

**FIRE FIGHTER ADVISORY COMMITTEE  
AGENDA**

**June 2, 2016 9:00 A.M.**

**1701 N. Congress Ave., 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 March 24, 2016 Fire Fighter Advisory Committee meeting minutes.
3. Report from the Curriculum and Testing Committee with discussion and possible action on recommendations regarding possible changes to the Certification Curriculum Manual, including but not limited to the Aircraft Rescue Fire Suppression Curriculum, outline and reference list.
4. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 423, Fire Suppression, including but not limited to, Subchapter A, Minimum Standards for Structure Fire Protection Personnel Certifications, §423.13, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §423.211, International Fire Service Accreditation Congress (IFSAC) Seal.
5. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 425, Fire Service Instructors, including but not limited to, §425.11, International Fire Service Accreditation Congress (IFSAC) Seal.
6. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 429, Minimum Standards For Fire Inspector Certification, including but not limited to, §429.211, International Fire Service Accreditation Congress (IFSAC) Seal.
7. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 431, Fire Investigation, including but not limited to, Subchapter A, Minimum Standards for Arson Investigator Certification, §431.13, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Fire Investigator Certification, §431.211, International Fire Service Accreditation Congress (FSAC) Seal – Fire Investigator.
8. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 433, Minimum Standards For Driver/Operator-Pumper, including but not limited to, §433.7, International Fire Service Accreditation Congress (IFSAC) Seal.
9. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 451, Fire Officer, including but not limited to, Subchapter A, Minimum Standards for Fire Officer I, §451.7, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Fire Officer II, §451.207, International Fire Service Accreditation Congress (IFSAC) Seal.
10. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 453, Hazardous Materials, including but not limited to, Subchapter A, Minimum Standards For Hazardous Materials Technician, §453.7, International Fire Service Accreditation Congress (IFSAC) Seal.

- 11. Discussion and possible action on current commission proposed rule changes to title 37 TAC, Chapter 451, Fire Officer, including but not limited to, Subchapter C, Minimum Standards for Fire Officer III, new §451.307, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter D, Minimum Standards for Fire Officer IV, new §451.407, International Fire Service Accreditation Congress (IFSAC) Seal.**
- 12. Discussion and possible action on current commission proposed rule changes to title 37 TAC, Chapter 439, Examinations for Certification, including but not limited to, Subchapter A, Examinations For On-Site Delivery Training, §439.1, Requirements — General, §439.3, Definitions, §439.7, Eligibility, §439.9, Grading, and §439.11, Commission-Designated Performance Skill Evaluations.**
- 13. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 435, Fire Fighter Safety, including but not limited to, §435.25, Courage to be Safe So Everyone Goes Home Program.**
- 14. Discussion and possible action on development of a Fire Inspector Certification that does not include all current rule components.**
- 15. Discussion and possible action on setting future meeting dates, locations and agenda items.**
- 16. Adjourn meeting.**

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

2. **Adoption of the March 24, 2016 Fire Fighter Advisory Committee meeting minutes.**

**TEXAS COMMISSION ON FIRE PROTECTION**

Presiding Officer Jim Reidy called the March 24, 2016 meeting of the Fire Fighter Advisory Committee to order at 9:00 a.m. at the William B. Travis Building, 1701 N. Congress Ave., Room 1-104, in Austin, Texas.

Attending	Jim Reidy	Michael Wisko	Amado Cano, Jr.	Ken Swindle
	Jason Collier	Daniel DeYear	J. P. Steelman	
				*absent entire meeting
				**absent part of meeting

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Staff	Tim Rutland	Deborah Cowan	Joyce Guinn	Mark Roughton	Sylvia Miller	Paul Maldonado
	Veena Mohan, Assistant Attorney General					

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| 1. Roll call | Secretary J. P. Steelman called roll and a quorum was present. |
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| 2. Election Of Officers | The committee selected Jim Reidy, Chair, Mike Wisko, Vice-Chair and J. P. Steelman, Secretary |
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| 3. Adoption Of Minutes | A motion was made by Michael Wisko and seconded by J. P. Steelman to approve the minutes of the December 4, 2015, fire fighter advisory committee meeting as discussed. The motion carried. |
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| 4. Report from Curriculum & Testing Committee | Pat McAuliff, Chair of the committee went over the recommended changes.<br><br>A motion was made by J. P. Steelman and seconded by Amado Cano to approve for recommendation to the commission the changes to the reference list for the Incident Safety Officer Curriculum as discussed. The motion carried. |
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| 5. 37 TAC, Chapter 437 | A motion was made by Mike Wisko and seconded by Daniel DeYear to approve for recommendation to the commission amendments to 37 TAC, Chapter 437, §437.13, and §437.17 as discussed. The motion carried. |
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| 6. 37 TAC, Chapter 439 | A motion was made by Daniel DeYear and seconded by Jason Collier to approve for recommendation to the commission amendments to 37 TAC, Chapter 439, Subchapter A, §439.1, §439.3, §439.7, §439.9, §439.11, and §439.19 with changes as discussed. The motion carried. |
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| 7. 37 TAC, Chapter 451 | A motion was made by Mike Wisko and seconded by J. P. Steelman to approve for recommendation to the commission amendments to 37 TAC, Chapter 451, new §451.307 and §451.407. The motion carried. |
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| 8. Injury Report | After discussion and review of the report provided to the committee, a motion was made by Daniel DeYear and seconded by Ken Swindle to send the report to the commission for review at its April commission meeting. The motion carried. |
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| 9. Future meeting dates, locations agenda items | The next meeting was scheduled for June 2, 2016 beginning at 9:00 a.m.<br><br>Future agenda items: Chapter 435 and Injury Report Update |
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10. Adjournment      A motion to adjourn was made by Daniel DeYear and seconded by J. P. Steelman. 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 possible changes to the Certification Curriculum Manual, including but not limited to the Aircraft Rescue Fire Suppression Curriculum, outline and reference list.**

## **SECTION 200**

### **BASIC AIRCRAFT RESCUE FIRE SUPPRESSION**

#### **Basic Aircraft Rescue Fire Fighting Personnel**

The Fire Fighter II who has demonstrated the skills and knowledge necessary to function as an integral member of an aircraft rescue and fire fighting (ARFF) team.

**(NUMBERING CHANGES:** In the 2010 version of NFPA 1003, Chapter 5 was Airport Fire Fighter qualifications. Now it is Chapter 4. So all of the numbering has to change from 200-5.1... etc. to 200-4.1... etc.)

#### **200-4.1      General**

##### **200-4.1.1      Qualifications**

To be qualified as an airport fire fighter, the candidate shall meet the requirements for Texas Commission on Fire Protection (TCFP) certification as Fire Fighter II, as defined in NFPA 1001, *Standard for Fire Fighter Professional Qualifications*; ~~first responder operational level defined in NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*~~; and TCFP certification standards as defined in NFPA 1003, *Standard for Airport Fire Fighter Professional Qualifications*.

##### **200-4.1.1.1      Duties**

These requirements shall be divided into three major duties: response, fire suppression and rescue.

##### **200-4.1.1.2      Function**

The primary function of the airport fire fighter shall be to execute fire suppression and rescue activities.

##### **200-4.1.1.3      General Knowledge Requirements**

Fundamental aircraft fire-fighting techniques, including the approach, positioning, initial attack, and selection, application, and management of the extinguishing agents; limitations of various sized hand lines; use of personal protective equipment (PPE); fire behavior; fire-fighting techniques in oxygen-enriched atmospheres; reaction of aircraft materials to heat and flame; critical components and hazards of civil aircraft construction and systems related to ARFF operations; special hazards associated with military aircraft systems; a national defense area and limitations within that area; characteristics of different aircraft fuels;

hazardous areas in and around aircraft; aircraft fueling systems (hydrant/vehicle); aircraft egress/ingress (hatches, doors, and evacuation chutes); hazards associated with aircraft cargo, including dangerous goods; hazardous areas, including entry control points, crash scene perimeters, and requirements for operations within the hot, warm, and cold zones; and critical stress management policies and procedures.

- 1) Fundamental aircraft fire-fighting techniques of approach
    - a. Size up
      - i. Weather
      - ii. Terrain
      - iii. Debris trail
      - iv. Exposures
      - v. Aircraft
        1. Size/type
        2. Fire
          - a) Absence
          - b) Presence
        3. Souls on Board (SOB)
        4. Fuel on board
- 2) Fundamental aircraft fire-fighting techniques of positioning
  - a. Weather
  - b. Terrain
  - c. Exposures
  - d. Aircraft
    - i. Size/Type
    - ii. Fire
      1. Absence
      2. Presence
  - e. Impact
    - i. High
    - ii. Low
  - f. Non-impact
    - i. Fire
      1. Interior
      2. Exterior
    - ii. No fire
  - g. Egress routes
  - h. Wreckage
    - i. Intact

- ii. Fragmented
    - iii. Debris trail
    - iv. Upside down
  - i. Scene preservation
  - j. Hazardous areas
    - i. Fuel
      - 1. **Jet fuels**
      - 2. **AVGAS**
      - 3. **Other fuels**
    - ii. Engines
      - 1. Jet turbine
      - 2. Propellers
      - 3. Rotors
    - iii. Military ordnance/armament
    - iv. Collapse zones
    - v. Dangerous goods
- 3) Fundamental aircraft fire-fighting techniques of initial attack
- a. Rescue of occupants
    - i. Isolation
    - ii. Insulation
  - b. Fire control
    - i. Interior
    - ii. Exterior
  - c. Loss control
- 4) Fundamental aircraft fire-fighting techniques of fire extinguishing agents
- a. Selection
    - i. Water
    - ii. Foaming agents
    - iii. Dry chemicals
    - iv. Halogenated agents and halon replacements
    - v. Dry powders
  - b. Application
    - i. Turret
    - ii. Hand line
    - iii. Hand held extinguishers
    - iv. Special appliance(s)
  - c. Management
    - i. Conservation of agent

ii. Replenishment

- 5) Limitations of various sized hand lines
- a. Diameter
  - b. Discharge
  - c. Length of hand line
  - d. Reach of agent application

- 6) Use of personal protective equipment (PPE)

**Note: Each AHJ has the option to select between PrPPE and/or structural firefighting PPE based on the results of the NFPA 1851 risk-assessment.**

- a. **Personal Protective Clothing**
  - i. **Station/work uniform**
  - ii. **Structural fire-fighting protective clothing**
  - iii. **Proximity fire-fighting protective clothing**
  - iv. **Chemical protective clothing**
- b. **Respiratory protection (SCBA)**
  - i. **Conditions that require respiratory protection**
    1. **Oxygen deficiency**
    2. **Elevated temperatures**
    3. **Toxic environments**
    4. **Smoke (by-products of combustion)**
- c. Donning **of PPE**
- d. Doffing **of PPE**
- e. Care **of PPE**
- f. Cleaning **of PPE**
- g. Inspections **of PPE**
- h. Limitations **of PPE**
- i. Maintenance **of PPE**
  - i. Replacement
  - ii. Storage
  - iii. ~~Components of ARFF proximity protective personal equipment (PrPPE)~~
    1. ~~Helmet with reflective bonnet, reflective shield and neck shroud~~
    2. ~~Coat~~
      - a. ~~Reflective outer shell~~
      - b. ~~Thermal barrier~~
      - c. ~~Vapor barrier~~
    3. ~~Pants~~
      - a. ~~Reflective outer shell~~

- b. Thermal barrier
    - c. Vapor barrier
  - 4. ARFF boots
  - 5. Gloves
    - a. Reflective outer shell
    - b. Thermal barrier
    - c. Vapor barrier
  - 6. Reflective SCBA covers
  
- 7) Conditions that require respiratory protection
  - a. Oxygen deficiency
  - b. Elevated temperatures
  - c. Toxic environments
  - d. Smoke (by-products of combustion)
  
- 8) Fire behavior
  - a. Class A fires
    - i. Aircraft interior
    - ii. Aircraft cargo
    - iii. Airport structures
  - b. Class B fires
    - i. Pooled fuel
    - ii. Three-dimensional
  - c. Class C fires
    - i. Avionics
    - ii. Wiring
  - d. Class D fires
    - i. Landing gear
    - ii. Engine components
  
- 9) Fire-fighting techniques in oxygen-enriched atmospheres
  - a. Recognizing an oxygen enriched atmosphere
  - b. Defensive tactics to reduce oxygen concentration
  
- 10) Reaction of aircraft materials to heat and flame
  - a. Aluminum and aluminum alloy
  - b. Steel
  - c. Magnesium and magnesium alloy
  - d. Titanium
  - e. Advance aerospace (composite) materials
  - f. Wood

- 11) Critical components and hazards of civil aircraft construction and systems related to ARFF operations
  - a. Pinching and limb severing hazards
  - b. Propeller dangers
  - c. Helicopter hazards
  - d. Jet-Engine hazards
  - e. Evacuation hazards
  - f. Ballistic recovery systems
  - g. Landing gear
  - h. Wheel assemblies
  - i. Electrical systems
  - j. Hydraulic systems
  - k. Advanced aircraft composite materials
  - l. Fuel systems
  - m. Radar systems
  - n. Pressurized cylinders
  - o. Oxygen supply systems
  - p. Protruding devices
  - q. Ram Air Turbine (RAT)
  
