

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL**

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**ATTACHMENT 2**

**Date:** February 20, 2014

**To:** State Board of Fire Services

**From:** Mark Romer, Fire Service Training Specialist III

**SUBJECT/AGENDA ACTION ITEM:**  
Fire Fighter I Curriculum**Recommended Actions:**

Discussion/Action

*Seeking SBFS approval of the new Fire Fighter I curriculum materials not available at the November 21, 2013 meeting*

**Background Information:**

STEAC approved the final documentation for this curriculum package at their October 18, 2013 meeting. The curriculum was then brought forward to the State Board of Fire Services for review and approval at your November 21, 2013 meeting. Due to the previous submittal missing the Task Book and Certification Training Standard (CTS), SBFS granted approval of the course plan to move forward for the Beta test at Sierra College. The document design and development process for the Task Books was completed in December. This staff report contains, for your approval the completed package of the 2013 Firefighter I curriculum including the CTS, Course Plan, Task Book, skill sheets, and Implementation Plan.

Our Fire Fighter I curriculum was last updated in 2001 to the 1997 NFPA Standard 1001, Fire Fighter Professional Qualifications. A revision to the CTS was completed in 2006 that reflected the removal of Confined Space Operations from the Fire Fighter II level.

The current program has a total of 348 hrs of instructional time plus an undefined amount of manipulative lab hours and testing hours. It is important to understand that the psychomotor lessons identified do not include practice time nor did they take into account instructing more than one student. Additionally included in the 348 hours are 40 hours of EMS training (Identified as the Emergency Care of the Sick and Injured an FSTEP program that no longer exists), 12 hours of ICS (Identified as I-200 introduction to ICS), 8 hours of Confined Space Awareness (an FSTEP class) and 27:45 hrs. of wildland fire control (No program referenced).

In January 2013 the new addition of NFPA 1001, Fire Fighter Professional Qualifications was published and State Fire Training issued a task order for the rewriting of the Fire Fighter I and II curriculum.

Through our contract with Sacramento State University, Department of Continuing Education a development cadre was formed with 5 fire service personnel representing organizations from around the state. The members are Fire Fighter Michael Stahl Menlo Park Fire, Fire Fighter Darin Hebert Los Angeles City Fire, Captain Jon Black Santa Clara County Fire, Captain Demmond Simmons Oakland City Fire and Division Chief Tony Mecham CALFIRE. The first development cadre meeting was held in April 2013. The responsibilities of this cadre were to review the old Fire Fighter I and II curriculum along with the latest standards from NFPA. The updated CTS was then used to develop course plans. The cadre met three times; each meeting consisted of four days. At the end of our third meeting the cadre had developed both the Fire Fighter I CTS and course plans along with all of the identified skill sheets required for IFSAC and Pro Board testing. The cadre also developed the CTS and course plan for Fire Fighter II. This normally would have taken up to a year using the old system for curriculum development which also included writing lesson plans. Once the Development Cadre finished, a Validation Cadre was formed to review and validate the content of these new programs. The Validation Cadre consisted of 15 members of the fire service from throughout the state along with representatives from the community colleges, labor and CFFJAC. Their task was to review and validate the 2 CTS and 2 course plans to ensure they will meet the needs of the California Fire Service. This cadre met on July 8 – 12, 2013.

### **Analysis/Summary of Issue:**

The following is an analysis of the major differences between the 2001 and 2013 Fire Fighter I curriculum.

Fire Fighter I version 2001 had an identified 348 hours of instructional time; it is important to remember this did not include skills practice time nor testing. The curriculum had imbedded within the 348 hours all of NFPA FFI as well as state specific information including:

- 40 hour Emergency Care of the Sick and Injured
- 12 hour Incident Command System I-200 (Introduction into ICS)
- 8 hour Confined Space Awareness
- 24 hour Hazardous Materials FRO
- 27:45 hour section on wildland fire fighting
- 17:30 hour section on vehicle extrication

Furthermore, when the cadre reviewed the old curriculum and compared it to the 2013 NFPA 1001 we found there were some significant differences. The following are the changes that were made in the 2013 curriculum to bring it into alignment with NFPA 1001 2013 standard:

1. NFPA has a prerequisite of EMS training. Chapter 4, Entrance Requirements, 4.1 General states that prior to entering training to meet the requirements of Chapter 5 and 6 of this standard, the candidate shall meet the following requirements:

4.3 Emergency Medical Care. Minimum emergency medical care performance capabilities for entry-level personnel shall be developed and validated by the AHJ to include infection control, CPR, bleeding control and shock management.

