

# **FIRE FIGHTER I**

## **TRAINING BY**

### **MODULES**

**Third Edition**  
**September 2004**

Meeting the requirements of NFPA 1001, 2002 edition



**FIRE PROTECTION**  
**BUREAU**

## **FIRE FIGHTER I TRAINING BY MODULES**

### **SAFETY TRAINING REQUIRED FOR ALL FIRE FIGHTERS:**

- ◆ Emergency medical protection (WAC 296-305-02501)
- ◆ Respiratory equipment protection (WAC 296-305-04001)
- ◆ Accident prevention (WAC 296-305-01505)
- ◆ Asbestos recognition (WAC 296-205-05001[6])
- ◆ Training in the function, donning and doffing, care, use, inspection, maintenance, and limitations of personal protective equipment issued (WAC 296-305-02001)
- ◆ First aid training and certification (WAC 296-305-01515)
- ◆ Familiarity with an ICS system (WAC 296-305-05001[1])

### **REQUIRED TRAINING, AS DEFINED BY THE EMPLOYER, BEFORE LIVE STRUCTURAL FIRE TRAINING (WAC 296-305-05501, 05503):**

- ◆ Safety practices
- ◆ Protective equipment
- ◆ Fire hose
- ◆ Nozzles
- ◆ Fire streams
- ◆ Ladders
- ◆ Rescue
- ◆ Live fire training conforming to NFPA 1403\*

\*Live fire training evolutions in structures require that prior to their being permitted to participate in live fire training evolutions, students must meet the performance objectives for Fire Fighter I of the following NFPA 1403 sections:

- 3-3 Safety
- 3-5 Fire behavior
- 3-6 Portable extinguishers
- 3-7 Personal protective equipment
- 3-11 Ladders
- 3-12 Fire hose, appliances, & streams
- 3-16 Overhaul
- 3-19 Water supply

### 5.5.3 Clean and Checking Equipment

#### Knowledge

- A. Types of cleaning methods for various tools and equipment
- B. Correct use of cleaning solvents
- C. Manufacturer's and departmental guidelines for cleaning tools and equipment

#### Skills – Ability to:

- D. Select correct tools for cleaning and maintenance use
- E. Follow guidelines
- F. Record and report procedures

The above Standards address the following:

- ◆ Forcible entry tools
- ◆ Ropes
- ◆ Salvage equipment
- ◆ Ladders
- ◆ Nozzles

### 5.5.4 Clean, Inspect, and Return Fire Hose to Service

#### Knowledge

- A. Departmental procedures for noting defective hose and removing from service
- B. Hose cleaning methods
- C. Hose rolls
- D. Hose loads

#### Skills – Ability to:

- E. Clean different types of hose
- F. Operate hose washing & drying equipment available
- G. Mark defective hose
- H. Replace coupling gaskets
- I. Roll hose
- J. Reload hose

The following program uses a module system with content based on NFPA 1001 Fire Fighter Professional Qualification 2002 Edition. Module I is the basic fire fighter training module. Burn items requiring a specialized setting such as a training center or burn facility are covered in module II. Certification testing can be done at the end of each module, or after modules I, II, and III are completed. Certification testing is not required but is an option for a fire fighter desiring to become a certified Fire Fighter I.

*Note: Text in italics is not a mandatory Fire Fighter I Performance Task; it is a suggested means of meeting the desired objective.*

## MODULE I

### FIRST AID COMPONENT. WAC 296-305-01515

### INCIDENT COMMAND COMPONENT. NWCG I-100 training

### ASPECTS OF WAC 296-305

#### 5.1 GENERAL REQUIREMENTS NFPA 1001 (PARTIAL)

##### 5.1.1 Training to awareness level of NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, meeting the requirements of WAC 296-62-3112

###### 5.1.1.1 General Knowledge Requirements

- G. The critical aspects of NFPA 1500 as apply to the Fire Fighter I

###### 5.1.1.2 General Skill Requirements – Ability To:

- A. Don personal protective clothing within one minute
- B. Doff personal protective clothing and prepare for reuse