- 12) Special hazards associated with military aircraft systems
  - a. Pinching and limb severing hazards
  - b. Propeller dangers
  - c. Helicopter hazards
  - d. Jet-engine hazards
  - e. Evacuation hazards
  - f. Ejection seats
  - g. Landing gear
  - h. Wheel assemblies
  - i. Electrical systems
  - j. Hydraulic systems
  - k. Advanced aircraft composite materials
  - l. Fuel systems
  - m. Special or exotic fuels
  - n. Radar systems
  - o. Pressurized cylinders
  - p. Oxygen supply systems
  - q. Protruding devices
  - r. RAT (**Ram Air Turbine**)
  - s. Weapons and weapon systems

- t. Aircraft emergency systems
- 13) A national defense area and limitations within that area
- a. Department of Defense (DOD) designation
  - b. Exclusion area for ARFF
- 14) Characteristics of different aircraft fuels
- a. Civilian
  - b. Military
- 15) Hazardous areas in and around aircraft
- a. Hazard areas in the aircraft
    - i. Cockpit/flight deck
    - ii. Cargo area
    - iii. Galley
    - iv. Avionics area
    - v. Energized electrical area
  - b. Hazardous areas around the aircraft
    - i. Propellers
    - ii. Engines
    - iii. Military armament
    - iv. Collapse zones
    - v. Wheel assembly
    - vi. Aircraft radar
    - vii. RAT (**Ram Air Turbine**)
    - viii. **Ballistic Recovery System**
- 16) Aircraft egress/ingress (hatches, doors, and evacuation chutes)
- a. Aircraft egress
    - i. Doors
    - ii. Hatches
    - iii. Slides
    - iv. Door height
    - v. Stairs
    - vi. Emergency exits
    - vii. Emergency rafts
    - viii. Flight deck windows
  - b. Aircraft ingress
    - i. Doors
    - ii. Hatches
    - iii. Door height

- iv. Stairs
  - v. Ladders
  - vi. Emergency exits
  - vii. Air stairs
- 17) Hazards associated with aircraft cargo, including dangerous goods
- a. Laws and regulations
    - i. Classifications of dangerous goods
    - ii. Shipment of dangerous goods
  - b. Product identification
    - i. Identification
    - ii. Verification
    - iii. Information gathering
  - c. Personal Protective Equipment (PPE)
    - i. NFPA levels of protection
      - 1. Structural gear
      - 2. Proximity gear (PrPPE)
      - 3. Chemical protective clothing
        - a) Vapor protective
        - b) Liquid splash protective
    - ii. Environmental Protection Agency (EPA) levels of protection
      - 1. Level A
      - 2. Level B
      - 3. Level C
      - 4. Level D
  - d. Dangerous goods operations
  - e. Agricultural applications
- 18) Hazardous areas, including entry control points, crash scene perimeters, and requirements for operations within the hot, warm, and cold zones
- a. Hazardous areas
  - b. Entry control points
  - c. Crash scene perimeters
  - d. Operational Zones
    - i. Hot Zone (Restricted Zone)
    - ii. Warm Zone (Limited Access Zone)
    - iii. Cold Zone (Support Zone)
- 19) Critical stress management policies and procedures

- a. Policies
  - i. Authority Having Jurisdiction (AHJ)
- b. Procedures
  - i. Coping with stress
  - ii. Critical Incident Stress Debriefing (CISD)

#### **200-4.1.1.4 General Skills Requirements**

Don PPE; operate hatches, doors, and evacuation chutes; approach, position, and initially attack an aircraft fire; select, apply, and manage extinguishing agents; shut down aircraft systems, including engine, electrical, hydraulic, and fuel systems; operate aircraft extinguishing systems, including cargo area extinguishing systems.

- 200-4.1.2** The job performance requirements of this chapter shall be accomplished in accordance with the requirements of the authority having jurisdiction and NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

#### **200-4.2 Response**

This duty involves the timely arrival at an incident or accident and the capability to perform emergency functions. The duty also includes responding to hazardous conditions and performing standby operations.

- 200-4.2.1** Respond to day and night incidents or accidents on and adjacent to the airport, given an assignment, operating conditions, a location, a grid map, a vehicle, and a prescribed response time, so that the route selected and taken provides access to the site within the allotted time.

**Requisite Knowledge:** Airport familiarization, including runway and taxiway designations, frangible gate locations, airport markings, lights, Instrument Landing System (ILS) critical areas, **and** critical rescue and fire-fighting access areas, **recognize the impact of low-visibility conditions on movement areas and areas of response in and close to the airport;** designated isolation areas; vehicular traffic controls on airfield; bridge load limits; controlled access points; aircraft traffic patterns and taxi routes; fuel storage and distribution locations; airport and immediate local area topographic layout, drainage systems, water supplies, airport facilities and security.

Airport familiarization, including:

- 1) Runway and taxiway designations
  - a. Runway identification

- i. Designation
        - 1. Compass heading
        - 2. Numbers and letters
      - ii. Markings
        - 1. White
        - 2. Yellow
      - iii. Signage
      - iv. Lighting
        - 1. White
        - 2. Amber
        - 3. Red
        - 4. Green
    - b. Taxiway identification
      - i. Designation
        - 1. Phonetic alphabet
        - 2. Name
      - ii. Markings
      - iii. Signage
      - iv. Lighting
        - 1. Blue
        - 2. Green
- 2) Frangible gate locations
- a. AHJ
  - b. Gate controlled access
  - c. Alternate response route
    - i. Weather
    - ii. Location
    - iii. Terrain
    - iv. Topography
- 3) Airport markings
- a. Aircraft operations area (AOA)
    - i. Pavement markings
      - 1. White
      - 2. Red
      - 3. Yellow
    - ii. Signs
      - 1. Mandatory instruction
      - 2. Runway hold position
      - 3. Location signs

- 4. Direction signs
  - 5. Destination signs
  - 6. Information signs
  - 7. Runway distance remaining signs
  - b. Non aircraft operations area
    - i. AHJ
    - ii. Department of Transportation (DOT)
    - iii. **Designated diesel vehicle regeneration area**
- 4) Lights
- a. Surface lighting
    - i. Blue lights
    - ii. White lights
    - iii. Green lights
    - iv. Red lights
    - v. Amber or yellow lights
- 5) Instrument landing system (ILS) critical areas
- a. Locations per AHJ
  - b. Identification
  - c. Interference
  - d. Alternate response routes
  - e. Hazards
- 6) Critical rescue and fire-fighting access areas (CRFFAA)
- a. Location in relation to grid map (AHJ)
  - b. Size
    - i. Departure and approach area
    - ii. Distance from runway centerline
- 7) **Recognize the impact of low-visibility conditions on movement areas and areas of response in and close to the airport**
- a. **Driver's Enhanced Vision systems (DEVs)**
    - i. **Night vision**
    - ii. **Navigation**
    - iii. **Tracking**
- 8) Designated isolation areas (AHJ)
- a. Predetermined area designed for temporary parking for aircraft experiencing hazardous cargo problems
  - b. Know isolation location for your airport (AHJ)

- i. Hijacking
- ii. Bomb threat
- iii. Terrorist attack
- iv. Weapons of Mass Destruction (WMD)
- v. Bio-Hazards
  - 1. Cargo
  - 2. Passengers

c. **Military**

- 9) Vehicular traffic controls on airfield
  - a. Navigational Aids (NAVAIDS)
  - b. Construction
  - c. Airport markings
    - i. Hold bars
    - ii. Safety zones
  - d. Airport ramps
  - e. Fences and gates
  - f. All weather roads
  
- 10) Bridge load limit/**overpass clearance** (AHJ)
  - a. Road weight limits
  - b. ARFF apparatus weight **and height**
  - c. Local area bridges in the response area covered by AHJ
  - d. Alternate routes
  
- 11) Controlled access points
  - a. Solid red marking
  - b. Fences and gates
  - c. Mandatory signs
  
- 12) Aircraft traffic patterns and taxi routes (AHJ)
  - a. Patterns used by aircraft in the vicinity of the airport
  - b. Emergency declarations for aircraft
  - c. Components of the pattern
    - i. Crosswind leg
    - ii. Downwind leg
    - iii. Base leg
    - iv. Final approach
  - d. Designated routes for aircraft to final destinations
  
- 13) Fuel storage and distribution locations (AHJ)

- a. Airport fuel operations
    - i. Fuel storage
    - ii. Supply methods
    - iii. Fuel distribution systems
    - iv. Aircraft fueling methods
  - b. Airport fuel operation locations
  - c. Emergency fuel operation shut-down
  - d. Preplanning for emergencies
  - e. Fire fighting systems
- 14) Airport and immediate local area topographic layout
- a. Airport layout
  - b. Airport markings
  - c. Length and width of runways
  - d. Taxiway identification
  - e. Streets and highway within the emergency response area on airport, and off airport
  - f. Grid map
  - g. Local terrain features
  - h. Response area off airport property
  - i. Bodies of water
  - j. Airport structures
- 15) Drainage systems (AHJ)
- a. Drainage system dynamics
  - b. Drainage system openings
  - c. Fuel/water separator
  - d. Containment for drainage
  - e. Run off locations
  - f. Airport without drainage system
    - i. Pre-planning for the event
    - ii. Confinement
    - iii. Containment
    - iv. Clean up and recovery efforts
- 16) Water supplies (AHJ)
- a. Sources
    - i. Wells
    - ii. Tanks
    - iii. Domestic supply
  - b. Hydrant locations

- c. Mobile supply types
    - i. Fire apparatus
    - ii. Tankers/tenders
  - d. Mutual aid response for water supply
  - e. Pre-planning for water supply strategies
- 17) Airport facilities
- a. Terminals
    - i. Life safety concerns
    - ii. Jetways
    - iii. Baggage handling areas
    - iv. Mass transportation equipment
    - v. Hotels
    - vi. Parking garages
    - vii. Controlled access
  - b. Aircraft Maintenance Facilities
    - i. Fuel system repair
    - ii. Painting facilities
    - iii. Hazardous materials storage
    - iv. Aircraft electrical, avionics and radar systems repair locations
    - v. Welding and cutting locations
    - vi. Office locations and high occupancy areas
    - vii. Fire prevention
- 18) **Airport Security and Controlled Access Points**
- a. Airfield perimeter fencing/protection
  - b. Controlled access points (already stated)
    - i. Manned access points
    - ii. Unmanned access points - Radio Frequency Identification (RFID) or remote control
    - iii. Manually operated gates
    - iv. Frangible gates
  - c. Vehicle incursion prevention systems
    - i. Tiger teeth (tire damaging systems)
    - ii. Barriers
  - d. Airfield vehicle eligibility markings
    - i. Decals
    - ii. Lighting
  - e. Airfield personnel eligibility identification
    - i. **SIDA (Security Identification Display Area)**

**Requisite Skills:** Read, interpret, and take correct action related to grid maps, water distribution maps, airport markings, and lights.

- 200-4.2.2** Communicate critical incident information regarding an incident ~~or accident~~ on or adjacent to an airport, given an assignment involving an incident ~~or accident~~ and an incident management system (IMS) protocol, so that the information provided is accurate ~~and sufficient~~ for the incident commander ~~to initiate an attack plan~~.

**Requisite Knowledge:** Incident management system (IMS) protocol, the airport emergency plan, airport and aircraft familiarization, ~~and~~ communications equipment and procedures, **and incident communications procedures.**

- 1) Incident management system (IMS) protocol
  - a. IMS and the functional responsibilities (AHJ)
  - b. Strategic goals
  - c. Tactical objectives
  - d. IMS Organizational Chart (AHJ)
  - e. Chain of command (AHJ)
  
- 2) The airport emergency plan (AHJ)
  - a. Mutual aid resources
  - b. Fire rescue resources
  - c. Emergency medical resources
  - d. Law enforcement resources
  - e. Other airport personnel
  - f. Critical stress management
  - g. Mitigation
  
- 3) Airport familiarization (AHJ)
  - a. Airport traffic flow systems
    - i. Aircraft
    - ii. Vehicular
  - b. Location of incident
    - i. Runways
    - ii. Taxiways
    - iii. Grid map
  - c. Access control points
  - d. Approach safety areas
  - e. Departure safety areas

- f. National Defense area limitations
- 4) Aircraft familiarization
- a. Aircraft types
    - i. Commercial
    - ii. General aviation
    - iii. Military aircraft
    - iv. Unmanned aircraft**
  - b. Aircraft systems
  - c. Hazards of aircraft
  - d. Aircraft fuels
  - e. Aircraft evacuation
- 5) Communications equipment and procedures
- a. Airport communication systems
  - ~~b. Pilot/ARFF (discrete emergency frequency)~~
  - b. Proper radio **Communication** protocols
    - i. **Radio communications**
      - 1. International Civil Aviation Organization (ICAO)
      - 2. ICAO phonetic alphabet
    - ii. Computers
      - 1. Mobile Data Terminals (MDT)
      - 2. Mobile Computer Terminals (MCT)
      - 3. Global Positioning Systems (GPS)
    - iii. **Air Traffic Control Tower (ATCT) Light-gun signals and their meanings**
      - 1. Steady green
      - 2. Steady red
      - 3. Flashing red
      - 4. Flashing white
      - 5. Alternating red/green
    - iv. **Aircraft** Hand signals
      - 1. Recommend evacuation
      - 2. Recommend stop
      - 3. Emergency contained
    - v. Other **fire-fighting** audible/visible signals
      - 1. Back out or retreat
      - 2. Apparatus is running out of agent
      - 3. Open or close hand line
      - 4. Change hand line nozzle/stream pattern
      - 5. Advance with hand line

6. Back out with hand line

- 6) **Incident communications procedures**
  - a. **Emergency response notification methods (AHJ)**
    - i. **Categories of emergency alerts (FAA – Federal Aviation Administration)**
  - b. **Pilot/ARFF (Discrete Emergency Frequency - DEF)**
  - c. **Agency operations frequencies**
  - d. **Mutual aid frequencies**

**Requisite Skills:** Operate communications systems, communicate an accurate situation report, implement incident management system (IMS) protocol and airport emergency plan, and recognize aircraft types.