The state has set this level under California Health and Safety Code, Section 1797.182, as Public Safety First Aid and CPR as the minimum. You will note on the course plan that this level of training is now a prerequisite prior to entering into this training. This eliminates the 40 hours of training within the 2001 version of the program.

2. NFPA 1001 does not address incident command system training at the Fire Fighter I level. The cadre thought it was very important that this type of training needed to part of our Fire Fighter I program. It should also be noted that under Homeland and Security Presidential Directive - 5 all emergency responders are to receive ICS training. Further, California Code of Regulations, Title 19, Public Safety, Division 2, Office of Emergency Services, Chapter 1 requires compliance with the Standardized Emergency Management System (SEMS) § 2428 Minimum Performance Objectives. (a) Emergency response agencies shall determine the appropriate level (s) of SEMS instruction for each member of their staff, based upon the staff member's potential assignment during an emergency response this state is in concert with HSPD-5. The cadre reviewed the information and identified that a candidate for Fire Fighter I should have IS-100.b (Introduction to the Incident Command System) and IS – 700.a (National Incident Managements System (NIMS) an Introduction) as the minimum level of training. These two courses are listed as corequisites meaning they need to be delivered within the Fire Fighter I program.
3. Confined space awareness was also moved to a corequiste course requirement.
4. Hazardous Materials will now be part of the Fire Fighter I training as required in NFPA 1001, Chapter 5, 5.1 general. This provision states “Requirements defined in chapter 5, Core Competencies for Operational Level Responders, and section 6.6, mission-specific competencies: Product Control, of NFPA 472, Standards for competence of responders to hazardous materials/weapons of mass destruction incidents.” The course hours remained the same.
5. Wildland fire fighting hours were increased to meet the requirements of S-130/S-190 thus meeting the requirements of CICCIS and the needs of CALFIRE. This program is still part of Fire Fighter I, which will result in a candidate receiving certification at the NFPA Wildland Fire Fighter I (CICCIS level Type 2 Basic Fire Fighter). The requirement increased the course by 55 hours.
6. Vehicle Extrication was moved to Fire Fighter II, which brings CAL FIRE in-line with NFPA 1001, Chapter 6.
7. The section on flammable liquids and gas fire fighting was moved to Fire Fighter II, which brings it in-line with NFPA 1001, Chapter 6.
8. Overall Hours for the program break down as follows:
 

a. Lecture hours	126:30	this is down from 348 hrs in the old curriculum
b. Skills/Activities	240:00	the old curriculum did not identify these hours
c. Testing	36:00	this includes formative and summative exams as well as the all skill certification testing
d. Total Hours	402:30	
9. The addition of the skills and activities hours is new. The new hours requirement will help ensure personnel coming out of an academy or training program have a level of competency with basic fire fighter skills. Remember these skills hours are based on a class size of 50 and may be different for other size classes. Please refer to page 46 of the Course Plan for further detail on program hours.
10. The Cadre also developed skills testing sheets to meet the IFSAC and Pro Board requirements. These skill sheets will become the standardized testing requirements for all academies up and down the state.

State Fire Training is seeking approval of the 2013 Fire Fighter I curriculum by the SBFS.

# Fire Fighter I

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## Certification Training Standards Guide [Month Year]



California Department of Forestry and Fire Protection  
Office of the State Fire Marshal  
State Fire Training

# Fire Fighter I

## Certification Training Standards Guide [Month Year]

This CTS guide utilizes NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013, NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012, and NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents to provide the qualifications for State Fire Training's Fire Fighter II certification.

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).

**CALIFORNIA  
STATE FIRE**



**TRAINING**

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# State Fire Training

## Mission

To enable the California Fire Service to safely protect life and property through education, training, and certification.

## The California Fire Services Training and Education System

The California Fire Service Training and Education System (CFSTES) were established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

CFSTES facilitates, coordinates, and assists in the development and implementation of standards and certification for the California fire service. CFSTES:

1. Administers the California Fire Academy System
2. Provides accredited courses leading to certification and approved standardized training programs for local and regional delivery
3. Administers the national accreditation process in California
4. Publishes certification training standards, course plans, and a capstone task book for each certified level in the California fire service

CFSTES is a fire service system developed by the fire service, for the fire service. It is only as successful and effective as the people involved in it.

