cluster furniture; deploy covering materials; roll and fold salvage covers for reuse; construct water chutes and catch-alls; remove water; cover building openings, including doors, windows, floor openings, and roof openings; separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination; stop the flow of water from a sprinkler with sprinkler wedges or stoppers; and operate a main control valve on an automatic sprinkler system.

101-5.3.15 Connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.

101-A.5.3.15 Static water sources can include portable water tanks, ponds, creeks, and so forth.

Requisite Knowledge. Loading and off-loading procedures for mobile water supply apparatus; fire hydrant operation; and suitable static water supply sources, procedures, and protocol for connecting to various water sources.

1. Loading and off-loading procedures for mobile water supply apparatus (AHJ)
 - a. Portable water tanks
 - b. Drafting and siphoning appliances
 - c. Relay pumping apparatus

- d. Fill apparatus and drafting appliances
 - e. Portable pumps
 - f. Fire hydrant appliances
 - g. Dry hydrants or suction supply points
2. Fire hydrant operation
 - a. Types
 - i. Dry barrel hydrant
 - ii. Wet barrel hydrant
 - b. Color coding
 - i. Class AA light blue
 - ii. Class A green
 - iii. Class B orange
 - iv. Class C red
 3. Suitable static water supply sources
 - a. Lakes
 - b. Rivers
 - c. Streams
 - d. Ponds
 - e. Pools
 4. Procedures protocol for connecting to various water sources
 - a. Hydrant to pumper connection
 - i. Forward hose lay
 - ii. Reverse hose lay
 - b. Drafting

Requisite Skills. The ability to hand lay a supply hose, connect and place hard suction hose for drafting operations, deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them, make hydrant-to-pumper hose connections for forward and reverse lays, connect supply hose to a hydrant, and fully open and close the hydrant.

101-5.3.16 Extinguish incipient Class A, Class B, and Class C fires, given a selection of portable fire extinguishers, so that the correct extinguisher is chosen, the fire is completely extinguished, and correct extinguisher-handling techniques are followed.

101-A.5.3.16 The fire Fighter I should be able to extinguish incipient Class A fires such as wastebaskets, small piles of pallets, wood, or hay; Class B fires of approximately 9 ft² (0.84 m²); and Class C fires where the electrical equipment is energized. If the Fire Department has Class D or K type

extinguishers, the fire fighter should be knowledgeable on the devices and their use.

Requisite Knowledge. The classifications of fire; the types of, rating systems for, and risks associated with each class of fire; and the operating methods of and limitations of portable extinguishers.

1. Classifications of fire
 - a. Class A – ordinary combustible materials
 - b. Class B – flammable and/or combustible liquids and gases
 - c. Class C – energized electrical equipment
 - d. Class D – combustible metals
 - e. Class K – combustible cooking oils

2. Types of fire
 - a. Combustible materials
 - b. Flammable liquids and gases
 - c. Energized electrical equipment
 - d. Combustible metals
 - e. Combustible cooking oils

3. Rating systems for fire
 - a. Class A test
 - i. Wood panel
 - ii. Wood crib
 - b. Class B test
 - i. Pan of flammable liquid
 - ii. n-heptane used
 - c. Class C test
 - i. Applies to energized electrical fires only
 - ii. De-energized equipment is treated as a class A, B or D fire
 - d. Class D test
 - i. Metal fires only
 - ii. Dry powder agent must be formulated to the specific metal
 - e. Class K test
 - i. Cooking oil fires
 - ii. Uses a specialized extinguishing agent

4. Operating methods of portable extinguishers
 - a. Acronym PASS
 - i. Pull
 - ii. Aim

- iii. Squeeze
- iv. Sweep
- b. Distance from the fire

- 5. Limitations of portable extinguishers
 - a. Type of agent for fire
 - b. Size of extinguisher for fire

Requisite Skills. The ability to operate portable fire extinguishers, approach fire with portable fire extinguishers, select an appropriate extinguisher based on the size and type of fire, and safely carry portable fire extinguishers.

- 101-5.3.17 Illuminate the emergency scene, given fire service electrical equipment and an assignment, so that designated areas are illuminated and all equipment is operated within the manufacturer's listed safety precautions.

Requisite Knowledge. Safety principles and practices, power supply capacity and limitations, and light deployment methods.

- 1. Safety principles and practices
 - a. Safely lifts equipment during set up
 - b. Locates the power plant in a remote and well-ventilated position
 - c. Arranges power cords neatly to minimize tripping hazards
 - d. Ground Fault Interrupters (GFI) operations
- 2. Power supply capacity and limitations
 - a. Power supply (portable or mounted)
 - b. Lights
 - c. Auxiliary equipment
 - d. Cords
 - e. Connectors
- 3. Light deployment methods
 - a. Organizes lights to illuminate area sufficiently
 - b. Follow equipment operating guidelines

Requisite Skills. The ability to operate department power supply and lighting equipment, deploy cords and connectors, reset ground-fault interrupter (GFI) devices, and locate lights for best effect.

- 101-5.3.18 Turn off building utilities, given tools and an assignment, so that the assignment is safely completed.

Requisite Knowledge. Properties, principles, and safety concerns for electricity, gas, and water systems; utility disconnect methods and associated dangers; and use of required safety equipment.

1. Electrical systems
 - a. Properties
 - b. Principles
 - c. Safety concerns
2. Gas systems
 - a. Properties
 - b. Principles
 - c. Safety concerns
3. Water systems
 - a. Properties
 - b. Principles
 - c. Safety concerns
4. Utility disconnect methods
 - a. Electrical
 - i. Electric meter
 - ii. Main breaker box
 - b. Natural gas meter
 - c. Water meter
5. Dangers associated with utility disconnect methods
 - a. Electrocution
 - b. Fire/explosion
6. Use of required safety equipment (AHJ)

Requisite Skills. The ability to identify utility control devices, operate control valves or switches, and assess for related hazards.

101-5.3.19 Combat a ground cover fire operating as a member of a team, given protective clothing, SCBA if needed, hose lines, extinguishers or hand tools, and an assignment, so that threats to property are reported, threats to personal safety are recognized, retreat is quickly accomplished when warranted, and the assignment is completed.

101-A.5.3.19 Protective clothing is not personal protective clothing as used throughout the rest of this document. Some jurisdictions provide fire fighters with different clothing for ground cover fires than is worn for structural fires.

This clothing can be substituted for structural protective clothing in order to meet the intent of this JPR.

Requisite Knowledge. Types of ground cover fires, parts of ground cover fires, methods to contain or suppress, and safety principles and practices.

1. Types of ground cover fires
 - a. Crown fire – aerial fuel
 - b. Surface fire – surface fuel
 - c. Subsurface fire – subsurface fuel

2. Parts of ground cover fires
 - a. Head
 - b. Origin
 - c. Heel
 - d. Flanks
 - e. Fingers
 - f. Spot fires
 - g. Island
 - h. Perimeter
 - i. Green
 - j. Black

3. Methods to contain or suppress
 - a. Direct attack
 - b. Indirect attack

4. Safety principles and practices
 - a. Proper use of PPE
 - b. Proper use of tools
 - c. Scene hazard awareness

5. Factors influencing the spread of ground fires
 - a. Weather
 - b. Topography
 - c. Fuel

Requisite Skills. The ability to determine exposure threats based on fire spread potential, protect exposures, construct a fire line or extinguish with hand tools, maintain integrity of established fire lines, and suppress ground cover fires using water.

101-5.3.20 Tie a knot appropriate for hoisting tool, given personal protective equipment, tools, ropes, and an assignment, so that the knots used are appropriate for hoisting tools securely and as directed.

Requisite Knowledge. Knot types and usage; the difference between life safety and utility rope; reasons for placing rope out of service; the types of knots to use for given tools, ropes, or situations; hoisting methods for tools and equipment; and using rope to support response activities.

(↓ Numbers 1 through 6 copied from the old 5.1.1 #17)

1. **Knot types and use**
 - a. **Safety knot or overhand knot**
 - b. **Half hitch**
 - c. **Clove hitch**
 - d. **Figure 8**
 - e. **Figure 8 on a bight**
 - f. **Figure 8 with a follow through**
 - g. **Bowline**
 - h. **Sheet bend or becket bend**
2. **Differentiating between life safety and utility rope**
 - a. **Natural**
 - b. **Synthetic**
3. **Reasons for placing rope out of service**
 - a. **Inspection**
 - i. **Routine**
 - ii. **After use**
 - b. **Storage**
 - c. **Maintenance**
4. **Types of knots used for given tools, ropes or situations**
 - a. **Hoisting an axe**
 - b. **Pike pole**
 - c. **Hose**
 - d. **Ladder**
 - e. **Power tools or fans**
5. **Hoisting methods for tools and equipment**
6. **Using rope to support response activities**
 - a. **Utility**
 - b. **Life safety/rescue**

Requisite Skills. The ability to hoist tools using specific knots based on the type of tool.

101-5.4 **Rescue Operations**

This duty shall involve no requirements for Fire Fighter I.

101-5.5 **Prevention, Preparedness and Maintenance**

This duty shall involve performing activities that reduce the loss of life and property due to fire through response readiness, according to the JPRs in 5.5.1 and 5.5.2.

- 101-5.5.1 Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer's or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

Requisite Knowledge. Types of cleaning methods for various tools and equipment, correct use of cleaning solvents, and manufacturer's or departmental guidelines for cleaning equipment and tools.

1. Types of cleaning methods for various tools and equipment
 - a. Ladders
 - b. Ventilation equipment
 - c. SCBA
 - d. Ropes
 - e. Salvage equipment
 - f. Hand tools

2. Correct use of cleaning solvents
 - a. Mild diluted detergent
 - b. Safety solvent
 - c. Water

Requisite Skills. The ability to select correct tools for various parts and pieces of equipment, follow guidelines, and complete recording and reporting procedures.

- 101-5.5.2 Clean, inspect, and return fire hose to service, given washing equipment, water, detergent, tools, and replacement gaskets, so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service.

Requisite Knowledge. Departmental procedures for noting a defective hose and removing it from service, cleaning methods, and hose rolls and loads.

1. Departmental procedures for noting a defective hose and removing it from service (AHJ)
2. Cleaning methods
 - a. Rinse
 - b. Gently scrub with mild detergent
 - c. Final rinse
3. Hose rolls
 - a. Straight roll
 - b. Donut roll
 - c. Twin donut roll
 - d. Self-locking twin donut roll
4. Hose loads
 - a. Forward lay
 - b. Reverse lay
 - c. Accordion load
 - d. Horseshoe load
 - e. Reverse horseshoe load
 - f. Flat load
 - g. Triple layer load
 - h. Minuteman load
 - i. Booster hose load (reel)

Requisite Skills. The ability to clean different types of hose, operate hose washing and drying equipment, mark defective hose, and replace coupling gaskets, roll hose, and reload hose.

SECTION 102
BASIC FIRE SUPPRESSION – FIREFIGHTER II

A Basic Structure Fire Protection Personnel is a Fire Fighter who has met all the job performance requirements of Fire Fighter I and Fire Fighter II as defined in NFPA 1001 *Standard for Fire Fighter Professional Qualifications*. In order to satisfactorily meet these requirements, the Fire Fighter trainee must meet all the job performance requirements (JPRs) and demonstrate mastery of all the knowledge, skills, and ability requirements of the following components of the Texas Commission on Fire Protection Certification Curriculum Manual:

- Chapter 1, Section 101 – 5 Basic Fire Suppression – Firefighter I
- Chapter 1, Section 102 – 6 Basic Fire Suppression – Firefighter II
- Chapter 6, Section 601 – 4 Hazardous Materials Awareness
- Chapter 6, Section 602 – 5 Hazardous Materials Operations
- Chapter 6, Section 603 – 6.2 Hazardous Materials Operations – Mission Specific Competencies – Using Personal Protective Equipment
- Chapter 6, Section 603 – 6.6 Hazardous Materials Operations – Mission Specific Competencies – Product Control

102-6.1 **General**

102-6.1.1 **General Knowledge Requirements**

Responsibilities of the Fire Fighter II in assuming and transferring command within an incident management system, performing assigned duties in conformance with applicable NFPA and other safety regulations and authority having jurisdiction (AHJ) procedures, and the role of a Fire Fighter II within the organization.

1. Identify and describe the purpose of an Incident Management System
 - i. Common terminology
 - ii. Modular organization
 - iii. Integrated communications
 - iv. Unified command structure
 - v. Consolidated action plans
 - vi. Manageable span of control
 - vii. Predesignated incident facilities
 - viii. Comprehensive resource management
2. Functions necessary to manage an incident effectively and the responsibilities within the Incident Management System
 - i. Command
 - ii. Safety
 - iii. Liaison

- iv. Information
 - v. Operations
 - vi. Planning
 - vii. Logistics
 - viii. Finance/Administration
3. Components and functions of the operations section within the Incident Management System
- a. Incident Command
 - b. Staging
 - c. Branches
 - d. Divisions and Groups
 - e. Strike Teams and Task Forces
 - f. Single Resources
4. Procedure for implementing the Incident Management System
- a. Hazard and risk analysis
 - i. What has occurred?
 - ii. What is the current status of the emergency?
 - iii. Is anyone trapped or injured?
 - iv. Can the emergency be handled with the resources on scene or en route?
 - v. Does the emergency fall within the scope of the individual's training?
 - b. Risk vs. benefit
5. Establishing command and the transfer of command
- a. First on scene
 - i. Investigation
 - ii. Command
 - iii. Pass command for fast attack/rescue
 - b. Considerations for transfer of command
 - i. Arrival of senior staff
 - ii. Specialized incident
 - iii. Resource requirements
 - iv. Time restraints
 - v. demobilization
 - c. Methods of transferring command
 - i. Face-to-face
 - ii. Via radio
6. Transferring command
- a. Situation status report (sit stat)
 - b. Communicating transfer of command

102-6.1.2 **General Skill Requirements**

The ability to determine the need for command, organize and coordinate an incident management system until command is transferred, and function within an assigned role in an incident management system.

102-6.2 ***Fire Department Communications***

This duty shall involve performing activities related to initiating and reporting responses, according to the JPRs in 6.2.1 and 6.2.2.

102-6.2.1 Complete a basic incident report, given the report forms, guidelines, and information, so that all pertinent information is recorded, the information is accurate, and the report is complete.

Requisite Knowledge. Content requirements for basic incident reports, the purpose and usefulness of accurate reports, consequences of inaccurate reports, how to obtain necessary information, and required coding procedures.

1. Content requirements for basic incident reports
 - a. National Fire Incident Reporting System (NFIRS)
 - b. Texas fire incident reporting system (TXFIRS)
2. Purpose of accurate reports
 - a. A legal record of an incident
 - b. Consistent format for the collection of data usable at the state and national level
3. Usefulness of accurate reports
 - a. Provides information to officials for evaluation performance and making changes
 - b. Aids in determining departmental needs
4. Consequences of inaccurate reports
 - a. Incorrect data
 - b. Litigation
5. How to obtain necessary information
 - a. Person or entity involved
 - b. Owner
 - c. Bystanders or eye witnesses
 - d. Dispatch
 - e. Equipment involved in ignition
 - f. Fire fighters on scene

6. Required coding procedures
 - a. NFIRS
 - b. TXFIRS

Required Skills. The ability to determine necessary codes, proof reports, and operate fire department computers or other equipment necessary to complete reports.

102-6.2.2 Communicate the need for team assistance, given fire department communications equipment, SOPs, and a team, so that the supervisor is consistently informed of team needs, departmental SOPs are followed, and the assignment is accomplished safely.

102-A.6.2.2 The Fire Fighter II could be assigned to accomplish or coordinate tasks away from direct supervision. Many of these tasks could result in the need for additional or replacement personnel due to the over-changing conditions on the scene of an emergency. The Fire Fighter II is expected to identify these needs and effectively communicate this information within an incident management system. Use of radio communication equipment necessitates that these communications be accurate and efficient.

Requisite Knowledge. SOPs for alarm assignments and fire department radio communication procedures. (AHJ)

1. Alarm assignment SOP
2. Fire department radio communication procedures

Requisite Skills. The ability to operate fire department communications equipment.

102-6.3 **Fireground Operations**

This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 6.3.1 through 6.3.4.

102-6.3.1 Extinguish an ignitable liquid fire, operating as a member of a team, given an assignment, an attack line, personal protective equipment, a foam proportioning device, a nozzle, foam concentrates, and a water supply, so that the correct type of foam concentrate is selected for the given fuel and conditions, a properly proportioned foam stream is applied to the surface of the fuel to create and maintain a foam blanket, fire is extinguished,

reignition is prevented, team protection is maintained with a foam stream, and the hazard is faced until retreat to safe haven is reached

- 102-A.6.3.1 The Fire Fighter II should be able to accomplish this task with each type of foam concentrate used by the jurisdiction. This could include the use of both Class A and B foam concentrates on appropriate fires. When using Class B foams to attack flammable or combustible liquid fires, the Fire Fighter II should extinguish a fire of at least 100 ft² (9 m²). The Fire Fighter II is not expected to calculate application rates and densities. The intent of this JPR can be met in training through the use of training foam concentrates or gas-fired training props.

Requisite Knowledge. Methods by which foam prevents or controls a hazard; principles by which foam is generated; causes for poor foam generation and corrective measures; difference between hydrocarbon and polar solvent fuels and the concentrates that work on each; the characteristics, uses, and limitations of fire-fighting foams; the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application; foam stream application techniques; hazards associated with foam usage; and methods to reduce or avoid hazards.

1. Methods by which foam prevents a hazard
 - a. Blanketing effect
 - b. Vapor suppression
2. Methods by which foam controls a hazard
 - a. Heat resistance
 - b. Fuel resistance
 - c. Vapor suppression
3. Principles by which foam is generated
 - a. Components of finished foam
 - i. Foam solution
 - a) Foam concentrate
 - b) Water
 - ii. Air (aeration/mechanical agitation at the nozzle)
 - b. Water + concentrate = foam solution
 - c. Foam solution + air = finished foam
4. Methods by which foam is generated
 - a. Foam eductor
 - i. Venture principle
 - ii. In-line eductor
 - iii. Bypass eductor

- b. Around the pump foam proportioner
 - c. Balanced pressure foam system
 - d. Premix
5. Cause for poor foam generation
- a. Foam concentrate/fuel type mismatch
 - b. Fuel area and depth
 - c. Wrong application rate
 - d. Inadequate water supply, or pressure
 - e. Foam eductor type and setting
 - f. Nozzle type and setting
 - g. Back pressure
6. Corrective measures for poor foam generation
- a. Identify fuel type
 - i. Hydrocarbon
 - ii. Polar solvent
 - b. Determine fuel depth and surface area
 - c. Determine application rate (GPM/ft²)
 - d. Acquire adequate supply of foam concentrate
 - e. Establish water supply and correct pressure
 - f. Verify proper educator operation
 - i. Setting (i.e. 1%, 3%, 6%)
 - ii. Concentrate pick-up tube
 - g. Nozzle flow matches educator capability (GPM) and provides aeration
 - h. Check for hose kinks and/or blockage
 - i. Assure nozzle is fully open
7. Differentiating between hydrocarbon and polar solvent fuels
- a. Hydrocarbon fuels
 - i. Examples
 - ii. Concentrate types
 - iii. Concentrate percentage and application rate
 - b. Polar solvent fuels
 - i. Examples
 - ii. Concentrate types
 - iii. Concentrate percentage and application rate
8. Advantages, uses and limitations of fire-fighting foams
- a. Protein
 - i. High water retention and heat resistance
 - ii. Effective vapor suppression
 - iii. Limited shelf life

- iv. Poor fuel resistance
- v. Slow knockdown
- vi. Poor compatibility with dry chemical agents
- b. Fluoroprotein
 - i. Excellent fuel resistance
 - ii. Compatible with specific dry chemical agents
 - iii. High heat resistance
 - iv. Requires use of foam nozzle
- c. Film Forming Fluoroprotein (FFFP)
 - i. Fast film-forming capability
 - ii. High heat resistance
- d. Aqueous Film Forming Foam (AFFF) / Alcohol Type Concentrate (ATC)
 - i. Fast film-forming capability
 - ii. Applied with regular fog nozzles
 - iii. Compatible with specific dry chemical agents
 - iv. ATC suitable for polar solvent fuel fires
 - v. Quick drain-down may require continued application
- e. High-expansion foam
 - i. Reduces surface tension of water
 - ii. Excellent penetration into Class A materials
 - iii. Poor heat resistance
- f. Class A foams
 - i. Reduces surface tension of water
 - ii. Foamy water solution clings to surfaces
 - iii. Fast extinguishment
 - iv. Requires a more accurate proportioning system
 - v. Impacts fire investigation laboratory tests
 - vi. Creates difficult salvage operations

9. Advantages and disadvantages of using fog nozzles
- a. Suitable for use with AFFF and Class A foams
 - b. Not suitable for use with protein and fluoroprotein foams
 - c. Use of expansion tubes
 - d. Reduced reach when flowing foam

10. Advantages and disadvantages of using foam nozzles
- a. Creates highest quality of foam
 - b. Must be used with protein and fluoroprotein foam
 - c. Stream reach less than a standard fog nozzle

11. Foam stream application techniques
- a. Roll-on technique
 - b. Bank-down technique

c. Rain-down technique

12. Hazards associated with foam usage

- a. Mildly irritating
- b. Mildly corrosive
- c. Environmental impact
- d. Limited foam stream reach

13. Methods to reduce or avoid hazards

- a. Flush affected areas with water
- b. Control run-off
- c. Additional exposure lines for personnel protection

Requisite Skills. The ability to prepare a foam concentrate supply for use, assemble foam stream components, master various foam application techniques, and approach and retreat from spills as part of a coordinated team.

102-6.3.2 Coordinate an interior attack line for a team's accomplishment of an assignment in a structure fire, given attack lines, personnel, personal protective equipment, and tools, so that crew integrity is established; attack techniques are selected for the given level of the fire (e.g., attic, grade level, upper levels, or basement); attack techniques are communicated to the attack teams; constant team coordination is maintained; fire growth and development is continuously evaluated; search, rescue, and ventilation requirements are communicated or managed; hazards are reported to the attack teams; and incident command is apprised of changing conditions.

102-A.6.3.2 The Fire Fighter II should be able to coordinate the actions of the interior attack line team at common residential fires and small business fires in the fire department's district. Complex or large interior fire management should be left to the officers; however, this JPR will facilitate the development of the Fire Fighter II toward effectively handling specific assignments within large fires.

Jurisdictions that use Fire Fighter IIs as acting company officers should comply with the requirements of NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

Requisite Knowledge. Selection of the nozzle and hose for fire attack, given different fire situations; selection of adapters and appliances to be used for specific fireground situations; dangerous building conditions created by fire and fire suppression activities; indicators of building

collapse; the effects of fire and fire suppression activities on wood, masonry (brick, block, stone), cast iron, steel, reinforced concrete, gypsum wallboard, glass, and plaster on lath; search and rescue and ventilation procedures; indicators of structural instability; suppression approaches and practices for various types of structural fires; and the association between specific tools and special forcible entry needs.