- 200-4.2.3** Communicate with applicable air traffic control facilities, given a response destination on or adjacent to an airport and radio equipment, so that all required clearances are obtained.

**Requisite Knowledge:** **Airfield familiarization, airport operational procedures, avoiding runway/aircraft movement area incursion,** communications equipment and frequencies, tower light signals, aviation phraseology, and phonetic alphabet.

- 1) **Airfield familiarization**
- 2) **Airport operational procedures**
- 3) **Avoiding runway/aircraft movement area incursion**
- 4) Communications equipment and frequencies
  - a. **ATCT (Air Traffic Control Tower) Tower**
    - i. Ground control
    - ii. Local control or tower frequencies
    - iii. Discrete Emergency Frequency (DEF) (AHJ)
  - b. Aviation radio
    - i. Procedures
    - ii. Terminology
  - c. Fire frequency radio (AHJ)
- 5) **ATCT light-gun signals**
  - a. Used in the event of communication failure with ATCT
  - b. Colors

- i. Steady green
- ii. Steady red light
- iii. Flashing red light
- iv. Flashing white light
- v. Alternating red and green light
- e. ~~Meaning~~
  - i. ~~Steady green – Cleared to cross, proceed or go~~
  - ii. ~~Steady red light – Stop~~
  - iii. ~~Flashing red light – Clear the taxiway/runway~~
  - iv. ~~Flashing white light – Return to the starting point on the airport~~
  - v. ~~Alternating red and green light – Exercise extreme caution~~

6) Aviation phraseology

7) Phonetic alphabet

**Requisite Skills:** Operate communications equipment and use aviation phraseology and phonetic alphabet.

**200-4.2.4** Perform an airport operation, given an assignment, a hazardous condition, and the airport policies and procedures, so that unsafe conditions are detected and reduced in accordance with the airport policies and procedures.

**Requisite knowledge:** Airport and aircraft policies and procedures for hazardous conditions ~~and aircraft policies and procedures for hazardous conditions.~~

- 1) Airport policies and procedures for hazardous conditions
  - a. Airport certification manual
  - b. Airport emergency plan
  - c. Notification of the emergency hazardous condition
    - i. Accident
    - ii. Incident
    - iii. Emergency
  - d. Response
  - e. Initiation of IMS
  - f. ARFF safety
  - g. Airport structure emergencies
    - i. Terminals
    - ii. Hangars
  - h. Fuel storage and distribution

- i. Fuel spills
  - j. Aircraft fueling operations
  - k. Aircraft maintenance areas
    - i. Welding
    - ii. Painting
  - l. Airport Environment
    - i. Construction
    - ii. Traffic
    - iii. Drainage
    - iv. Airport Topography
    - v. **Review wildlife management plan**
  - m. Designated isolation areas
    - i. Bomb threats
    - ii. Terrorists
    - iii. Hazardous materials
    - iv. **Hijacking**
    - v. **Weapons of Mass Destruction (WMD)**
    - vi. **Bio-Hazards**
- 2) Aircraft policies and procedures for hazardous conditions
- a. Airport emergency plan (AHJ)
  - b. Standardized response
  - c. Coordination with flight crew
  - d. Aircraft familiarization
  - e. Aircraft emergencies
    - i. Ground emergencies
    - ii. In-flight emergencies

**Requisite Skills:** Recognize hazardous conditions and initiate corrective action.

### **200-4.3** **Fire Suppression**

This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities, and other equipment related to airport operations and property conservation. The primary purpose of this duty is to protect lives and property.

- 200-5.3.1** ~~Extinguish a 23.2 m<sup>2</sup> (250 ft<sup>2</sup>) aircraft fuel spill fire, given approved PPE, a minimum of a 45 kg (100 lb) dry chemical fire extinguisher, and procedures, so that the agent is applied according to procedures and the fire is extinguished in 25 seconds.~~

**Requisite Knowledge:** The fire behavior of aircraft fuels in spills and pools, physical properties, characteristics of aircraft fuel, agent application rates, densities, and procedures.

- 1) The fire behavior of aircraft fuels in spills and pools
  - a. Flame spread
  - b. Flashback (re-ignition)
  - c. Vapors
  - d. Flammability
- 2) Physical properties
  - a. Aviation gasoline (AVGAS)
    - i. Weight
    - ii. Specific gravity
    - iii. Vapor density
  - b. Jet-A (grade of kerosene)
    - i. Weight
    - ii. Specific gravity
    - iii. Vapor density
  - c. Other fuels
    - i. Blends
    - ii. Military grade
- 3) Characteristics of aircraft fuel
  - a. Flashpoint
  - b. Auto ignition temperature
  - c. Explosive limits
    - i. Upper
    - ii. Lower
  - d. Flame spread
  - e. Vapor pressure
- 4) Agent application rates, densities, and procedures
  - a. Agent application rates—minimum 1 lb/sec.
  - b. Densities
  - c. Procedures
    - i. Fully extend extinguisher hose
    - ii. Activate extinguisher
    - iii. Open nozzle
    - iv. Direct agent at base of fire
    - v. Sweep back and forth
  - d. Types of agents
    - i. Primary agents
    - ii. Water

- iii. Foam
  - 1. Class A
    - a. High expansion foams
    - b. Wetting agents
  - 2. Class B
    - a. Aqueous film forming foam (AFFF)
    - b. Protein foam (PF)
    - c. Fluoroprotein foam (FPF)
    - d. Film-forming fluoroprotein foam (FFFP)
    - e. Polar solvent
  - 3. Complimentary agents
    - a. Halogenated agents
    - b. Dry powder
    - c. CO<sub>2</sub>
    - d. Storage (consider putting in re-supply)
    - e. Pails
    - f. Barrels
    - g. Apparatus tanks
    - h. Totes

~~Requisite Skills: Operate dry chemical extinguishers equipped with a hose line, including removing and operating hose and applying agent.~~

(Used to be 5.3.2)

- 200-4.3.1** Extinguish an aircraft fuel spill fire, given **approved** PPE, an assignment, agent application procedures, an **fire-fighting** ARFF vehicle hand line flowing a minimum of 95 gpm (359 L/min) of AFFF **approved foam** extinguishing agent, and a fire sized to the flow rate used [~~AFFF flow rate divided by 4.92 L/min/m<sup>2</sup> for fire size in square meters (0.13 gpm/min/ft<sup>2</sup> for fire size in square feet)~~], so that the agent is applied using the prescribed techniques and the fire is extinguished **as required by the AHJ**. ~~in a time proportionate to, but no longer than, 90 seconds for a 73 m<sup>2</sup> (786 ft<sup>2</sup>) fire with a flow rate at 359 L/min (95 gpm).~~

**Requisite Knowledge:** The fire behavior of aircraft fuels in pools, physical properties and characteristics of aircraft fuel, and agent application rates and densities.

- 1) Fire behavior of aircraft fuels in pools
  - a. Flame spread
  - b. Flashback (re-ignition)
  - c. Vapors

- d. Flammability
- 2) Physical properties of aircraft fuels
    - a. Aviation gasoline (AVGAS)
      - i. Weight
      - ii. Specific gravity
      - iii. Vapor density
    - b. Jet-A (grade of kerosene)
      - i. Weight
      - ii. Specific gravity
      - iii. Vapor density
    - c. Other fuels
      - i. Blends
      - ii. Military grade
  - 3) Characteristics of aircraft fuels
    - a. Flashpoint
    - b. Auto ignition temperature
    - c. Explosive limits
      - i. Upper
      - ii. Lower
    - d. Flame spread
    - e. Vapor pressure
  - 4) Agent application rates and densities
    - a. Agent application - minimum 95 gpm @ at nozzle pressure specified by manufacturer
    - b. Agent application **and proportioning density (in accordance with manufacturer's specifications)** - 0.13 gpm/minimum/ft<sup>2</sup> of AFFF **approved foam** extinguishing agent **and a fire sized to the flow rate used** for fire size in square feet

**Requisite Skills:** Operate fire streams and apply agent.

(Was 5.3.3)

#### 200-4.3.2

Extinguish an aircraft fuel spill fire, given an assignment, **approved** PPE, an ARFF vehicle turret flowing a **the approved** minimum **required flow**, of 946 L/min (250 gpm), a fire sized to the **approved** flow rate used, [~~AFFF flow rate divided by 4.92 L/min/m<sup>2</sup> for fire size in square meters (0.13 gpm/min/ft<sup>2</sup> for fire size in square feet)~~], and the procedures for agent application, so that the agent is applied according to procedures

and the fire is extinguished **as required by the AHJ**. ~~in a time proportionate to, but no longer than, 90 seconds for 192 m<sup>2</sup> (1923 ft<sup>2</sup>) fire with a flow rate at 946 L/min (250 gpm).~~

**Requisite Knowledge:** Operation of ARFF vehicle agent delivery systems, the fire behavior of aircraft fuels in pools, physical properties and characteristics of aircraft fuel, the procedures for agent application, and agent application rates and densities.

- 1) Operation of ARFF vehicle agent delivery systems
  - a. As per manufacturer operating procedures
  - b. Per AHJ
  
- 2) Fire behavior of aircraft fuels in pools
  - a. Flame Spread
  - b. Flashback (re-ignition)
  - c. Vapors
  - d. Flammability
  
- 3) Physical properties of aircraft fuels
  - a. Aviation gasoline (AVGAS)
    - i. Weight
    - ii. Specific gravity
    - iii. Vapor density
  - b. Jet-A (grade of kerosene)
    - i. Weight
    - ii. Specific gravity
    - iii. Vapor density
  - c. Other fuels
    - i. Blends
    - ii. Military grade
    - iii. Alternative fuels
  
- 4) Characteristics of aircraft fuels
  - a. Flashpoint
  - b. Auto ignition temperature
  - c. Explosive limits
    - i. Upper
    - ii. Lower
  - d. Flame spread
  - e. Vapor pressure

- 5) Agent application rates and densities
  - a. Agent application rate - minimum 250 gpm @ at nozzle pressure specified by manufacturer
  - b. Agent application **and proportioning density (in accordance with manufacturer's specifications)** - ~~0.13~~ **gpm/minimum/ft<sup>2</sup> of AFFF approved foam** extinguishing agent **and a fire sized to the flow rate used** ~~for fire size in square feet~~

**Requisite Skills:** Apply fire-fighting agents and streams using ARFF vehicle turrets.

(Used to be 5.3.4)

### 200-4.3.3

Extinguish a three-dimensional aircraft fuel fire as a member of a team, given a team, **approved** PPE, an assignment, ARFF **fire-fighting** vehicle hand line(s) using primary and secondary agents, and agent application procedures, so that a dual-agent attack is used, the agent is applied according to procedures, the fire is extinguished, and the fuel source is secured.

**Requisite Knowledge:** The fire behavior of aircraft fuels in ~~three-dimensional~~ **solid, pressurized**, and atomized states; physical properties and characteristics of aircraft fuel; **advantages and limitations of agents**; agent application rates and densities, agent application procedures; and methods of controlling fuel sources.