#### 5.3 FIREGROUND OPERATIONS

##### 5.3.1 Use SCBA During Emergency Operations

###### Knowledge

- A. Conditions that require respiratory protection
- B. Uses and limitations of a SCBA
- C. Components of a SCBA
- D. Donning procedures for a SCBA
- E. Breathing techniques
- F. Emergency procedures used with SCBA and indications for
- G. Physical requirements of the SCBA wearer

###### Skills – Ability to:

- H. Control breathing
- I. Replace SCBA cylinders

##### 5.3.19 Combat a Ground Cover Fire

###### Knowledge

- A. Types of ground cover fires
- B. Parts of ground cover fires
- C. Methods to contain or suppress ground cover fires
- D. Safety principles and practices

###### Skills – Ability to:

- E. Determine exposure threats based on fire spread potential
- F. Protect exposures
- G. Construct a fire line or extinguish with hand tools
- H. Maintain integrity of established fire lines
- I. Suppress ground cover fires using water

#### 5.5 PREVENTION, PREPAREDNESS, AND MAINTENANCE

##### 5.5.1 Perform a Fire Safety Survey in a Private Dwelling

###### Knowledge

- A. Organizational policy and procedures
- B. Common causes of fire and their prevention
- C. Importance of a fire safety survey
- D. Public fire education program's importance to the fire department public relations and the community

###### Skills – Ability to:

- E. For a survey in a private dwelling, complete forms used, recognize hazards, and match findings to pre-approved recommendations, and communicate findings to occupants or referred

##### 5.5.2 Present Fire Safety Information

###### Knowledge

- A. Parts of informational materials and how to use them
- B. Basic presentation skills
- C. Department sop for giving station tours

###### Skills – Ability to:

- D. Document presentations
- E. Use prepared materials

### 5.3.14 Conserve Property as a Member of a Team

#### Knowledge

- A. Purpose of property conservation and its value to the public
- B. Methods used to protect property
- C. Types of and uses for salvage covers
- D. Operations at properties protected with automatic sprinklers
- E. How to stop the flow of water from an automatic sprinkler head
- F. Identification of the main control valve of a sprinkler system
- G. Forcible entry issues related to salvage

#### Skills – Ability to:

- H. Cluster furniture
- I. Deploy covering materials
- J. Roll and fold salvage covers for reuse
- K. Construct water chutes and catch-alls
- L. Remove water
- M. Cover building openings including doors, windows, floor openings, and roof openings
- N. Separate, remove, and relocate charred material to safe location while protecting the area of origin for cause determination
- O. Stop the flow of water from sprinkler with wedges or stoppers
- P. Operate the main control valve of a sprinkler system

### 5.3.17 Illuminate the Emergency Scene

#### Knowledge

- A. Safety principles and practices
- B. Power supply capacity and limitations
- C. Light deployment methods

#### Skills – Ability to:

- D. Operate department power supply and lighting equipment
- E. Deploy cords and connectors
- F. Reset ground-fault interrupter devices
- G. Locate lights for best effect

- J. Use SCBA to exit through restricted passages
- K. Initiate and complete emergency procedures in event of SCBA failure or air depletion
- L. Complete SCBA donning procedures

### 5.3.2 Respond on an Apparatus to an Emergency Scene

#### Knowledge

- A. Mounting and dismounting procedures for riding fire apparatus
- B. Hazards and ways to avoid associated with riding fire apparatus
- C. Prohibited practices while operating on or near a fire apparatus
- D. Types of personal protective equipment and means for usage  
\*(This is equipment used while riding, such as hearing protection)

#### Skills – Ability to:

- E. Use each piece of provided safety equipment

*Demonstrate the proper hand signals to be used when guiding apparatus.*

### 5.3.5 Exit a Hazardous Area as a Team

#### Knowledge

- A. Personnel accountability systems
- B. Communications procedures
- C. Emergency evacuation methods
- D. What constitutes a safe haven
- E. Elements that create or indicate a hazard
- F. Emergency procedures for loss of air supply

#### Skills – Ability to:

- G. Operate as a team member in vision-obscured conditions
- H. Locate and follow a guideline
- I. Conserve air supply
- J. Evaluate areas for hazards
- K. Identify a safe haven

### 5.3.6 Set Up Ground Ladders

#### Knowledge

- A. Parts of a ladder
- B. Hazards associated with ladder placement
- C. What constitutes a stable foundation for ladder placement
- D. Ladder angles for various tasks
- E. Safety limits to the degree of angulation
- F. What constitutes a reliable structural component for top placement