1. Selection of the nozzle for fire attack
 - a. Handlines
 - i. Fog nozzles
 - ii. Solid stream
 - iii. Broken stream
 - b. Master streams
 - i. Fog nozzles
 - ii. Solid stream

2. Selection of the hose for fire attack
 - a. Small diameter ($\frac{3}{4}$ ", 1", 1½", 1¾", 2") handlines
 - b. Medium diameter (2½", 3") handlines
 - c. Medium (2½", 3") or large diameter hose (3½", 4", 5", 6") for master stream support

3. Selection of adapters and appliances to be used for specific fire ground situations
 - a. Wyes – gated and non-gated
 - b. Siamese – clapper and non-clapper
 - c. Water thief
 - d. Manifold (portable hydrant)
 - e. Hydrant valve
 - f. Double male
 - g. Double female
 - h. Reducers
 - i. Adapters
 - i. Adapts one thread type to another
 - ii. Adapts threaded couplings to sexless couplings

4. Dangerous building conditions created by fire and fire suppression activities
 - a. Conditions that contribute to the spread and intensity of the fire
 - i. Fire loading
 - ii. Combustible furnishings and finishes
 - iii. Roof coverings
 - iv. Wooden floors and ceilings
 - v. Large, open spaces

- b. Conditions that make the building susceptible to collapse
 - i. Damage to structural system of the building from fire or firefighting activities
 - ii. Age of the building
 - iii. Lightweight or truss construction
 - iv. Older buildings exposed to weather
 - v. Firefighting operations
 - a) Improper vertical ventilation
 - b) Added weight of water used for fire extinguishment
5. Indicators of building collapse
- a. Deterioration of mortar joints
 - b. Overall age and condition of the building
 - c. Cracks in walls, floors, ceilings, and roofs
 - d. Signs of building repair (tie rods and stars)
 - e. Large open spans
 - f. Bulges, bowing and leaning of walls
 - g. Sagging floors
 - h. Abandoned buildings
 - i. Large volume of fire
 - j. Extended firefighting operations
 - k. Smoke coming from cracks in walls
 - l. Dark smoke from truss roof or floor spaces
 - m. Multiple fires in same building or damage from previous fires
6. Effects of fire suppression activities on:
- a. Wood
 - b. Masonry (brick, block, stone)
 - c. Cast iron
 - d. Steel
 - e. Reinforced concrete
 - f. Gypsum wallboard
 - g. Glass
 - h. Plaster on lath
7. Search and rescue procedures
- a. Define the following
 - i. Primary search
 - ii. Secondary search
 - b. Search techniques
 - i. Right hand/left hand
 - ii. Large area/small area considerations
 - iii. Rope assisted, or hose line
 - iv. Use of tools

- a) To extend reach
- b) Door chocks or door/latch straps
- c) Thermal imaging cameras
- v. Vent Enter Search (VES)
- vi. Communication during search
- vii. Search marking systems

8. Ventilation procedures

- a. Types
 - i. Natural
 - ii. Mechanical
 - a) Positive pressure
 - b) Negative pressure
 - c) Hydraulic
- b. Techniques
 - i. Horizontal
 - ii. Vertical
- c. Coordinate with fire attack
- d. Special considerations
 - i. Concrete roofs
 - ii. Metal roofs
 - iii. Ventilating basements
 - iv. Ventilating high-rises
 - v. Ventilating windowless buildings
 - vi. Ventilating large buildings

9. Indicators of structural instability

- a. Truss
- b. Lightweight construction
- c. Cracks or separations in walls, floors, ceilings and roof structures
- d. Presence of tie rods and stars
- e. Loose bricks, blocks, or stones falling from buildings
- f. Deteriorated mortar joints
- g. Walls that appear to be leaning
- h. Structural members that appear to be distorted

10. Suppression approaches for various types of structural fires

- a. Offensive
- b. Defensive
- c. Occupancy
 - i. Single-family dwellings
 - ii. Multi-family dwellings
 - iii. Commercial occupancies

- iv. High-rises

- 11. Suppression practices for various types of structural fires

- a. Residential fires
 - i. Attic
 - ii. Grade-level
 - iii. Upper-level
 - iv. Basement
 - v. Concealed spaces
- b. Small business fires
 - i. Attic
 - ii. Grade-level
 - iii. Upper-level
 - iv. Basement
 - v. Concealed spaces

- 12. Association between specific tools and special forcible entry needs

- a. Hand tools
 - i. Pry axe
 - ii. Detroit door opener
- b. Power tools
 - i. Chain saw
 - ii. Circular saw
 - iii. Reciprocating saw
 - iv. Drill
- c. Lock tools
 - i. A tool
 - ii. K tool
 - iii. J tool
 - iv. Shove knife
 - v. Duck bill lock breaker
 - vi. Locking pliers and chain
 - vii. Bam bam tool
 - viii. Elevator keys
- d. Hydraulic/pneumatic tools
 - i. Rabbet tool
 - ii. Hydraulic spreaders
 - iii. Hydraulic rams
 - iv. Hydraulic cutters
 - v. Pneumatic spreaders
 - vi. Pneumatic cutters
 - vii. Pneumatic drills and saws

Requisite Skills. The ability to assemble a team, choose attack techniques for various levels of a fire (e.g., attic, grade level, upper levels, or basement), evaluate and forecast a fire's growth and development, select tools for forcible entry, incorporate search and rescue procedures and ventilation procedures in the completion of the attack team efforts, and determine developing hazardous building or fire conditions.

102-6.3.3 Control a flammable gas cylinder fire, operating as a member of a team, given an assignment, a cylinder outside of a structure, an attack line, personal protective equipment, and tools, so that crew integrity is maintained, contents are identified, safe havens are identified prior to advancing, open valves are closed, flames are not extinguished unless the leaking gas is eliminated, the cylinder is cooled, cylinder integrity is evaluated, hazardous conditions are recognized and acted upon, and the cylinder is faced during approach and retreat.

102-A.6.3.3 Controlling flammable gas cylinder fires can be a very dangerous operation. The Fire Fighter II should act as a team member, under the direct supervision of an officer, during these operations.

Requisite Knowledge. Characteristics of pressurized flammable gases, elements of a gas cylinder, effects of heat and pressure on closed cylinders, boiling liquid expanding vapor explosion (BLEVE) signs and effects, methods for identifying contents, how to identify safe havens before approaching flammable gas cylinder fires, water stream usage and demands for pressurized cylinder fires, what to do if the fire is prematurely extinguished, valve types and their operation, alternative actions related to various hazards, and when to retreat.

1. Characteristics of pressurized flammable gases
 - a. Pressure
 - b. Vapor pressure
 - c. Vapor density
 - d. Expansion ratio
2. Elements of a gas cylinder
 - a. Cylinder design
 - b. Cylinder valves
 - c. Pressure relief valves
 - d. Test limits
3. Effects of heat on closed cylinders
 - a. Increase in pressure
 - b. Thermal damage

- c. Container failure
- 4. Effects of pressure on closed cylinders
 - a. Expansion of cylinder
 - b. Pressure relief valves
 - c. Container failure
- 5. Boiling liquid expanding vapor explosion (BLEVE) signs
 - a. Pinging sound of pressure-stretched metal
 - b. Discoloration of metal shell
 - c. Bulge or bubble in metal shell
 - d. Activation of pressure relief valve
 - e. Failure of pressure relief valve
 - f. Increase in intensity of pressure relief valve (torch)
- 6. BLEVE effects
 - a. Container failure
 - b. Violent explosion with fragmentation
 - c. Rapid expansion of gases
 - d. Huge fireball
 - e. Radiant heat
 - f. Flying container fragments
- 7. Methods for identifying contents
 - a. Placards
 - b. Labels
 - c. Shipping papers
 - d. Facility documents
- 8. How to identify safe havens before approaching flammable gas cylinder fires
 - a. Perform scene size-up
 - i. Note position and condition of container
 - ii. Analyze terrain
 - iii. Identify possible safe havens
 - b. Do not approach container from the ends
- 9. Water stream usage for pressurized cylinder fires
 - a. Volume of water
 - i. Vapor space
 - ii. Point of impingement
 - iii. 500 gpm minimum
 - b. Placement of streams
 - c. Manned vs. unmanned fire streams

10. Water stream demands for pressurized cylinder fires
 - a. Secured, uninterrupted source
 - b. Adequate stream application

11. What to do if the fire is prematurely extinguished
 - a. Vapor dispersion
 - b. Vapor control (close valve)
 - c. Secure or eliminate ignition sources

12. Valve types and their operation
 - a. Shut-off valves
 - b. Pressure relief valves

13. Alternative actions related to various hazards
 - a. Evacuate
 - b. Isolate
 - c. Allow self extinguishment
 - d. Retreat

14. When to retreat
 - a. Failure of relief valve
 - b. Significant container damage
 - c. Loss of water

Requisite Skills. The ability to execute effective advances and retreats, apply various techniques for water application, assess cylinder integrity and changing cylinder conditions, operate control valves, and choose effective procedures when conditions change.

- 102-6.3.4 Protect evidence of fire cause and origin, given a flashlight and overhaul tools, so that the evidence is noted and protected from further disturbance until investigators can arrive on the scene.
- 102-A.6.3.4 The Fire Fighter II should be able to recognize important evidence as to a fire's cause and maintain the evidence so that further testing can be done without contamination or chain-of-custody problems. Evidence should be left in place (when possible; otherwise, chain of custody must be established), not altered by improper handling, walking, and so forth, and not destroyed. Possible means to protect evidence is to avoid touching, protect with salvage covers during overhaul, or rope off the area where the evidence lies, The Fire Fighter II is not intended to be highly proficient at origin and cause determination.

Jurisdictions that use Fire Fighter IIs to determine origin and cause should comply with the requirements of NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

Requisite Knowledge. Methods to assess origin and cause; types of evidence; means to protect various types of evidence; the role and relationship of Fire Fighter IIs, criminal investigators, and insurance investigators in fire investigations; and the effects and problems associated with removing property or evidence from the scene.

1. Methods to assess origin and cause
 - a. Legal considerations (Michigan v. Tyler court decision)
 - b. Unusual odors
 - c. Abnormal behavior of fire when water is applied
 - d. Obstacles hindering fire fighting
 - e. Incendiary devices
 - f. Trailer
 - g. Structural alterations
 - h. Fire patterns
 - i. Heat intensity
 - j. Availability of documents
 - k. Fire detection and protection systems
 - l. Intrusion alarms
 - m. Location of fire
 - n. Personal possessions
 - o. Household items
 - p. Equipment or inventory
 - q. Business records
 - r. Time of day
 - s. Weather conditions
 - t. Vehicles and people on scene
2. Types of evidence
 - a. Physical evidence
 - b. Trace or transfer evidence
 - c. Demonstrative evidence
 - d. Direct evidence
 - e. Circumstantial evidence
3. Means to protect various types of evidence
 - a. Securing the fire scene
 - b. Chain of custody
 - c. Do not gather or handle evidence
 - d. Avoid trampling over evidence

- e. Avoid excess use of water
 - f. Protect human footprints and tire marks
 - g. Protect partially burned papers found in a furnace, stove or fireplace
 - h. Leave charred documents found in containers
4. Role and relationship of Fire Fighter II to the fire investigation
 - a. The importance of writing a chronological account of important circumstances personally observed
 - b. Identify the importance of reporting hearsay to the investigator
 - c. Identify the importance of performing salvage and overhaul carefully
 5. Criminal investigators
 - a. Fire marshal
 - b. Arson investigator
 - c. Fire investigator
 - d. Police
 6. Insurance investigators in fire investigations
 - a. Insurance investigator
 - b. Private investigator
 7. Effects and problems associated with removing property or evidence from the scene
 - a. Legal considerations (Michigan v. Tyler court decision)
 - b. Chain of custody
 - c. Documentation/photographs

Requisite Skills. The ability to locate the fire's origin area, recognize possible causes, and protect the evidence.

102-6.4 **Rescue Operations**

This duty shall involve performing activities related to accessing and disentangling victims from motor vehicle accidents and helping special rescue teams, according to the JPRs in 6.4.1 and 6.4.2.

102-6.4.1 Extricate a victim entrapped in a motor vehicle as part of a team, given stabilization and extrication tools, so that the vehicle is stabilized, the victim is disentangled without further injury, and hazards are managed.

102-A.6.4.1 In the context of this standard, the term *extricate* refers to those activities required to allow emergency medical personnel access to the victim, stabilization of the vehicle, the displacement or removal of vehicle

components obstructing victim removal, and the protection of the victim and response personnel from hazards associated with motor vehicle accidents and the use of hand and power tools on a motor vehicle.

As persons performing extrication can be different from those performing medical functions, this standard does not address medical care of the victim. An awareness of the needs and responsibilities of emergency medical functions is recommended to allow for efficient coordination between the “extrication” team and the “medical” team.

Requisite Knowledge. The fire department’s role at a vehicle accident, points of strength and weakness in auto body construction, dangers associated with vehicle components and systems, the uses and limitations of hand and power extrication equipment, and safety procedures when using various types of extrication equipment.

1. The fire department’s role at a vehicle accident
 - a. Response
 - b. Arrival and size-up
 - c. Stabilization of the scene
 - d. Gaining access and disentangling victims
 - e. Removing and treating the victim

2. Points of strength in auto body construction
 - a. Vehicle door and door posts
 - b. Vehicle roof
 - c. Steering wheel
 - d. Vehicle floor
 - e. Vehicle pedals
 - f. Vehicle seats
 - g. Reinforced dashboard

3. Points of weakness in auto body construction
 - a. Vehicle windshield and windows
 - b. Dashboard

4. Dangers associated with vehicle components and systems
 - a. Vehicle stabilization
 - b. Airbag systems (SRS and SIPS)
 - c. Roll over protection systems (ROPS)
 - d. Hybrid electrical systems
 - e. Fuels

5. Uses and limitations of hand extrication equipment

- a. Hydraulic devices
 - i. Upright
 - ii. Upside down
 - iii. On its side
 - iv. On an inclined surface
 - b. Pneumatic devices
 - c. Block and tackle
 - d. Cribbing and shoring materials
 - e. Ratchet device
6. Uses and limitations of power extrication equipment
- a. Hydraulic extrication spreaders
 - b. Hydraulic extrication shears
 - c. Hydraulic extrication ram
7. Safety procedures when using various types of extrication equipment
- a. PPE
 - b. Flammable hazards
 - c. Electrical hazards
 - d. Pinch hazards
 - e. Crush hazards
 - f. Vehicle safety device deployment hazards
 - g. Proper tool use

Requisite Skills. The ability to operate hand and power tools used for forcible entry and rescue as designed; use cribbing and shoring material; and choose and apply appropriate techniques for moving or removing vehicle roofs, doors, windshields, windows, steering wheels or columns, and the dashboard.

102-6.4.2 Assist rescue operation teams, given standard operating procedures, necessary rescue equipment, and an assignment, so that procedures are followed, rescue items are recognized and retrieved in the time as prescribed by the AHJ, and the assignment is completed.

102-A.6.4.2 The Fire Fighter II is not expected to be proficient in technical rescue skills. The Fire Fighter II should be able to help technical rescue teams in their efforts to safely manage structural collapses, trench collapses, cave and tunnel emergencies, water and ice emergencies, elevator and escalator emergencies, energized electrical line emergencies, and industrial accidents.

Requisite Knowledge. The fire fighter's role at a technical rescue operation, the hazards associated with technical rescue operations, types and uses for rescue tools, and rescue practices and goals.

1. The fire fighter's role at a technical rescue operation
 - a. Safety
 - b. Receive direction from technical rescue personnel
 - c. Work as a team
 - d. Basic components of rescue operations
 - i. Preparation
 - ii. Response
 - iii. Arrival and size-up
 - iv. Stabilization
 - v. Access
 - vi. Disentanglement
 - vii. Removal
 - viii. Transport
 - ix. Security of the scene and preparation for next call
 - x. Post incident analysis

2. The hazards associated with technical rescue operations
 - a. Machinery
 - b. Confined space
 - c. Rope rescue (vertical rescue)
 - d. Trench
 - e. Structural collapse
 - f. Water and ice
 - g. Energized electrical line
 - h. Elevator and escalator emergencies
 - i. Wilderness
 - j. Mine, tunnel and cave
 - k. Industrial/hazardous materials

3. Types and uses of rescue tools
 - a. Machinery (e.g., hydraulic spreaders/cutters/rams)
 - b. Confined space (e.g., taglines, harnesses, supplied air respirators, air monitoring devices, tripod, winch)
 - c. Rope rescue (vertical rescue, e.g., rope, carabiners, anchor plates, pulleys)
 - d. Trench (e.g., shoring, cribbing, stringers, rakers, air monitoring devices)
 - e. Structural collapse (e.g., jacks, shoring, cribbing)
 - f. Water and ice (e.g., PFDs, throw bag of rope)
 - g. Elevator and escalator emergencies (e.g., elevator keys)

- h. Wilderness (e.g., compass, GPS, stokes basket)
 - i. Mine, tunnel and cave (e.g., shoring, ropes, flashlights)
4. Rescue practices and goals
- a. Machinery
 - b. Confined space
 - c. Rope rescue (vertical rescue)
 - d. Trench
 - e. Structural collapse
 - f. Water and ice
 - g. Elevator and escalator emergencies
 - h. Wilderness
 - i. Mine, tunnel and cave

Requisite Skills. The ability to identify and retrieve various types of rescue tools, establish public barriers, and assist rescue teams as a member of the team when assigned.

102-6.5 Fire and Life Safety Initiatives, Prevention, Preparedness, and Maintenance

This duty shall involve performing activities related to reducing the loss of life and property due to fire through hazard identification, inspection, and response readiness, according to the JPRs in 6.5.1 through 6.5.5.

102-6.5.1 Perform a fire safety survey ~~in a private dwelling~~ **in an occupied structure**, given survey forms and procedures, so that fire and life safety hazards are identified, recommendations for their correction are made to the occupant, and unresolved issues are referred to the proper authority.

102-A.6.5.1 It is the intent of the committee to recognize that there are response areas that do not have private dwellings. The term occupied structure allows for greater flexibility and for the AHJ to determine which structures could be used for performing a fire safety survey.

Requisite Knowledge. Organizational policy and procedures, common causes of fire and their prevention, the importance of a fire safety survey and public fire education programs to fire department public relations and the community, and referral procedures.

- 1. Organizational policy and procedures
 - a. Scheduling considerations
 - i. FD personnel
 - ii. ~~Dwelling owner~~ **Structure occupant**
 - b. Approach and introduction

- c. Conducting the survey
 - d. Formulate recommendations
2. Common causes of fire and their prevention
 - a. Housekeeping practices
 - b. Smoking
 - c. Open burning
 - d. Electrical sources of ignition
 - e. Common hazards by location
 - i. Kitchen
 - ii. Living area
 - iii. Bedroom
 - iv. Garage/storage
 - v. Bathroom
 - vi. Laundry
 - vii. Attics and basements
 - viii. Exterior
 - f. Special hazards
 3. The importance of a fire safety survey and public fire education programs to fire department public relations and the community
 - a. Enhances community life safety
 - b. Prevents loss
 - c. Promotes community support
 4. Referral procedures – AHJ

Requisite Skills. The ability to complete forms, recognize hazards, match findings to preapproved recommendations, and effectively communicate findings to occupants or referrals.

102-6.5.2 Present fire safety information to station visitors or small groups, given prepared materials, so that all information is presented, the information is accurate, and questions are answered or referred.

102-A.6.5.2 The Fire Fighter II should be able to present basic information on how to do the following:

- (1) Stop, drop, and roll when one's clothes are on fire
- (2) Crawl low under smoke
- (3) Plan and practice a home escape plan with two ways out of each room (especially sleeping rooms), a meeting place, and how to call the fire department (from the neighbor's house)
- (4) Alert others to an emergency

- (5) Call the fire department
- (6) Test and maintain residential smoke alarms according to manufacturer's instructions

The Fire Fighter II is not expected to be an accomplished speaker or instructor.

Requisite Knowledge. Parts of informational materials and how to use them, basic presentation skills, and departmental standard operating procedures for giving fire station tours.

1. Educational programs
 - a. Learn Not to Burn
 - b. EDITH (Exit Drill In The Home)
 - c. Installation and maintenance of smoke alarms
 - d. Change your clock – change your battery
 - e. Stop, drop and roll
 - f. Fire safety for babysitters
 - g. Fire safety for seniors
 - h. Fire safety for college students
 - i. Wildland prevention program
2. How to use informational materials
 - a. Pamphlets
 - b. Coloring books
 - c. Public service announcements (PSAs)
 - d. Public presentations
3. Basic presentation skills
 - a. Age and audience appropriateness
 - b. Knowledge of subject – preparation
 - c. Use of props
 - d. Professional attire
 - e. Positive attitude
4. Departmental standard operating procedures (SOPs) for giving fire station tours – AHJ

Requisite Skills. The ability to document presentations and to use prepared materials.

- 102-6.5.3 Prepare a preincident survey, given forms, necessary tools, and an assignment, so that all required occupancy information is recorded, items of concern are noted, and accurate sketches or diagrams are prepared.

102-A.6.5.3 The Fire Fighter II should be able to compile information related to potential emergency incidents within their community for use by officers in the development of preincident plans. Jurisdictions that use Fire Fighter IIs to develop preincident plans should comply with the requirements of NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

Requisite Knowledge. The sources of water supply for fire protection; the fundamentals of fire suppression and detection systems; common symbols used in diagramming construction features, utilities, hazards, and fire protection systems; departmental requirements for a preincident survey and form completion; and the importance of accurate diagrams.

1. The sources of water for fire protection
 - a. Pressurized
 - b. Static
2. The fundamentals of fire suppression and detection systems
 - a. Automatic sprinkler systems
 - i. Types
 - a) Wet pipe
 - b) Dry pipe
 - c) Pre-action
 - d) Deluge
 - e) Residential
 - ii. Sprinkler heads
 - a) Deflector style
 - 1) Upright
 - 2) Pendant
 - 3) Side wall
 - 4) Deluge
 - 5) Special
 - b) Activating devices
 - 1) Fusible link
 - 2) Frangible bulb
 - 3) Chemical pellet
 - iii. Control valves
 - a) Outside screw and yoke (OS&Y)
 - b) Butterfly valve
 - c) Wall post indicator valve (WPIV)
 - d) Post indicator valve (PIV)
 - e) Post indicator valve assembly (PIVA)
 - iv. Valves
 - a) Check valve

- b) Main drain
 - c) Alarm test
 - d) Inspector test
 - v. Fire department connection (FDC)
 - a) Two 2½" inlets
 - b) One large diameter hose (LDH)
- b. Standpipe systems
 - i. Class I
 - a) Fire department use only
 - b) 2½" connection with a valve
 - ii. Class II
 - a) Occupant use
 - b) 1½" single jacket hose preconnected
 - iii. Class III
 - a) Occupant or fire department use
 - b) 2½" connection with 1 ½" reducer and hose preconnected
- c. Specialized extinguishment systems
 - i. Dry chemical systems
 - ii. Wet chemical systems
 - iii. Foam systems
 - iv. Clean agent systems
 - v. Carbon dioxide systems
- d. Fire department notification systems
 - i. Local alarm systems
 - ii. Remote station systems
 - iii. Auxiliary systems
 - iv. Proprietary systems
 - v. Central station systems
- e. Fire alarm system components
 - i. Initiating devices
 - a) Heat detectors
 - 1) Fixed-temperature detectors
 - 2) Rate-of-rise detectors
 - 3) Combination rate-of-rise fixed temperature detectors
 - b) Smoke detectors
 - 1) Ionization
 - 2) Photoelectric
 - c) Flame detectors
 - 1) Ultraviolet (UV)
 - 2) Infrared (IR)
 - d) Fire – gas detectors
 - e) Manual pull station

- ii. Indicating devices
 - a) Audible
 - 1) Bells
 - 2) Horns
 - 3) Sirens
 - 4) Recorded announcement
 - b) Visual
 - 1) Strobes
 - 2) Rotating beacons
 - c) Fire alarm control panel (FACP)
- 3. Common symbols used in diagramming construction features, utilities, hazards, and fire protection systems
 - a. Construction features
 - i. Fire escape
 - ii. Skylight
 - iii. Stairs
 - iv. Elevator
 - v. Fire wall
 - b. Utilities
 - i. Gas
 - ii. Electric
 - iii. Water
 - c. Fire protection
 - i. Hydrant
 - ii. Sprinkler riser
 - iii. Fire department connection
 - iv. Automatic sprinklers
 - v. Not sprinklered
 - vi. Standpipe
 - vii. Fire alarm
 - viii. Fire pump
 - d. Hazards
 - i. Gasoline tank
 - ii. Steam boiler
 - a) Vertical
 - b) Horizontal
- 4. Departmental requirements for a preincident survey
 - a. Tactical information – considerations/planning for:
 - i. Water supply
 - ii. Utilities
 - iii. Search and rescue
 - iv. Forcible entry

- v. Ladder placement
- vi. Ventilation
- b. Occupancy type
 - i. High rise
 - ii. Assembly
 - iii. Health care facilities
 - iv. Detention and correctional facilities
 - v. Residential occupancies
- c. Locations requiring special considerations
 - i. Gas or liquid fuel pipelines
 - ii. Electrical transmission lines
 - iii. Ships and waterways
 - iv. Subways
 - v. Railroads
 - vi. Airports
 - vii. Industrial facilities
 - viii. Hazardous materials bulk storage locations

5. Departmental requirements for form completion – AHJ

6. The importance of accurate diagrams

- a. Accurate diagrams promote better decision making
- b. Enhances civilian and firefighter safety
- c. Search and rescue operations are conducted efficiently

Requisite Skills. The ability to identify the components of fire suppression and detection systems; sketch the site, buildings, and special features; detect hazards and special considerations to include in the preincident sketch; and complete all related departmental forms.