- ~~4) Fire behavior of aircraft fuels in three-dimensional state~~
  - ~~a. Running, flowing fuel fire from elevated source~~
  - ~~b. Pressurized fuel source~~
- 1) Fire behavior of aircraft fuels **in solid, pressurized, and** atomized states
  - a. Explosive atmosphere
  - b. Higher proliferation of vapors
- 2) Physical properties of aircraft fuels
  - a. Aviation gasoline (AVGAS)
    - i. Weight
    - ii. Specific gravity
    - iii. Vapor density
  - b. Jet-A (~~grade of kerosene~~) **fuel**
    - i. Weight

- ii. Specific gravity
    - iii. Vapor density
  - c. Other fuels
    - i. Blends
    - ii. Military grade
    - iii. **Alternative fuels**
  
- 3) Characteristics of aircraft fuels
  - a. Flashpoint
  - b. Auto ignition temperature
  - c. Explosive limits
    - i. Upper
    - ii. Lower
  - d. Flame spread
  - e. Vapor pressure
  
- 4) **Advantages of agents**
  
- 5) **Limitations of agents**
  
- 6) Agent application rates and densities
  - a. Agent application rate
    - i. Minimum 95 gpm @ at nozzle pressure specified by manufacturer
    - ii. Minimum 5 lbs/second dry chemical
  - b. Agent application densities
    - i. Agent application **and proportioning density (in accordance with manufacturer's specifications)** - 0.13 gpm/minimum/ft<sup>2</sup> of AFFF **approved foam** extinguishing agent **and a fire sized to the flow rate used** for fire size in square feet
    - ii. Amount of dry chemical proportionate to hazard
  
- 7) Agent application procedures
  - a. Rapid knock down
  - b. Vapor suppression
  
- 8) Methods of controlling fuel sources
  - a. Shut off source
  - b. Control ignition source
  - c. Suppress vapors

- d. Prevent run-off

**Requisite Skills:** Operate fire streams and apply agents; and secure fuel sources.

(Used to be 5.3.5)

#### 200-4.3.4

Attack a fire on the interior of an aircraft while operating as a member of a team, given a team, **approved** PPE, an assignment, an ARFF **fire-fighting** vehicle hand line, an extinguishing agent, and a ladder or other means of accessing the aircraft, so that team integrity is maintained, the attack line is deployed for advancement, ladders or other means are used, access is gained into the fire area, effective agent application practices are used, the fire is approached, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, hazards are avoided or managed, and the fire is brought under control.

**Requisite Knowledge:** Techniques for accessing the aircraft interior according to the aircraft type, methods for advancing hand lines from an ARFF **fire-fighting** vehicle, precautions to be followed when advancing hose lines to a fire, observable results that a fire stream has been applied, dangerous structural 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, the role of the backup team in fire attack situations, attack and control techniques, and techniques for exposing hidden fires.

- 1) Techniques for accessing the aircraft interior according to aircraft type
  - a. Assessing the exterior prior to entry
    - i. Blistering or peeling of paint
    - ii. Visible signs of heavy interior fire
    - iii. Exterior is very hot to the touch
    - iv. Engine fires
    - v. Wheel assembly fires
    - vi. HVAC system fires
  - b. Access points
    - i. Doors
      1. Cabin
      2. Cargo
    - ii. Emergency exits
    - iii. Rear stairs
    - iv. Hatches

- v. Windows
  - vi. Fuselage breach
  - c. Access equipment
    - i. Ladders
      - 1. Ground ladders
      - 2. Specialty ladders
    - ii. Elevated platforms
    - iii. Mobile air stairs
    - iv. Forcible entry tools
- 2) Methods for advancing hand lines from the ARFF **fire-fighting** vehicle
- a. Proper PPE and SCBA
  - b. Deployment of hand line(s)
  - c. Advancement of hand line(s)
  - d. Two person team
  - e. Two in/two out rule
  - f. Awareness of hazards
- 3) Precautions to be followed when advancing hose lines to a fire
- a. Do not impede passenger evacuation
  - b. Deploy hand line(s) in a safe area
  - c. Watch for sharp objects
  - d. Avoid flammable liquids
  - e. Be aware of hazards present
  - f. Potential backdraft, flashover, rollover, and smoke explosion occurrences
- 4) Observable results that fire stream has been applied
- a. Steam from hose line application on a hot object (steam conversion)
  - b. Cooling
  - c. Fire knock down
  - d. Displacement of products of combustion
  - e. Smoke transformation
- 5) Dangerous structural conditions created by fire
- a. Missing structural components
  - b. Fire/flame spread to concealed areas
  - c. Instability
  - d. Molten metals
  - e. Collapses
  - f. Weakened structural components

- 6) Principles of exposure protection
  - a. Hand line(s) should be in place to protect unburned portions
  - b. Protection of exposed or surrounding objects
  - c. Adequate water supply
  - d. Proper coverage to ensure cooling effect
  - e. Wind direction
  
- 7) Potential long-term consequences of exposure to products of combustion
  - a. Carcinogenic effects
  - b. Respiratory damage
  - c. Dermatological
  - d. Product specific effects
    - i. Composites
    - ii. Fuels
    - iii. Aircraft fluids
  
- 8) Physical states of matter in which fuels are found
  - a. Solid
  - b. Liquid
  - c. Vapor
  
- 9) Common types of accidents or injuries and their causes
  - a. Types
    - i. Physical
    - ii. Psychological
  - b. Causes
    - i. Inadequate training
    - ii. Lack of critical incident stress management
    - iii. Failure to comply with safety standards
    - iv. Dangerous conditions
  
- 10) The role of the backup team in fire attack situations
  - a. Two in/two out rule
    - i. Rescue of primary entry team **Rapid Intervention Team/RIT**
    - ii. Exterior support operations
  - b. Observing and communicating conditions
  
- 11) Attack and control techniques
  - a. Point of entry
  - b. Never impede egress of passengers
  - c. Observe hottest area of fire
  - d. Direct fire attack

- e. Indirect fire attack
  - f. Cool exterior if entry is delayed
  - g. Piercing appliances
- 12) Techniques for exposing hidden fires
- a. Ventilation
  - b. Overhaul
  - c. Thermal imagers
  - d. Interior inspection
    - i. Light ballasts
    - ii. Galley area
    - iii. Lavatories
    - iv. Flight deck area
    - v. Avionics
    - vi. Cargo compartments
    - vii. Electrical components

**Requisite Skills:** Deploy ARFF fire-fighting vehicle hand line on an interior aircraft fire; gain access to aircraft interior; open, close, and adjust nozzle flow and patterns; apply agent using direct, indirect and combination attacks; advance charged and uncharged hose lines up ladders and up and down interior and exterior stairways; and locate and suppress interior fires.

(Used to be 5.3.6)

- 200-4.3.5** Attack an engine or auxiliary power unit/emergency power unit (APU/EPU) fire on an aircraft while operating as a member of a team, given approved PPE, an assignment, ARFF fire-fighting vehicle hand line or turret, a correct agent, and agent application procedures, so that agent application procedures are followed, the fire is extinguished, and the engine or APU/EPU is shut down.

**Requisite Knowledge:** Techniques for accessing the aircraft engines and APU/EPUs, operation of on-board aircraft fire-fighting systems and potential hazards, safety procedures, methods for advancing hand line from an ARFF fire-fighting vehicle, methods for operating turrets, and methods for shutting down engine and APU/EPU operation.

- 1) Techniques for accessing the aircraft engines and APU/EPUs
- a. Assessing the exterior prior to entry
    - a. Blistering or peeling of paint
    - b. Visible signs of compartment fire
    - c. Engine fires
  - b. Gaining access

- a. Hatches
    - b. Cowlings
    - c. Fire ports
  - c. Access equipment
    - a. Ladders
      - i. Ground ladders
      - ii. Specialty ladders
    - b. Elevated platforms
    - c. Mobile air stairs
    - d. Forcible entry tools
- 2) Safety procedures
- a. Avoid intake
  - b. Avoid exhaust
  - c. Avoid propellers
  - d. Engine/APU shut down
- 3) Methods for advancing hand line from an ARFF **fire-fighting** vehicle
- a. Proper PPE and SCBA
  - b. Deployment of hand line(s)
    - i. Reel lines
    - ii. Preconnected hose lines
  - c. Advancement of hand line(s)
  - d. Two person team
  - e. Two in/two out rule
  - f. Awareness of hazards
- 4) Methods for operating turrets
- a. Per manufacturer specification
  - b. As per AHJ
- 5) Methods for shutting down engine and APU/EPU operation
- a. Engine
    - i. By flight crew
      - 1. Fuel (throttles)
      - 2. On board extinguishing systems (bottles)
      - 3. Electrical (batteries)
    - ii. By ARFF crew
      - 1. Fuel (throttles)
      - 2. On board extinguishing systems (bottles)
      - 3. Electrical (batteries)
  - b. Auxiliary power unit (APU/**EPU**)

- i. By flight crew
  - 1. Fuel (throttles)
  - 2. On board extinguishing systems (bottles)
  - 3. Electrical (batteries)
- ii. By ARFF crew
  - 1. Flight deck
    - a) Fuel (throttles)
    - b) On board extinguishing systems (bottles)
    - c) Electrical (batteries)
  - 2. External controls
    - a) Engine shut down
    - b) Extinguishing systems

**Requisite Skills:** Deploy and operate ARFF fire-fighting vehicle hand line, operate turrets, gain access to aircraft engine and APU/EPU, and shut down engine and APU.

(Used to be 5.3.7)

#### 200-4.3.6

Attack a wheel assembly fire, as a member of a team, given PPE, a team, an assignment, an ARFF vehicle hand line, and correct agent, so that the fire is extinguished.

**Requisite Knowledge:** Agent selection and application procedure, special safety considerations, and the characteristics of combustible metals.

- 1) Agent selection and application procedure
  - a. Agent selection
    - i. Water
    - ii. Class D extinguishing agents
    - iii. Dry chemical
  - b. Application procedure
    - i. Mass application of water
    - ii. Adequate amount of class D agent for encapsulation
    - iii. Adequate amount of dry chemical for extinguishment
    - iv. Conservation of agent
- 2) Special safety considerations
  - a. Fusible plugs
  - b. Proper approach
  - c. Tire disintegration
  - d. Wheel fragmentation

- e. Aircraft collapse
  - f. Appropriate utilization of PPE with SCBA
  - g. Hazardous or flammable fluid release
  - h. Engine intake
  - i. Engine exhaust
- 3) The characteristics of combustible metals
- a. High ignition point
  - b. Intense pyrolysis
  - c. Extreme heat
  - d. Reactivity

**Requisite Skills:** Approach the fire in accordance with safety procedures; and select and apply agent.

(Used to be 5.3.8)

**200-4.3.7**

Ventilate an aircraft through available doors and hatches while operating as a member of a team, given PPE an assignment, tools, and mechanical ventilation devices, so that openings are created, all ventilation barriers are removed, and the heat and other products of combustion are released.

**Requisite Knowledge:** Aircraft access points; principles, advantages, limitations, and effects of mechanical ventilation; the methods of heat transfer; the principles of thermal layering within an aircraft on fire; and the techniques and safety precautions for venting aircraft.

- 1) Aircraft access points
  - a. Normal door operations
  - b. Over wing access
  - c. Cargo doors
  - d. Hatches
  - e. Breaks in structure of aircraft
- 2) Principles, advantages, limitations, and effects of mechanical ventilation
  - a. Negative pressure ventilation
    - i. Hydraulic
    - ii. Gas powered fans
    - iii. Electrical powered fans
  - b. Positive pressure ventilation
    - i. Gas powered fans
    - ii. Electrical powered fans

- 3) The methods of heat transfer
  - a. Conduction
  - b. Convection
  - c. Radiation
  - d. Direct flame impingement
  
- 4) The principles of thermal layering within an aircraft on fire
  - a. Smoke stratification
  - b. Heat travel
    - i. Vertical
    - ii. Horizontal
  
- 5) The techniques and safety precautions for venting aircraft
  - a. Techniques for venting aircraft
    - i. Mechanical
      1. Positive pressure
      2. Negative pressure
    - ii. Natural
      1. Horizontal
      2. Vertical
  - b. Safety considerations for venting aircraft
    - i. Flashover
    - ii. Rollover
    - iii. Backdraft
    - iv. Smoke explosion

**Requisite Skills:** Operate doors, hatches, and forcible entry tools; operate mechanical ventilation devices; and remove barriers.

(Used to be 5.3.9)

#### 200-4.3.8

Replenish extinguishing agents while operating as a member of a team, given an assignment, an ARFF **fire-fighting** vehicle, a fixed or mobile water source, a supply of agent, and supply lines and fittings, so that agents are available for application by the ARFF **fire-fighting** vehicle within the time established by the authority having jurisdiction (AHJ).

**Requisite Knowledge:** Re-supply procedures during an incident and operation procedures for ARFF **fire-fighting** vehicle replenishment. ~~and pumps and transfer devices.~~

- 1) Re-supply procedures during an incident

- a. Water sources
    - i. Airport water distribution system.
    - ii. Mobile water supply
    - iii. Additional water supplies
  - b. Water refill methods
    - i. Direct connection
    - ii. Overhead fill
  - c. Foam re-supply
    - i. Overhead gravity
    - ii. Mechanical or hand foam concentrate transfer pump
    - iii. 5 gallon container direct fill
  - d. Auxiliary agent refill
    - i. Knowledge of agent type
    - ii. Follow manufacturers procedures
    - iii. Service in well ventilated areas and utilize respiratory protection
- 2) Operation procedures for ARFF **fire-fighting** vehicle replenishment
- a. Per ARFF ~~vehicle~~ manufacturer specifications
  - b. Procedures per AHJ
- 3) ~~Operation procedures for pumps and transfer devices~~
- a. ~~Per manufacturer specifications~~
  - b. ~~All agent systems should be thoroughly flushed after each use~~
  - c. ~~Procedures per AHJ~~

**Requisite Skills:** Connect hose lines **and** operate valves. ~~and operate pumps and transfer devices.~~

(Used to be 5.3.10)

### 200-4.3.9

Preserve the aircraft accident scene, given an assignment and procedures, so that evidence is identified, protected, and reported according to procedures.