#### Skills – Ability to:

- G. Carry, raise, extend ladders, and lock flies
- H. Determine that a wall and roof will support a ladder
- I. Judge extension ladder height requirements
- J. Place ladder to avoid obvious hazards

### 5.3.9 Conduct a Search and Rescue in a Structure

#### Knowledge

- A. Use of forcible entry tools during rescue operations
- B. Ladder operations for rescue
- C. Psychological effects of operating in obscured conditions and ways to manage them
- D. Methods to determine if an area is tenable
- E. Primary and secondary search techniques
- F. Team member's roles and goals
- G. Methods to use and indicators of finding victims
- H. Victim removal methods (including carries)
- I. Considerations related to respiratory protection

#### Skills – Ability to:

- J. Use SCBA to exit restricted passages
- K. Set up and use different types of ladders for various rescue operations
- L. Rescue firefighter with functioning respiratory protection
- M. Rescue firefighter whose SCBA is not functioning
- N. Rescue person who has no respiratory protection
- O. Assess areas to determine tenability

*Demonstrate the removal of injured persons from an immediate hazard by the use of carries, drags, and stretchers.*

### 5.3.11 Perform Horizontal Ventilation on a Structure (Partial)

#### Knowledge

- A. Principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation
- B. Safety considerations when venting a structure
- C. Prevention of a backdraft

#### Skills – Ability to:

- G. Transport (carry) and operate ventilation tools and equipment and ladders
- H. Use safe procedures for breaking window and door glass and removing obstructions

### 5.3.12 Perform Vertical Ventilation on a Structure (Partial)

#### Knowledge

- C. Techniques and safety precautions for venting:
  - ◆ Flat roofs
  - ◆ Pitched roofs
  - ◆ Basements
- D. Basic indicators of potential collapse or roof failure
- E. Effects of construction type and elapsed time under fire conditions on structural integrity
- F. The advantages and disadvantages of vertical and trench/strip ventilation

#### Skills – Ability to:

- G. Transport (carry) and operate ventilation tools and equipment
- H. Hoist ventilation tools to roof
- I. Cut roofing and flooring materials to vent flat and pitched roofs and basements
- J. Sound roof for integrity
- K. Clear an opening with hand tools
- L. Select, carry, deploy, and secure ground ladders for ventilation activities
- M. Deploy roof ladders on pitched roofs from ground ladder
- N. Carry ventilation tools and equipment while ascending and descending ladders

*Demonstrate the procedures of working from ground or aerial ladders with tools and appliances, with and without a safety harness*

## 5.2 FIRE DEPARTMENT COMMUNICATIONS

### 5.2.1 Initiate Response to a Reported Emergency

#### Knowledge

- A. Procedures for reporting emergencies
- B. Department sops for taking and receiving alarms
- C. Radio codes or procedures
- E. Information needs of dispatch center

#### Skills – Ability to:

- F. Operate Fire Department communications equipment
- G. Relay information
- H. Record information

### 5.2.2 Use of a Telephone

#### Knowledge

- A. Department procedures for answering nonemergency phone calls

#### Skills – Ability to:

- B. Operate fire station telephone and intercom equipment

### 5.2.3 Transmit and Receive Radio Messages

#### Knowledge

- A. Department radio procedures and etiquette for:
  - ◆ Routine traffic
  - ◆ Emergency traffic
  - ◆ Emergency evacuation signals

#### Skills – Ability to:

- B. Operate radio equipment
- C. Discriminate between routine and emergency traffic

## 5.3 FIREGROUND OPERATIONS

### 5.3.4 Force Entry Into a Structure

#### Knowledge

- A. Basic construction of typical doors, windows, and walls within department's community or service area
- B. Operation of doors, windows, and locks
- C. Dangers associated with forcing entry through doors, windows, and walls

#### Skills – Ability to:

- D. Transport (carry) hand and power tools
- E. Operate hand and power tools
- F. Force entry through doors, windows, and walls using assorted methods and tools