## Acknowledgments

State Fire Training appreciates the hard work and accomplishments of those who built the solid foundation on which this program continues to grow.

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## Acknowledgments

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**Partners**

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## How to Read a CTS Guide

State Fire Training develops a Certification Training Standards (CTS) Guide for a variety of job functions in the fire service such as fire fighter, driver/operator, fire instructor, and company officer. The CTS guide lists the requisite knowledge and skills and the job performance requirements a person is expected to complete in order to become certified in a specific function. CTS guides are appropriate for fire service personnel and individuals in related occupations pursuing State Fire Training certification.

Each CTS guide serves as a foundation for the certification programs recommended for adoption by the Office of the State Fire Marshal. Any certification program must be based on job-related knowledge and measurable performance standards. To master the knowledge and skills needed for specialized operations, individuals will require additional training to augment the performance standards included in the CTS guide.

Within the CTS guide, it is impossible to capture the different policies and procedures of each organization in the California fire service. Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own departments or jurisdictions.

### Format

Each certification training standard included in the CTS guide includes the following:

#### Section Heading

The section heading describes a general category for a group of training standards. For example, the Fire Marshal CTS includes the following sections: Administration, Risk Management, Community Relations, Professional Development, Regulatory Programs, Fire and Life Safety, and Investigation. Each section contains one or more individual training standards.

#### Training Standard Title

The training standard title provides a general description of the performance requirement contained within the standard.

#### Authority

The CTS guide references each standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

### **Given**

This section lists the objects, equipment, materials, or facilities an individual needs in order to acquire the requisite knowledge and skills or to accomplish the job performance requirement(s) within a training standard.

### **Requisite Knowledge and Skills**

This section lists the knowledge and skills that an individual must acquire in order to accomplish the job performance requirement(s) within a training standard.

This section does not include NFPA requisite knowledge or skills that are too general to teach or that individuals should develop through life experiences. For example, a training standard would not list “communicate orally and in writing” or “ability to relate interpersonally” unless they specifically apply to a job performance requirement about acquiring communication skills or developing interpersonal relationships.

### **Job Performance Requirements**

This section includes one or more written statements that describe a specific job-related task and define measurable or observable outcomes. After an individual completes all coursework and requisite requirements, the capstone task book process verifies completion of job performance requirements.

## **Content**

In addition to the individual certification training standards, the CTS guide also includes State Fire Training Revisions and Errata pages.

### **State Fire Training Content**

Located at the back of the CTS guide, this table documents any significant revisions made by State Fire Training to the NFPA standards in the development of this CTS guide. This table is used to justify content additions and advise the course plan development team.

### **Errata**

Located at the back of the CTS guide, this page documents any changes made to the CTS guide outside of the five-year NFPA revision cycle.

# Fire Fighter I

## Section 1: General

### 1-1: General Knowledge Requirements

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.1.1
2. Office of the State Fire Marshal

#### Given

1. None identified

#### Requisite Knowledge and Skills

1. *Describe* the organization of the fire department
2. *Define* the role of Fire Fighter I in the organization
3. *Describe* the mission of the fire service
4. *Describe* fire department standard operating procedures and rules and regulations as they apply to the Fire Fighter I
5. *Discuss* the value of fire and life safety initiatives in support of the fire department mission to reduce fire fighter line of duty injuries and fatalities
6. *Identify* the role of other agencies as they relate to the fire department
7. *Identify* aspects of the fire department's member assistance program
8. *Discuss* the importance of physical fitness and a healthy lifestyle to the performance and duties of a fire fighter
9. *Define* the critical aspects of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
10. *Locate information in departmental documents and standard or code materials*

#### Job Performance Requirements

There are no job performance requirements identified for this training standard.

## **1-2: Operating in a Confined Space**

### **Authority**

1. Office of the State Fire Marshal
  - CCR Title 8, Section 5157 & 5158

### **Given**

1. *A confined space*

### **Requisite Knowledge and Skills**

1. *Describe the codes that affect operations within confined spaces*
2. *Identify confined spaces and permit required confined spaces*
3. *Identify hazards associated with confined spaces*
4. *Identify equipment and procedures required to deal with confined space rescue safely and legally*
5. *Describe operational positions and their responsibilities as set forth by Cal/OSHA*

### **Job Performance Requirements**

1. *Operate at a confined space or permit-required confine space and identify when a confined space is present, hazards are recognized and mitigated, equipment is secured, procedures are followed, and Cal/OSHA position are utilized.*

### **1-3: Operating Within the Incident Command System**

#### **Authority**

1. Office of the State Fire Marshal
  - Title 19. Public Safety, Chapter 1. Standardized Emergency Management System (SEMS)
  - Homeland Security Presidential Directive, HSPD-5, Section 502 of the Homeland Security Act, 6 U.S.C §§ 101 et. seq.