102-6.5.4 Maintain power plants, power tools, and lighting equipment, given tools and manufacturers' instructions, so that equipment is clean and maintained according to manufacturer and departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

Requisite Knowledge. Types of cleaning methods, correct use of cleaning solvents, manufacturer and departmental guidelines for maintaining equipment and its documentation, and problem-reporting practices.

- 1. Types of cleaning methods
 - a. Metal parts
 - b. Wood parts

- c. Fiberglass/synthetic parts
 - d. Cutting edges
 - e. Power tools
 - f. Electrical/electronic devices
2. Correct use of cleaning solvents
 - a. Associated hazards
 - b. Application
 - c. Safety considerations
 3. Manufacturer and departmental guidelines for maintaining equipment and its documentation
 - a. Per the manufacturer's recommendations
 - b. Inspection frequency and procedures per AHJ
 4. Problem-reporting practices
 - a. Tag problem item
 - b. Remove from service
 - c. Report problem per AHJ

Requisite Skills. The ability to select correct tools; follow guidelines; complete recording and reporting procedures; and operate power plants, power tools, and lighting equipment.

102-6.5.5 Perform an annual service test on fire hose, given a pump, a marking device, pressure gauges, a timer, record sheets, and related equipment, so that procedures are followed, the condition of the hose is evaluated, any damaged hose is removed from service, and the results are recorded.

102-A.6.5.5 Procedures for conducting hose testing can be found in Chapter 5 of NFPA 1962, *Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose*.

Requisite Knowledge. Procedures for safely conducting hose service testing, indicators that dictate any hose be removed from service, and recording procedures for hose test results.

1. Procedures for safety conducting hose service testing
 - a. Routine inspection
 - i. Lay clean hose out on flat surface
 - ii. Inspect hose for defects
 - iii. Mark defects as found
 - iv. Tag hose with description of defects found
 - b. Annual service test

- i. Don protective gear – wear helmet and gloves at a minimum
 - ii. Connect up to 300 feet maximum of hose to a discharge outlet
 - iii. Attach a nozzle or valve to the end of the hose
 - iv. Fill hose to 50 psi, remove air, twists and kinks in hose
 - v. Mark hose at the base of the coupling
 - vi. Check couplings and hose for leaks
 - vii. If couplings leak at the gasket, replace the gasket
 - viii. After gaskets are replaced or if no leaks are present, increase pressure to manufacturer's recommended pressure per NFPA 1962 and maintain for 5 minutes
 - ix. Monitor hose and couplings for leaks or failure
 - x. Reduce pressure, depressurize hose, and drain
 - xi. Inspect marks at couplings for separation or slippage
 - xii. Tag failures or defects
 - xiii. Distinctly mark hose that passed
 - xiv. Log test results for departmental record
 - c. Safety notes:
 - i. Always wear a helmet and gloves while working around pressurized hose
 - ii. Never walk over, straddle, or stand over hose being pressure tested
2. Indicators that dictate any hose be removed from service
 - a. Mechanical damage
 - i. Bent or damaged couplings
 - ii. Hose separating from couplings
 - iii. Cuts or holes
 - iv. Crushed suction hose
 - b. Chemical damage
 - i. Chemical degradation
 - ii. contamination
 - c. Heat damage
 - i. Burn holes
 - ii. Delamination
 - d. Mildew/rot
 - e. Service test pressure failure (i.e. burst hose)
3. Recording procedures for hose test results
 - a. Hose records should contain:
 - i. Hose size/length, type, and diameter
 - ii. Date of manufacture
 - iii. Date of purchase

- iv. Testing dates
- v. Any repairs made
- b. Other information per AHJ

Requisite Skills. The ability to operate hose testing equipment and nozzles and to record results.

CHAPTER ONE BASIC FIRE SUPPRESSION CURRICULUM OUTLINE

INTRODUCTION

The History of the Curriculum and Testing Committee

The Curriculum and Testing Committee was created and appointed by the commission to periodically review and recommend changes to the commission's testing and training programs. Testing committee members met for the first time on August 24, 1989 in response to the need for certification exams to be administered by the Commission. The intent of the exams is to verify competency for the performance of fire service duties within the State of Texas.

Upon a recommendation in December 1991, through action of the Fire Protection Personnel Advisory Committee and the Commission, approximately one-third of the original twenty-one members were asked to maintain an active role on the committee. In January 1994, there were two more members added to the testing committee. The current Curriculum and Testing Committee consists of eleven fire service professionals including fire officers, college instructors, and fire fighters from around the state.

Committee members are charged with development and review of curricula, test questions, and the testing process leading to certifications based on NFPA Professional Qualifications standards. Review and development of curricula, test questions and performance skill evaluations are integral to the accreditation process as required by the International Fire Service Accreditation Congress.

The amount of questioning and discussion incurred at the meetings, along with the mixture of diverse fire service professionals representing areas within the state, serve as a means for validating curriculum competencies and objectives. It is in the spirit of the fire service of Texas that these individuals contribute to the development of a meaningful testing process for fire service certifications in the state.

**CHAPTER ONE
BASIC FIRE SUPPRESSION
CURRICULUM OUTLINES**

BASIC FIRE SUPPRESSION		
SECTIONS	SUBJECT	RECOMMENDED HOURS
101-5.1; 102-6.1	General	
101-5.2; 102-6.2	Fire Department Communications	
101-5.3; 102-6.3	Fireground Operations	
102-6.4	Rescue Operations	
101-5.5	Preparedness and Maintenance	
102-6.5	Fire and Life Safety Initiatives, Preparedness and Maintenance	
601; 602; 603-6.2; 603-6.6	Hazardous Materials Awareness, Operations, Mission Specific as identified in Chapter Six	
	TOTAL RECOMMENDED HOURS	468*

*TOTAL RECOMMENDED HOURS include Fire Fighter I, Fire Fighter II, Awareness and Operations

FIREFIGHTER I CURRICULUM OUTLINE		
SECTION	SUBJECT	RECOMMENDED HOURS
101-5.1	General	
101-5.2	Fire Department Communications	
101-5.3	Fireground Operations	
101-5.4	(Reserved for future use)	
101-5.5	Preparedness and Maintenance	
	TOTAL RECOMMENDED HOURS	294

FIREFIGHTER II CURRICULUM OUTLINE		
SECTION	SUBJECT	RECOMMENDED HOURS
102-6.1	General	
102-6.2	Fire Department Communications	
102-6.3	Fireground Operations	
102-6.4	Rescue Operations	
102-6.5	Fire and Life Safety Initiatives, Preparedness and Maintenance	
	TOTAL RECOMMENDED HOURS	140

**CHAPTER SIX
HAZARDOUS MATERIALS AWARENESS AND OPERATIONS
CURRICULUM OUTLINES**

HAZARDOUS MATERIALS AWARENESS CURRICULUM OUTLINE		
SECTION	SUBJECT	RECOMMENDED HOURS
601-4.1	General	
601-4.2	Analyzing the Incident	
601-4.3	Planning the Response – Reserved – None required at this level	
601-4.4	Implementing the Planned Response	
601-4.5	Evaluating Progress – Reserved – None required at this level	
601-4.6	Terminating the Incident – Reserved – None required at this level	
	TOTAL RECOMMENDED HOURS	8

HAZARDOUS MATERIALS OPERATIONS CURRICULUM OUTLINE		
SECTION	SUBJECT	RECOMMENDED HOURS
602-5.1	General	
602-5.2	Analyzing the Incident	
602-5.3	Planning the Response	
602-5.4	Implementing the Planned Response	
602-5.5	Evaluating Progress	
602-5.6	Terminating the Incident – Reserved – None required at this level	
603-6.2; 603-6.6	Mission Specific – PPE and Product Control	
	TOTAL RECOMMENDED HOURS	26

The recommended hours include time for skills evaluation and are based on a class size of 12 students. Hours needed depend on the actual number of students.

REFERENCE LIST FOR THE BASIC FIRE SUPPRESSION CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Certification Curriculum Manual. Austin, TX: Texas Commission on Fire Protection. Current issue.

Essentials of Fire Fighting (~~5th ed.~~) (2007) **(6th ed.) (2013)**. Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

~~*Firefighter's Handbook: Essentials of Firefighting and Emergency Response* (3rd ed.) (2008). Clifton Park NY: Thomson Delmar Learning.~~

Fundamentals of Fire Fighter Skills (~~2nd ed.~~) (2008) **(3rd ed.) (2014)**. Sudbury, MA: Jones and Bartlett Publishers, Inc.

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2008 **2013** ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection. Current issue.

Note to training providers:

The reference lists for Hazardous Materials Awareness and Operations are located in [Chapter 6](#) of the Certification Curriculum Manual.

4. **Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 421, Standards For Certification, including but not limited to, §421.1, Procedures for Meetings, §421.3, Minimum Standards Set by the Commission, §421.5, Definitions, §421.9, Designation of Fire Protection Duties, §421.11, Requirement to be Certified Within One Year, §421.13, Individual Certificate Holders, §421.15, Extension of Training Period, and §421.17, Requirement to Maintain Certification.**

CHAPTER 421
STANDARDS FOR CERTIFICATION

§421.1 Procedures for Meetings.

- (a) Time and place. The Fire Fighter Advisory Committee and the Curriculum and Testing Committee shall meet at such time and place in the State of Texas as they deem proper. The Fire Fighter Advisory Committee shall meet at least twice each calendar year.
- (b) Meeting called. Meetings shall be called by the chairman, by the Commission, or upon the written request of five members.
- (c) Quorum. A majority of members shall constitute a quorum.
- (d) Members. The Fire Fighter Advisory Committee shall consist of nine members appointed by the Commission. The Curriculum and Testing Committee shall consist of members appointed by the Commission upon the recommendation of the Fire Fighter Advisory Committee. Committee members serve at the will of the Commission.
- (e) Officers. Officers of the Fire Fighter Advisory Committee and the Curriculum and Testing Committee shall consist of a chairman, vice-chairman, and secretary. Each committee shall elect its officers from the appointed members at its first meeting and thereafter at its first meeting following January 1 of each year or upon the vacancy of an office.
- (f) Responsibility. The Fire Fighter Advisory Committee shall review Commission rules relating to fire protection personnel and fire departments and recommend changes in the rules to the Commission.
- (g) Effective Date. Rules shall become effective no sooner than 20 days after filing with the Texas Register for final adoption. The committee or Commission may recommend a later effective date.
- (h) Removal. It is a ground for removal from an advisory committee appointed by the Commission if a member is absent from more than half of the regularly scheduled committee meetings that the member is eligible to attend during a calendar year unless the absence is excused by a majority vote of the committee.

§421.3 Minimum Standards Set by the Commission.

- (a) General statement. It shall be clearly understood that the specified minimum standards described in this section are designated as a minimum program. Employing entities are encouraged to exceed the minimum program wherever possible. Continuous in-service training beyond the minimum standards for fire protection personnel is strongly recommended. Nothing in these regulations shall limit or be construed as limiting the powers of the Civil Service Commission, or the employing entity, to enact rules and regulations which establish a higher standard of training than the minimum specified, or which provides for the termination of the services of unsatisfactory employees during or upon completion of the prescribed probationary period.
- (b) Functional position descriptions.

- (1) Structural Fire Protection personnel. The following general position description for structural fire protection personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the fire fighter operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
 - (A) Qualifications. Successfully complete a commission approved course; achieve a passing score on written and performance certification examinations; must be at least 18 years of age; generally, the knowledge and skills required show the need for a high school education or equivalent; ability to communicate verbally, via telephone and radio equipment; ability to lift, carry, drag, and balance weight equivalent to the average human weight; ability to interpret in English, written and oral instructions; ability to work effectively in high stress situations; ability to work effectively in an environment with loud noises and flashing lights; ability to function through an entire work shift; ability to calculate weight and volume ratios; ability to read and understand English language manuals including chemical, medical and technical terms, and road maps; ability to accurately discern street signs and address numbers; ability to document in English, all relevant information in prescribed format in light of legal ramifications of such; ability to converse in English with coworkers and other emergency response personnel. Good manual dexterity with ability to perform all tasks related to the protection of life and property; ability to bend, stoop, and crawl on uneven surfaces; ability to withstand varied environmental conditions such as extreme heat, cold, and moisture; and ability to work in low or no light, confined spaces, elevated heights and other dangerous environments.
 - (B) Competency. A basic fire fighter must demonstrate competency handling emergencies utilizing equipment and skills in accordance with the objectives in Chapter 1 of the commission's Certification Curriculum Manual.
- (2) Aircraft Rescue Fire Fighting personnel. The following general position description for aircraft rescue fire fighting personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of aircraft rescue fire fighting personnel operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
 - (A) Qualifications. In addition to the qualifications for basic structural fire protection personnel: familiarity with geographic and physical components of an airport; ability to use and understand communication equipment, terminology, and procedures utilized by airports; ability and knowledge in the application of fire suppression agents; and ability to effectively perform fire suppression and rescue operations.
 - (B) Competency. Basic fire fighting and rescue personnel must demonstrate competency handling emergencies utilizing equipment and skills in accordance with the objectives in Chapter 2 of the commission's Certification Curriculum Manual.
- (3) Marine Fire Protection personnel. The following general position description for marine fire protection personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the marine fire fighter operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
 - (A) Qualifications. In addition to the qualifications for basic structural fire protection personnel: familiarity with geographic and physical components of a navigable waterway; ability to use and understand communication equipment, terminology, and procedures used by the maritime industry; and knowledge in the operation of fire fighting vessels.

(B) Competency. A marine fire fighter must demonstrate competency in handling emergencies utilizing equipment and skills in accordance with the objectives in Chapter 3 of the commission's Certification Curriculum Manual.

(4) Fire Inspection personnel. The following general position description for fire inspection personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the fire inspector operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. Successfully complete a commission approved course; achieve a passing score on certification examinations; must be at least 18 years of age; generally, the knowledge and skills required to show the need for a high school education or equivalent; ability to communicate verbally, via telephone and radio equipment; ability to lift, carry, and balance weight equivalent to weight of common tools and equipment necessary for conducting an inspection; ability to interpret written and oral instructions; ability to work effectively with the public; ability to work effectively in an environment with potentially loud noises; ability to function through an entire work shift; ability to calculate area, weight and volume ratios; ability to read and understand English language manuals including chemical, construction and technical terms, building plans and road maps; ability to accurately discern street signs and address numbers; ability to document, in writing, all relevant information in a prescribed format in light of legal ramifications of such; ability to converse in English with coworkers and other personnel. Demonstrate knowledge of characteristics and behavior of fire, and fire prevention principles. Good manual dexterity with the ability to perform all tasks related to the inspection of structures and property; ability to bend, stoop, and crawl on uneven surfaces; ability to climb ladders; ability to withstand varied environmental conditions such as extreme heat, cold, and moisture; and the ability to work in low light, confined spaces, elevated heights, and other dangerous environments.

(B) Competency. A fire inspector must demonstrate competency in conducting inspections utilizing equipment and skills in accordance with the objectives in Chapter 4 of the commission's Certification Curriculum Manual.

(5) Fire Investigator personnel. The following general position description for fire investigator personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the fire investigator operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. Successfully complete a commission approved course; achieve a passing score on certification examinations; be at least 18 years of age; generally, the knowledge and skills required to show the need for a high school education or equivalent; ability to communicate verbally, via telephone and radio equipment; ability to lift, carry, and balance weight equivalent to weight of common tools and equipment necessary for conducting an investigation; ability to interpret written and oral instructions; ability to work effectively with the public; ability to work effectively in a hazardous environment; ability to function through an entire work shift; ability to calculate area, weight and volume ratios; ability to read and understand English language manuals including chemical, legal and technical terms, building plans and road maps; ability to accurately discern street signs and address numbers; ability to document, in writing, all relevant information in a prescribed format in light of legal ramifications of such; ability to converse in English with coworkers and other personnel. Good manual dexterity with the ability to perform all tasks related to fire investigation; ability to bend, stoop, and walk on uneven surfaces; ability to climb ladders; ability to withstand varied environmental conditions such as extreme heat, cold and

moisture; and the ability to work in low light, confined spaces, elevated heights, and other potentially dangerous environments.

- (B) Competency. A fire investigator or arson investigator must demonstrate competency in determining fire cause and origin utilizing equipment and skills in accordance with the objectives in Chapter 5 of the commission's Certification Curriculum Manual.
- (6) Hazardous Materials Technician personnel. The following general position description for hazardous materials personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the hazardous materials technician operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
- (A) Qualifications. In addition to the qualifications for basic structural fire protection personnel: successfully complete a commission approved course; achieving a passing score on the certification examination; the ability to analyze a hazardous materials incident, plan a response, implement the planned response, evaluate the progress of the planned response, and terminate the incident.
- (B) Competency. A hazardous materials technician must demonstrate competency handling emergencies resulting from releases or potential releases of hazardous materials, using specialized chemical protective clothing and control equipment in accordance with the objectives in Chapter 6 of the commission's Certification Curriculum Manual.
- (7) Hazardous Materials Incident Commander personnel. The following general position description for Hazardous Materials Incident Commander serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Hazardous Materials Incident Commander operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
- (A) Qualifications. In addition to the qualifications for awareness and operations level personnel, the Hazardous Materials Incident Commander is an individual who has met all the job performance requirements of Hazardous Materials Incident Commander as defined in Chapter 8 of NFPA 472, Competence of Responders to Hazardous Materials Incidents/Weapons of Mass Destruction. The individual should demonstrate knowledge in the policies, plans, and procedures regarding hazardous materials response as adopted by the local jurisdiction; and all components of the incident command system and their proper utilization.
- (B) Competency. In addition to the competencies of awareness and operations level personnel, a Hazardous Materials Incident Commander must demonstrate competency in such areas as: analyzing an incident via the collection of information and an estimation of potential outcomes; planning appropriate response operations; implementing a planned response; evaluating the progress of a planned response and revising as necessary; terminating an incident; conducting a post-incident critique; and reporting and documenting an incident in a manner consistent with local, state, and federal requirements.
- (8) Driver/Operator-Pumper personnel. The following general position description for driver/operator-pumper personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the driver/operator-pumper of a fire department pumper operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.
- (A) Qualifications. In addition to the qualifications for basic structural fire protection personnel: ability to perform specified routine test, inspection, and maintenance functions;

ability to perform practical driving exercises; ascertain the expected fire flow; ability to position a fire department pumper to operate at a fire hydrant; ability to produce effective streams; and supply sprinkler and standpipe systems.

(B) Competency. A driver/operator-pumper must demonstrate competency operating a fire department pumper in accordance with the objectives in Chapter 7 of the commission's Certification Curriculum Manual.

(9) Fire Officer I personnel. The following general position description for Fire Officer I personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Officer I operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to the qualifications for basic structural fire protection and Fire Instructor I personnel: the ability to supervise personnel, and assign tasks at emergency operations; the ability to direct personnel during training activities; the ability to recommend action for member-related problems; the ability to coordinate assigned tasks and projects, and deal with inquiries and concerns from members of the community; the ability to implement policies; the ability to perform routine administrative functions, perform preliminary fire investigation, secure an incident scene and preserve evidence; the ability to develop pre-incident plans, supervise emergency operations, and develop and implement action plans; the ability to deploy assigned resources to ensure a safe work environment for personnel, conduct initial accident investigation, and document an incident.

(B) Competency. A Fire Officer I must demonstrate competency in handling emergencies and supervising personnel utilizing skills in accordance with the objectives in Chapter 9 of the commission's Certification Curriculum Manual.

(10) Fire Officer II personnel. The following general position description for Fire Officer II personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Officer II operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to the qualifications for Fire Officer I and Fire Instructor I personnel: the ability to motivate members for maximum job performance; the ability to evaluate job performance; the ability to deliver life safety and fire prevention education programs; the ability to prepare budget requests, news releases, and policy changes; the ability to conduct pre-incident planning, fire inspections, and fire investigations; the ability to supervise multi-unit emergency operations, identify unsafe work environments or behaviors, review injury, accident, and exposure reports.

(B) Competency. A Fire Officer II must demonstrate competency in supervising personnel and coordinating multi-unit emergency operations utilizing skills in accordance with the objectives in Chapter 9 of the commission's Certification Curriculum Manual.

(11) Fire Officer III personnel. The following general position description for Fire Officer III personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Officer III operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. A Fire Officer III is a midlevel supervisor who performs both supervisory and first-line managerial functions. In addition to the qualifications and competency for Fire

Officer II, the Fire Officer III is an individual who has met all the job performance requirements of Fire Officer III as defined in Chapter 6 of NFPA 1021, Standard for Fire Officer Professional Qualifications. Typical duties of an individual at the Fire Officer III level include: establishing procedures for hiring, assignment, and professional development of personnel; developing public service/partnership and programs; preparing budgets and budget management systems; planning for organizational resource management; evaluating inspection and public safety programs and plans; managing multi-agency plans and operations; serving as Incident Commander at expanding emergency incidents for all hazard types; and developing and managing a departmental safety program.

(B) Competency. A Fire Officer III must demonstrate competency doing research; analyzing data and using evaluative techniques; developing proposals; developing, preparing, and implementing various procedures and programs within an organization; managing personnel resources; preparing and managing budgets; utilizing techniques to encourage personnel participation and development; and working in top-level positions within the incident command system.

(12) Fire Officer IV personnel. The following general position description for Fire Officer IV personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Officer IV operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. A Fire Officer IV is an upper level supervisor who performs both supervisory and managerial functions. In addition to the qualifications and competency for Fire Officer III, the Fire Officer IV is an individual who has met all the job performance requirements of Fire Officer IV as defined in Chapter 7 of NFPA 1021, Standard for Fire Officer Professional Qualifications. Typical duties of an individual at the Fire Officer IV level include: administering job performance requirements; evaluating and making improvements to department operations; developing long-range plans and fiscal projections; developing plans for major disasters; serving as Incident Commander at major incidents for all hazard types; and administering comprehensive risk management programs.

(B) Competency. A Fire Officer IV must demonstrate competency in appraising and evaluating departmental programs to ensure adherence to current laws and best practices; developing medium and long-range plans for organizations; and assuming a top-level leadership role in both the organization and community.

(13) Fire Service Instructor I personnel. The following general position description for Fire Service Instructor I personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Service Instructor I operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to successfully completing a commission approved course and achieving a passing score on the certification examination: must have the ability to deliver instructions effectively from a prepared lesson plan; the ability to use instructional aids and evaluation instruments; the ability to adapt to lesson plans to the unique requirements of both student and the jurisdictional authority; the ability to organize the learning environment to its maximum potential; the ability to meet the record-keeping requirements of the jurisdictional authority.

(B) Competency. A Fire Service Instructor I must demonstrate competency in delivering instruction in an environment organized for efficient learning while meeting the record-

keeping needs of the authority having jurisdiction, utilizing skills in accordance with the objectives in Chapter 8 of the commission's Certification Curriculum Manual.

(14) Fire Service Instructor II personnel. The following general position description for Fire Service Instructor II personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Service Instructor II operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to successfully completing a commission approved course, achieving a passing score on the certification examination, and meeting the qualifications for Fire Service Instructor I: the ability to develop individual lesson plans for a specific topic, including learning objectives, instructional aids, and evaluation instruments; the ability to schedule training sessions based on the overall training plan of the jurisdictional authority; the ability to supervise and coordinate the activities of other instructors.

(B) Competency. A Fire Service Instructor II must demonstrate competency in developing individual lesson plans; scheduling training sessions; and supervising other instructors, utilizing skills in accordance with the objectives in Chapter 8 of the commission's Certification Curriculum Manual.

(15) Fire Service Instructor III personnel. The following general position description for Fire Service Instructor III personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Fire Service Instructor III operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to successfully completing a commission approved course, achieving a passing score on the certification examination, and meeting the qualifications for Fire Service Instructor II: the ability to develop comprehensive training curricula and programs for use by single or multiple organizations; the ability to conduct organizational needs analysis; and the ability to develop training goals and implementation strategies.