### 5.3.10 Attack an Interior Structure Fire (Partial)

#### Knowledge

- A. Principle of fire streams
- B. Nozzles (types, design, operation, flow capabilities)
- C. Precautions to be followed when advancing hose lines to a fire
- D. Observable results when a fire stream is properly applied
- E. Fire caused dangerous building conditions
- F. Principles of exposure protection
- G. Potential long-term consequences of exposure to products of combustion
- H. Physical states of matter in which fuels are found
- I. Common types of accidents or injuries on the fire ground and their causes
- J. Application of each size and type of attack line
- K. Role of a backup team in fire attack situations

#### Skills – Ability to:

- P. Define and prevent water hammer
- Q. Open, close, and adjust nozzle pattern and flow
- R. Apply water using direct, indirect, and combination attacks
- S. Advance charged and uncharged lines (1½ - in. or larger):
  - Up ladders
  - Up and down interior stairways
  - Up and down exterior stairways
- T. Extend hose lines
- U. Replace burst hose section
- V. Operate charged hose lines (1½ - in. or larger) while secured to a ground ladder
- W. Couple and uncouple various hose connections
- X. Carry hose

*Climb the full length of each type of ground and aerial ladder available to the authority having jurisdiction and demonstrate:*

*(a) Carrying fire fighting tools or equipment while ascending and descending; (b) Bringing an injured person down the ladders.*

*Demonstrate carrying a 100 ft (30 m) attack line 1½ in. (38 mm) or larger into a building, connecting it to a standpipe, and advancing the line from the standpipe. (This skill may be described if building with standpipe not present in the department service area.)*

*Don a life safety harness that meets the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope, Harnesses, and Hardware.*

*Demonstrate the use of nozzles, adapters, hose appliances, and tools on a pumper as required by Section 7-2 of NFPA 190.1*

### 5.3.11 Perform Horizontal Ventilation on a Structure (Partial)

#### Knowledge

- D. Structural fire behavior
- E. Products of combustion found in a structure fire
- F. Signs, causes, effects, and prevention of backdrafts
- H. Relationship of oxygen concentration to life safety and fire growth

### 5.3.12 Perform Vertical Ventilation on a Structure (Partial)

#### Knowledge

- A. Methods of heat transfer
- B. Principles of thermal layering within a structure fire

*Define fire.*

*Define the fire triangle and tetrahedron.*

### 5.3.13 Overhaul a Fire Scene

#### Knowledge

- A. Types of attack lines and water application devices effective for overhaul
- B. Water application methods for extinguishment that limit water damage
- C. Types of tools and methods used to expose hidden fires
- D. Dangers associated with overhaul
- E. Obvious signs of area of origin or signs of arson
- F. Reasons for protection of fire scene

*Identify the purpose of overhaul.*

*Recognize at least 4 indicators of hidden fires.*

#### Skills – Ability to:

- G. Deploy and operate an attack line
- H. Remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity
- I. Apply water for maximum effectiveness
- J. Expose and extinguish hidden fires in walls, ceilings, and subfloor spaces
- K. Recognize and preserve signs of arson
- L. Evaluate for complete extinguishment

## MODULE III

### 5.1 GENERAL REQUIREMENTS (PARTIAL)

#### 5.1.1.1 General Knowledge Requirements

- A. Organization of the fire department
  - B. Role of the Fire Fighter 1 in the organization
  - C. The mission of the fire service
  - D. The fire department standard operating procedures
  - E. The fire department rules and regulations as they pertain to the Fire Fighter 1
  - F. The role of other agencies as they relate to the fire department
  - G. The fire department member assistance program aspects
- Ropes and knots:**
- H. Knot types and usage
  - I. Difference between life safety and utility rope
  - J. Reasons for placing rope out of service
  - K. Types of knots to use for given tools, ropes, or situations
  - L. Hoisting methods for tools and equipment
  - M. Using rope to support response activities

#### 5.1.1.2 General Skill Requirements – Ability To:

- C. Hoist tools and equipment using ropes and the correct knot
- D. Tie the following knots:
  - ◆ Bowline
  - ◆ Clove hitch
  - ◆ Figure of eight on a bight
  - ◆ Half hitch
  - ◆ Becket or sheet bend
  - ◆ Safety knot
- E. Locate information in departmental documents and standard or code materials