#### **Given**

1. *An incident*
2. *An incident action plan*

#### **Requisite Knowledge and Skills**

1. *Describe the application of the Incident Command System*
1. *Explain Incident Command System organizational principles and elements*
2. *Identify Incident Command System positions and responsibilities*
3. *Identify Incident Command System facilities and functions*
4. *Describe the Incident Command System planning process*
5. *Describe the basic National Incident Management System*

#### **Job Performance Requirements**

1. *Operate within the Incident Command System on an incident so that organizational elements are recognized, positions and responsibilities are identified, facility needs are met, and the incident is managed.*

## Section 2: Fire Department Communications

### 2-1: Initiating Response to an Emergency

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.2.1
2. Office of the State Fire Marshal

#### Given

1. The report of an emergency
2. Fire department standard operating procedures
3. Communications equipment

#### Requisite Knowledge and Skills

1. *Explain* the procedures for reporting an emergency
2. *Identify* department standard operating procedures for taking and receiving alarms
3. *Identify* radio codes, procedures, *and clear text for communications*
4. *List* information needs of dispatch center
5. *Identify the different types of fire department communications equipment*
6. Operate fire department communications equipment
7. Relay information
8. Record information

#### Job Performance Requirements

1. Initiate the response to a reported emergency, obtain all necessary information, correctly operate all communications equipment, and promptly and accurately relay information to the dispatch center.

## **2-2: Operating a Phone in a Non-emergency Situation**

### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.2.2

### **Given**

1. A fire department phone

### **Requisite Knowledge and Skills**

1. *Describe* fire department procedures for answering non-emergency phone calls
2. Operate fire station telephone and intercom equipment

### **Job Performance Requirements**

1. Receive a telephone call using correct procedures for answering the phone and relaying information.

## 2-3: Operating Fire Department Radios

### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.2.3
2. Office of the State Fire Marshal

### Given

1. A fire department radio
2. Fire department *standard* operating procedures

### Requisite Knowledge and Skills

1. *Describe fire department* procedures and etiquette for routine *radio* traffic
2. *Describe fire department* procedures and etiquette for emergency *radio* traffic
3. *Describe fire department procedures and etiquette* for emergency *radio* evacuation signals
4. *Identify basic types and operations of fire department radios*
5. *Identify the difference* between routine and emergency *radio* traffic
6. *Operate fire department* radio equipment

### Job Performance Requirements

1. Transmit and receive messages via the fire department radio and relay accurate, clear information within the time established by the AHJ.

## **2-4: Activating an Emergency Call for Assistance**

### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.2.4
2. Office of the State Fire Marshal

### **Given**

1. Vision-obscured conditions
2. Personal protective equipment
3. Fire department standard operating procedures

### **Requisite Knowledge and Skills**

1. *Identify different* personnel accountability systems
2. *Identify* emergency communication procedures
3. Initiate an emergency call in accordance with the AHJ's procedures
4. Use other methods of emergency calls for assistance

### **Job Performance Requirements**

1. Activate an emergency call for assistance to locate and rescue the fire fighter.

## Section 3: Fireground Operations

### 3-1: Using Structural Personal Protective Ensemble

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.1.2
2. Office of the State Fire Marshal

#### Given

1. *Structural personal protective ensemble*

#### Requisite Knowledge and Skills

1. *Identify the components of structural personal protective ensemble*
2. *Describe the protection provided by structural personal protective ensemble*
3. *Explain the importance of standards for structural personal protective ensemble*
4. *Describe the limitations of structural personal protective ensemble*
5. *Identify the proper method for inspecting, cleaning, and maintaining structural personal protective ensemble*
6. *Don structural personal protective ensemble*
7. *Doff structural personal protective ensemble*
8. *Prepare structural personal protective ensemble for reuse*

#### Job Performance Requirements

1. Don structural personal protective ensemble so that all elements of the ensemble are worn according to manufacturer guidelines, within 60 seconds.