(B) Competency. A Fire Service Instructor III must demonstrate competency in developing comprehensive training curricula and programs; conducting organizational needs analysis; and developing training goals and implementation strategies, utilizing skills in accordance with the objectives in Chapter 8 of the commission's Certification Curriculum Manual.

(16) Incident Safety Officer personnel. The following general position description for Incident Safety Officer personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Incident Safety Officer operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. An Incident Safety Officer is an individual who has met the requirements of Fire Officer Level I specified in NFPA 1021, Standard for Fire Officer Professional Qualifications and Chapter 6 of NFPA 1521, Standard for Fire Department Safety Officer and has the knowledge, skill, and abilities to manage incident scene safety. Typical Incident Safety Officer duties include risk and resource evaluation; hazard identification and communication; action plan reviews; safety briefings; accident investigation; post incident analysis; and participation in safety committee activities.

(B) Competency. An Incident Safety Officer must demonstrate competency in management of incident scene safety through a working knowledge of the various emergency operations as prescribed by the local jurisdiction; an understanding of building construction; fire

science and fire behavior; managing an organization's personnel accountability system; and incident scene rehabilitation methodology.

(17) Basic Wildland Fire Protection personnel. The following general position description for Basic Wildland Fire Protection personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Basic Wildland Fire Fighter operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. A Basic Wildland Fire Fighter is an individual who has met the requirements of Chapter 5 of NFPA 1051, Standard for Wildland Fire Fighter Professional qualifications, and should demonstrate knowledge in: wildland fire behavior; fireline safety and use; limitations of personal protective equipment; fire shelter use; fire suppression tactics and techniques in wildland settings; and have an understanding of the fire fighter's role within the local incident management system.

(B) Competency. A Basic Wildland Fire Fighter must demonstrate competency in such areas as: maintaining personal protective equipment and assigned fire suppression tools and equipment; the ability to quickly prepare for a response when notified; recognizing hazards and unsafe situations in a wildland fire; securing a fire line; mopping up a fire area; and patrolling a fire area so as to ensure fire control.

(18) Intermediate Wildland Fire Protection personnel. The following general position description for Intermediate Wildland Fire Protection personnel serves as a guide for anyone interested in understanding the qualifications, competencies, and tasks required of the Intermediate Wildland Fire Fighter operating in the State of Texas. It is ultimately the responsibility of an employer to define specific job descriptions within each jurisdiction.

(A) Qualifications. In addition to the qualifications and competency for the Basic Wildland Fire Fighter, the Intermediate Wildland Fire Fighter is an individual who has met the requirements of Chapter 6 of NFPA 1051, Standard for Wildland Fire Fighter Professional qualifications, and should demonstrate knowledge in: basic map reading; use of a locating device such as a compass; radio procedures as adopted by the local jurisdiction; and record keeping.

(B) Competency. An Intermediate Wildland Fire Fighter must demonstrate competency in such areas as: the ability to lead a team of fire fighters in the performance of assigned tasks while maintaining the safety of personnel; implementing appropriate fireline construction methods and other techniques for protection of exposed property; operation of water delivery equipment; securing an area of suspected fire origin and associated evidence; and serving as a lookout in a wildland fire.

§421.5 Definitions

The following words and terms, when used in the Standards Manual, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Admission to employment--An entry level full-time employee of a local government entity in one of the categories of fire protection personnel.

(2) Appointment--The designation or assignment of a person to a discipline regulated by the commission. The types of appointments are:

- (A) permanent appointment--the designation or assignment of certified fire protection personnel or certified part time fire protection employees to a particular discipline (See Texas Government Code, §419.032); and
- (B) probationary or temporary appointment--the designation or assignment of an individual to a particular discipline, except for head of a fire department, for which the individual has passed the commission's certification and has met the medical requirement of §423.1(c) of this title (relating to Minimum Standards for Structure Fire Protection Personnel), if applicable, but has not yet been certified. (See Texas Government Code, §419.032.)
- (3) Approved training--Any training used for a higher level of certification must be approved by the commission and assigned to either the A-List or the B-List. The training submission must be in a manner specified by the commission and contain all information requested by the commission. The commission will not grant credit twice for the same subject content or course. Inclusion on the A-List or B-List does not preclude the course approval process as stated elsewhere in the Standards Manual.
- (4) Assigned/work--A fire protection personnel or a part-time fire protection employee shall be considered "assigned/working" in a position, any time the individual is receiving compensation and performing the duties that are regulated by the commission [certification] and has been permanently appointed, as defined in this section, to the particular discipline.
- (5) Assistant fire chief--The officer occupying the first position subordinate to the head of a fire department.
- (6) Auxiliary fire fighter--A volunteer fire fighter.
- (7) Benefits--Benefits shall include, but are not limited to, inclusion in group insurance plans (such as health, life, and disability) or pension plans, stipends, free water usage, and reimbursed travel expenses (such as meals, mileage, and lodging).
- (8) Chief Training Officer--The individual, by whatever title he or she may be called, who coordinates the activities of a certified training facility.
- (9) Class hour--Defined as not less than 50 minutes of instruction, also defined as a contact hour; a standard for certification of fire protection personnel.
- (10) Code--The official legislation creating the commission.
- (11) College credits--Credits earned for studies satisfactorily completed at an institution of higher education accredited by an agency recognized by the U.S. Secretary of Education and including National Fire Academy (NFA) open learning program colleges, or courses recommended for college credit by the American Council on Education (ACE) or delivered through the National Emergency Training Center (both EMI and NFA) programs. A course of study satisfactorily completed and identified on an official transcript from a college or in the ACE National Guide that is primarily related to Fire Service, Emergency Medicine, Emergency Management, or Public Administration is defined as applicable for Fire Science college credit, and is acceptable for higher levels of certification. A criminal justice course related to fire and or arson investigation that is satisfactorily completed and identified on an official transcript from a college or in the ACE National Guide may be used to qualify for Master Arson Investigator certification.
- (12) Commission--Texas Commission on Fire Protection.

- (13) Commission-recognized training--A curriculum or training program which carries written approval from the commission, or credit hours that appear on an official transcript from an accredited college or university, or any fire service training received from a nationally recognized source, i.e., the National Fire Academy.
- (14) Compensation--Compensation is to include wages, salaries, and "per call" payments (for attending drills, meetings or answering emergencies).
- (15) Expired--Any certification that has not been renewed on or before the end of the certification period.
- (16) Federal fire fighter--A person as defined in the Texas Government Code, §419.084(h).
- (17) Fire chief--The head of a fire department.
- (18) Fire department--A department of a local government that is staffed by one or more fire protection personnel or part-time fire protection employees.
- (19) Fire protection personnel--Any person who is a permanent full-time employee of a fire department or governmental entity and who is appointed duties in one of the following categories/disciplines: fire suppression, fire inspection, fire and arson investigation, marine fire fighting, aircraft rescue fire fighting, fire training, fire education, fire administration and others employed in related positions necessarily or customarily appertaining thereto.

(20) Fire Safety Inspection – Also called a fire code inspection. An inspection performed for the purpose of determining and enforcing compliance with an adopted fire code. A determination of failure to comply with the adopted fire code may result in the issuance of citations or the invoking of other remedies so as to ensure compliance. This differs from pre-fire planning activities or inspections, which are walk-through inspections performed by fire fighters for the purpose of gaining familiarity with a building, its contents, and its occupancy. This benefits fire protection personnel in the event an emergency occurs at a particular occupancy. If a code violation is recognized by personnel during a pre-fire planning inspection, the building occupant should be notified and directed to make an immediate correction. However, the issuance of citations or invoking of other remedies should only be undertaken by a certified fire inspector.

(21)~~(20)~~ Fire suppression duties--Engaging in the controlling or extinguishment of a fire of any type or performing activities which are required for and directly related to the control and extinguishment of fires or standing by on the employer's premises or apparatus or nearby in a state of readiness to perform these duties.

(22)~~(21)~~ Full-time--An officer or employee is considered full-time if the employee works an average of 40 hours a week or averages 40 hours per week or more during a work cycle in a calendar year. For the purposes of this definition paid leave will be considered time worked.

(23)~~(22)~~ Government entity--The local authority having jurisdiction as employer of full-time fire protection personnel in a state agency, incorporated city, village, town or county, education institution or political subdivision.

(24)~~(23)~~ High school--A school accredited as a high school by the Texas Education Agency or equivalent accreditation agency from another jurisdiction.

(25)~~(24)~~ Immediately dangerous to life or health (IDLH)--An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

(26)~~(25)~~ Incipient stage fire--A fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus.

(27)~~(26)~~ Instructor:

- (A) Lead Instructor--Oversees the presentation of an entire course and assures that course objectives are met in accordance with the applicable curriculum or course material. The lead instructor should have sufficient experience in presenting all units of the course so as to be capable of last-minute substitution for other instructors.
- (B) Instructor (also Unit Instructor for wildland courses)--Responsible for the successful presentation of one or more areas of instruction within a course, and should be experienced in the lesson content they are presenting.
- (C) Guest Instructor--An individual who may or may not hold Instructor certification but whose special knowledge, skill, and expertise in a particular subject area may enhance the effectiveness of the training in a course. Guest instructors shall teach under the endorsement of the lead instructor.

(28)~~(27)~~ Interior structural fire fighting--The physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage. (See 29 CFR §1910.155)

(29)~~(28)~~ Municipality--Any incorporated city, village, or town of this state and any county or political subdivision or district in this state. Municipal pertains to a municipality as defined in this section.

(30)~~(29)~~ National Fire Academy semester credit hours--The number of hours credited for attendance of National Fire Academy courses is determined as recommended in the most recent edition of the "National Guide to Educational Credit for Training Programs," American Council on Education (ACE).

(31)~~(30)~~ National Fire Protection Association (NFPA)--An organization established to provide and advocate consensus codes and standards, research, training, and education for fire protection.

(32)~~(31)~~ National Wildfire Coordinating Group (NWCG)--An Operational group designed to establish, implement, maintain, and communicate policy, standards, guidelines, and qualifications for wildland fire program management among participating agencies

(33)~~(32)~~ Non-self-serving affidavit--A sworn document executed by someone other than the individual seeking certification.

(34)~~(33)~~ Participating volunteer fire fighter--An individual who voluntarily seeks certification and regulation by the commission under the Texas Government Code, Chapter 419, Subchapter D.

(35)~~(34)~~ Participating volunteer fire service organization--A fire department that voluntarily seeks regulation by the commission under the Texas Government Code, Chapter 419, Subchapter D.

(36)~~(35)~~ Part-time fire protection employee--An individual who is appointed as a part-time fire protection employee and who receives compensation, including benefits and reimbursement for expenses. A part-time fire protection employee is not full-time as defined in this section.

(37)~~(36)~~ Personal alert safety system (PASS)--Devices that are certified as being compliant with NFPA 1982, and that automatically activates an alarm signal (which can also be manually activated) to alert and assist others in locating a fire fighter or emergency services person who is in danger.

(38)~~(37)~~ Political subdivision--A political subdivision of the State of Texas that includes, but is not limited to the following:

- (A) city;
- (B) county;
- (C) school district;
- (D) junior college district;
- (E) levee improvement district;
- (F) drainage district;
- (G) irrigation district;
- (H) water improvement district;
- (I) water control and improvement district;
- (J) water control and preservation district;
- (K) freshwater supply district;
- (L) navigation district;
- (M) conservation and reclamation district;
- (N) soil conservation district;
- (O) communication district;
- (P) public health district;
- (Q) river authority;
- (R) municipal utility district;
- (S) transit authority;
- (T) hospital district;
- (U) emergency services district;
- (V) rural fire prevention district; and
- (W) any other governmental entity that:
 - (i) embraces a geographical area with a defined boundary;

- (ii) exists for the purpose of discharging functions of the government; and
- (iii) possesses authority for subordinate self-government through officers selected by it.

(39)~~(38)~~ Reciprocity for IFSAC seals--Valid documentation of accreditation from the International Fire Service Accreditation Congress used for commission certification may only be used for obtaining an initial certification.

(40)~~(39)~~ Recognition of training--A document issued by the commission stating that an individual has completed the training requirements of a specific phase level of the Basic Fire Suppression Curriculum.

(41)~~(40)~~ School--Any school, college, university, academy, or local training program which offers fire service training and included within its meaning the combination of course curriculum, instructors, and facilities.

(42)~~(41)~~ Structural fire protection personnel--Any person who is a permanent full-time employee of a government entity who engages in fire fighting activities involving structures and may perform other emergency activities typically associated with fire fighting activities such as rescue, emergency medical response, confined space rescue, hazardous materials response, and wildland fire fighting.

(43)~~(42)~~ Trainee--An individual who is participating in a commission approved training program.

(44)~~(43)~~ Volunteer fire protection personnel--Any person who has met the requirements for membership in a volunteer fire service organization, who is assigned duties in one of the following categories: fire suppression, fire inspection, fire and arson investigation, marine fire fighting, aircraft rescue fire fighting, fire training, fire education, fire administration and others in related positions necessarily or customarily appertaining thereto.

(45)~~(44)~~ Volunteer fire service organization--A volunteer fire department or organization not under mandatory regulation by the commission.

(46)~~(45)~~ Years of experience--For purposes of higher levels of certification or fire service instructor certification:

- (A) Except as provided in subparagraph (B) of this paragraph, years of experience is defined as full years of full-time, part-time or volunteer fire service while holding:
 - (i) a commission certification as a full-time, or part-time employee of a government entity, a member in a volunteer fire service organization, and/or an employee of a regulated non-governmental fire department; or
 - (ii) a State Firemen's and Fire Marshals' Association advanced fire fighter certification and have successfully completed, as a minimum, the requirements for an Emergency Care Attendant (ECA) as specified by the Department of State Health Services (DSHS), or its successor agency, or its equivalent; or
 - (iii) an equivalent certification as a full-time fire protection personnel of a governmental entity from another jurisdiction, including the military, or while a member in a volunteer fire service organization from another jurisdiction, and have, as a minimum, the requirements for an ECA as specified by the DSHS, or its successor agency, or its equivalent; or

(iv) for fire service instructor eligibility only, a State Firemen's and Fire Marshals' Association Level II Instructor Certification, received prior to June 1, 2008 or Instructor I received on or after June 1, 2008 or an equivalent instructor certification from the DSHS or the Texas Commission on Law Enforcement. Documentation of at least three years of experience as a volunteer in the fire service shall be in the form of a non self-serving sworn affidavit.

(B) For fire service personnel certified as required in subparagraph (A) of this paragraph on or before October 31, 1998, years of experience includes the time from the date of employment or membership to date of certification not to exceed one year.

§421.9 Designation of Fire Protection Duties.

- (a) An individual who performs one or more fire protection duties, listed in the Texas Government Code, §419.021(3)(C), for a fire department of local government entity shall be designated to only one of the following categories:
- (1) fire protection personnel;
 - (2) a part-time fire protection employee; or
 - (3) a volunteer fire fighter or other auxiliary fire fighter.
- (b) A fire department regulated by the Commission may not designate the same person under more than one category under this section. The designation shall be made on the records of the department and the designation shall be made available for inspection by the Commission or sent to the Commission on request.
- (c) A fire department regulated by the Commission shall report the appointment of fire protection personnel to a regulated discipline via the Commission's online management program, or the appropriate form if available. Fire protection personnel who are assigned to a regulated discipline as part of their regularly assigned duties shall be appointed to that discipline with the Commission. No individual may be appointed to a discipline without approval by the Commission. The Commission shall not approve an initial appointment to a regulated discipline until it has reviewed and approved a person's fingerprint-based criminal history record. Termination of fire protection personnel or part-time fire protection employees shall be reported to the Commission via the Commission's online management program, or the appropriate form if available within 14 calendar days of the action. In the case of termination, the employing entity shall report an individual's last known home address to the Commission. A Removal from Appointment form may be submitted without the employee's signature.
- (d) A fire department may not in a calendar year compensate, reimburse, or provide benefits to a person the department has designated as a volunteer or other auxiliary fire fighter in an amount that is equal to or more than what a person receives working 2,080 hours at the federal minimum wage.
- (e) A person certified as fire protection personnel in one fire department may be employed and designated as a part-time fire protection employee in another fire department without additional certification as a part-time fire protection employee.

§421.11 Requirement To Be Certified Within One Year.

- (a) Fire protection personnel or part-time fire protection employees of a fire department who are appointed duties identified as fire protection personnel duties must be certified by the

Commission in the discipline(s) to which they are assigned within one year of their appointment to the duties or within two years of successfully passing the applicable Commission examination, whichever is less. The Commission shall not approve an initial certification for a regulated discipline until it has reviewed and approved a person's fingerprint-based criminal history record. An individual who accepts appointment(s) in violation of this section shall be removed from the appointment(s) and will be subject to administrative penalties. A department or local government that appoints an individual in violation of this section will also be subject to administrative penalties.

- (b) An individual who has been removed from appointment to duties identified as fire protection personnel duties for violation of this section must petition the Commission in writing for permission to be reappointed to the duties from which they were removed. The petition will be considered only if the individual has obtained all appropriate certification(s) applicable to the duties to which the individual seeks reappointment.

§421.13 Individual Certificate Holders.

- (a) Employment is not mandatory for certification. An individual may hold or renew any certificate issued by the commission for which they maintain their qualifications.
- (b) An individual certificate holder must notify the commission of a change of his or her home address within 14 calendar days of a change of address.

§421.15 Extension of Training Period.

A fire department may apply to the commission for an extension of the one-year training period, identified in §419.032(c) of the Government Code, for a time period not exceeding two years from the date of original appointment as follows:

- (1) the request for extension shall be placed on the Fire Fighter Advisory Committee's (FFAC's) agenda to be heard at its next regular or special called meeting after submission of the request;
- (2) after review by the FFAC, the application along with the FFAC's recommendations will be sent to the commission to be heard at its next regular meeting. If the request for extension is approved by the commission, the extension shall become effective immediately; and
- (3) the one-year extension of training time, if granted, shall run from the date of forfeiture and removal or, at the latest, from one year after the original date training began, whichever occurs first.

§421.17 Requirement to Maintain Certification.

- (a) All full-time or part-time employees of a fire department or local government who are assigned duties identified as fire protection personnel duties must maintain certification by the commission in the discipline(s) to which they are assigned for the duration of their assignment.
- (b) In order to maintain the certification required by this section, the certificate(s) of the employees must be renewed annually by complying with §437.5 of this title (relating to Renewal Fees) and Chapter 441 of this title (relating to Continuing Education) of the commission standards manual.

- (c) An individual whose certificate has been expired for one year or longer may not renew the certificate that was previously held. To obtain a new certification, an individual must meet the requirements in Chapter 439 of this title (relating to Examinations for Certification).
- (d) The commission will provide proof of current certification to individuals whose certification has been renewed.
- (e) All certificate holders are subject to the requirements of §57.491 of the Texas Education Code regarding license renewal and default on student loans.

5. **Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 427, Training Facilities, Subchapter C, Training Programs for On-Site and Distance Training Providers, including but not limited to, §427.301, General Provisions for Training Programs--On-Site and Distance Training Providers, §427.303, Training Approval process for On-Site and Distance Training Providers, §427.305, Procedures for Testing Conducted by On-Site and Distance Training Providers, and §427.307, On-Site and Distance Training Provider Staff Requirements.**

CHAPTER 427

TRAINING FACILITY CERTIFICATION

SUBCHAPTER C

TRAINING PROGRAMS FOR ON-SITE AND DISTANCE TRAINING PROVIDERS

§427.301 General Provisions for Training Programs--On-Site and Distance Training Providers.

- (a) Training programs that are intended to satisfy the requirements for fire protection personnel certification for each curriculum must meet the objectives and competencies in that curriculum.
- (b) A system for evaluating the comprehension of the trainee, including periodic and comprehensive written tests, is required. If performance skills are part of the applicable curriculum, performance testing shall be done in accordance with §439.11 of this title.

§427.303 Training Approval Process for On-Site and Distance Training Providers.

- (a) When seeking training approvals, a training provider, whether on-site or distance, shall certify that it has provided the resources described in §427.1(f) of this title.
- (b) All training for certification must be approved by the Commission. A training provider must submit to the Commission a completed Training Prior Approval Form at least 20 days prior to the proposed start date of the training.
- (c) The provider of training will receive from the Commission the following documents.
 - (1) A Notice of Course Approval. This document will serve as notification that the course has been approved by the Commission and will contain the approval number assigned by the Commission and the course I.D. number.
 - (2) An Application for Testing Form, when applicable.
 - (3) A Certificate of Completion Form. This document must be completed by the training provider and issued to each student when the student has successfully completed the applicable curriculum.
 - (4) Commission-designated skills envelope when applicable.
- (d) Approved courses are subject to audit by Commission staff at any time. Any deviation from the approved start-and-end date of the class, periodic and final test schedule, field examiners or the substitution of one instructor for another (this does not apply to an instructor already approved for the course) must be reported to the Commission within three business days of the deviation.

§427.305 Procedures for Testing Conducted by On-Site and Distance Training Providers.

- (a) The requirements and provisions in this section apply to procedures for periodic and final testing conducted by training providers. For procedures regarding state examinations for certification Commission examinations that occur after a training program is completed, see Chapter 439 of this title (relating to Examinations for Certification).

- (b) Periodic and comprehensive final tests shall be given by the training provider in addition to the Commission examination required in Chapter 439 of this title.
- (c) Periodic tests shall be administered at the ratio of one test per 50 hours of recommended training, or portion thereof. An average score of 70% must be achieved on all required periodic tests.
- (d) In addition to periodic tests, a comprehensive final test must be administered. The final test must be conducted in a proctored setting. For purposes of this section, a proctor can be an approved TCFP Field Examiner, or a member or testing center of an educational institution. A passing score of 70% must be achieved.
- (e) If a course is taught in phases, a comprehensive exam for each phase shall be administered upon completion of each phase and a passing score of 70% must be achieved.

§427.307 On-Site and Distance Training Provider Staff Requirements.

- (a) The chief training officer of a training facility, as a minimum, must possess Fire Service Instructor III certification.
- (b) All training instructors (except guest instructors) must possess fire instructor certification. The instructor(s) must be certified in the applicable discipline or be approved by the commission to instruct in the applicable subject.
- (c) The lead instructor, as a minimum, shall possess a Fire Service Instructor II certification and must be certified by the commission in the applicable discipline, except as stated in subsections (h)(2) and (i)(2) of this section.
- (d) Guest instructors are not required to be certified as instructors. ~~[A guest instructor is defined as an individual with special knowledge, skill, and expertise in a specific subject area who has the ability to enhance the effectiveness of the training. Guest instructors shall teach under the endorsement of the lead instructor.]~~
- (e) In order to teach fire officer certification courses, an individual who does not meet the requirements of subsection (a) or (c) of this section, shall possess a minimum of a bachelor's degree in management or its equivalent.
- (f) In order to teach an instructor certification training course for Fire Service Instructor I, an individual must hold one of the following three qualifications:
 - (1) Hold a Fire Service Instructor II or higher; or
 - (2) A Bachelor's degree with the following:
 - (A) As a minimum, a minor in education; and
 - (B) Three years of teaching experience in a fire department, department of a state agency, educational institution, or political subdivision of the state, during which time the individual taught a minimum of 200 class hours; or
 - (3) An Associate's degree with the following:
 - (A) twelve semester hours of education instructional courses; and

- (B) five years of teaching experience in a fire department, department of a state agency, educational institution, or political subdivision of the state, during which time the individual taught a minimum of 400 class hours.
- (g) In order to teach an instructor certification training course for Fire Service Instructor II or III, an individual must hold one of the following three qualifications:
 - (1) Hold a Fire Service Instructor III; or
 - (2) A Bachelor's degree with the following:
 - (A) As a minimum, a minor in education; and
 - (B) Three years of teaching experience in a fire department, department of a state agency, educational institution, or political subdivision of the state, during which time the individual taught a minimum of 200 class hours; or
 - (3) An Associate's degree with the following:
 - (A) twelve semester hours of education instructional courses; and
 - (B) five years of teaching experience in a fire department, department of a state agency, educational institution, or political subdivision of the state, during which time the individual taught a minimum of 400 class hours.
- (h) In order to teach a certification course for Basic Wildland Fire Protection:
 - (1) The unit instructor must hold Basic Wildland Fire Protection certification and a Texas Commission on Fire Protection Instructor I certification.
 - (2) The lead instructor must hold Intermediate Wildland Fire Protection certification and a Texas Commission on Fire Protection Instructor I certification.
 - (3) The lead instructor must be present in any class being taught.
- (i) In order to teach a certification course for Intermediate Wildland Fire Protection:
 - (1) The unit instructor must hold an Intermediate Wildland Fire Protection certification and a Texas Commission on Fire Protection Instructor I certification.
 - (2) The lead instructor must hold an Intermediate Wildland Fire Protection certification and a Texas Commission on Fire Protection Instructor I certification.
 - (3) The lead instructor must be present in any class being taught.

6. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 431, Fire Investigation, Subchapter A, Minimum Standards for Arson Investigator Certification, including but not limited to, §431.1, Minimum Standards for Arson Investigation Personnel, §431.3, Minimum Standards for Basic Arson Investigator Certification, §431.5, Minimum Standards for Intermediate Arson Investigator Certification, §431.7, Minimum Standards for Advanced Arson Investigator Certification, §431.9, Minimum Standards for Master Arson Investigator Certification, §431.11, Minimum Standards for Arson Investigator Certification for Law Enforcement Personnel, and §431.13, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, §431.201, Minimum Standards for Fire Investigation Personnel, §431.203, Minimum Standards for Fire Investigator Certification, §431.205, Minimum Standards for Intermediate Fire Investigator Certification, §431.207, Minimum Standards for Advanced Fire Investigator Certification, §431.209, Minimum Standards for Master Fire Investigator Certification, and §431.211, International Fire Service Accreditation Congress (IFSAC Seal—Fire Investigator.

CHAPTER 431

FIRE INVESTIGATION

SUBCHAPTER A

MINIMUM STANDARDS FOR ARSON INVESTIGATOR CERTIFICATION

§431.1 Minimum Standards for Arson Investigation Personnel.

- (a) Fire protection personnel who are appointed arson investigation duties must be certified, as a minimum, as a basic arson investigator as specified in §431.3 of this title (relating to Minimum Standards for Basic Arson Investigator Certification) within one year from the date of initial appointment to such position.
- (b) Prior to being appointed to arson investigation duties, fire protection personnel must complete a commission approved basic fire investigator training program, successfully pass the commission examination pertaining to that curriculum, and possess a current peace officer license from the Texas Commission on Law Enforcement ~~[Officer Standards and Education]~~ or document that the individual is a federal law enforcement officer.
- (c) Personnel holding any level of arson investigation certification shall be required to comply with the continuing education requirements in §441.15 of this title (relating to Continuing Education for Arson Investigator or Fire Investigator).

§431.3 Minimum Standards for Basic Arson Investigator Certification.

In order to be certified by the commission~~[Commission]~~ as a Basic Arson Investigator an individual must:

- (1) possess a current basic peace officer's license from the Texas Commission on Law Enforcement~~[Officer Standards and Education]~~ or documentation that the individual is a federal law enforcement officer;
- (2) hold a current license as a peace officer and notify the commission~~[Commission]~~ on the prescribed form regarding the law enforcement agency currently holding the individual's peace officer license; and
- (3) possess valid documentation of accreditation from the International Fire Service Accreditation Congress as a Fire Investigator; or
- (4) complete a commission~~[Commission]~~ approved basic fire investigation training program and successfully pass the commission~~[Commission]~~ examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved fire investigation training program shall consist of one of the following:
 - (A) completion of the commission~~[Commission]~~ approved Fire Investigator Curriculum, as specified in Chapter 5 of the commission's~~[Commission's]~~ Certification Curriculum Manual;
 - (B) successful completion of an out-of-state, NFA, or military training program which has been submitted to the commission~~[Commission]~~ for evaluation and found to meet the minimum

requirements as listed in the **commission** [Commission-] approved Fire Investigator Curriculum as specified in Chapter 5 of the **commission's** [Commission's] Certification Curriculum Manual; or

- (C) successful completion of the following college courses: Fire and Arson Investigation I or II, 3 semester hours; Hazardous Materials I, II, or III, 3 semester hours; Building Construction in the Fire Service or Building Codes and Construction, 3 semester hours; Fire Protection Systems, 3 semester hours. Total semester hours, 12.

§431.5 Minimum Standards for Intermediate Arson Investigator Certification.

- (a) Applicants for Intermediate Arson Investigator Certification must complete the following requirements:
- (1) hold as a prerequisite a Basic Arson Investigator Certification as defined in §431.3 of this title (relating to Minimum Standards for Basic Arson Investigator Certification); and
 - (2) acquire a minimum of four years of fire protection experience and complete the requirements listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section); or
 - (D) Option 4--Hold current Intermediate Peace Officer certification from the Texas Commission on Law Enforcement [~~Officer Standards and Education (TCLEOSE)~~] with four additional law enforcement courses applicable for fire investigations. (See exception outlined in subsection (c) of this section.)
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Arson Investigator Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§431.7 Minimum Standards for Advanced Arson Investigator Certification.

- (a) Applicants for Advanced Arson Investigator certification must complete the following requirements:
- (1) hold as a prerequisite an Intermediate Arson Investigator Certification as defined in §431.5 of this title (relating to Minimum Standards for Intermediate Arson Investigator Certification); and
 - (2) acquire a minimum of eight years of fire protection experience and complete the requirements listed in one of the following options:

- (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section); or
 - (D) Option 4--Advanced Arson for Profit or Complex Arson Investigative Techniques (Bureau of Alcohol, Tobacco, Firearms, and Explosives resident or field course, 80 hours); or
 - (E) Option 5--Hold current Advanced Peace Officer certification from the Texas Commission on Law Enforcement [~~Officer Standards & Education (TCLEOSE)~~] with four additional law enforcement courses applicable for fire investigations. (See exception outlined in subsection (c) of this section.)
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
 - (c) The training required in this section must be in addition to any training used to qualify for any lower level of Arson Investigator Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§431.9 Minimum Standards for Master Arson Investigator Certification.

- (a) Applicants for Master Arson Investigator Certification must complete the following requirements:
 - (1) hold as a prerequisite an Advanced Arson Investigator Certification as defined in §431.7 of this title (relating to Minimum Standards for Advanced Arson Investigator Certification); and
 - (2) acquire a minimum of twelve years of fire protection experience, and 60 college semester hours or an associate's degree, either of which includes at least 18 college semester hours in fire science subjects or criminal justice subjects related to fire and or arson investigation.
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Arson Investigator Certification.

§431.11 Minimum Standards for Arson Investigator Certification for Law Enforcement Personnel.

- (a) A law enforcement officer employed or commissioned by a law enforcement agency as a peace officer who is designated as an arson investigator by an appropriate local authority is eligible for certification on a voluntary basis by complying with this chapter.
- (b) An individual holding commission certification as a fire investigator who becomes a law enforcement officer employed or commissioned by a law enforcement agency as a peace officer, and who is designated as an arson investigator by an appropriate local authority will qualify for a similar level arson investigator certificate. To obtain a printed certificate the individual must make application to the commission to include confirmation of commission.

§431.13 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current commission Arson Investigator certification received prior to March 10, 2003 may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Investigator by making application to the commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a commission-approved basic fire investigator program and passing the applicable state examination may be granted an IFSAC seal as a Fire Investigator by making application to the commission for the IFSAC seal and paying applicable fees.

CHAPTER 431**FIRE INVESTIGATION****SUBCHAPTER B****MINIMUM STANDARDS FOR FIRE INVESTIGATOR CERTIFICATION****§431.201 Minimum Standards for Fire Investigation Personnel.**

- (a) Fire protection personnel who receive temporary or probationary appointment to fire investigation duties must be certified as a fire investigator by the Commission within one year of appointment to such duties.
- (b) Prior to being appointed to fire investigation duties, personnel must:
 - (1) complete a commission approved basic fire investigator training program and successfully pass the commission examination pertaining to that curriculum; or
 - (2) hold current certification as structure fire protection personnel.
- (c) Individuals holding a Fire Investigator certification shall be required to comply with the continuing education requirements in §441.15 of this title (relating to Continuing Education for Arson Investigator or Fire Investigator).
- (d) Individuals certified under this subchapter shall limit their investigation to determining fire cause and origin. If evidence of a crime is discovered, custody and control of the investigation shall be immediately transferred to a certified arson investigator or licensed peace officer.
- (e) Individuals who previously held arson investigator certification, who no longer hold a current commission as a peace officer, will qualify for certification as a fire investigator of similar level upon notice to the commission. To obtain a printed certificate the individual will be required to make application to the commission.

§431.203 Minimum Standards for Fire Investigator Certification.

- (a) In order to be certified by the Commission as a Fire Investigator an individual must complete the requirements specified in §431.3(a)(3) or (4) of this title (relating to Minimum Standards for Basic Arson Investigator Certification).
- (b) A person who holds or is eligible to hold a certificate as a Fire Investigator may be certified as an Arson Investigator by meeting the requirements of Chapter 431, Subchapter A, but shall not be required to repeat the applicable examination requirements.

§431.205 Minimum Standards for Intermediate Fire Investigator Certification.

- (a) Applicants for Intermediate Fire Investigator must complete the following requirements:
 - (1) hold as a prerequisite a Basic Fire Investigator Certification as defined in §431.203 of this title (relating to Minimum Standards for Fire Investigator Certification); and

- (2) acquire a minimum of four years of fire protection experience and complete the training listed in one of the following options:
- (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses. (See the exception outlined in subsection (c) of this section).
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Fire Investigator Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§431.207 Minimum Standards for Advanced Fire Investigator Certification.

- (a) Applicants for Advanced Fire Investigator must complete the following requirements
- (1) hold as a prerequisite an Intermediate fire Investigator Certification as defined in §431.203 of this title (relating to Minimum Standards for Fire Investigator Certification); and
 - (2) acquire a minimum of eight years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from the either A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses. (See the exception outlined in subsection (c) of this section).
 - (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification

Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.

- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Fire Investigator Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§431.209 Minimum Standards for Master Fire Investigator Certification.

- (a) Applicants for Master Fire Investigator Certification must complete the following requirements:
 - (1) hold as a prerequisite an Advanced Fire Investigator Certification as defined in §431.207 of this title (relating to Minimum Standards for Advanced Fire Investigator Certification); and
 - (2) acquire a minimum of twelve years of fire protection experience, and sixty college semester hours or an associate degree, which includes at least eighteen college semester hours in fire science subjects **or criminal justice subjects related to fire and or arson investigation.**
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Fire Investigator Certification.

§431.211 International Fire Service Accreditation Congress (IFSAC) Seal--Fire Investigator.

- (a) Individuals holding a current commission Fire Investigator certification received prior to March 10, 2003 may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Investigator by making application to the commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a commission-approved basic fire investigator program and passing the applicable state examination may be granted an IFSAC seal as a Fire Investigator by making application to the commission for the IFSAC seal and paying applicable fees.

7. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 437, Fees, including but not limited to, §437.1, Purpose and Scope, §437.3, Certification Fees, §437.5, Renewal Fees, §437.7, Standards Manual and Certification Curriculum Manual Fees, §437.11, Copying Fees, and §437.13, Processing Fees for Test Application, §437.15, International Fire Service Accreditation Congress (IFSAC) Seal Fees, and §437.17, Records Review Fees.

CHAPTER 437

FEES

§437.1 Purpose and Scope.

- (a) The purpose of this chapter is to set forth requirements governing the fees **charged by the commission** [~~for the issuance of certificates to fire protection personnel, to establish the procedures for the collection of annual renewal fees and copying fees~~] as prescribed by the Government Code, §419.025 and §419.026, and commission rule.
- (b) This chapter shall govern all proceedings before and dealing with the commission concerning [~~certification fees, renewal fees, and copying~~] fees. Hearings and appellate proceedings regarding these fees shall be governed by this chapter where applicable and by the rules of the practice and procedure of the commission and the Administrative Procedure Act and Texas Register Act, Chapter 2001, of the Texas Government Code.
- (c) If a fee submitted in the form of a check is returned for insufficient funds the certification, seal or test for which the fee was collected will be invalidated.
- (d) Additional fees, such as those charged for exam administration or criminal background checks, may be charged to applicants and regulated entities by service providers other than the commission. The commission does not charge and will not collect these additional fees. Payment of the additional fees shall be made via a separately established agreement between the individual or regulated entity and the applicable service provider.**

§437.3 Certification Application Processing Fees.

- (a) A non-refundable application **processing** fee of \$85 is required for each certificate issued by the Commission. If a certificate is issued within the time provided in §401.125 of this title (relating to Processing Periods), the fee will be applied to the certification. If the certificate is denied, the applicant must pay a new certification application **processing** fee to file a new application.
- (b) The regulated employing entity shall be responsible for all certification **application processing** fees required as a condition of appointment.
- (c) Nothing in this section shall prohibit an individual from paying a certification **application processing** fee for any certificate which he or she is qualified to hold, providing the certificate is not required as a condition of appointment (see subsection (b) of this section concerning certification fees).
- ~~(d) Any person who holds a certificate, and is no longer employed by an entity that is regulated by the Commission may submit in writing, a request, together with the required fee to receive a one-time certificate stating the level of certification in each discipline held by the person on the date that person left employment pursuant to the Texas Government Code, §419.033(b). Multiple certifications may be listed on the one-time certificate. The one-time fee for the one-time certificate shall be limited to the maximum amount allowed by §419.033(b) of the Texas Government Code.]~~

(d)~~(e)~~ A facility that provides ~~[basic-level]~~ training for any discipline for which the **commission** ~~[Commission]~~ has established a **curriculum** ~~[Basic Curriculum]~~ must be certified by the **commission** ~~[Commission]~~. The training facility will be charged a separate certification **application processing** fee for each discipline or **level of discipline for which application is made**.

§437.5 Renewal Fees.

- (a) A non-refundable annual renewal fee of \$85 shall be assessed for each certified individual and certified training facility. If an individual or certified training facility holds more than one certificate, the **commission** ~~[Commission]~~ may collect only one renewal fee of \$85, which will renew all certificates held by the individual or certified training facility.
- (b) A regulated employing entity shall pay the renewal fee for **each individual who is required to possess certification as a condition of employment**. ~~[all certificates which a person must possess as a condition of employment]~~
- (c) If a person re-enters the fire service whose certificate(s) has been expired for less than one year, the regulated entity must pay all applicable renewal fee(s) and any applicable additional fee(s). Upon payment of the required fees, the certificates previously held by the individual, for which he or she continues to qualify, will be renewed.
- (d) If a person **wishes to renew** ~~[reapplies for]~~ a certificate(s) which has been expired less than one year and the individual is not employed by a regulated employing entity as defined in subsection (b) of this section, the individual must pay all applicable renewal fee(s) and any applicable additional fee(s). Upon payment of the required fee(s), the certificate(s) previously held by the individual, for whom he or she continues to qualify, will be renewed.
- (e) Nothing in this section shall prohibit an individual from paying a renewal fee for any certificate which he or she is qualified to hold providing the certificate is not required as a condition of employment.
- (f) Certification renewal information will be sent to all regulated employing entities and individuals holding certification at least 60 days prior to October 31 of each calendar year. Certification renewal information will be sent to certified training facilities at least 60 days prior to February 1 of each calendar year.
- (g) **If renewal payment is submitted by mail, all** ~~[All]~~ certification renewal fees must be **submitted** ~~[returned]~~ with the renewal **invoice** ~~[statement]~~ to the **commission** ~~[Commission]~~.
- (h) All certification renewal fees must be paid on or before the **last day of the certification period (see subsection (i) of this section)** ~~[renewal date posted on the certification renewal statement]~~ to avoid additional fee(s).
- (i) The certification period shall be a period not to exceed one year. The certification period for employees of regulated employing entities, and individuals holding certification is November 1 to October 31. The certification period of certified training facilities is February 1 to January 31.
- (j) All certification renewal fees received from one to 30 days after the **last day of the certification period** ~~[renewal date posted on the renewal notice]~~ will cause the individual or entity responsible for payment to be assessed a non-refundable late fee of \$42.50 in addition to the renewal fee for each individual for which a renewal fee was due.

- (k) All certification renewal fees received more than 30 days after the **last day of the certification period** ~~[renewal date posted on the renewal notice]~~ will cause the individual or entity responsible for payment to be assessed a non-refundable late fee of \$85 in addition to the renewal fee for each individual for which a renewal fee was due.
- (l) In addition to any non-refundable late fee(s) assessed for certification renewal, the **commission** ~~[Commission]~~ may hold an informal conference to determine if any further action(s) is to be taken.
- (m) An individual or entity may petition the **commission** ~~[Commission]~~ for a waiver of the late fees required by this section if the person's certificate expired because of the individual or regulated employing entity's good faith clerical error, or expired as a result of termination of the person's employment where the person has been restored to employment through a disciplinary procedure or a court action. ~~[All required renewal fees including applicable late fees and all required continuing education must be submitted before the waiver request may be considered.]~~
- (1) Applicants claiming good faith clerical error must submit a sworn statement together with any supporting documentation that evidences the applicant's good faith efforts to comply with **commission** ~~[Commission]~~ renewal requirements and that failure to comply was due to circumstances beyond the control of the applicant.
 - (2) Applicants claiming restoration to employment as a result of a disciplinary or court action must submit a certified copy of the order restoring the applicant to employment.
- (n) An individual, upon returning from activation to military service, whose certification has expired, must notify the **commission** ~~[Commission]~~ in writing. The individual will have any normally associated late fees waived and will be required to pay a renewal fee of \$85.

§437.7 Standards Manual and Certification Curriculum Manual Fees.

- (a) Current versions of the Standards Manual for Fire Protection Personnel and Certification Curriculum Manual are available on the commission's website.
- (b) The **commission** ~~[Commission]~~ does not provide printed copies of the manuals. A printed copy of the **commission's** ~~[Commission's]~~ standards may be obtained from Thomson West, 610 Opperman Drive, Eagan, MN 55123, by requesting "Title 37, Public Safety and Corrections" of the Texas Administrative Code. The web address for Thomson West is www.west.thomson.com.

§437.11 Copying Fees.

- (a) All photographic reproduction of records or documents in the files of the commission and prepared on standard office machines will be furnished for a fee.
- (b) A fee will be charged for address and telephone number lists of fire service agencies.
- (c) A fee will be charged for mailing peel-off labels of fire service agencies.

§437.13 Processing Fees for Test Application.

- (a) A non-refundable application processing fee of \$85 shall be charged for each examination.

- (b) Fees will be paid in advance with the application or the certified training provider may be invoiced or billed if previous arrangements have been approved by the commission in writing via mail, e-mail or fax.
- (1) Any payment postmarked from 61 to 90 days after the invoice date will cause the provider of training to be assessed a non-refundable late fee of one half the amount shown on the invoice. This late fee is in addition to the amount shown on the invoice for test application processing fees.
- (2) Any payment postmarked more than 90 days after the invoice date will cause the provider of training to be assessed a non-refundable late fee in an amount equal to the amount shown on the invoice. This late fee is in addition to the amount shown on the invoice for test application processing fees.

§437.15 International Fire Service Accreditation Congress (IFSAC) Seal Fees.

A non-refundable \$15 fee shall be charged for each IFSAC seal issued by the commission effective October 1, 2012.

§437.17 Records Review Fees.

- (a) A non-refundable fee of \$35 shall be charged for each training records review conducted by the commission for the purpose of determining equivalency to the appropriate commission training program or to establish eligibility to test. Applicants submitting training records for review shall receive a written analysis from the commission.
- (b) The fee provided for in this section shall not apply to an individual who holds an advanced certificate from the State Firemen's and Fire Marshals' Association of Texas.

8. Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 449, Head Of A Fire Department, including but not limited to, §449.1, Minimum Standards for the Head of a Fire Department, §449.3, Minimum Standards for Certification as Head of a Suppression Fire Department, and §449.5, Minimum Standards for Certification as Head of a Prevention Only Department.

CHAPTER 449

HEAD OF A FIRE DEPARTMENT

§449.1 Minimum Standards for the Head of a Fire Department.

- (a) An individual who becomes employed and is assigned as the head of a fire department must be certified by the Commission as head of a fire department, within one year of appointment.
- (b) An individual appointed head of a department must be eligible to be certified at the time of the appointment or will become eligible to be certified within one year of the appointment and must submit an affidavit verifying eligibility status at the time of the appointment if not holding a Commission certification.
- (c) Holding the head of a fire department certification does not qualify an individual for any other certification. An individual who seeks certification in another discipline must meet the requirements for that discipline.
- (d) Nothing contained in this chapter shall be construed to supercede Chapter 143, Local Government Code, in regard to appointment of a head of a fire department.

§449.3 Minimum Standards for Certification as Head of a Suppression Fire Department.

- (a) Applicants for Head of a Fire Department certification must complete the following requirements:
 - (1) must be appointed as head of a fire department; and
 - (2) complete the Standards Review Assignment for Head of a Fire Department identified in the applicable chapter of the Curriculum Manual; and
 - (3) meet with a Texas Commission on Fire Protection Compliance Section representative for review and approval of the Standards Review Assignment; and
 - (4) attend at least one Texas Commission on Fire Protection regularly scheduled commission meeting or one regularly scheduled fire fighter advisory committee meeting in the first year of appointment; and
 - (5) hold a certification as a fire protection personnel in any discipline that has a commission approved curriculum that requires structural fire protection personnel certification and five years experience in a full-time fire suppression position; or
 - (6) an individual from another jurisdiction who possesses valid documentation of accreditation from the International Fire Service Accreditation Congress that is deemed equivalent to the commission's approved basic fire suppression curriculum and provide documentation in the form of a sworn nonself serving affidavit of five years experience in a full-time fire suppression position; or
 - (7) provide documentation in the form of a nonself serving sworn affidavit of ten years experience as an employee of a local governmental entity in a full-time structural fire protection personnel position in a jurisdiction other than Texas; or

- (8) provide documentation in the form of a sworn nonself serving affidavit of ten years of experience as a certified structural part-time fire protection employee; or
- (9) provide documentation in the form of a sworn nonself serving affidavit of ten years experience as an active volunteer fire fighter in one or more volunteer fire departments that meet the requirements of subsection (b) of this section.
- (b) The ten years of volunteer service must include documentation of attendance at 40% of the drills for each year and attendance of at least 25% of a department's emergencies in a calendar year while a member of a volunteer fire department or departments with 10 or more active members that conducts a minimum of 48 hours of drills in a calendar year.
- (c) Individuals certified as the head of a fire department must meet the continuing education requirement as provided for in Chapter 441 of this title (relating to Continuing Education).
- (d) An individual certified as head of a fire department under this section may engage in fire fighting activities only as the head of a fire department. These activities include incident command, direction of fire fighting activities or other emergency activities typically associated with fire fighting duties, i.e. rescue, confined space and hazardous materials response.

§449.5 Minimum Standards for Certification as Head of a Prevention Only Department.

- (a) Applicants for Head of a Fire Department certification must complete the following requirements:
 - (1) must be appointed as head of a fire department; and
 - (2) complete the Standards Review Assignment for Head of a Fire Department identified in the applicable chapter of the Curriculum Manual; and
 - (3) meet with a Texas Commission on Fire Protection Compliance Section representative for review and approval of the Standards Review Assignment; and
 - (4) attend at least one Texas Commission on Fire Protection regularly scheduled commission meeting or one regularly scheduled fire fighter advisory committee meeting in the first year of appointment; and
 - (5) hold a certification as a fire inspector, fire investigator, or arson investigator and have five years of full-time experience in fire prevention activities; or
 - (6) an individual from another jurisdiction who possesses valid documentation of accreditation from the International Fire Service Accreditation Congress that is deemed equivalent to the commission's approved basic arson investigator, fire investigator or fire inspector curriculum and provide documentation in the form of a sworn nonself serving affidavit of five years experience in a full-time fire prevention position; or
 - (7) provide documentation in the form of a sworn nonself serving affidavit of ten years experience as an employee of a local governmental entity in a full-time fire inspector, fire investigator, or arson investigator position in a jurisdiction other than Texas; or
 - (8) provide documentation in the form of a sworn nonself serving affidavit of ten years experience as a certified fire investigator, fire inspector or arson investigator as a part-time fire prevention employee; or

- (9) provide documentation in the form of a sworn nonself serving affidavit of ten years experience as an active volunteer fire inspector, fire investigator, or arson investigator with ten years experience in fire prevention.
- (b) Individuals certified as the head of a fire department under this section must meet the continuing education requirement as provided for in Chapter 441 of this title (relating to Continuing Education).