**Requisite Knowledge:** Airport emergency plan requirements for preservation of the scene, evidence identification, evidence protection, and evidence reporting procedures.

- 1) Airport emergency plan requirements for preservation of the scene
  - a. Scene security
  - b. Photographs
  - c. Sketches or drawings

- d. Marking evidence locations
- 2) Evidence identification
    - a. During the primary search of an aircraft accident site
      - i. Life safety is the priority during this phase of the incident
      - ii. Evidence protection is secondary
    - b. During the secondary search of an aircraft accident site
      - i. Protection of evidence should have priority
      - ii. Since all the survivors should be rescued, slow down the search and protect evidence
  - 3) Evidence protection
    - a. National Transportation Safety Board (NTSB) regulations
      - i. Removal of persons trapped or injured
      - ii. Protect the aircraft from further damage
      - iii. Protect the public from injury
    - b. Secure the scene
    - c. Document the moving of evidence
    - d. Secure and protect the flight data recorder (FDR) or cockpit voice recorder (CVR)
    - e. Special care should be taken in certain areas
      - i. In the cockpit or control areas
      - ii. Areas of primary structural failure or damage
  - 4) Evidence reporting procedures
    - a. Documentation
      - i. Responder statements
      - ii. Witness statements
      - iii. Incident reporting
      - iv. Photographs
      - v. Maps
    - b. Discuss the relationships between various aircraft parts and occupants

**Requisite Skills:** Preserve the scene for investigators, and identify, protect, and report evidence.

(Used to be 5.3.11)

- 200-4.3.10** Overhaul the accident scene, given PPE, an assignment, hand lines, and property conservation equipment, so that all fires are located, exposed, and extinguished and all property is protected from further damage.

**Requisite Knowledge:** Methods of complete extinguishment and prevention of re-ignition, reasons for conservation, operating procedures for property conservation equipment, overhaul procedures, signs of a hidden fire, methods of detecting hidden fires, and tools and equipment used for overhaul.

- 1) Methods of complete extinguishment and prevention of re-ignition
  - a. Thermal imaging cameras/**Forward Looking Infra-Red (TIC/FLIR)**
  - b. Overhaul
  - c. Secure aircraft operating systems
  - d. Vapor suppression
  
- 2) Reasons for conservation
  - a. Scene stabilization
  - b. Evidence protection
  - c. NTSB investigation
  
- 3) Operating procedures for property conservation equipment
  - a. Deployment of loss control systems
  - b. As per manufacturer's specifications
  
- 4) Overhaul procedures
  - a. Appropriate agency authorization
  - b. Use of PPE and **including** SCBA
  - c. Aircraft stabilization
  - d. Air quality monitoring
  - e. Hazardous materials considerations
  - f. Hand line protection
  - g. Evidence protection
  - h. Hot spots located
  - i. Extinguishment and cooling
  - j. Pressurized systems identified
  - k. Void spaces opened or pierced
  
- 5) Signs of a hidden fire
  - a. Smoke
  - b. Steam
  - c. Thermal imaging cameras/**Forward Looking Infra-Red (TIC/FLIR)**

- 6) Methods of detecting hidden fires
  - a. Smoke
  - b. Steam
  - c. Thermal imaging cameras/**Forward Looking Infra-Red (TIC/FLIR)**
  
- 7) Tools and equipment used for overhaul
  - a. **PPE/SCBA**
  - b. ~~Personal protective equipment~~
  - b. Hand line
  - c. Thermal imaging cameras/**Forward Looking Infra-Red (TIC/FLIR)**
  - d. Forcible entry tools
  - e. Air monitors

Requisite Skills: Use property conservation equipment; detect hidden fires, and use tools and equipment to expose hidden fires.

#### **200-4.4**      **Rescue**

This duty involves gaining access to an aircraft and assisting in the evacuation process, performing disentanglement, and initial triage.

- 200-4.4.1**      Gain access into and out of an aircraft through normal entry points and emergency hatches, **secure and** shut down ~~and safety~~ the aircraft, and assist in the evacuation process while operating as a member of a team, given PPE and an assignment, so that passenger evacuation and rescue can be accomplished.

**Requisite Knowledge:** Aircraft familiarization, including materials used in construction, aircraft terminology, automatic explosive devices, hazardous areas in and around aircraft, aircraft egress/ingress (hatches, doors, and evacuation chutes), military aircraft systems and associated hazards; capabilities and limitations of manual and power rescue tools and specialized high-reach devices, aircraft shutdown and safety procedures.

- 1) Aircraft familiarization
  - a. General aviation
  - b. Commercial
  - c. Military
  
- 2) Materials used in construction

- a. Aluminum/aluminum alloys
  - b. Steel
  - c. Magnesium/magnesium alloys
  - d. Titanium
  - e. Advanced aerospace (composite) materials
  - f. Wood
- 3) Aircraft terminology
- a. Fixed wing
  - b. Rotary wing
- 4) Automatic explosive devices
- a. Ejection seats
  - b. Canopy removers
  - c. Initiators
  - d. Rotary actuators
  - e. Thrusters
  - f. Explosive squibs
  - g. Seat catapults
  - h. Ballistic recovery system (BRS)
- 5) Hazardous areas in and around aircraft
- a. Wings
    - i. Fuel leaks and spills
    - ii. ~~Guns~~ **Weapons**/missiles/rockets
    - iii. Pinching hazards
    - iv. No step areas – **flight control surfaces**
    - v. **Anti-icing systems**
  - b. Engines
    - i. Fuel leaks and spills
    - ii. Propellers
    - iii. Jet engines
      - 1. intake
      - 2. exhaust
  - c. Fuselage
    - i. Radar systems
    - ii. Appendages
    - iii. Overheated wheel assemblies
    - iv. Tire/wheel failures
    - v. Evacuation slides
  - d. Tail

- i. Engine or APU fires
    - ii. Tail cones
    - iii. Evacuation slides
  - e. General hazards
    - i. Electrocution hazards
    - ii. Composites
    - iii. Aircraft hazardous materials
    - iv. Aircraft cargo hazards
- 6) Aircraft egress/ingress (hatches, doors, and evacuation chutes)
  - a. Aircraft doors
  - b. Aircraft hatches
  - c. Rear stairs
  - d. Tail-cone jettison
  - e. Escape slides
  - f. Emergency exits
  - g. Hatches
  - h. Windows
  - i. Fuselage breach
- 7) Military aircraft systems and associated hazards
  - a. Fire protection/detection systems
  - b. Ejection systems
  - c. Weapon systems
  - d. Exotic fuels
- 8) Capabilities and limitations of manual and power rescue tools and specialized high-reach devices
  - a. Flammable atmosphere
  - b. Stability of aircraft
  - c. Hands-on training
  - d. Safety standards apply
  - e. Hand tools
  - f. Power tools
    - i. Electric
    - ii. Hydraulic
    - iii. Pneumatic
  - g. Lifting and pulling tools
- 9) Aircraft shutdown and safety procedures
  - a. Fuel cutoff/throttle

- b. Fire shutoff “T” or “L” handles
- c. Battery switch/disconnect

**Requisite Skills:** Operate power saws and cutting tools, hydraulic devices, pneumatic devices, and pulling devices; operate specialized ladders and high-reach devices; secure aircraft safety and shutdown.

**200-4.4.2** Locate and disentangle an entrapped ~~victim~~ **person** from an aircraft as a member of a team, given **approved** PPE, a team, ~~and~~ an assignment, and rescue tools, so that the ~~victim~~ **person** is freed from entrapment without undue further injury and hazards are managed.

**Requisite Knowledge:** Capabilities and limitations of rescue tools, search procedures, hazard identification, and control methods.

- 1) Capabilities and limitations of rescue tools
  - a. Flammable atmosphere
  - b. Stability of aircraft
  - c. Hands-on training
  - d. Safety standards apply
  - e. Hand tools
  - f. Power tools
    - i. Electric
    - ii. Hydraulic
    - iii. Pneumatic
  - g. Lifting and pulling tools
- 2) Search procedures
  - a. Exterior search
  - b. Interior search
  - c. Two in/two out rule
  - d. ~~Extrication~~ **Rescue** of survivors
  - e. Primary search
  - f. Secondary search
  - g. Preservation of evidence
- 3) Hazard identification
  - a. Aircraft hazardous/flammable materials
  - b. Aircraft dangerous goods
  - c. Post-crash aircraft hazards
    - i. Fire

- ii. Electrical
- iii. Disrupted aircraft systems
- iv. ~~Etiological~~ **Biohazard**
- v. Debris
- vi. **Hazardous materials**
- vii. **Military aircraft hazards**

- 4) Control methods
  - a. Safety
  - b. Isolation
  - c. Insulation
  - d. Extinguishment

**Requisite Skills:** Perform search procedures, control hazards, remove victims, and operate rescue tools.

**200-4.4.3** Implement initial triage of the victims of an aircraft accident, given PPE, an assignment, and the triage protocol of the AHJ, so that each victim is evaluated and correctly categorized according to protocol.

**Requisite Knowledge:** Categories of triage according to the triage protocol of the AHJ, and methods of assessment.

- 1) Categories of triage according to the triage protocol of the AHJ
- 2) Methods of assessment
  - a. START – simple triage and rapid treatment
  - b. As per AHJ

**Requisite Skills:** Triage patients per protocol.

**CHAPTER TWO  
BASIC AIRCRAFT RESCUE FIRE SUPPRESSION  
CURRICULUM OUTLINE**

<b>SECTION</b>	<b>SUBJECT</b>	<b>RECOMMENDED HOURS</b>
200 – 4.1	General	18
200 – 4.2	Response	20
200 – 4.3	Fire Suppression	48
200 – 4.4	Rescue	34
	<b>TOTAL RECOMMENDED HOURS*</b>	<b>120</b>

\* The recommended hours for training include time for skills evaluation and are based on 12 students. Hours needed depend on the actual number of students.

## REFERENCE LIST FOR THE BASIC AIRCRAFT RESCUE FIRE SUPPRESSION CURRICULUM

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is not all inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

### Required References

~~AC 150/5200-12B~~ **AC 150/5200-12C**, Fire Department Responsibility in Protecting Evidence at the Scene of an Aircraft Accident, September 3, 1999 **September 28, 2009**: [www.airweb.faa.gov](http://www.airweb.faa.gov)

~~AC 150/5200-31A~~ **AC 150/5200-31C**, Federal Aviation Administration Airport Emergency Plan, September 30, 1999 **June 30, 2011**: [www.airweb.faa.gov](http://www.airweb.faa.gov)

AC 150/5210-6D, Aircraft Fire Extinguishing Agents, July 8, 2004: [www.airweb.faa.gov](http://www.airweb.faa.gov)

AC 150/5210-14 B, Aircraft Rescue Fire Fighting Equipment, Tools and Clothing, September 30, 2008: [www.airweb.faa.gov](http://www.airweb.faa.gov)

~~AC 150/5210-17A~~ **AC 150/5210-17C**, Programs for Training of Aircraft Rescue and Firefighting Personnel, April 28, 2006 **June 12, 2015**: [www.airweb.faa.gov](http://www.airweb.faa.gov)

*Aircraft Rescue and Fire Fighting*. (5<sup>th</sup> edition) (2009) **(6<sup>th</sup> edition) (2015)**. Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA)

*Code of Federal Regulations, 14 CFR, Part 139, Subpart A, Certification of Airports: General*. (January 1, 2007 edition) **(Amended January 16, 2013)** U.S. Department of Transportation, Federal Aviation Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr>

*Code of Federal Regulations, 14 CFR, Part 139, Subpart D, Certification of Airports: Operations*. (January 1, 2007 edition) **(Amended January 16, 2013)** U.S. Department of Transportation, Federal Aviation Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr>

Code of Federal Regulations, 14 CFR, Part 139.311 Marking, signs and lighting (January 1, 2007 edition) **(Amended January 16, 2013)** U.S. Department of Transportation, Federal Aviation Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr>

Code of Federal Regulations, 14 CFR, Part 139.325 Airport emergency plan: (January 1, 2007 edition) **(Amended January 16, 2013)** U.S. Department of Transportation, Federal Aviation Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr>

Code of Federal Regulations, 14 CFR, Part 139.329, Pedestrians and ground vehicles (January 1, 2007 edition) **(Amended January 16, 2013)** U.S. Department of Transportation, Federal Aviation Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr>

Code of Federal Regulations, 49 CFR, Part 175.310 Transportation of flammable liquid fuel; aircraft only means of transportation (October 1, 2006 ed.). **(October 1, 2011 ed.)** U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration <http://www.gpoaccess.gov/cfr/retrieve.html>  
<https://www.gpo.gov/fdsys/granule/CFR-2011-title49-vol2/CFR-2011-title49-vol2-sec175-310>

Code of Federal Regulations, 49 CFR, Part 830.10 Preservation of aircraft wreckage, mail, cargo, and records (October 1, 2006 edition) U.S. Department of Transportation, National Transportation Safety Board <http://www.gpoaccess.gov/cfr/retrieve.html>  
<https://www.gpo.gov/fdsys/granule/CFR-2006-title49-vol7/CFR-2006-title49-vol7-sec830-10>

*Essentials of Fire Fighting and Fire Department Operations*. (5th edition) (2009) **(6<sup>th</sup> edition) (2013)**. Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA)

National Transportation Safety Board Accident Reports, <http://www.nts.gov>.