## 3-2: Operating a Self-Contained Breathing Apparatus

### Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.1

### Given

1. Self-contained breathing apparatus
2. Other personal protective equipment

### Requisite Knowledge and Skills

1. *Identify* conditions requiring respiratory protection
2. *Describe* the uses and limitations of a self-contained breathing apparatus
3. *Identify* the components of a self-contained breathing apparatus
4. *Describe different* donning procedures
5. *Describe different* breathing techniques
6. *Describe* indications for and emergency procedures used with a self-contained breathing apparatus
7. *Describe operational inspection for a self-contained breathing apparatus*
8. *Identify* physical requirements of the self-contained breathing apparatus wearer
9. *Demonstrate different controlled breathing techniques*
10. Replace self-contained breathing apparatus air cylinders
11. Use a self-contained breathing apparatus to exit through restricted passages
12. Initiate and complete emergency procedures in the event of self-contained breathing apparatus failure or air depletion
13. *Perform operational inspection for self-contained breathing apparatus*
14. Complete donning procedures

### Job Performance Requirements

1. Use a self-contained breathing apparatus during emergency operations, correctly don and activate a self-contained breathing apparatus within 60 seconds, use controlled breathing techniques, activate emergency techniques and procedures if the self-contained breathing apparatus fails, recognize low-air warnings, avoid intentionally compromising respiratory protection, and exit hazardous areas prior to air depletion.

### **3-3: Responding on an Apparatus**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.2

#### **Given**

1. Personal protective clothing
2. Other necessary personal protective equipment
3. *An apparatus*

#### **Requisite Knowledge and Skills**

1. *Describe* mounting and dismounting procedures for riding a fire apparatus
2. *Identify* hazards and ways to avoid hazards associated with riding an apparatus
3. *Describe* prohibited practices
4. *Identify different* types of department personal protective equipment and *their uses*
5. Use each piece of provided safety equipment

#### **Job Performance Requirements**

1. Respond on an apparatus to an emergency scene, correctly mount and dismount the apparatus, use seat belts while the vehicle is in motion, and correctly use other personal protective equipment.

### **3-4: Operating at an Emergency Scene**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.3

#### **Given**

1. *Personal* protective equipment
2. Traffic and scene control devices
3. Structure fire and roadway emergency scenes
4. Traffic hazards
5. Downed electrical wires
6. An assignment
7. Standard operating procedures
8. *An apparatus*

#### **Requisite Knowledge and Skills**

1. *Identify* potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions
2. *Describe* proper procedures for *mounting and* dismounting an apparatus in traffic
3. *Describe* procedures for safe operation at emergency scenes
4. *Identify* the protective equipment available for members' safety on emergency scenes and work zone designations
5. Use personal protective clothing
6. Deploy traffic and scene control devices
7. Dismount an apparatus
8. Operate in the protected work areas as directed

#### **Job Performance Requirements**

1. Establish and operate in work areas at emergency scenes, follow procedures, wear protective equipment, establish protected work areas as directed using traffic and scene control devices, and perform assigned tasks only in established protected work areas.

### **3-5: Forcing Entry into a Structure**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.4

#### **Given**

1. Personal protective equipment
2. Tools
3. An assignment
4. *Doors, windows, and walls*

#### **Requisite Knowledge and Skills**

5. *Describe* basic construction of typical doors, windows, and walls within the department's community or service area
6. *Describe types and uses of hand and power tools*
7. *Describe the* operation of doors, windows, and locks
8. *Identify* the dangers associated with forcing entry through doors, windows, and walls
9. Transport and operate hand and power tools
10. Force entry through doors, windows, and walls using assorted methods and tools

#### **Job Performance Requirements**

1. Remove barriers and produce an opening that is safe and ready for use by forcing entry into a structure using tools as designed.

### **3-6: Operating in a Hazardous Area**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.5
2. Office of the State Fire Marshal

#### **Given**

1. Vision-obscured conditions
2. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Describe* emergency evacuation methods *for fire fighter survival*
2. *Define* what constitutes a safe haven
3. *Identify* elements that create or indicate a hazard
4. *Identify* emergency procedures for loss of air supply
5. *Demonstrate emergency evacuation methods for fire fighter survival*
6. Operate as a team member in vision-obscured conditions
7. Locate and follow a guide line
8. Evaluate areas for hazards
9. Identify a safe haven

#### **Job Performance Requirements**

1. As a team, exit a hazardous area without endangering others, maintain team integrity, and find a safe haven before the air supply is exhausted.