9. **Discussion and possible action regarding proposed rule changes to title 37 TAC, Chapter 457, Incident Safety Officer, including but not limited to, §457.1, Incident Safety Officer Certification, §457.3, Minimum Standards for Incident Safety Officer Certification, and §457.5, Examination Requirements.**

CHAPTER 457

MINIMUM STANDARDS FOR INCIDENT SAFETY OFFICER CERTIFICATION

§457.1 Incident Safety Officer Certification.

- (a) An Incident Safety Officer is defined as a member of the command staff responsible for monitoring and assessing safety hazards or unsafe situations and for developing measures for ensuring personnel safety at an incident.
- (b) All individuals holding an Incident Safety Officer certification shall be required to comply with the continuing education requirements in Chapter 441 of this title (relating to Continuing Education).
- (c) All Safety Officer certifications issued by the commission and referenced in this chapter are voluntary.

§457.3 Minimum Standards for Incident Safety Officer Certification.

In order to be certified as an Incident Safety Officer an individual must:

- (1) hold commission certification as Fire Officer I and;
- (2) possess valid documentation of accreditation from the International Fire Service Accreditation Congress as an Incident Safety Officer; or
- (3) complete a commission-approved Incident Safety Officer program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Incident Safety Officer program must consist of one of the following:
 - (A) completion of a commission-approved Incident Safety Officer curriculum as specified in the applicable chapter of the commission's Certification Curriculum Manual; or
 - (B) completion of the National Fire Academy Incident Safety Officer course; or
 - (C) completion of the Fire Department Safety Officers Association Incident Safety Officer course; or
 - (D) completion of an out-of-state, educational institution of higher education, and/or military training program that has been submitted to the commission for evaluation and found to be equivalent to, or exceeds the commission [~~commission-~~]approved Incident Safety Officer curriculum.
- ~~[(4) The commission examination requirement is waived for individuals who have completed one of the training programs in paragraph (3)(B) – (D) of this section and apply for certification by August 31, 2013. After this date, individuals must successfully pass the commission examination prior to applying for certification.]~~

§457.5 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive an Incident Safety Officer certification, unless otherwise specified in this chapter.
- (b) Individuals will be permitted to take the commission examination for Incident Safety Officer certification by documenting Fire Officer I certification through the commission or the equivalent IFSAC seal, and completing a commission approved

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - a. Title 37, Chapter 423, Fire Suppression, Subchapter A, Minimum Standards for Structure Fire Protection Personnel Certification, §423.1, Minimum Standards for Structure Fire Protection Personnel, §423.3, Minimum Standards for Basic Structure Fire Protection Personnel Certification, §423.5, Minimum Standards for Intermediate Structure Fire Protection Personnel Certification, §423.7, Minimum Standards for Advanced Structure Fire Protection Personnel Certification, §423.9, Minimum Standards for Master Structure Fire Protection Personnel Certification, §423.11, Higher Levels of Certification, and §423.13, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §423.201, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §423.203, Minimum Standards for Basic Aircraft Rescue Fire Fighting Personnel Certification, §423.205, Minimum Standards for Intermediate Aircraft Rescue Fire Fighting Personnel Certification, §423.207, Minimum Standards for Advanced Aircraft Rescue Fire Fighting Personnel Certification, §423.209, Minimum Standards for Master Aircraft Rescue Fire Fighting Personnel Certifications, and §423.211, International Fire Service Accreditation Congress (IFSAC) Seal.

CHAPTER 423

FIRE SUPPRESSION

SUBCHAPTER A

MINIMUM STANDARDS FOR STRUCTURE FIRE PROTECTION PERSONNEL CERTIFICATION

§423.1 Minimum Standards for Structure Fire Protection Personnel.

- (a) Fire protection personnel of any local government entity, who receive probationary or temporary appointment to structure fire protection duties, must be certified by the Commission within one year from the date of their appointment in a structural fire protection personnel position.
- (b) Prior to being appointed to fire suppression duties or certified as fire protection personnel, the Commission must review and approve the applicants fingerprint based criminal history record information obtained from the Department of Public Safety and the Federal Bureau of Investigation. The individual or fire department must follow the procedure established by the Department of Public Safety to initiate and complete the electronic fingerprint process. The results will be available to the Commission through the Department of Public Safety's data base. The Commission will follow the criteria established in Title 37 Chapter 403 of the Texas Administrative Code (TAC) for denying a person certification based on the results of the fingerprint based criminal history record check.
- (c) Prior to being appointed to fire suppression duties, personnel must complete a Commission-approved basic structure fire suppression program and successfully complete a Commission recognized emergency medical course. The individual must successfully pass the Commission examination pertaining to that curriculum as required by §423.3 of this title. The Commission recognizes the following emergency medical training:
 - (1) Department of State Health Services Emergency Medical Service Personnel certification training;
 - (2) an American Red Cross Emergency Response course, including the optional lessons and enrichment sections;
 - (3) an American Safety and Health Institute First Responder course;
 - (4) National Registry of Emergency Medical Technicians certification; or
 - (5) medical training deemed equivalent by the Commission.
- (d) Personnel holding any level of structure fire protection personnel certification must comply with the continuing education requirements specified in §441.7 of this title (relating to Continuing Education for Structure Fire Protection Personnel).

§423.3 Minimum Standards for Basic Structure Fire Protection Personnel Certification.

- (a) In order to become certified as basic structure fire protection personnel, an individual must:
 - (1) possess valid documentation [of accreditation] from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System**

issued by the Texas A&M Engineering Extension Service as: [~~a Fire Fighter I, Fire Fighter II, Hazardous Materials Awareness Level Personnel; and~~]

(A) Fire Fighter I, Fire Fighter II, Hazardous Materials Awareness Level Personnel; and

(B)[~~(A)~~] Hazardous Materials Operations Level Responders including the Mission-Specific Competencies for Personal Protective Equipment and Product Control under the current edition; or

(C)[~~(B)~~] NFPA 472 Hazardous Materials Operations prior to the 2008 edition; and

(D)[~~(C)~~] must meet the medical requirements outlined in §423.1(b) of this title; or

(2) complete a **commission** [~~Commission~~] approved basic structure fire suppression program, meet the medical requirements outlined in §423.1(b), and successfully pass the **commission** [~~Commission~~] examination(s) as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved basic structure fire suppression program shall consist of one or any combination of the following:

(A) completion of a **commission** [~~Commission~~] approved Basic Fire Suppression Curriculum, as specified in Chapter 1 of the **commission's** [~~Commission's~~] Certification Curriculum Manual; or

(B) completion of an out-of-state, and/or military training program deemed equivalent to the **commission** [~~Commission~~] approved Basic Fire Suppression Curriculum; or

(C) documentation of the receipt of an advanced certificate or training records from the State Firemen's and Fire Marshals' Association of Texas, that is deemed equivalent to a **commission** [~~Commission~~] approved Basic Fire Suppression Curriculum.

(b) A basic fire suppression program may be submitted to the **commission** [~~Commission~~] for approval by another jurisdiction as required in Texas Government Code, §419.032(d), Appointment of Fire Protection Personnel. These programs include out-of-state and military programs, and shall be deemed equivalent by the **commission** [~~Commission~~] if the subjects taught, subject content, and total hours of training meet or exceed those contained in Chapter 1 of the **commission's** [~~Commission's~~] Certification Curriculum Manual.

§423.5 Minimum Standards for Intermediate Structure Fire Protection Personnel Certification.

(a) Applicants for Intermediate Structure Fire Protection Personnel Certification must complete the following requirements:

(1) hold, as a prerequisite, a Basic Structure Fire Protection Personnel Certification as defined in §423.3 of this title (relating to Minimum Standards for Basic Structure Fire Protection Personnel Certification); and

(2) acquire a minimum of four years of fire protection experience and complete the training listed in one of the following options:

(A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the Commission that the courses comply with subsections (b) and (c) of this section; or

(B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or

- (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1, with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section).
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the Commission's Certification Curriculum Manual or for experience in fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Structure Fire Protection Personnel Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§423.7 Minimum Standards for Advanced Structure Fire Protection Personnel Certification.

- (a) Applicants for Advanced Structure Fire Protection Personnel certification must complete the following requirements:
- (1) hold as a prerequisite an Intermediate Structure Fire Protection Personnel Certification as defined in §423.5 of this title (relating to Minimum Standards for Intermediate Structure Fire Protection Personnel Certification); and
 - (2) acquire a minimum of eight years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section).
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Structure Fire Protection Personnel Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§423.9 Minimum Standards for Master Structure Fire Protection Personnel Certification.

- (a) Applicants for Master Structure Fire Protection Personnel Certification must complete the following requirements:
- (1) hold as a prerequisite an Advanced Structure Fire Protection Personnel Certification as defined in § 423.7 of this title (relating to Minimum Standards for Advanced Structure Fire Protection Personnel Certification); and

- (2) acquire a minimum of twelve years of fire protection experience, and 60 college semester hours or an associate degree, which includes at least 18 college semester hours in fire science subjects.
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Structure Fire Protection Personnel Certification.

§423.11 Higher Levels of Certification.

- (a) An individual may receive higher levels of certification in structural fire protection while being assigned to another discipline, provided that all requirements for the higher level or levels of certification are met.
- (b) Repetitive training cannot be used toward higher levels of certification.

§423.13 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current Commission Structure Fire Protection Personnel certification received prior to March 10, 2003, may be granted International Fire Service Accreditation Congress (IFSAC) seals for Hazardous Materials Awareness Level Personnel, Hazardous Materials Operations Level Responders, Fire Fighter I, and Fire Fighter II by making application to the Commission for the IFSAC seals and paying applicable fees.
- (b) Individuals completing a Commission-approved basic fire suppression program, meeting any other NFPA requirement, and passing the applicable examination(s) based on the basic fire suppression curriculum, may be granted IFSAC seal(s) for Hazardous Materials Awareness Level Personnel, Hazardous Materials Operations Level Responders (including the Mission-Specific Competencies for Personal Protective Equipment and Product Control), Fire Fighter I, and/or Fire Fighter II by making application to the Commission for the IFSAC seal(s) and paying applicable fees, provided they meet the following provisions:
 - (1) To receive the IFSAC Hazardous Materials Awareness Level Personnel seal, the individual must:
 - (A) complete the Hazardous Materials Awareness section of a Commission-approved course; and
 - (B) pass the Hazardous Materials Awareness section of a Commission examination.
 - (2) To receive the IFSAC Hazardous Materials Operations Level Responders seal (including the Mission-Specific Competencies for Personal Protective Equipment and Product Control) the individual must:
 - (A) complete the Hazardous Materials Operation section of a Commission-approved course;
 - (B) document possession of an IFSAC Hazardous Materials Awareness Level Personnel seal; and
 - (C) pass the Hazardous Materials Operations section of a Commission examination.
 - (3) To receive the IFSAC Fire Fighter I seal, the individual must:
 - (A) complete a Commission-approved Fire Fighter I course;
 - (B) provide medical documentation as outlined in subsection (c) of this section;
 - (C) document possession of an IFSAC Hazardous Materials Awareness Level Personnel seal; and

- (D) document possession of an IFSAC Hazardous Materials Operations Level Responders seal;
and
 - (E) pass the Fire Fighter I section of a Commission examination.
- (4) To receive the IFSAC Fire Fighter II seal, the individual must:
- (A) complete a Commission-approved Fire Fighter II course;
 - (B) document possession of an IFSAC Fire Fighter I seal; and
 - (C) pass the Fire Fighter II section of a Commission examination.
- (c) In order to meet the medical requirements of NFPA 1001, the individual must document successful completion of an emergency medical training course or program. The Commission recognizes the following emergency medical training:
- (1) The Texas Department of State Health Services Emergency Medical Service Personnel certification training;
 - (2) American Red Cross Response course (including optional lessons and enrichment sections);
 - (3) American Safety and Health Institute First Responder course;
 - (4) National Registry of Emergency Medical Technicians certification; or
 - (5) medical training deemed equivalent by the Commission.

CHAPTER 423

FIRE SUPPRESSION

SUBCHAPTER B

MINIMUM STANDARDS FOR AIRCRAFT RESCUE FIRE FIGHTING PERSONNEL

§423.201 Minimum Standards for Aircraft Rescue Fire Fighting Personnel.

- (a) Aircraft rescue fire fighting personnel are employees of a local governmental entity who are appointed to aircraft rescue firefighting duties. These duties may include fighting aircraft fires at airports, standing by for potential crash landings, and performing aircraft rescue and fire fighting duties.
- (b) Personnel appointed as Aircraft Rescue Fire Fighting Personnel must be certified to at least the basic level by the Commission within one year from their employment in an Aircraft Rescue Fire Fighting Personnel position.
- (c) Prior to being appointed to aircraft rescue fire suppression duties, all personnel must:
 - (1) successfully complete a Commission-approved basic fire suppression course and pass the Commission's examination pertaining to that curriculum; and
 - (2) successfully complete a Commission-approved basic aircraft rescue fire protection course and pass the Commission's examination pertaining to that curriculum.
- (d) "Stand by" means the act of responding to a designated position in the movement area on the airfield at which initial response fire and rescue units will await the arrival of an aircraft experiencing an announced emergency.
- (e) "Movement area" is comprised of all runways, taxiways, and other areas of the airport which are used for taxiing or hover taxiing, take-off, and landing of aircraft, exclusive of loading ramps and aircraft parking areas.
- (f) Personnel holding any level of aircraft rescue fire fighting personnel certification shall be required to comply with the continuing education specified in §441.9 of this title (relating to Continuing Education for Aircraft Rescue Fire Fighting Personnel).
- (g) Aircraft rescue fire fighting personnel that perform structure fire fighting duties must be certified, as a minimum, as basic structural fire protection personnel.

§423.203 Minimum Standards for Basic Aircraft Rescue Fire Fighting Personnel Certification.

In order to obtain a Basic Aircraft Rescue Fire Fighting Personnel Certification the individual must:

- (1) hold a Basic Structure Fire Protection Personnel Certification; and
- (2) possess valid documentation **as an Airport Fire Fighter**~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service**~~[as an Airport Fire Fighter]~~; or

(3) complete a **commission** [~~Commission~~] approved aircraft rescue fire suppression training program and successfully pass the **commission** [~~Commission~~] examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved aircraft rescue fire suppression training program shall consist of one of the following:

(A) a **commission** [~~Commission~~] approved Basic Aircraft Rescue Fire Suppression Curriculum as specified in Chapter 2 of the **commission's** [~~Commission's~~] Certification Curriculum Manual.

(B) an out-of-state, and/or military training program that has been submitted to the **commission** [~~Commission~~] for evaluation and found to be equivalent to or exceeds the **commission** [~~Commission~~] approved Basic Aircraft Rescue Fire Suppression Curriculum.

§423.205 Minimum Standards for Intermediate Aircraft Rescue Fire Fighting Personnel Certification.

(a) Applicants for Intermediate Aircraft Rescue Fire Fighting Personnel Certification must complete the following requirements:

(1) hold as a prerequisite a Basic Aircraft Rescue Fire Fighting Personnel Certification as defined in §423.203 of this title (relating to Minimum Standards for Basic Aircraft Rescue Fire Fighting Personnel Certification); and

(2) acquire a minimum of four years of fire protection experience and complete the training listed in one of the following options:

(A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or

(B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or

(C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section).

(b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.

(c) The training required in this section must be in addition to any training used to qualify for any lower level of Aircraft Rescue Fire Fighting Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§423.207 Minimum Standards for Advanced Aircraft Rescue Fire Fighting Personnel Certification.

(a) Applicants for Advanced Aircraft Rescue Fire Fighting Personnel certification must complete the following requirements:

(1) hold as a prerequisite an Intermediate Aircraft Rescue Fire Fighting Personnel Certification as defined in §423.205 of this title (relating to Minimum Standards for Intermediate Aircraft Rescue Fire Fighting Personnel Certification); and

- (2) acquire a minimum of eight years of fire protection experience and complete the training listed in one of the following options:
- (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section).
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Aircraft Rescue Fire Fighting Personnel Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§423.209 Minimum Standards for Master Aircraft Rescue Fire Fighting Personnel Certification.

- (a) Applicants for Master Aircraft Rescue Fire Fighting Personnel Certification must complete the following requirements:
- (1) hold, as a prerequisite, an Advanced Aircraft Rescue Fire Fighting Personnel Certification as defined in §423.207 of this title (relating to Minimum Standards for Advanced Aircraft Rescue Fire Fighting Personnel Certification); and
 - (2) acquire a minimum of twelve years of fire protection experience, and 60 college semester hours or an associate's degree, which includes at least 18 college semester hours in fire science subjects.
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Aircraft Rescue Fire Fighting Personnel Certification.

§423.211 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current commission Aircraft Rescue Fire Fighting Personnel certification received prior to March 10, 2003, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as an Airport Fire Fighter by making application to the commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a commission-approved basic aircraft rescue fire suppression program, documenting an IFSAC seal for Fire Fighter II, and passing the applicable state examination may be granted an IFSAC seal as an Airport Fire Fighter by making application to the commission for the IFSAC seal and paying applicable fees.

CHAPTER 423**FIRE SUPPRESSION****SUBCHAPTER C****MINIMUM STANDARDS FOR MARINE FIRE PROTECTION PERSONNEL****§423.301 Minimum Standards for Marine Fire Protection Personnel.**

- (a) Marine fire protection personnel are employees of a local governmental entity who work aboard a fire boat with a minimum pumping capacity of 2,000 gallons per minute, and fight fires that occur on or adjacent to a waterway, waterfront, channel, or turning basin.
- (b) Fire protection personnel of any local government entity, who are appointed marine fire protection duties, must be certified by the Commission within one year from the date of their appointment in a marine fire protection personnel position.
- (c) Prior to being appointed to marine fire suppression duties, all personnel must:
 - (1) successfully complete a Commission-approved basic fire suppression course and pass the Commission's examination pertaining to that curriculum; and
 - (2) successfully complete a Commission-approved basic marine fire suppression course and pass the Commission's examination pertaining to that curriculum.
- (d) Personnel holding any level of Marine Fire Protection Personnel certification shall be required to comply with the continuing education specified in §441.11 of this title (relating to Continuing Education for Marine Fire Protection Personnel).

§423.303 Minimum Standards for Basic Marine Fire Protection Personnel Certification.

In order to obtain a basic Marine Fire Protection Personnel Certification the individual must:

- (1) hold a Basic Structure Fire Protection Personnel Certification;
- (2) complete a training program specific to marine fire protection consisting of one of the following:
 - (A) complete the Commission-approved Basic Marine Fire Protection Curriculum as specified in Chapter 3, of the Commission's Certification Curriculum Manual.
 - (B) An out-of-state, and/or military training program that has been submitted to the Commission for evaluation and found to be equivalent to or exceed the Commission-approved Basic Marine Fire Protection Curriculum.
- (3) successfully pass the Commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification) prior to assignment.

§423.305 Minimum Standards for Intermediate Marine Fire Protection Personnel Certification.

- (a) Applicants for Intermediate Marine Fire Protection Personnel Certification must complete the following requirements:

- (1) hold, as a prerequisite, a Basic Marine Fire Protection Personnel Certification as defined in §423.303 of this title (relating to Minimum Standards for Basic Marine Fire Protection Personnel Certification); and
- (2) acquire a minimum of four years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the Commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses. (See the exception outlined in subsection (c) of this section).
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the Commission's Certification Curriculum Manual or for experience in fire service, may not be counted towards this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Marine Fire Protection Personnel Certification. Repeating a course, or a course of similar content, cannot be used towards this level of certification.

§423.307 Minimum Standards for Advanced Marine Fire Protection Personnel Certification.

- (a) Applicants for Advanced Marine Fire Protection Personnel certification must complete the following requirements:
 - (1) hold as a prerequisite an Intermediate Marine Fire Protection Personnel Certification as defined in §423.305 of this title (relating to Minimum Standards for Intermediate Marine Fire Protection Personnel Certification); and
 - (2) acquire a minimum of eight years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses (See the exception outlined in subsection (c) of this section).

- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the commission's Certification Curriculum Manual or for experience in the fire service, may not be counted towards this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Marine Fire Protection Personnel Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§423.309 Minimum Standards for Master Marine Fire Protection Personnel Certification.

- (a) Applicants for Master Marine Fire Protection Personnel Certification must complete the following requirements:
 - (1) hold, as a prerequisite, an Advanced Marine Fire Protection Personnel Certification as defined in §423.307 of this title (relating to Minimum Standards for Advanced Marine Fire Protection Personnel Certification); and
 - (2) acquire a minimum of twelve years of fire protection experience, 60 college semester hours or an associate's degree, which includes at least 18 college semester hours in fire science subjects.
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Marine Fire Protection Personnel Certification.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - b. Title 37 TAC, Chapter 425, Fire Service Instructors, including but not limited to, §425.1, Minimum Standards for Fire Service Instructor Certification, §425.3, Minimum Standards for Fire Service Instructor I Certification, §425.5, Minimum Standards for Fire Service Instructor II Certification, §425.7, Minimum Standards for Fire Service Instructor III Certification, §425.9, Minimum Standards for Master Fire Service Instructor III Certification, and §425.11, International Fire Service Accreditation Congress (IFSAC) Seal.

CHAPTER 425
FIRE SERVICE INSTRUCTORS

§425.1 Minimum Standards for Fire Service Instructor Certification.

- (a) Training programs that are intended to satisfy the requirements for fire service instructor certification must meet the curriculum and competencies based upon NFPA 1041. All applicants for certification must meet the examination requirements of this section.
- (b) Prior to being appointed to fire service instructor duties, all personnel must complete a commission approved fire service instructor program and successfully pass the commission examination pertaining to that curriculum.
- (c) Personnel who receive probationary or temporary appointment to fire service instructor duties must be certified by the commission within one year from the date of appointment to such position.
- (d) An out-of-state, military, or federal instructor training program may be accepted by the commission as meeting the training requirements for certification as a fire service instructor if the training has been submitted to the commission for evaluation and found to be equivalent to or to exceed the commission approved instructor course for that particular level of fire service instructor certification.
- (e) An individual who holds a bachelor's degree or higher in education from a regionally accredited educational institution or a teaching certificate issued by the State Board for Educator Certification or an associate's degree with twelve semester hours of education instructional courses is considered to have training equivalent to the commission's curriculum requirements for Instructor I, II and III training.
- (f) Personnel holding any level of fire service instructor certification must comply with the continuing education requirements specified in §441.21 of this title (relating to Continuing Education for Fire Service Instructor).

§425.3 Minimum Standards for Fire Service Instructor I Certification.

In order to become certified as a Fire Service Instructor I an individual must:

- (1) have a minimum of three years of experience (as defined in §421.5(43) of this title (relating to Definitions)) in fire protection in one or more or any combination of the following:
 - (A) a paid, volunteer, or regulated non-governmental fire department; or
 - (B) a department of a state agency, education institution or political subdivision providing fire protection training and related responsibilities; and
- (2) possess valid documentation **as a Fire Instructor I, II or III** [~~of accreditation~~] from **either** the International Fire Service Accreditation Congress (IFSAC) **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** [~~as a Fire Instructor I or II or III~~]; or

- (3) have completed the appropriate curriculum for Fire Service Instructor I contained in Chapter 8 of the commission's Certification Curriculum Manual, or meet the equivalence as specified in §425.1(d) or (e) of this title (relating to Minimum Standards for Fire Service Instructor Certification); and
- (4) successfully pass the applicable commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification).

§425.5 Minimum Standards for Fire Service Instructor II Certification.