**Skills – Ability to:**

- J. Recognize inherent hazards related to a material's configuration
- K. Operate handlines or master streams.
- L. Break up material using hand tools and water streams
- M. Evaluate for complete extinguishment
- N. Operate hose lines and other water application devices
- O. Evaluate and modify water application for maximum penetration
- P. Locate and expose hidden fires
- Q. Assess patterns for origin determination

**5.3.10 Attack an Interior Structure Fire (Partial)**

**Knowledge**

- K. Role of a backup team in fire attack situations
- L. Control techniques for grade level fires
- M. Control techniques for above grade level fires
- N. Control techniques for below grade level fires
- O. How to expose hidden fires

**Skills – Ability to:**

- Y. Attack fires at:
  - Grade level
  - Above grade level
  - Below grade level
- Z. Locate and suppress interior wall and subfloor fires

**5.3.15 Connect a Fire Department Pumper to a Water Supply**

**Knowledge**

- A. Loading and off-loading procedures for mobile water supply apparatus
- B. Fire hydrant operation
- C. Suitable static water supply sources
- D. Procedures and protocol for connecting to various water sources

**Skills – Ability to:**

- E. Hand lay a supply hose
- F. Connect and place hard suction hose for drafting
- G. Deploy portable water tanks and equipment needed to transfer water between tanks and draft from the tanks (if portable water tanks are not used in the department service area, this skill may be described)
- H. Make hydrant-to-pumper hose connections for forward and reverse lays
- I. Connect a supply hose to a hydrant and fully open and close hydrant

**5.3.16 Extinguish Incipient Class A, B, and C Fires With Portable Fire Extinguishers**

**Knowledge**

- A. Classifications of fire
- B. Types and rating systems of fire extinguishers
- C. Risks of each class of fire
- D. Operating methods and limitations of each type of extinguishers

**Skills – Ability to:**

- E. Operate portable fire extinguishers
- F. Approach fire with portable fire extinguishers
- G. Select an extinguisher based on size and type of fire
- H. Safely carry portable fire extinguishers

**5.3.18 Turn Off Building Utilities**

**Knowledge**

- A. Properties, principles, and safety concerns for electricity, gas, and water systems
- B. Utility disconnect methods and associated dangers
- C. Use of required safety equipment

**Skills – Ability to:**

- D. Identify utility control devices
- E. Operate control valves or switches and assess for related hazards

## 5.5 PREVENTION, PREPAREDNESS, AND MAINTENANCE

### 5.5.3 Clean and Checking Equipment (Partial)

#### Knowledge

- A. Types of cleaning methods for a SCBA

#### Skills – Ability to:

- D. Select correct tools for cleaning use
- E. Follow guidelines
- F. Record and report procedures

The above standards address the following SCBA

## MODULE II

### 5.3 FIREGROUND OPERATIONS

#### 5.3.7 Attack a Passenger Vehicle Fire

##### Knowledge

- A. Principle of fire streams as relate to fighting auto fires
- B. Precautions to be followed when advancing hose lines toward auto fires
- C. Observable results of properly applied fire streams
- D. Identifying alternative fuels and their hazards
- E. Dangerous conditions created during an automobile fire
- F. Common types of accidents or injuries related to fighting automobile fire and how to avoid
- G. How to access locked passenger, trunk, and engine compartments
- H. Methods of overhauling an auto fire

##### Skills – Ability to:

- I. Identify fuel types
- J. Assess and control fuel leaks
- K. Open, close, and adjust the flow and pattern on nozzles
- L. Apply water for maximum effectiveness while maintaining flash protection
- M. Advance attack lines (1 ½ - in. or larger)
- N. Expose hidden fires by opening all compartments

#### 5.3.8 Extinguish Class A Exterior Fires

##### Knowledge

- A. Types of attack lines and water streams appropriate for attacking stacked or piled materials and outdoor fires
- B. Dangers associated with stacked and piled materials
- C. Various extinguishing agents and their effect on different material configurations
- D. Tools and methods to use in breaking up various types of materials
- E. Difficulties related to complete extinguishment of stacked or piled materials
- F. Water application methods for exposure protection and extinguishment
- G. Dangers such as exposure to toxic or hazardous materials associated with storage building and container fires
- H. Obvious signs of origin and cause
- I. Techniques for preservation of evidence