*NFPA 402: Aircraft Rescue and Fire-Fighting Operations*, (2008 edition) **(2013 edition)**. NFPA Publications Quincy, MA. National Fire Protection Association

*NFPA 1003: Standard for Airport Fire Fighter Professional Qualifications*, (2010 edition) (2015 edition). NFPA Publications Quincy, MA: NFPA Publications. National Fire Protection Association

*NFPA 1403: Standard on Live Fire Training Evolutions, (2007 edition) **(2012 edition)**. NFPA Publications Quincy, MA. National Fire Protection Association*

*NFPA 1500: Standard on Fire Department Occupational Safety and Health Program, (2007 edition) **(2013 edition)** NFPA Publications Quincy, MA: NFPA Publications. National Fire Protection Association*

### **Recommended References**

**The most current edition of the following publications are recommended (not required) supplemental material for program use.**

**[For additional info on solid fuels] Jones and Bartlett, Fire Investigator, 4<sup>th</sup> Ed. pp. 371-372**

**See also: *Essentials of Fire Fighting and Fire Department Operations. (6<sup>th</sup> edition)(2013). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA) pp. 228-230***

**USAF TO 00-105E-9**

**<http://legacy.dodffcert.com/00-105e-9/>**

**ARFF Vehicle and High Reach Extendable Turret AC 150/5210-23 Sept 30, 2010**

**[http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150\\_5210\\_23.pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5210_23.pdf)**

**Ballistic recovery systems (BRS) FAA 13-04 cert alert “Additional Precautions for Approaching Aircraft with Ballistic Parachutes, Ejection Seats, and Airbags” July 29, 2013**

**[https://www.faa.gov/airports/airport\\_safety/certalerts/media/cert1304.pdf](https://www.faa.gov/airports/airport_safety/certalerts/media/cert1304.pdf)**

**Unmanned aircraft/drones UAV/UAS**

**<https://www.faa.gov/uas/>**

**FAA Advisory Circular AC120-60B (anti-icing, de-icing isolation) December 20, 2004**

**[https://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.information/documentID/23199](https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/23199)**

**Diesel particulate filter (DPF) regeneration**

**[https://www.iafc.org/files/1EVM/FAMA\\_EmerVehEmissionsSysGuide.pdf](https://www.iafc.org/files/1EVM/FAMA_EmerVehEmissionsSysGuide.pdf)**

**150/5230-4B – Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports,**

**Sept. 28, 2012**

**[http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150\\_5230\\_4b.pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5230_4b.pdf)**

**Commercial aviation Alternative Fuels Initiative. Information on biodiesel/alt fuels**

**<http://www.caafi.org/>**

**Pumping and Aerial Apparatus Driver/Operator Handbook (3rd ed.) (2014). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.**

**National Defense Area (Department of Defense)**

**Official definition: [http://www.dtic.mil/doctrine/new\\_pubs/jp1\\_02.pdf](http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf)**

**International Association for Disaster Preparedness and Response (DERA) guide for responding to military aircraft**

**crash: <http://www.disasters.org/dera/library/ACCIDENT.PDF>**

**Department of Defense Nuclear accident National Defense Area**

**guidance: <http://www.au.af.mil/au/awc/awcgate/dod/d523016p.pdf>**

**Sustainable Alternative Jet Fuels**

**[https://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/research/alternative\\_fuels/](https://www.faa.gov/about/office_org/headquarters_offices/apl/research/alternative_fuels/)**

4. **Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 423, Fire Suppression, including but not limited to, Subchapter A, Minimum Standards for Structure Fire Protection Personnel Certifications, §423.13, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Aircraft Rescue Fire Fighting Personnel, §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 from the International Fire Service Accreditation Congress or the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2008 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General) as:

- (A) Fire Fighter I, Fire Fighter II, Hazardous Materials Awareness Level Personnel; and
  - (B) Hazardous Materials Operations Level Responders including the Mission-Specific Competencies for Personal Protective Equipment and Product Control under the current edition; or
  - (C) NFPA 472 Hazardous Materials Operations prior to the 2008 edition; and
- (D) must meet the medical requirements outlined in §423.1(c) of this title (relating to Minimum Standards for Structure Fire Protection Personnel); or
- (2) complete a commission-approved basic structure fire suppression program, meet the medical requirements outlined in §423.1(c) of this title, and successfully pass the 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-approved Basic Fire Suppression Curriculum, as specified in Chapter 1 of the commission's Certification Curriculum Manual; or
  - (B) completion of an out-of-state, and/or military training program deemed equivalent to the 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-approved Basic Fire Suppression Curriculum.
- (b) A basic fire suppression program may be submitted to the commission for approval by another jurisdiction as required in Texas Government Code, Chapter 419, §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 if the subjects taught, subject content, and total hours of training meet or exceed those contained in Chapter 1 of the 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. This subsection will expire on August 1, 2016.]~~

**(a)**~~(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.

**(b)** ~~[(e)]~~ 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.

**(c) In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

## 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 from either:
  - (A) the International Fire Service Accreditation Congress; or
  - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2010 or later edition of the NFPA standard

applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or

- (3) complete a commission approved aircraft rescue fire suppression training program and successfully pass the 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 approved Basic Aircraft Rescue Fire Suppression Curriculum as specified in Chapter 2 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 exceeds the 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. This subsection will expire on August 1, 2016.]~~

[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

5. **Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 425, Fire Service Instructors, including but not limited to, §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(47) 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 from either:
  - (A) the International Fire Service Accreditation Congress (IFSAC); or
  - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2007 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); 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(47) 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 from either:
- (A) the International Fire Service Accreditation Congress (IFSAC); or
- (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2007 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); 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(47) 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 hold commission Instructor I certification prior to March 1, 2006 may be granted an IFSAC seal for Instructor I by making application to the commission and paying the applicable fee before August 1, 2016.~~] Individuals completing a commission approved Fire Service Instructor I training program and passing the applicable state examination may be granted an IFSAC seal for Instructor I by making application to the commission and paying the applicable fee.
- (b) [~~Individuals who hold commission Instructor II certification prior to March 1, 2006 may be granted an IFSAC seal for Instructor II by making application to the commission and paying the applicable fee [before August 1, 2016].~~] Individuals holding an IFSAC Instructor I seal, completing a commission approved Fire Service Instructor II training program, and passing the applicable state examination may be granted an IFSAC seal for Instructor II by making application to the commission and paying the applicable fee.
- (c) [~~Individuals who hold commission Instructor III certification prior to March 1, 2006 may be granted an IFSAC seal for Instructor III by making application to the commission and paying the applicable fee before August 1, 2016.~~] Individuals holding an IFSAC Instructor II seal, completing a commission approved Fire Service Instructor III training program, and passing the applicable state examination may be granted an IFSAC seal for Instructor III by making application to the commission and paying the applicable fee.

**(d) In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

- 6. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 429, Minimum Standards For Fire Inspector Certification, including but not limited to, §429.211, International Fire Service Accreditation Congress (IFSAC) Seal.**

## CHAPTER 429

### 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 from either:
  - (A) the International Fire Service Accreditation Congress; or
  - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or
- (2) complete a commission approved Basic Fire Inspector program and successfully pass the 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 approved Basic Fire Inspector Curriculum, as specified in Chapter 4 of the 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 for evaluation and found to meet the minimum requirements as listed in the commission approved Basic Fire Inspector Curriculum as specified in Chapter 4 of the 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).

(D) documentation of the receipt of Fire Inspector I, Fire Inspector II, and Plan Examiner I certificates issued by the State Firemen's and Fire Marshals' Association of Texas that are deemed equivalent to a commission approved Basic Fire Inspector curriculum.

**§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. This subsection will expire on August 1, 2016.]~~

**(a)**~~[(b)]~~ Individuals who hold commission Fire Inspector certification **issued** 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.

**(b)**~~[(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.

**(c) In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

- 7. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 431, Fire Investigation, including but not limited to, Subchapter A, Minimum Standards for Arson Investigator Certification, §431.13, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Fire Investigator Certification, §431.211, International Fire Service Accreditation Congress (FSAC) 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 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 as a Basic Arson Investigator an individual must:

- (1) possess a current basic peace officer's license from the Texas Commission on Law Enforcement or documentation that the individual is a federal law enforcement officer;
- (2) hold a current license as a peace officer and notify the 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 approved basic fire investigation training program and successfully pass the 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 approved Fire Investigator Curriculum, as specified in Chapter 5 of the 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 for evaluation and found to meet the minimum requirements as listed in the commission approved Fire Investigator Curriculum as specified in Chapter 5 of the 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 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 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. This subsection will expire on August 1, 2016.]~~

~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

## 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
  - (3) sixty college semester hours or an associate degree, that must include 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. This subsection will expire on August 1, 2016.]~~

~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

- 8. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 433, Minimum Standards For Driver/Operator-Pumper, including but not limited to, §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 from either:

(A) the International Fire Service Accreditation Congress; or

(B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or

(3) complete a commission approved Driver/Operator-Pumper Curriculum and successfully pass the 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 approved Driver/Operator-Pumper Curriculum as specified in Chapter 7 of the commission's Certification Curriculum Manual;

(B) complete an out-of-state training program that has been submitted to the commission for evaluation and found to be equivalent to or exceeds the commission approved Driver/Operator-Pumper Curriculum; or

(C) complete a military training program that has been submitted to the commission for evaluation and found to be equivalent to or exceeds the commission approved Driver/Operator-Pumper 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 7 (pertaining to Driver/Operator-Pumper) of the 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. This subsection will expire on August 1, 2016.]~~

~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

9. **Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 451, Fire Officer, including but not limited to, Subchapter A, Minimum Standards for Fire Officer I, §451.7, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter B, Minimum Standards for Fire Officer II, §451.207, International Fire Service Accreditation Congress (IFSAC) Seal.**

**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; and

(A) possess valid documentation as a Fire Fighter II and Fire Officer I from either:

(i) the International Fire Service Accreditation Congress; or

(ii) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or

(B) complete a commission approved Fire Officer I program and successfully pass the 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 approved Fire Officer I Curriculum as specified in Chapter 9 of the commission's Certification Curriculum Manual;

(ii) 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 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 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 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. This subsection will expire on August 1, 2016.]~~
- ~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

**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; and

(3) hold, as a minimum, Fire Service Instructor I certification through the commission; and

(A) possess valid documentation as Fire Officer II; from either:

(i) the International Fire Service Accreditation Congress; or

(ii) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or

(B) complete a commission approved Fire Officer II program and successfully pass the 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 approved Fire Officer II Curriculum as specified in Chapter 9 of the commission's Certification Curriculum Manual;

(ii) 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 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 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.

(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. This subsection will expire on August 1, 2016.]~~

~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

**10. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 453, Hazardous Materials, including but not limited to, Subchapter A, Minimum Standards For Hazardous Materials Technician, §453.7, International Fire Service Accreditation Congress (IFSAC) Seal.**

## 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 from either:
    - (A) the International Fire Service Accreditation Congress; or
    - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2008 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); 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; or
    - (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 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. This subsection will expire on August 1, 2016.]~~

~~[(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. **In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.**

**11. Discussion and possible action on current commission proposed rule changes to title 37 TAC, Chapter 451, Fire Officer, including but not limited to, Subchapter C, Minimum Standards for Fire Officer III, new §451.307, International Fire Service Accreditation Congress (IFSAC) Seal; and Subchapter D, Minimum Standards for Fire Officer IV, new §451.407, International Fire Service Accreditation Congress (IFSAC) Seal.**

## 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; from either:
  - (A) the International Fire Service Accreditation Congress; or
  - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); 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; or
  - (vii) Community Risk Reduction.
- (7) Special temporary provision: Through February 2015, an individual is eligible for Fire Officer III certification upon documentation of the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 edition of the NFPA standard applicable to this discipline.
- (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.