In order to become certified as a Fire Service Instructor II, an individual must:

- (1) hold as a prerequisite a Fire Instructor I certification as defined in §425.3 of this title (relating to Minimum Standards for Fire Service Instructor I Certification); and
- (2) have a minimum of three years of experience (as defined in §421.5(43) of this title (relating to Definitions)) in fire protection in one or more or any combination of the following:
 - (A) a paid, volunteer, or regulated non-governmental fire department; or
 - (B) a department of a state agency, education institution or political subdivision providing fire protection training and related responsibilities; and
- (3) possess valid documentation **as a Fire Instructor I, II or III** [~~of accreditation~~] from **either** the International Fire Service Accreditation Congress (IFSAC) **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** [~~as a Fire Instructor II, or III~~]; or
- (4) have completed the appropriate curriculum for Fire Service Instructor II contained in Chapter 8 of the commission's Certification Curriculum Manual, or meet the equivalence as specified in §425.1(d) or (e) of this title (relating to Minimum Standards for Fire Service Instructor Certification); and
- (5) successfully pass the applicable commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification).

§425.7 Minimum Standards for Fire Service Instructor III Certification.

In order to become certified as a Fire Service Instructor III an individual must:

- (1) hold as a prerequisite, a Fire Instructor II Certification as defined in §425.5 of this title (relating to Minimum Standards for Fire Service Instructor II Certification); and
- (2) have a minimum of three years of experience (as defined in §421.5(43) of this title (relating to Definitions)) in fire protection in one or more or any combination of the following:
 - (A) a paid, volunteer, or regulated non-governmental fire department; or
 - (B) a department of a state agency, education institution or political subdivision providing fire protection training and related responsibilities; and
- (3) possess valid documentation of accreditation from the International Fire Service Accreditation Congress (IFSAC) as a Fire Instructor III; or

- (4) have completed the appropriate curriculum for Fire Service Instructor III contained in Chapter 8 of the commission's Certification Curriculum Manual, or meet the equivalence as specified in §425.1(d) or (e) of this title (relating to Minimum Standards for Fire Service Instructor Certification); and
- (5) successfully pass the applicable commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification); and either
 - (A) hold as a prerequisite an advanced structural fire protection personnel certification, an advanced aircraft fire protection personnel certification, advanced marine fire protection personnel certification, advanced inspector certification, advanced fire investigator, or advanced arson investigator certification; or
 - (B) have 60 college hours from a regionally accredited educational institution; or
 - (C) hold an associate's degree from a regionally accredited educational institution.

§425.9 Minimum Standards for Master Fire Service Instructor III Certification.

In order to become certified as a Master Fire Service Instructor III the individual must:

- (1) hold as a prerequisite a Fire Service Instructor III certification; and
- (2) be a member of a paid, volunteer, or regulated non-governmental fire department; or a department of a state agency, education institution or political subdivision providing fire protection training and related responsibilities; and
- (3) hold as a prerequisite a master structural fire protection personnel certification, a master aircraft rescue fire fighting personnel certification, master marine fire protection personnel certification, master inspector certification, master fire investigator certification, or master arson investigator certification; or
- (4) hold a bachelors degree or higher in education from a regionally accredited educational institution or a teaching certificate issued by the Texas State Board of Education.

§425.11 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals who held an equivalent Instructor I certification prior to March 1, 2006 or individuals completing a commission approved Fire Service Instructor I training program and passing the applicable state examination after the effective date of this chapter, may be granted an IFSAC seal for Instructor I by making application to the commission and paying the applicable fee.
- (b) Individuals who held an equivalent Instructor II certification prior to March 1, 2006 or individuals holding an IFSAC Instructor I certification, completing a commission approved Fire Service Instructor II training program, and passing the applicable state examination after the effective date of this chapter, may be granted an IFSAC seal for Instructor II by making application to the commission and paying the applicable fee.
- (c) Individuals who held an equivalent Instructor III certification prior to March 1, 2006 or individuals holding an IFSAC Instructor II certification, completing a commission approved Fire Service Instructor III training program, and passing the applicable state examination after the effective date of this chapter, may be granted an IFSAC seal for Instructor III by making application to the commission and paying the applicable fee.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - c. Title 37 TAC, Chapter 429, Minimum Standards for Fire Inspectors, Subchapter B, Minimum Standards for Fire Inspector Certification, §429.201, Minimum Standards for Fire Inspector Personnel, §429.203, Minimum Standards for Basic Fire Inspector Certification, §429.205, Minimum Standards for Intermediate Fire Inspector Certification, §429.207, Minimum Standards for Advanced Fire Inspector Certification, and §429.211, International Fire Service Accreditation Congress (IFSAAC) Seal.

CHAPTER 429

MINIMUM STANDARDS FOR FIRE INSPECTOR CERTIFICATION ~~[INSPECTORS]~~

~~[SUBCHAPTER B]~~

~~[MINIMUM STANDARDS FOR FIRE INSPECTOR CERTIFICATION]~~

§429.201 Minimum Standards for Fire Inspector Personnel.

- (a) Fire protection personnel of a governmental entity who are appointed to fire code enforcement duties must be certified, as a minimum, as a basic fire inspector as specified in §429.203 of this title (relating to Minimum Standards for Basic Fire Inspector Certification) within one year of initial appointment to such position.
- (b) Prior to being appointed to fire code enforcement duties, all personnel must complete a Commission-approved basic fire inspection training program and successfully pass the Commission examination pertaining to that curriculum.
- (c) Individuals holding any level of fire inspector certification shall be required to comply with the continuing education requirements in §441.13 of this title (relating to Continuing Education for Fire Inspection Personnel).
- (d) Code enforcement is defined as the enforcement of laws, codes, and ordinances of the authority having jurisdiction pertaining to fire prevention.

§429.203 Minimum Standards for Basic Fire Inspector Certification.

In order to be certified as a basic fire inspector, an individual must:

- (1) possess valid documentation **as an Inspector I, Inspector II, and Plan Examiner I** ~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** ~~[as an Inspector I, Inspector II, and Plans Examiner I]~~; or
- (2) complete a **commission** ~~[Commission-]~~ approved Basic Fire Inspector program and successfully pass the **commission** ~~[Commission]~~ examination(s) as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved basic fire inspection training program shall consist of one or any combination of the following:
 - (A) completion of the **commission** ~~[Commission-]~~ approved Basic Fire Inspector Curriculum, as specified in Chapter 4 of the **commission's** ~~[Commission's]~~ Certification Curriculum Manual; or
 - (B) successful completion of an out-of-state, NFA, and/or military training program which has been submitted to the **commission** ~~[Commission]~~ for evaluation and found to meet the minimum requirements as listed in the **commission** ~~[Commission-]~~ approved Basic Fire Inspector Curriculum as specified in Chapter 4 of the **commission's** ~~[Commission's]~~ Certification Curriculum Manual; or
 - (C) successful completion of the following college courses:
 - (i) Fire Protection Systems, three semester hours;

- (ii) Fire Prevention Codes and Inspections, three semester hours;
- (iii) Building Construction in the Fire Service or Building Codes and Construction, three semester hours;
- (iv) Hazardous Materials I, II, or III, three semester hours. (Total semester hours, 12).

§429.205 Minimum Standards for Intermediate Fire Inspector Certification.

- (a) Applicants for Intermediate Fire Inspector Certification must meet the following requirements:
 - (1) hold as a prerequisite Basic Fire Inspector Certification as defined in §429.203 of this title (relating to Minimum Standards for Basic Fire Inspector Certification); and
 - (2) acquire a minimum of four years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the Commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or
 - (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses. (See the exception outlined in subsection (c) of this section.)
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the Commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Fire Inspector Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§429.207 Minimum Standards for Advanced Fire Inspector Certification.

- (a) Applicants for Advanced Fire Inspector Certification must complete the following requirements:
 - (1) hold as a prerequisite an Intermediate Fire Inspector Certification as defined in §429.205 of this title (relating to Minimum Standards for Intermediate Fire Inspector Certification); and
 - (2) acquire a minimum of eight years of fire protection experience and complete the training listed in one of the following options:
 - (A) Option 1--Successfully complete six semester hours of fire science or fire technology from an approved Fire Protection Degree Program and submit documentation as required by the Commission that the courses comply with subsections (b) and (c) of this section; or
 - (B) Option 2--Completion of coursework from either the A-List or the B-List courses. Acceptable combinations of courses are as follows: two A-List courses; or eight B-List courses; or one A-List course and four B-List courses. (See the exception outlined in subsection (c) of this section); or

- (C) Option 3--Completion of coursework from either the A-List or the B-List courses in combination with college courses in fire science or fire protection. Acceptable combinations of courses are three semester hours meeting the requirements of Option 1 with either one A-List course or four B-List courses. (See the exception outlined in subsection (c) of this section.)
- (b) Non-traditional credit awarded at the college level, such as credit for experience or credit by examination obtained from attending any school in the Commission's Certification Curriculum Manual or for experience in the fire service, may not be counted toward this level of certification.
- (c) The training required in this section must be in addition to any training used to qualify for any lower level of Fire Inspector Certification. Repeating a course or a course of similar content cannot be used towards this level of certification.

§429.209 Minimum Standards for Master Fire Inspector Certification.

- (a) Applicants for Master Fire Inspector Certification must complete the following requirements:
- (1) hold as a prerequisite an Advanced Fire Inspector Certification as defined in §429.207 of this title (relating to Minimum Standards for Advanced Fire Inspector Certification); and
 - (2) acquire a minimum of 12 years of fire protection experience, and 60 college semester hours or an associate's degree, which includes at least 18 college semester hours in fire science subjects.
- (b) College level courses from both the upper and lower division may be used to satisfy the education requirement for Master Fire Inspector Certification.

§429.211 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals who hold commission Fire Inspector certification prior to January 1, 2005, may be granted International Fire Service Accreditation Congress (IFSAC) seals for Inspector I and Inspector II by making application to the commission for the IFSAC seals and paying applicable fees.
- (b) Individuals who hold commission Fire Inspector certification prior to January 1, 2005, may apply to test for Plan Examiner I. Upon successful completion of the examination an IFSAC seal for Plan Examiner I may be granted by making application to the commission for the IFSAC seal and paying the applicable fee.
- (c) Individuals who pass the applicable section of the state examination on or after January 1, 2005, may be granted IFSAC seal(s) for Inspector I, Inspector II, and/or Plan Examiner I by making application to the commission for the IFSAC seal(s) and paying the applicable fees, provided they meet the following provisions:
- (1) To receive the IFSAC Inspector I seal, the individual must:
 - (A) complete the Inspector I section of a commission-approved course; and
 - (B) pass the Inspector I section of a commission examination.
 - (2) To receive the IFSAC Inspector II seal, the individual must:
 - (A) complete the Inspector II section of a commission-approved course;
 - (B) document possession of an IFSAC Inspector I seal; and

(C) pass the Inspector II section of a commission examination.

(3) To receive the IFSAC Plan Examiner I seal, the individual must:

(A) complete the Plan Examiner I section of a commission-approved course; and

(B) pass the Plan Examiner I section of a commission examination.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - d. Title 37 TAC, Chapter 433, Minimum Standards for Driver/Operator-Pumper, §433.1, Driver/Operator-Pumper Certification, §433.3, Minimum Standards for Driver/Operator-Pumper Certification, §433.5, Examination Requirements, and §433.7, International Fire Service Accreditation Congress (IFSAC) Seal.

CHAPTER 433

MINIMUM STANDARDS FOR DRIVER/OPERATOR-PUMPER

§433.1 Driver/Operator-Pumper Certification.

A driver/operator - pumper is defined as an individual who safely operates a fire pumper in accordance with all state and local laws; operates a fire pump in a safe manner; and determines effective fire stream calculations and pump discharge pressures. Responsibilities include routine apparatus tests, maintenance, inspections, and servicing functions.

§433.3 Minimum Standards for Driver/Operator-Pumper Certification.

(a) In order to obtain Driver/Operator-Pumper certification, the individual must:

- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
- (2) possess valid documentation **as a Driver/Operator-Pumper** ~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** ~~[as Driver/Operator-Pumper]~~; or
- (3) complete a **commission** ~~[Commission-]~~ approved Driver/Operator-Pumper Curriculum and successfully pass the **commission** ~~[Commission]~~ examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved driver/operator-pumper program must consist of one of the following:
 - (A) complete a **commission** ~~[Commission-]~~ approved Driver/Operator-Pumper Curriculum as specified in Chapter 7 of the **commission's** ~~[Commission's]~~ Certification Curriculum Manual.
 - (B) complete an out-of-state training program that has been submitted to the **commission** ~~[Commission]~~ for evaluation and found to be equivalent to or exceeds the **commission** ~~[Commission-]~~ approved Driver/Operator-Pumper Curriculum.
 - (C) complete a military training program that has been submitted to the **commission** ~~[Commission]~~ for evaluation and found to be equivalent to or exceeds the **commission** ~~[Commission-]~~ approved Driver/Operator-Pumper Curriculum.
- (b) Out-of-state or military training programs, which are submitted to the **commission** ~~[Commission]~~ for the purpose of determining equivalency, will be considered equivalent if all competencies set forth in Chapter 7 (pertaining to Driver/Operator-Pumper) of the **commission's** ~~[Commission's]~~ Certification Curriculum Manual are met.

§433.5 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive driver/operator-pumper certification.
- (b) Individuals will be permitted to take the Commission examination for driver/operator-pumper by documenting, as a minimum, completion of the NFPA 1001 Fire Fighter I training, and completing a Commission-approved driver/operator-pumper curriculum.

§433.7 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current commission Driver/Operator-Pumper certification received prior to March 10, 2003, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Driver/Operator-Pumper by making application to the commission for the IFSAC seal and paying the applicable fees.
- (b) Individuals completing a commission-approved driver/operator-pumper program; documenting, as a minimum, an IFSAC seal for Fire Fighter I; and passing the applicable state examination may be granted an IFSAC seal as a Driver/Operator-Pumper by making application to the commission for the IFSAC seal and paying applicable fees.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - e. Title 37 TAC, Chapter 439, Examinations For Certification, Subchapter A, Examinations For On-Site Delivery Training, §439.1, Requirements—General, §439.3 Definitions, §439.5, Procedures, §439.7, Eligibility, §439.9, Grading, §439.11, Commission-Designated Performance Skill Evaluations, §439.13, Special Accommodations for Testing, and §439.19, Number of Test Questions, Subchapter B, Examinations For Distance Training, §439.201 Requirements—General, §439.203, Procedures, and §439.205 Performance Skill Evaluation.

CHAPTER 439
EXAMINATIONS FOR CERTIFICATION
SUBCHAPTER A
EXAMINATIONS FOR ON-SITE DELIVERY TRAINING

§439.1 Requirements—General.

- (a) The administration of examinations for certification, including performance skill evaluations, shall be conducted in compliance with [the] commission **rules** and; **as applicable, with:** [~~International Fire Service Accreditation Congress (IFSAC) regulations. It is incumbent upon commission staff, committee members, training officers and field examiners to maintain the integrity of any state examination (or portion thereof) for which they are responsible.~~]
- (1) International Fire Service Accreditation Congress (IFSAC) regulations; or**
- (2) Pro Board Fire Service Professional Qualifications System regulations for examinations administered by the Texas A&M Engineering Extension Service. Only Pro Board examinations administered by the Texas A&M Engineering Extension Service will be accepted by the commission for certification. In order for a Pro Board document to be accepted for certification, it must:**
- (A) List the TCFP issued course approval number for which the examination was conducted; and**
- (B) Indicate that the examination was conducted in English; and**
- (C) List any special accommodations provided to the examinee. The commission may not issue a certificate for an examination conducted under special accommodations other than those listed in §439.13 of this title (relating to Special Accommodations for Testing).**
- (b) It is incumbent upon commission staff, committee members, training officers and field examiners to maintain the integrity of the state certification examination process (or portion thereof) for which they are responsible.**
- (c) The commission shall reserve the authority to conduct an annual review of Pro Board examinations, procedures, test banks, and facilities utilized by the Texas A&M Engineering Extension Service. The commission may also conduct a review at any time for cause and as deemed necessary to ensure the integrity of the certification examination process.**
- (d) ~~(b)~~ Exams will be based on the job performance requirements and knowledge and skill components of the applicable NFPA standard for that discipline, if a standard exists and has been adopted by the commission. If a standard does not exist or has not been adopted by the commission, the exam will be based on curricula as currently adopted in the commission's Certification Curriculum Manual.** [~~curricula as currently adopted in the commission's Certification Curriculum Manual~~]
- (e) ~~(c)~~ Commission examinations that receive a passing grade shall expire two years from the date of the examination.**

~~(f)~~(d) The commission shall prescribe the content of any certification examination that tests the knowledge and/or skill of the examinee concerning the discipline addressed by the examination.

(1) An examination **for Basic Structure Fire Protection shall** ~~[based on Chapter 1, "Basic Fire Suppression Curriculum" as identified in the Certification Curriculum Manual may]~~ consist of four sections: Fire Fighter I, Fire Fighter II, **Hazardous Materials Awareness Level, Hazardous Materials Operations Level including the Mission-Specific Competencies for Personal Protective Equipment and Product Control.** ~~[First Responder Awareness, and First Responder Operations].~~

(2) An examination **for Basic Fire Inspector shall** ~~[based on Chapter 4, "Basic Fire Inspector Curriculum" as identified in the Certification Curriculum Manual may]~~ consist of three sections: Inspector I, Inspector II, and Plan Examiner I.

(3) An examination **for Basic Structure Fire Protection and Intermediate Wildland Fire Protection** ~~[based on the applicable chapters for "Basic Fire Suppression Curriculum" and "Wildland Fire Protection Curriculum" in the Certification Curriculum Manual]~~ shall consist of five sections: Fire Fighter I, Fire Fighter II, First Responder Awareness, First Responder Operations, and Intermediate Wildland Fire Protection.

(4) All other state examinations consist of only one section.

~~(g)~~(e) The individual who fails to pass a commission examination for state certification will be given one additional opportunity to pass the examination or section thereof. This opportunity must be exercised within 180 days after the date of the first failure. An individual who passes the applicable state certification examination but fails to pass a section thereof for an IFSAC seal(s) will be given one additional opportunity to pass the section thereof. This opportunity must be exercised within two years after the date of the first attempt. An examinee who fails to pass the examination within the required time may not sit for the same examination again until the examinee has re-qualified by repeating the curriculum applicable to that examination.

~~(h)~~(f) An individual may obtain a new certificate in a discipline which was previously held by passing a commission proficiency examination.

~~(i)~~(g) If an individual who has never held certification in a discipline defined in §421.5 of this title (relating to Definitions), seeks certification in that discipline, the individual shall complete all certification requirements.

~~(j)~~(h) If an individual completes an approved training program that has been evaluated and deemed equivalent to a certification curriculum approved by the commission, such as an out-of-state or military training program or a training program administered by the State Firemen's and Fire Marshals' Association of Texas, the individual must pass a commission examination for certification status and meet any other certification requirements in order to become eligible for certification by the commission as fire protection personnel.

~~(k)~~(i) An individual or entity may petition the commission for a waiver of the examination required by this section if the person's certificate expired because of the individual's or employing entity's good faith clerical error, or expired as a result of termination of the person's employment where the person has been restored to employment through a disciplinary procedure or a court action. All required renewal fees including applicable late fees and all required continuing education must be submitted before the waiver request may be considered.

(1) Applicants claiming good faith clerical error must submit a sworn statement together with any supporting documentation that evidences the applicant's good faith efforts to comply with

commission renewal requirements and that failure to comply was due to circumstances beyond the control of the applicant.

- (2) Applicants claiming restoration to employment as a result of a disciplinary or court action must submit a certified copy of the order, ruling or agreement restoring the applicant to employment.

§439.3 Definitions.

The following words and terms, when used in this chapter, have the following definitions unless the context clearly indicates otherwise.

- (1) Certificate of Completion--A signed statement certifying that an individual has successfully completed a Commission-approved certification curriculum or phase program for a particular discipline, including having been evaluated by field examiners on performance skills identified by the Commission. The certificate of completion will be on a form provided by the Commission and is to be completed and signed by the provider of training and issued to the individual upon successful completion of the training. The certificate of completion must, as a minimum, identify the provider of training, the course I.D. number, the course approval number, date issued, curriculum name, training officer, and the name of the person completing the course. The certificate of completion qualifies an individual to take an original certification examination.
- (2) Curriculum--The competencies established by the Commission as a minimum requirement for certification in a particular discipline.
- (3) Designee--An entity or individual approved by the standards division director to administer Commission certification examinations and/or performance skills in accordance with this chapter.
- (4) Eligibility--A determination of whether or not an individual has met the requirements set by the Commission and would therefore be allowed to take a Commission examination.
- (5) Endorsement of eligibility--A signed statement testifying to the fact that an individual has met all requirements specified by the Commission and is qualified to take a Commission examination. An endorsement of eligibility will be issued by a member of the Commission staff.
- (6) Examination--A state test which an examinee must pass as one of the requirements for certification.
- (7) Examinee--An individual who has met the Commission requirements and therefore qualifies to take the Commission examination.
- (8) Field examiner--An individual authorized to evaluate performance skills in Commission-approved curricula. The field examiner must possess a Fire Instructor Certification, complete the on-line Commission field examiner course, and sign an agreement to comply with the Commission's testing procedures. The field examiner must be approved by the Commission to instruct all subject areas identified in the curriculum that he or she will be evaluating. The field examiner must repeat the examiner course every two years and submit a new Letter of Intent.
- (9) Lead Examiner--A member of the Commission staff or a designee who has been assigned by the Commission to administer a Commission examination.
- (10) Letter of Intent--A statement, signed by an individual applying to the Commission for field examiner status, that he or she is familiar with the Commission's examination procedures, and agrees to abide by the policies and guidelines as set out in Chapter 439 of this title.

§439.5 Procedures.

- (a) Procedures for conducting examinations are determined by the commission.
- (b) All application processing fees due to the commission must be paid in a timely manner. Late payments shall be assessed a late fee in accordance with §437.13 of this title (relating to Processing Fees for Test Application).
- (c) Each examination must be administered by a lead examiner.
- (d) The lead examiner must:
 - (1) ensure that the tests remain secure and that the examination is conducted under conditions warranting honest results;
 - (2) monitor the examination while in progress;
 - (3) control entrance to and exit from the test site;
 - (4) assign or re-assign seating; and
 - (5) bar admission to or dismiss any examinee who fails to comply with any of the applicable provisions of this chapter.
- (e) All official grading and notification must come from the commission or its designee. The preliminary test results shall be made available within seven (7) business days after completion of the examination.

§439.7 Eligibility.

- (a) An examination may not be taken by an individual who currently holds an active certificate from the Commission in the discipline to which the examination pertains, unless required by the Commission in a disciplinary matter, or test scores have expired and the individual is testing for IFSAC seals.
- (b) An individual who passes an examination and is not certified in that discipline, will not be allowed to test again until 30 days before the expiration date of the previous examination unless required by the Commission in a disciplinary matter.
- (c) In order to qualify for a Commission examination, the examinee must:
 - (1) meet or exceed the minimum requirements set by the Commission as a prerequisite for the specified examination;
 - (2) submit a test application with documentation showing completion of a Commission-approved curriculum and any other prerequisite requirements, along with the appropriate application processing fee(s).
 - (3) receive from the Commission an "Endorsement of Eligibility" letter and provide this letter to the lead examiner.
 - (4) bring to the test site, and display upon request, state issued identification which contains the name and photograph of the examinee;
 - (5) report on time to the proper location; and

(6) comply with all the written and verbal instructions of the lead examiner.

(d) No examinee shall be permitted to:

(1) violate any of the fraud provisions of this section;

(2) disrupt the examination;

(3) bring into the examination site any books, notes, or other written materials related to the content of the examination;

(4) refer to, use, or possess any such written material at the examination site;

(5) give or receive answers or communicate in any manner with another examinee during the examination;

(6) communicate at any time or in any way, the contents of an examination to another person for the purpose of assisting or preparing a person to take the examination;

(7) steal, copy, or reproduce any part of the examination;

(8) engage in any deceptive or fraudulent act either during an examination or to gain admission to it;

(9) solicit, encourage, direct, assist, or aid another person to violate any provision of this section; or

(10) bring into the examination site any electronic devices.

(e) No person shall be permitted to sit for any Commission examination who has an outstanding debt owed to the Commission.

§439.9 Grading.