### **3-7: Working with Ground Ladders**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.6
2. Office of the State Fire Marshal

#### **Given**

1. Single and extension ladders
2. An assignment
3. Team members, if needed
4. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Identify the uses of ground ladders*
2. *Identify the types, parts and construction features of ground ladders*
3. *Identify types of lifts and carries*
4. *Describe methods used to secure ground ladders*
5. *Describe proper climbing techniques*
6. *Describe methods to safely work off ground ladders*
7. *Describe the hazards associated with setting up ladders*
8. *Define what constitutes a stable foundation for ladder placement*
9. *Identify different angles for various tasks*
10. *Describe safety limits to the degree of angulation*
11. *Describe what constitutes a reliable structural component for top placement*
12. Lift and carry ladders
13. *Tie off a halyard*
14. Raise *and move* ladders
15. Extend and lock flies
16. *Secure ground ladders*
17. Determine that a wall and roof will support the ladder
18. Judge extension ladder height requirements
19. Place the ladder to avoid obvious hazards
20. *Demonstrate proper methods to safely work off ground ladders*
21. *Demonstrate proper climbing techniques*

#### **Job Performance Requirements**

1. Set up ground ladders, assess hazards, ensure ground ladders are stable and their angles are correct for climbing, extend extension ladders to the necessary height and lock their flies, place the tops of the ladders against reliable structural components, and accomplish the assignment.

### **3-8: Extinguishing Passenger Vehicle Fires**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.7
2. Office of the State Fire Marshal

#### **Given**

1. Personal protective equipment
2. Attack line (*1½-inch or larger*)
3. Hand tools
4. *Passenger vehicle*

#### **Requisite Knowledge and Skills**

1. *Describe* principles of fire streams as they relate to fighting *passenger vehicle* fires
2. *Identify* precautions to be followed when advancing hose lines toward a *passenger vehicle*
3. *List* observable results that a fire stream has been properly applied
4. Identify the hazards associated with alternative fuels in passenger vehicle fires
5. *Describe* dangerous conditions created during a *passenger vehicle* fire
6. *Describe* common types of accidents or injuries related to fighting *passenger vehicle* fires and how to avoid them
7. *Describe* how to access locked passenger, trunk, and engine compartments
8. *Identify* methods for overhauling a *passenger vehicle*
9. Identify *passenger vehicle* fuel types
10. Assess and control fuel leaks
11. Open, close, and adjust the flow and pattern on nozzles
12. Apply water for maximum effectiveness while maintaining flash fire protection
13. Advance 1½-inch or larger diameter attack lines
14. Expose hidden fires by opening all *passenger vehicle* compartments

#### **Job Performance Requirements**

1. Operating as a member of a team, attack a passenger vehicle fire, avoid hazards, identify and control leaking flammable liquids, maintain protection from flash fires, overhaul all vehicle compartments, and extinguish the fire.

### 3-9: Extinguishing Exterior Fires

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.8
2. Office of the State Fire Marshal

#### Given

1. Fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior
2. Attack lines
3. Hand tools
4. Master stream devices
5. An assignment
6. *Personal protective equipment*

#### Requisite Knowledge and Skills

1. *Describe* the types of attack lines and water streams appropriate for attacking stacked, piled materials, and outdoor fires
2. *Identify* dangers, such as collapse, associated with stacked and piled materials
3. *Describe* various extinguishing agents and their effect on different material configurations
4. *Identify* tools and methods to use in breaking up various types of materials
5. *Describe* the difficulties related to complete extinguishment of stacked and piled materials
6. *Identify* water application methods for exposure protection and fire extinguishment
7. *Describe* dangers such as exposure to toxic or hazardous materials associated with storage building and container fires
8. *Identify* obvious signs of origin and cause
9. *List* techniques for the preservation of fire cause evidence
10. Recognize inherent hazards related to the material's configuration
11. Operate handlines or master streams
12. Break up material using hand tools and water streams
13. Evaluate and modify water application for maximum penetration
14. Search for and expose hidden fires
15. Assess patterns for origin determination
16. Evaluate for complete extinguishment

#### Job Performance Requirements

1. Extinguish fires in exterior Class A materials, protect exposures, stop the spread of fire, avoid collapse hazards, effectively apply water, extinguish the fire, and preserve signs of the origin area(s) and arson.