#### **§451.307 International Fire Service Accreditation Congress (IFSAC) Seal.**

- (a) Individuals holding a current commission Fire Officer III certification *that was issued from a commission examination and* received prior to September 1, 2016, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Officer III by making application to the commission for the IFSAC seal and paying applicable fees. This subsection will expire on August 31, 2017.**
- (b) Individuals completing a commission approved Fire Officer III program; documenting IFSAC seals for Fire Fighter II, Instructor II and Fire Officer II; and passing the applicable state examination, may be granted an IFSAC seal as a Fire Officer III by making application to the commission for the IFSAC seal and paying applicable fees. *In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.***

**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; from either:
  - (A) the International Fire Service Accreditation Congress; or
  - (B) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); 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: Through February 2015, an individual is eligible for Fire Officer IV certification upon documentation of the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 edition of the NFPA standard applicable to this discipline.
- (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.

#### **§451.407 International Fire Service Accreditation Congress (IFSAC) Seal.**

- (a) Individuals holding a current commission Fire Officer IV certification *that was issued from a commission examination and* received prior to September 1, 2016, may be granted an International Fire Service Accreditation Congress (IFSAC) seal as a Fire Officer IV by making application to the commission for the IFSAC seal and paying applicable fees. This subsection will expire on August 31, 2017.**
- (b) Individuals completing a commission approved Fire Officer IV program; documenting IFSAC seals for Fire Fighter II, Instructor II and Fire Officer III; and passing the applicable state examination, may be granted an IFSAC seal as a Fire Officer IV by making application to the commission for the IFSAC seal and paying applicable fees. *In order to qualify for an IFSAC seal, an individual must submit the application for the seal prior to the expiration of the examination.***

**12. Discussion and possible action on current commission proposed rule changes to title 37 TAC, Chapter 439, Examinations for Certification, including but not limited to, Subchapter A, Examinations For On-Site Delivery Training, §439.1, Requirements — General, §439.3, Definitions, §439.7, Eligibility, §439.9, Grading, and §439.11, Commission-Designated Performance Skill Evaluations.**

**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 commission rules and; as applicable, with:
  - (1) International Fire Service Accreditation Congress (IFSAC) regulations; or
  - (2) National Board on Fire Service Professional Qualifications (Pro Board) 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 commission issued course approval number for which the examination was conducted;
    - (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 specified 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) 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.
- (e) Commission examinations that receive a passing grade shall expire two years from the date of the examination.
- (f) An examination for Basic Structure Fire Protection shall consist of four sections: Fire Fighter I, Fire Fighter II, Hazardous Materials Awareness Level, and Hazardous Materials Operations

Level including the Mission-Specific Competencies for Personal Protective Equipment and Product Control. **The examinee must pass each section of the examination with a minimum score of 70% in order to qualify for certification.**

- (g) An examination for Basic Fire Inspector shall consist of three sections: Inspector I, Inspector II, and Plan Examiner I. **The examinee must pass each section of the examination with a minimum score of 70% in order to qualify for certification.**
- (h) An examination for Basic Structure Fire Protection and Intermediate Wildland Fire Protection shall consist of five sections: Fire Fighter I, Fire Fighter II, First Responder Awareness, First Responder Operations, and Intermediate Wildland Fire Protection. **The examinee must pass each section of the examination with a minimum score of 70% in order to qualify for certification.**
- (i) All other state examinations consist of only one section.
- (j) The individual who fails to pass a commission examination for state certification will be given one additional opportunity to pass the examination or **section(s)** [~~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.
- (k) An individual may obtain a new certificate in a discipline which was previously held by passing a commission proficiency examination.
- (l) 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.
- (m) If an individual completes **a commission** [~~an~~] approved training program, **or a 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 **may use only one of the following examination processes for certification:**
- (1) pass a commission examination; or**
  - (2) submit documentation of the successful completion of the Pro Board examination process administered by the Texas A&M Engineering Extension Service; and**
  - (3) meet any other certification requirements in order to become eligible for certification as fire protection personnel.**
  - (4) An individual cannot use a combination of the two examination processes in this subsection *from a single commission approved class* for certification. An individual who chooses to submit to the commission examination process may not utilize the**

~~**other process toward certification.** [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.]~~

(n) 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 statement by the provider of training 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 qualifies an individual to take an original certification examination. **The certificate expires two years from the date of completion. If an individual does not take the certification examination prior to the expiration of the certificate of completion, he or she must again complete the curriculum in order to obtain a new certificate of completion.**

(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 commission staff 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 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 or other instructor qualification as allowed by §427.307(h) and (i) of this title (relating to On-Site and Distance Training Provider Staff Requirements) for Wildland courses only, 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 (relating to Examinations for Certification).

**(11) Sectional examination -- A test that covers one section of a multiple-section examination.**

**§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 **if the original examination grade is still active**, ~~[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, government 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.
- (b) ~~The [During the course of instruction, the ]~~training provider shall test ~~[ for competency, ]~~the commission designated performance skills **for competency**. The skill evaluations **may only** ~~[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 system. 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) If performance skill evaluations are not conducted for a student during the course of instruction, they must be conducted within ninety (90) days following the end date of the course. If performance skill evaluations are not conducted within the ninety (90) day period, the student must repeat the course. The ninety (90) day period may be extended for students who were unable to complete their performance skill evaluations due to injury, illness, military commitment, or other situation beyond their control.**

- (e)** ~~(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.

- (f)** ~~(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 an~~[the state]~~ examination, **sectional examination, or retest** will be based upon the **specific examination, or** number of recommended hours **for a** ~~[in the]~~ particular curriculum or section **as shown in the table below.** ~~[being tested. The standard is outlined below]~~ **Any pilot questions added to an examination, sectional examination, or retest will be in addition to the number of exam questions.**

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

<u>Examination</u>	<u>Section</u>	<u>Number of Exam Questions</u>	<u>Maximum Possible Number of Pilot Questions</u>	<u>Time Allowed</u>
<b>Basic Structure FP</b>	<b><u>Hazardous Materials Awareness</u></b>	<b><u>25</u></b>		
	<b><u>Hazardous Materials Operations</u></b>	<b><u>25</u></b>		
	<b><u>Firefighter I</u></b>	<b><u>100</u></b>		
	<b><u>Firefighter II</u></b>	<b><u>75</u></b>		
	<b><u>TOTAL</u></b>	<b><u>225</u></b>	<b><u>25</u></b>	<b><u>4.5 Hours</u></b>
<b>Basic Fire Inspector</b>				
<b>Basic Fire Inspector</b>	<b><u>Inspector I</u></b>	<b><u>50</u></b>		
	<b><u>Inspector II</u></b>	<b><u>50</u></b>		
	<b><u>Plan Examiner I</u></b>	<b><u>50</u></b>		
	<b><u>TOTAL</u></b>	<b><u>150</u></b>	<b><u>25</u></b>	<b><u>3.0 Hours</u></b>
<b>Basic Structure FP/ Intermediate Wildland FP</b>				
<b>Basic Structure FP/ Intermediate Wildland FP</b>	<b><u>Hazardous Materials Awareness</u></b>	<b><u>25</u></b>		
	<b><u>Hazardous Materials Operations</u></b>	<b><u>25</u></b>		
	<b><u>Firefighter I</u></b>	<b><u>100</u></b>		
	<b><u>Firefighter II</u></b>	<b><u>75</u></b>		
	<b><u>Intermediate Wildland FP</u></b>	<b><u>25</u></b>		
	<b><u>TOTAL</u></b>	<b><u>250</u></b>	<b><u>25</u></b>	<b><u>5.0 Hours</u></b>
<b>FOR ALL OTHER EXAMINATIONS, SECTIONAL EXAMINATIONS, AND RETESTS</b>				
	<b><u>Recommended Hours</u></b>	<b><u>Number of Exam Questions</u></b>	<b><u>Maximum Possible Number of Pilot Questions</u></b>	<b><u>Time Allowed</u></b>
<b>IF THE RECOMMENDED HOURS FOR THE CURRICULUM OR SECTION IS:</b>	<b><u>Less than 30</u></b>	<b><u>25</u></b>	<b><u>5</u></b>	<b><u>30 Minutes</u></b>
	<b><u>31 to 100</u></b>	<b><u>50</u></b>	<b><u>5</u></b>	<b><u>1.0 Hour</u></b>
	<b><u>101 to 200</u></b>	<b><u>75</u></b>	<b><u>10</u></b>	<b><u>1.5 Hours</u></b>
	<b><u>201 to 300</u></b>	<b><u>100</u></b>	<b><u>15</u></b>	<b><u>2.0 Hours</u></b>
	<b><u>301 to 400</u></b>	<b><u>125</u></b>	<b><u>20</u></b>	<b><u>2.5 Hours</u></b>
	<b><u>401 or More</u></b>	<b><u>150</u></b>	<b><u>25</u></b>	<b><u>3.0 Hours</u></b>

**13. Discussion and possible action on proposed rule changes to title 37 TAC, Chapter 435, Fire Fighter Safety, including but not limited to, §435.25, Courage to be Safe So Everyone Goes Home Program.**

## **Chapter 435**

### **Fire Fighter Safety**

#### **CHAPTER 435**

#### **FIRE FIGHTER SAFETY**

##### **§435.1 Protective Clothing.**

A regulated fire department shall:

- (1) purchase, provide, and maintain a complete set of protective clothing for all fire protection personnel who would be exposed to hazardous conditions from fire or other emergencies or where the potential for such exposure exists. A complete set of protective clothing shall consist of garments including bunker coats, bunker pants, boots, gloves, helmets, and protective hoods, worn by fire protection personnel in the course of performing fire-fighting operations;
- (2) ensure that all protective clothing which are used by fire protection personnel assigned to fire suppression duties comply with the minimum standards of the National Fire Protection Association suitable for the tasks the individual is expected to perform. The National Fire Protection Association standard applicable to protective clothing is the standard in effect at the time the entity contracts for new, rebuilt, or used protective clothing; and
- (3) maintain and provide upon request by the commission, a departmental standard operating procedure regarding the use, selection, care, and maintenance of protective clothing which complies with NFPA 1851, Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles.
- (4) To ensure that protective clothing for fire protection personnel continues to be suitable for assigned tasks, risk assessments conducted in accordance with NFPA 1851 shall be reviewed and revised as needed, but in any case not more than five years following the date of the last risk assessment.

##### **§435.3 Self-Contained Breathing Apparatus.**

The employing entity shall:

- (1) purchase, provide, and maintain a complete self-contained breathing apparatus for each on-duty fire protection personnel who engage in operations where IDLH atmospheres may be encountered, where the atmosphere is unknown or would be exposed to hazardous atmospheres from fire or other emergencies or where the potential for such exposure exists;
- (2) ensure that all self-contained breathing apparatus used by fire protection personnel complies with the minimum standards of the National Fire Protection Association identified in NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters;

- (A) the National Fire Protection Association standard applicable to a self-contained breathing apparatus is the standard in effect at the time the entity contracts for new, rebuilt, or used self-contained breathing apparatus;
- (B) an entity may continue to use a self-contained breathing apparatus in use or contracted for before a change in the National Fire Protection Association standard, unless the commission determines that the continued use of the self-contained breathing apparatus constitutes an undue risk to the wearer, in which case the commission shall order that the use be discontinued and shall set an appropriate date for compliance with the revised standard;
- (3) develop an air quality program that complies with the most recent edition of the NFPA 1989 Standard on Breathing Air Quality for Emergency Services Respiratory Protection;
- (4) maintain and supply upon request by the commission, records and reports documenting compliance with commission requirements concerning self-contained breathing apparatus and breathing air. Records of all tests shall be made and the records shall be retained for a period of no less than three years;
- (5) maintain and provide upon request by the commission, a departmental standard operating procedure regarding the use of self-contained breathing apparatus; and
- (6) maintain and provide upon request by the commission, a department standard operating procedure regarding the selection, care, and maintenance of self-contained breathing apparatus that complies with the most recent edition of the NFPA 1852 Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA).

#### **§435.5 Commission Recommendations.**

The commission recommends that all employing entities use as a guide the following publications:

- (1) NFPA 1403 "Live Fire Training Evolutions";
- (2) NFPA 1500 "Fire Department Occupational Safety and Health Program;"
- (3) IAFF/IAFC - "Fire Service Joint Labor Management Wellness-Fitness Initiative."

#### **§435.7 Fire Department Staffing Studies.**

- (a) Section 419.022(a)(4) Texas Government Code provides that the commission may on request, assist in performing staffing studies of fire departments. Staffing studies must take into consideration all the objectives and missions of the fire department. Many staffing studies have been developed that can be used to assist in evaluating the needs of a fire department.
- (b) A city should ultimately decide on the level of fire protection it is willing to provide to its citizens. The city and fire department should, as a minimum, address the needs of prevention, investigation and suppression as outlined in the appropriate National Fire

Protection Association Standards. That decision should be based on facts, the safety of its citizens, and the safety of the fire fighters providing that protection.

- (c) The commission will assist by maintaining information pertinent to fire department staffing. The information shall be maintained in the Ernest A. Emerson Fire Protection Resource Library at the commission. Copies shall be made available, free of charge, to anyone requesting such information to the extent permitted by copyright laws.