(a) If performance skills are required as a part of the examination, the examinee must demonstrate performance skill objectives in a manner consistent with performance skill evaluation forms provided by the Commission. The evaluation format for a particular performance skill will determine the requirements for passage of the skill. Each performance skill evaluation form will require successful completion of one of the following formats:

(1) all mandatory tasks; or

(2) an accumulation of points to obtain a passing score of at least 70%; or

(3) a combination of both paragraphs (1) and (2) of this subsection.

(b) The minimum passing score on each examination or section thereof as outlined in §439.1(d) of this title (relating to Requirements--General) shall be 70%. This means that 70% of the total possible active questions must be answered correctly. The Commission may, at its discretion, invalidate any question.

(c) If the Commission invalidates an examination score for any reason, it may also, at the discretion of the Commission, require a retest to obtain a substitute valid test score.

§439.11 Commission-Designated Performance Skill Evaluations.

- (a) The Commission-designated performance evaluations are randomly selected from each subject area within the applicable curriculum containing actual skill evaluations. This applies only for curricula in which performance standards have been developed. The provider of training will receive from the Commission, with the course approval notice, one envelope for each subject area as identified in the applicable curriculum.
- (b) During the course of instruction, the training provider shall test for competency, the Commission-designated performance skills. The skill evaluations may be scheduled at any time during the course, but must take place after all training on the identified subject area has been completed. The date(s), time(s) and location(s) for the Commission-designated skill evaluations must be submitted on the Commission-designated skill schedule contained within the Training Prior Approval form. The Commission must be notified immediately of any deviation from the submitted Commission-designated skill schedule. All skills must be evaluated by a Commission-approved field examiner.
- (c) In order to qualify for the Commission certification examination, the student must successfully complete and pass all designated skill evaluations. The student may be allowed two attempts to complete each skill. A second failure during the evaluation process will require remedial training in the failed skill area with a certified instructor before being allowed a third attempt. A third failure shall require that the student repeat the entire certification curriculum.
- (d) The training facility must maintain records (electronic or paper) of skills testing on each examinee. The records must reflect the results of the evaluation of skills, the dates the evaluation of skills took place, and the names of the field examiners who conducted the evaluations.
- (e) For certification disciplines in which an IDLH environment may exist, all skill testing participants shall have available for use NFPA compliant PPE and SCBA as defined in §435.1 of this title (relating to Protective Clothing) and §435.3 of this title (relating to Self-Contained Breathing Apparatus).

§439.13 Special Accommodations for Testing.

- (a) Special accommodation testing is for those individuals that have a documented disability which may hamper their success on a Texas Commission on Fire Protection written examination. Some accommodations that can be allowed are:
 - (1) A testing room to oneself (examinee is allowed to read the questions out loud to him or herself). To accommodate the request the examinee will have to test in the Commission's Austin headquarters location or any location deemed appropriate by the Commission.
 - (2) The test to be split in two with up to an hour break in between (no access to the first half of the examination will be allowed during or after the break). To accommodate the request the examinee will have to test in the commission's Austin headquarters location or any location deemed appropriate by the Commission.
 - (3) The questions to be printed in a larger font (approximately 7% larger).
 - (4) The test to be copied on off-white paper (i.e., cream colored).
 - (5) The use of highlighters or a highlighter sheet.
 - (6) Any requests that changes the condition of the examination or the examination process.
- (b) If the applicant is seeking a special accommodation test, the applicant must submit written documentation of the disability and a written statement as to which of the allowable

accommodations is being requested. The applicant may ask for accommodations not listed above. The request will be reviewed and the applicant will receive a written response regarding the Commission's position on the request.

§439.19 Number of Test Questions.

- (a) Each examination may have two types of questions: pilot and active. Pilot questions are new questions placed on the examination for statistical purposes only. These questions do not count against an examinee if answered incorrectly.
- (b) The number of questions on the state examination will be based upon the number of recommended hours in the particular curriculum or section being tested. The standard is outlined below:

Recommended Hours	No. Questions	Maximum No. Pilot Questions	Time Allowed
30 or less	25	5	30 minutes
31-100	50	5	1 hour
101-200	75	10	1.5 hours
201-300	100	15	2 hours
301-400	125	20	2.5 hours
401 or more	150	25	3 hours

CHAPTER 439
EXAMINATIONS FOR CERTIFICATION
SUBCHAPTER B
EXAMINATIONS FOR DISTANCE TRAINING

§439.201 Requirements—General.

The examination requirements for those completing distance training shall be the same as those in Subchapter A of this chapter, except as noted in this subchapter.

§439.203 Procedures.

Once distance training is completed, each individual receiving a certificate of completion must obtain the appropriate test application packet.

§439.205 Performance Skill Evaluation.

If the performance skill portion of a state exam is to be evaluated by an approved field examiner who will not observe the completion of the skill while in the immediate physical presence of the examinee, a letter of assurance from the candidate's training officer or fire chief is required stating that the fire department assures the integrity of the evaluation procedure. If the candidate is not a member of a fire department, then a certified fire instructor, fire chief, or training officer may provide a letter of assurance that meets the requirements of this section. The provider of distance training is required to keep a record of this assurance and provide it to the Commission upon request.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
- f. Title 37 TAC, Chapter 451, Fire Officer, Subchapter A, Minimum Standards for Fire Officer I, §451.1 Fire Officer I Certification, §451.3, Minimum Standards for Fire Officer I Certification, §451.5, Examination Requirements, and §451.7, International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter B, Minimum Standards For Fire Officer II, §451.201, Fire Officer II Certification, §451.203, Minimum Standards for Fire Officer II Certification, §451.205, Examination Requirements, and §451.207 International Fire Service Accreditation Congress (IFSAC) Seal, Subchapter C, Minimum Standards For Fire Officer III, §451.302, Fire Officer III Certification, §451.303, Minimum Standards for Fire Officer III Certification, and §451.305, Examination Requirements, Subchapter D, Minimum Standards For Fire Officer IV, §451.401 Fire Officer IV Certification, §451.403, Minimum Standards for Fire Officer IV Certification, and §451.405, Examination Requirements.

CHAPTER 451

FIRE OFFICER

SUBCHAPTER A

MINIMUM STANDARDS FOR FIRE OFFICER I

§451.1 Fire Officer I Certification.

A Fire Officer I is defined as an individual who may supervise fire personnel during emergency and non-emergency work periods; serve in a public relations capacity with members of the community; implement departmental policies and procedures at the unit level; secure fire scenes and perform fire investigations to determine preliminary cause; conduct pre-incident planning; supervise emergency operations; or ensure a safe working environment for all personnel.

§451.3 Minimum Standards for Fire Officer I Certification.

(a) In order to be certified as a Fire Officer I an individual must:

- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
 - (2) hold Fire Service Instructor I certification through the **commission** [~~Commission~~]; and
- (A) possess valid documentation **as a Fire Fighter II and Fire Officer I** [~~of accreditation~~] from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** [~~as Fire Fighter II and Fire Officer I~~]; or
- (B) complete a **commission** [~~Commission~~] approved Fire Officer I program and successfully pass the **commission** [~~Commission~~] examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Fire Officer I program must consist of one of the following:
- (i) completion of a **commission** [~~Commission~~] approved Fire Officer I Curriculum as specified in Chapter 9 of the **commission's** [~~Commission's~~] Certification Curriculum Manual;
 - (ii) completion of an out-of-state and/or military training program that has been submitted to the **commission** [~~Commission~~] for evaluation and found to be equivalent to or exceed the **commission** [~~Commission~~] approved Fire Officer I Curriculum; or
 - (iii) successful completion of 12 college semester hours consisting of the following courses or their equivalent:
 - (I) Fire Prevention Codes and Inspections, 3 semester hours;
 - (II) Fire and Arson Investigation I or II, 3 semester hours;
 - (III) Fire Administration I, 3 semester hours; and
 - (IV) Firefighting Strategies and Tactics I or II, 3 semester hours.
- (b) Out-of-state or military training programs which are submitted to the **commission** [~~Commission~~] for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 9 (pertaining to Fire Officer I) of the **commission's** [~~Commission's~~] Certification Curriculum Manual are met.

- (c) College courses will be considered equivalent if the course description is substantially similar to the course description contained in the Workforce Education Course Manual (WECM) from the Texas Higher Education Coordinating Board.

§451.5 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive Fire Officer I certification.
- (b) Individuals will be permitted to take the Commission examination for Fire Officer I certification by documenting the following: Structure Fire Protection Personnel certification and Fire Service Instructor certification through the Commission or the equivalent IFSAC seals, and completing a Commission-approved Fire Officer I curriculum.

§451.7 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current commission Fire Officer I certification received prior to March 10, 2003, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Officer I by making application to the commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a commission-approved Fire Officer I program, documenting an IFSAC seal for Fire Fighter II and Instructor I, and passing the applicable state examination may be granted an IFSAC seal as a Fire Officer I by making application to the commission for the IFSAC seal and paying applicable fees.

CHAPTER 451

FIRE OFFICER

SUBCHAPTER B

MINIMUM STANDARDS FOR FIRE OFFICER II

§451.201 Fire Officer II Certification.

A Fire Officer II is defined as an individual who may evaluate the performance of personnel; deliver public education programs; prepare budget requests, news releases, and policy changes; conduct inspections and investigations; supervise multi-unit emergency operations; and identify unsafe work environments and take preventive action; or review injury, accident, and health exposure reports. Individuals who perform inspections must comply with Chapter 429 of this title (relating to Minimum Standards for Fire Inspectors). Individuals who perform investigations must comply with Chapter 431 of *this title (relating to Fire Investigation)*.

§451.203 Minimum Standards for Fire Officer II Certification.

(a) In order to be certified as a Fire Officer II an individual must:

(1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and

(2) hold Fire Officer I certification through the **commission** [~~Commission~~]; and

(3) hold, as a minimum, Fire Service Instructor I certification through the **commission** [~~Commission~~]; and

(A) possess valid documentation **as a Fire Officer II** [~~of accreditation~~] from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** [~~as Fire Officer II~~]; or

(B) complete a **commission** [~~Commission~~] approved Fire Officer II program and successfully pass the **commission** [~~Commission~~] examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Fire Officer II program must consist of one of the following:

(i) completion of a **commission** [~~Commission~~] approved Fire Officer II Curriculum as specified in Chapter 9 of the **commission's** [~~Commission's~~] Certification Curriculum Manual;

(ii) completion of an out-of-state and/or military training program that has been submitted to the **commission** [~~Commission~~] for evaluation and found to be equivalent to or exceed the **commission** [~~Commission~~] approved Fire Officer II Curriculum; or

(iii) successful completion of 15 college semester hours consisting of the following courses or their equivalent:

(I) Fire Prevention Codes and Inspections, 3 semester hours;

(II) Fire and Arson Investigation I or II, 3 semester hours;

(III) Fire Administration I, 3 semester hours;

(IV) Fire Administration II or Company Fire Officer, 3 semester hours; and

(V) Firefighting Strategies and Tactics I or II, 3 semester hours.

- (b) Out-of-state or military training programs which are submitted to the **commission** [Commission] for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 9 (pertaining to Fire Officer) of the **commission's** [Commission's] Certification Curriculum Manual are met.
- (c) College courses will be considered equivalent if the course description is substantially similar to the course description contained in the Workforce Education Course Manual (WECM) from the Texas Higher Education Coordinating Board.

§451.205 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive Fire Officer II certification.
- (b) Individuals will be permitted to take the Commission examination for Fire Officer II certification by documenting the following: Structure Fire Protection Personnel certification, Fire Service Instructor certification and Fire Officer I certification through the Commission or the equivalent IFSAC seals, and completing a Commission-approved Fire Officer II curriculum.

§451.207 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current Commission Fire Officer II certification received prior to March 10, 2003, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Officer II by making application to the Commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a Commission-approved Fire Officer II program; documenting IFSAC seals for Fire Fighter II, Instructor I and Fire Officer I; and passing the applicable state examination, may be granted an IFSAC seal as a Fire Officer II by making application to the Commission for the IFSAC seal and paying applicable fees.

CHAPTER 451

FIRE OFFICER

SUBCHAPTER C

MINIMUM STANDARDS FOR FIRE OFFICER III

§451.301 Fire Officer III Certification.

A Fire Officer III is a midlevel supervisor who performs both supervisory and first-line managerial functions who has met all the job performance and certification requirements of Fire Officer II as defined in NFPA 1021, Standard for Fire Officer Professional Qualifications. Typical duties of an individual at the Fire Officer III level include: establishing procedures for hiring, assignment, and professional development of personnel; developing public service/partnership and programs; preparing budgets and budget management systems; planning for organizational resource management; evaluating inspection and public safety programs and plans; managing multi-agency plans and operations; serving as Incident Commander at expanding emergency incidents for all hazard types; and developing and managing a departmental safety program.

§451.303 Minimum Standards for Fire Officer III Certification.

(a) In order to be certified as a Fire Officer III an individual must:

- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
- (2) hold Fire Officer II certification through the commission; and
- (3) hold, as a minimum, Fire Service Instructor II certification through the commission; and
- (4) document completion of ICS-300: Intermediate Incident Command System; and
- (5) possess valid documentation **as a Fire Officer III** ~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** ~~[as Fire Officer III]~~; or
- (6) complete a commission approved Fire Officer III program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Fire Officer III program must consist of one of the following:
 - (A) completion of a commission approved Fire Officer III Curriculum as specified in Chapter 9 of the commission's Certification Curriculum Manual;
 - (B) completion of an out-of-state and/or military training program that has been submitted to the commission for evaluation and found to be equivalent to or exceed the commission approved Fire Officer III Curriculum; or
 - (C) successful completion of 15 college semester hours of upper level coursework from a four-year regionally accredited institution in any of the following subject areas:
 - (i) Administration/Management
 - (ii) Budget/Finance
 - (iii) Planning/Organization
 - (iv) Leadership/Ethics

(v) Risk Management

(vi) Safety and Health

(vii) Community Risk Reduction

- (7) Special temporary provision: Within one year following the effective date of this rule, an individual is eligible to take the commission examination for Fire Officer III upon documentation to the commission that the individual has completed training that covers the requirements of NFPA 1021, Chapter 6. The documentation of completed training must be a certificate of completion from a nationally recognized training provider. During the one year period, the commission examination shall consist of a written exam. The examination requirements in §451.305(b) of this subchapter (relating to Examination Requirements) must still be met. This paragraph expires one year from the effective date of this rule.
- (8) The application processing fee for the initial examination is waived for individuals in paragraphs (6) and (7) of this subsection who have completed the training requirement and submit the application for the commission examination for one year from the effective date of this rule. After this date, the application processing fee for examinations will be required.
- (b) Out-of-state or military training programs which are submitted to the commission for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 9 (pertaining to Fire Officer) of the commission's Certification Curriculum Manual are met.

§451.305 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive Fire Officer III certification.
- (b) Individuals will be permitted to take the commission examination for Fire Officer III certification by documenting the following: Structure Fire Protection Personnel certification, Fire Service Instructor II certification and Fire Officer II certification through the commission or the equivalent IFSAC seals, and completing a commission approved Fire Officer III program.

CHAPTER 451

FIRE OFFICER

SUBCHAPTER D

MINIMUM STANDARDS FOR FIRE OFFICER IV

§451.401 Fire Officer IV Certification.

A Fire Officer IV is an upper level supervisor who performs both supervisory and managerial functions who has met all the job performance and certification requirements of Fire Officer III as defined in NFPA 1021, Standard for Fire Officer Professional Qualifications. Typical duties of an individual at the Fire Officer IV level include: Administering job performance requirements; evaluating and making improvements to department operations; developing long-range plans and fiscal projections; developing plans for major disasters; serving as Incident Commander at major incidents for all hazard types; and administering comprehensive risk management programs.

§451.403 Minimum Standards for Fire Officer IV Certification.

(a) In order to be certified as a Fire Officer IV an individual must:

- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
- (2) hold Fire Officer III certification through the commission; and
- (3) document completion of ICS-400: Advanced Incident Command System; and
- (4) possess valid documentation **as a Fire Officer IV** [of accreditation] from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** [as Fire Officer IV]; or
- (5) complete a commission approved Fire Officer IV program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Fire Officer IV program must consist of one of the following:
 - (A) completion of a commission approved Fire Officer IV Curriculum as specified in Chapter 9 of the commission's Certification Curriculum Manual;
 - (B) completion of an out-of-state and/or military training program that has been submitted to the commission for evaluation and found to be equivalent to or exceed the commission approved Fire Officer IV Curriculum; or
 - (C) successful attainment of a bachelor's degree or higher from a regionally accredited institution in any of the following:
 - (i) Fire Science/Administration/Management
 - (ii) Emergency Management
 - (iii) Public Administration
 - (iv) Emergency Medicine
 - (v) Business Management/Administration
 - (vi) Political Science

- (vii) Human Resources Management
 - (viii) Public Health
 - (ix) Risk Management
 - (x) Criminal Justice; or
 - (xi) a related management/administration/leadership degree.
- (6) Special temporary provision: Within one year following the effective date of this rule, an individual is eligible to take the commission examination for Fire Officer IV upon documentation to the commission that the individual has completed training that covers the requirements of NFPA 1021, Chapter 7. The documentation of completed training must be a certificate of completion from a nationally recognized training provider. During the one year period, the commission examination shall consist of a written exam. The examination requirements in §451.405(b) of this subchapter (relating to Examination Requirements) must still be met. This paragraph expires one year from the effective date of this rule.
- (7) The application processing fee for the initial examination is waived for individuals in paragraphs (5) and (6) of this subsection who have completed the training requirement and submit the application for the commission examination for one year from the effective date of this rule. After this date, the application processing fee for examinations will be required.
- (b) Out-of-state or military training programs which are submitted to the commission for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 9 (pertaining to Fire Officer) of the commission's Certification Curriculum Manual are met.

§451.405 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive Fire Officer IV certification.
- (b) Individuals will be permitted to take the commission examination for Fire Officer IV certification by documenting the following: Structure Fire Protection Personnel certification and Fire Officer III certification through the commission or the equivalent IFSAC seals, and completing a commission approved Fire Officer IV program.

10. Discussion and possible action regarding proposed rule changes for acceptance of Texas Engineering Extension (TEEX) ProBoard certification, including but not limited to the following:
 - g. Title 37 TAC, Chapter 453, Subchapter A, Minimum Standards for Hazardous Materials Technician, §453.1, Hazardous Materials Technician Certification, §453.3, Minimum Standards for Hazardous Materials Technician Certification, §453.5, Examination Requirements, and §453.7, International Fire Service Accreditation Congress (IFSAC) Seal. Subchapter B, Minimum Standards for Hazardous Materials Incident Commander, §453.201, Hazardous Materials Incident Commander Certification, §453.203, Minimum Standards for Hazardous Materials Incident Commander, and §453.205, Examination Requirements.

CHAPTER 453

HAZARDOUS MATERIALS

SUBCHAPTER A

MINIMUM STANDARDS FOR HAZARDOUS MATERIALS TECHNICIAN

§453.1 Hazardous Materials Technician Certification.

- (a) A Hazardous Materials Technician is defined as an individual who performs emergency response to an occurrence which results in, or is likely to result in, an uncontrolled release of a hazardous substance where there is a potential safety or health hazard (i.e., fire, explosion, or chemical exposure). A Hazardous Materials Technician responds to such occurrences and is expected to perform work to handle and control (stop, confine, or extinguish) actual or potential leaks or spills. The Hazardous Materials Technician assumes a more aggressive role than a first responder at the operations level, in that the Hazardous Materials Technician will approach the point of release. The Hazardous Materials Technician is expected to use specialized Chemical Protective Clothing (CPC) and specialized control equipment.
- (b) All individuals holding a Hazardous Materials Technician Certification shall be required to comply with the continuing education requirements in §441.17 of this title (relating to Continuing Education for Hazardous Materials Technician).

§453.3 Minimum Standards for Hazardous Materials Technician Certification.

- (a) In order to be certified as a Hazardous Materials Technician an individual must:
- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
 - (2) possess valid documentation **as a Hazardous Materials Technician** ~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** ~~[as a Hazardous Materials Technician]~~; or
 - (3) complete a commission approved Hazardous Materials Technician program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Hazardous Materials Technician program must consist of one of the following:
 - (A) completion of a commission approved Hazardous Materials Technician Curriculum as specified in Chapter 6 of the commission's Certification Curriculum Manual.
 - (B) completion of an out-of-state and/or military training program that has been submitted to the commission for evaluation and found to be equivalent to, or exceeds the commission approved Hazardous Materials Technician Curriculum.
- (b) Out-of-state or military training programs which are submitted to the commission for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 6 (pertaining to Hazardous Materials Technician) of the commission's Certification Curriculum Manual are met.

§453.5 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive a Hazardous Materials Technician Certification.
- (b) Individuals will be permitted to take the (b) commission examination for Hazardous Materials Technician by documenting completion of the NFPA 472 Awareness and Operations level training and completing a commission approved Hazardous Materials Technician curriculum.

§453.7 International Fire Service Accreditation Congress (IFSAC) Seal.

- (a) Individuals holding a current commission Hazardous Materials Technician certification received prior to March 10, 2003, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Hazardous Materials Technician by making application to the commission for the IFSAC seal and paying applicable fees.
- (b) Individuals completing a commission approved Hazardous Materials Technician program, documenting an IFSAC seal for Hazardous Materials Awareness Level Personnel; and
 - (1) Hazardous Materials Operations Level Responders, including the Mission-Specific Competencies for Personal Protective Equipment and Product Control under the current edition; or
 - (2) NFPA 472 Hazardous Materials Operations prior to the 2008 edition; and
 - (3) upon passing the applicable state examination, may be granted an IFSAC seal as a Hazardous Materials Technician by making application to the commission for the IFSAC seal and paying applicable fees.

CHAPTER 453

HAZARDOUS MATERIALS

SUBCHAPTER B

MINIMUM STANDARDS FOR HAZARDOUS MATERIALS INCIDENT COMMANDER

§453.201 Hazardous Materials Incident Commander Certification.

The Hazardous Materials Incident Commander is defined as that person responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources.

§453.203 Minimum Standards for Hazardous Materials Incident Commander.

- (a) In order to be certified as Hazardous Materials Incident Commander an individual must:
- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
 - (2) possess valid documentation **as a Hazardous Materials Incident Commander** ~~[of accreditation]~~ from **either** the International Fire Service Accreditation Congress **or the Pro Board Fire Service Professional Qualifications System issued by the Texas A&M Engineering Extension Service** ~~[as a Hazardous Materials Incident Commander]~~; or
 - (3) complete a commission approved Hazardous Materials Incident Commander program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Hazardous Materials Incident Commander program must consist of one of the following:
 - (A) completion of a commission approved Hazardous Materials Incident Commander curriculum as specified in Chapter 6 of the commission's Certification Curriculum Manual.
 - (B) completion of an out-of-state and/or military training program that has been submitted to the commission for evaluation and found to be equivalent to, or exceeds the commission approved Hazardous Materials Incident Commander curriculum.
 - (4) Special temporary provision: Within one year following the effective date of this rule, an individual is eligible to take the commission examination for Hazardous Materials Incident Commander upon documentation to the commission that the individual has completed training that covers the requirements of NFPA 472, Chapter 8. The documentation must be a certificate of completion from a nationally recognized training provider. During the one-year period, the commission examination shall consist of a written exam. The examination requirements in §453.205(b) of this subchapter (relating to Examination Requirements) must still be met. This paragraph expires one year from the effective date of this rule.
 - (5) The application processing fee for the initial examination is waived for individuals in paragraphs (3) and (4) of this subsection who have completed the training requirement and submit the application for the commission examination for one year from the effective date of this rule. After this date, the application processing fee for examinations will be required.
- (b) Out-of-state or military training programs which are submitted to the commission for the purpose of determining equivalency will be considered equivalent if all competencies set forth in Chapter 6 (pertaining to Hazardous Materials Incident Commander) of the commission's Certification Curriculum Manual are met.

§453.205 Examination Requirements.

- (a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive a Hazardous Materials Incident Commander certification.

- (b) Individuals will be permitted to take the commission examination for Hazardous Materials Incident Commander by documenting completion of NFPA 472 Awareness and Operations level training and completing a commission approved Hazardous Materials Incident Commander program.

11. Discussion and possible action on future meeting dates, locations and agenda items.

12. Adjourn meeting.