### **3-10: Conducting Search and Rescue Operations**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.9

#### **Given**

1. An assignment
2. Vision-obscured conditions
3. Personal protective equipment
4. A flashlight
5. Forcible entry tools
6. Hose lines *or* guide lines
7. Ladders, when necessary
8. *Thermal imaging camera*

#### **Requisite Knowledge and Skills**

1. *Describe the use of forcible entry tools during rescue operations*
2. *Describe the use of thermal imaging cameras and other search tools*
3. *Describe the use of ground ladders for rescue operations*
4. *Identify psychological effects of operating in obscured conditions and ways to manage them*
5. *Describe methods to determine if an area is tenable*
6. *Define primary and secondary search techniques*
7. *Identify team members' roles and goals in search and rescue operations within a structure*
8. *Define methods to use and indicators of finding victims*
9. *Describe victim removal methods (including various carries)*
10. Set up and use different types of ladders for various types of rescue operations
11. Rescue a fire fighter whose respiratory protection is not functioning
12. Rescue a person who has no respiratory protection
13. Assess areas to determine tenability

#### **Job Performance Requirements**

1. Operating as a member of a team, conduct search and rescue in a structure, maintain team integrity, correctly place ladders when used, search all assigned areas, locate and remove all victims, and avoid compromising team members' safety, including respiratory protection.

### 3-11: Conducting Structural Fire Fighting Operations

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.10
2. Office of the State Fire Marshal

#### Given

1. An attack line (*1½-inch or larger*)
2. Ladders, when needed
3. Personal protective equipment
4. Tools
5. An assignment

#### Requisite Knowledge and Skills

1. *Identify types, designs, and uses of fire hoses*
2. *Identify fittings, tools, and appliances*
3. *Describe common building materials and construction types*
4. *Identify the principles of fire streams*
5. *Describe types, design, operation, nozzle pressure effects, and flow capabilities of nozzles*
6. *Identify precautions to be followed when advancing hose lines to a fire*
7. *Describe observable results that a fire stream has been properly applied*
8. *Identify dangerous building conditions created by fire*
9. *Identify principles of exposure protection*
10. *Describe potential long-term consequences of exposure to products of combustion*
11. *List physical states of matter in which fuels are found*
12. *List common types of accidents or injuries and their causes*
13. *Describe the application of each size and type of attack line*
14. *Define the role of the backup team in fire attack situations*
15. *Describe attack and control techniques for below, at, and above grade level fires*
16. *Identify methods for locating and exposing hidden fires*
17. Prevent water hammer when shutting down nozzles
18. Open, close, and adjust nozzle flow and patterns
19. Apply water using direct, indirect, and combination attacks
20. Advance charged and uncharged *hand* lines (*1½-inch diameter or larger*) up ladders and up and down interior and exterior stairways
21. Extend hose lines
22. Replace burst hose sections
23. Operate charged *hand* lines of 1½-inch diameter or larger while secured to a ground ladder
24. Couple and uncouple various handline connections
25. Carry hose

- 26. Attack fires at grade level and above and below grade levels
- 27. Locate and suppress interior wall and subfloor fires

**Job Performance Requirements**

- 1. Operating as a member of a team, attack an interior structure fire, maintain team integrity, deploy the attack line for advancement, correctly place ladders when used, gain access into the fire area, effectively apply water, correctly approach the fire using attack techniques that facilitate suppression given the level of the fire, locate and control hidden fires, maintain the correct body posture, recognize and manage hazards, and bring the fire under control.

### **3-12: Performing Horizontal Ventilation Operations**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.11

#### **Given**

1. An assignment
2. Personal protective equipment
3. Ventilation tools
4. Equipment
5. Ladders

#### **Requisite Knowledge and Skills**

1. *Describe* the principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation
2. *Describe* safety considerations when venting a structure
3. *Describe* fire behavior in a structure
4. *List* the products of combustion found in a structure fire
5. *Identify* the signs, causes, effects, and prevention of backdrafts
6. *Describe* the relationship of oxygen concentration to life safety and fire growth
7. Transport and operate ventilation tools and equipment and ladders
8. Break windows and door glass and remove obstructions

#### **Job Performance Requirements**

1. As a part of a team, perform horizontal ventilation on a structure, free ventilation openings of obstructions, use tools as designed, place ladders and ventilation devices correctly, and clear structure of smoke.