#### **§435.9 Personal Alert Safety System (PASS).**

The employing entity shall:

- (1) purchase, provide, and maintain a PASS device for each on duty fire protection personnel who engage in operations where IDLH atmospheres may be encountered, or where the atmosphere is unknown, or where hazardous conditions from fire or other emergencies exist, or where the potential for such exposure exists;
- (2) ensure that all PASS devices used by fire protection personnel comply with the minimum standards of the National Fire Protection Association identified in NFPA 1982, Standard on Personal Alert Safety Systems (PASS) for Fire Fighters:
  - (A) the National Fire Protection Association standard applicable to a PASS device is the standard in effect at the time the entity contracts for new, rebuilt, or used PASS devices;
  - (B) an entity may continue to use a PASS device that meets the requirements of an earlier edition of NFPA 1982, unless the commission determines that the continued use of the PASS device constitutes an undue risk to the wearer, in which case the commission shall order that the use be discontinued and shall set an appropriate date for compliance with the revised standard;
- (3) ensure that the PASS device assigned to an individual user be inspected at the beginning of each duty period and before each use.
- (4) maintain and provide upon request by the commission, a departmental standard operating procedure regarding the proper use, selection, care and maintenance of PASS devices.

#### **§435.11 Incident Management System (IMS).**

- (a) The fire department shall develop, maintain and use an incident management system.
- (b) The incident management system shall:
  - (1) include a written operating procedure for the management of emergency incidents;
  - (2) require that the IMS be used at all emergency incidents;
  - (3) require operations to be conducted in a manner that recognizes hazards and assists in the prevention of accidents and injuries;
  - (4) require that all fire protection personnel be trained in the use of the IMS; and

- (5) require that the IMS be applied to all drills, exercises and all other situations that involve hazards similar to those encountered at an actual emergency.
- (c) The IMS shall meet the requirements of the applicable sections of the NFPA 1561, Standard on Fire Department Incident Management System.
- (d) The commission recommends departments follow the National Incident Management System (NIMS) when developing their incident management system.

**§435.13 Personnel Accountability System.**

- (a) The fire department shall develop, maintain and use a personnel accountability system that provides for a rapid accounting of all personnel at an emergency incident.
- (b) The accountability system shall:
  - (1) require all fire protection personnel be trained in the use of the accountability system;
  - (2) require that the fire protection personnel accountability system be used at all incidents;
  - (3) require that all fire protection personnel operating at an emergency incident to actively participate in the personnel accountability system; and
  - (4) require that the incident commander be responsible for the overall personnel accountability system for the incident.
- (c) The fire department shall be responsible for developing the system components required to make the personnel accountability system effective.
- (d) The personnel accountability system shall meet the minimum standards required by the National Fire Protection Association 1561, Standard on Fire Department Incident Management System. If the standard is revised, the fire department shall have one (1) year from the effective date of the new standard to comply.

**§435.15 Operating At Emergency Incidents.**

- (a) The fire department shall develop, maintain and use a standard operating procedure for fire protection personnel operating at emergency incidents.
- (b) The standard operating procedure shall:
  - (1) specify an adequate number of personnel to safely conduct emergency scene operations;
  - (2) limit operations to those that can be safely performed by personnel at the scene;
  - (3) require all personnel to be trained in and use the standard operating procedures; and
  - (4) comply with §435.17 (Procedures for Interior Structural Fire Fighting).

- (c) The fire department may use standards established by the National Fire Protection Association for fire protection personnel operating at an emergency incident.

**§435.17 Procedures for Interior Structural Fire Fighting (2-In /2-Out Rule).**

- (a) The fire department shall develop written procedures that comply with the Occupational Safety and Health Administration's Final Rule, 29 CFR Section 1910.134(g)(4) by requiring:
- (1) a team of at least four fire protection personnel must be assembled before an interior fire attack can be made when the fire has progressed beyond the incipient stage;
  - (2) at least two fire protection personnel to enter the IDLH atmosphere and remain in visual or voice (not radio) contact with each other;
    - (A) Visual means that the fire protection personnel must be close enough to see each other.
    - (B) Voice means that the fire protection personnel of the entry team must be close enough to speak to one another without the use of radios.
  - (3) at least two fire protection personnel remain located outside the IDLH atmosphere to perform rescue of the fire protection personnel inside the IDLH atmosphere;
  - (4) all fire protection personnel engaged in interior structural fire fighting use self-contained breathing apparatus and be clothed in a complete set of protective clothing as identified in Chapter 435;
  - (5) all fire protection personnel located outside the IDLH atmosphere be equipped with appropriate retrieval equipment where retrieval equipment would contribute to the rescue of the fire protection personnel that have entered the IDLH atmosphere;
  - (6) one of the outside fire protection personnel must actively monitor the status of the inside fire protection personnel and not be assigned other duties. The second outside fire protection personnel may be assigned to an additional role, including, but not limited to, incident commander, safety officer, driver-operator, command technician or aide, or fire fighter/EMS personnel, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any fire protection personnel working at the scene;
  - (7) the fire protection personnel outside the IDLH atmosphere must remain in communication (including, but not limited to, radio) with the fire protection personnel in the IDLH atmosphere. Use of a signal line (rope) as a communications instrument for interior fire fighting is not permitted by the commission. This does not preclude the use of rescue guide ropes (guide line or lifeline or by what ever name they may be called) used during structural searches; and
  - (8) each outside fire protection personnel must have a complete set of protective clothing and self-contained breathing apparatus, as identified in Chapter 435, immediately accessible for use if the need for rescue activities inside the IDLH atmosphere is necessary.

- (b) The fire department shall comply with the 2-in/2-out rule as described in this section except in an imminent life-threatening situation when immediate action could prevent the loss of life or serious injury before the team of four fire protection personnel are assembled.

**§435.19 Enforcement of Commission Rules.**

- (a) The commission shall enforce all commission rules at any time, including, but not limited to, commission investigations, fire department inspections, or upon receiving a written complaint from an identified person or entity of an alleged infraction of a commission rule.
- (b) The commission shall not provide prior notification of an inspection to a fire department.
- (c) Upon receipt of a signed complaint alleging a violation of a commission rule, the commission shall have 30 days to initiate an investigation and report back to the complainant its progress.
- (d) Upon substantiating the validity of a written complaint, the commission shall follow the procedures outlined in Texas Government Code, Chapter 419, §419.011(b) and (c).

**§435.21 Fire Service Joint Labor Management Wellness-Fitness Initiative.**

- (a) A fire department shall assess the wellness and fitness needs of the personnel in the department. The procedure used to make this assessment shall be written and made available for Commission inspection.
- (b) A fire department shall develop and maintain a standard operating procedure to address those needs.
- (c) The approach to the fitness needs of the department shall be based on the local assessment and local resources.
- (d) The standard operating procedure shall be made available to the Commission for inspection.

**§435.23 Fire Fighter Injuries.**

- (a) A fire department shall report all Texas Workers' Compensation Commission reportable injuries that occur to on-duty regulated fire protection personnel on the Commission form.
- (b) Minor injuries are those injuries that do not result in the fire fighter missing more than one duty period or does not involve the failure of personal protective equipment. Minor injuries shall be reported within 30 business days of the injury event.
- (c) Major injuries are those that require the fire fighter to miss more than one duty period. Major injuries shall be reported within five business days of the injury event.
- (d) Investigatable injuries are those resulting from the malfunction of personal protective equipment, failure of personal protective equipment to protect the fire fighter from injury, or injuries sustained from failure to comply with any provision of Commission mandated department SOPs. Investigatable injuries shall be reported within five business days of the injury event.

- (e) The regulated entity shall secure any personal protective equipment involved in a fire fighter injury and shall be made available to the Commission for inspection.

#### **§435.25 Courage to be Safe So Everyone Goes Home Program.**

- (a) In an effort to improve firefighter safety in the State of Texas, all regulated entities will ensure that the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program be completed as part of the continuing education required for certified fire protection personnel [by December 1, 2015]. Individuals will be credited with four hours of continuing education credit for completing this program.

~~[(b) All regulated fire protection personnel must complete the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program prior to December 1, 2015.]~~

- ~~(b)~~(c) All fire protection personnel [appointed after December 1, 2015] will be required to complete the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program training within one year **following** [of] appointment to a fire department **if the individual has not previously completed the program.**

- ~~(c)~~(d) Departments will report the completion of training through the commission's web based reporting system.

- ~~(d)~~(e) Failure to complete the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program before the required deadlines will be considered a violation of continuing education rules found in Chapter 441 of this title (relating to Continuing Education).

#### **§435.27 Live Fire Training Structure Evolutions.**

The most current edition of NFPA 1403, Standard on Live Fire Training Evolutions, shall be used as a guide when developing standard operating procedures for conducting live fire training. The following requirements shall apply for all Live Fire Training Structure Evolutions conducted.

- (1) The officer in charge or instructor will ensure that the water supply rate and duration for each individual Live Fire Training Structure Evolution is adequate to control and extinguish the training fire, the supplies necessary for backup lines to protect personnel, and any water needed to protect exposed property.
- (2) The instructor-in-charge shall assign the following personnel:
  - (A) One instructor to each functional crew, which shall not exceed five students.
  - (B) One instructor to each backup line.
  - (C) Additional personnel to backup lines to provide mobility.
  - (D) One additional instructor for each additional functional assignment.

- (3) The officer in charge or instructor will ensure that the buildings or props being utilized for live fire training are in a condition that would not pose an undue safety risk.
- (4) A safety officer shall be appointed for all Live Fire Training Structure Evolutions. The safety officer shall have the authority, regardless of rank, to alter, suspend or control any aspect of the operations when, in his or her judgment, a potential or actual danger, accident, or unsafe condition exists. The safety officer shall not be assigned other duties that interfere with safety responsibilities.
- (5) No person(s) shall play the role of a victim inside the building.
- (6) Prior to the ignition of any fire, instructors shall ensure that all personal protective clothing and/or self contained breathing apparatus are NFPA compliant and being worn in the proper manner.
- (7) Prior to conducting any live fire training, a pre-burn briefing session shall be conducted. All participants shall be required to conduct a walk-through of the structure in order to have a knowledge of, and familiarity with, the layout of the building and to be able to facilitate any necessary evacuation of the building.
- (8) A standard operating procedure shall be developed and utilized for Live Fire Training Structure Evolutions. The standard operating procedure shall include, but not be limited to:
  - (A) a Personal Alert Safety System (PASS). A PASS device shall be provided for all participating in live fire training and shall meet the requirements in §435.9 of this title (relating to Personal Alert Safety System (PASS));
  - (B) a Personnel Accountability System that complies with §435.13 of this title (relating to Personnel Accountability System) shall be utilized;
  - (C) an Incident Management System;
  - (D) use of personal protective clothing and self-contained breathing apparatus;
  - (E) an evacuation signal and procedure; and
  - (F) pre-burn, burn and post-burn procedures.

**§435.29 Federal Highway Administration Traffic Incident Management Program.**

- (a) In an effort to improve firefighter safety in the State of Texas, all regulated entities will ensure that the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission be completed as part of the continuing education required for certified fire protection personnel by December 1, 2020. Individuals will be credited with four hours of continuing education credit for completing this program.

- (b) All regulated fire protection personnel must complete the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission prior to December 1, 2020.
- (c) All fire protection personnel appointed after December 1, 2020 will be required to complete the Federal Highway Administration Traffic Incident Management program training or an equivalent course that is approved by the commission within one year of appointment to a fire department.
- (d) Departments will report the completion of training through the commission's web based reporting system.
- (e) Failure to complete the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission before the required deadline will be considered a violation of continuing education rules found in Chapter 441 of this title (relating to Continuing Education).

**14. Discussion and possible action on development of a Fire Inspector Certification that does not include all current rule components.**

## CHAPTER 429

### 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:

- (2) possess valid documentation as an Inspector I, Inspector II, and Plan Examiner I from either:
  - (C) the International Fire Service Accreditation Congress; or
  - (D) the National Board on Fire Service Professional Qualifications issued by the Texas A&M Engineering Extension Service using the 2009 or later edition of the NFPA standard applicable to this discipline and meeting the requirements as specified in §439.1(a)(2) of this title (relating to Requirements—General); or
- (2) complete a commission approved Basic Fire Inspector program and successfully pass the 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 approved Basic Fire Inspector Curriculum, as specified in Chapter 4 of the 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 for evaluation and found to meet the minimum requirements as listed in the commission approved Basic Fire Inspector Curriculum as specified in Chapter 4 of the 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).

(D) documentation of the receipt of Fire Inspector I, Fire Inspector II, and Plan Examiner I certificates issued by the State Firemen's and Fire Marshals' Association of Texas that are deemed equivalent to a commission approved Basic Fire Inspector curriculum.

**§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. This subsection will expire on August 1, 2016.
- (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

**15. Discussion and possible action on setting future meeting dates, locations and agenda items.**

**16. Adjourn meeting.**