### 3-13: Performing Vertical Ventilation Operations

#### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2012
  - Paragraph 5.3.12
2. Office of the State Fire Marshal

#### Given

1. An assignment
2. Personal protective equipment
3. Ground and roof ladders
4. *Ventilation* tools

#### Requisite Knowledge and Skills

1. *Describe* the methods of heat transfer
2. *Describe* the principles of thermal layering within a structure on fire
3. *List* the techniques and safety precautions for venting flat roofs, pitched roofs, and basements
4. *Describe* basic indicators of potential collapse or roof failure
5. *Identify* the effects of construction type and elapsed time under fire conditions on structural integrity
6. *Describe* the advantages and disadvantages of vertical and trench/strip ventilation
7. Transport and operate ventilation tools and equipment
8. Hoist ventilation tools to a roof
9. Cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements *and retreat from the area as a team when ventilation is accomplished*
10. Sound a roof for integrity
11. Clear an opening with hand tools
12. Deploy roof ladders on pitched roofs while secured to a ground ladder *for vertical ventilation*

#### Job Performance Requirements

1. As part of a team, perform vertical ventilation on a structure, position ladders for ventilation, create a specified opening, remove all ventilation barriers, avoid compromising structural integrity, release products of combustion from the structure, and retreat from the area as a team when ventilation is accomplished.

### **3-14: Performing Overhaul**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.13
2. Office of the State Fire Marshal

#### **Given**

1. Personal protective equipment
2. Attack line
3. Hand tools
4. A flashlight
5. An assignment

#### **Requisite Knowledge and Skills**

1. *Describe* types of fire attack lines and water application devices most effective for overhaul
2. *Discuss* water application methods for extinguishment that limit water damage
3. *Identify* types of tools and methods used to expose hidden fire
4. *Discuss* dangers associated with overhaul
5. *Describe* obvious signs of area of origin or arson
6. *Identify* reasons for protection of fire scene
7. Deploy and operate an attack line *for overhaul*
8. Remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity
9. Apply water for maximum effectiveness
10. Expose and extinguish hidden fires in walls, ceilings, and subfloor spaces
11. Recognize and preserve obvious signs of area of origin and arson
12. Evaluate for complete extinguishment
13. *Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination*

#### **Job Performance Requirements**

1. Overhaul a fire scene without compromising structural integrity, discover all hidden fires, preserve fire cause evidence, and extinguish the fire.

### **3-15: Performing Property Conservation Operations**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.14
2. Office of the State Fire Marshal

#### **Given**

1. Salvage tools and equipment
2. An assignment
3. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Discuss* the purpose of property conservation and its value to the public
2. *Describe* methods used to protect property
3. *List* types of and uses for salvage covers
4. *Describe* operations at properties protected with automatic sprinklers
5. *Discuss* how to stop the flow of water from an automatic sprinkler head
6. *Identify* the main control valve on an automatic sprinkler system
7. *Describe* procedures for protecting possible areas of origin and potential evidence
8. *Describe* forcible entry issues related to salvage
9. Cluster furniture
10. Deploy covering materials
11. Roll and fold salvage covers for reuse
12. Construct water chutes and catch-alls
13. Remove water
14. Cover building openings, including doors, windows, floor openings, and roof openings
15. Stop the flow of water from a sprinkler with sprinkler wedges or stoppers
16. Operate a main control valve on an automatic sprinkler system

#### **Job Performance Requirements**

1. As a member of a team, conserve property so that the building and its contents are protected from further damage.

### **3-16: Establishing Water Supply**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.15

#### **Given**

1. Supply or intake hose
2. Hose tools
3. A fire hydrant, portable water tank, or static water source
4. *An apparatus*
5. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Describe types and components of municipal and rural water systems*
2. *Discuss loading and off-loading procedures for a mobile water supply apparatus*
3. *Describe fire hydrant operations*
4. *Identify suitable static water supply sources*
5. *Describe procedures and protocol for connecting to various water sources*
6. Hand lay a supply hose
7. Connect and place hard suction hose for drafting operations
8. Deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them
9. Make hydrant-to-*engine* hose connections for forward and reverse lays
10. Connect a supply hose to a hydrant
11. Fully open and close a hydrant

#### **Job Performance Requirements**

1. As a member of a team, connect a fire department *engine* to a water supply, ensuring tight connections and an unobstructed water flow.

### **3-17: Operating Portable Extinguishers**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.16

#### **Given**

1. A selection of portable fire extinguishers
2. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Describe* the classifications of fire
2. *Identify* the types of, rating systems for, and risks associated with each class of fire *extinguisher*
3. *Discuss* the operating methods and limitations of portable extinguishers
4. Select an appropriate extinguisher based on the size and type of fire
5. Safely carry portable fire extinguishers
6. Approach fire with portable fire extinguishers
7. Operate portable fire extinguishers

#### **Job Performance Requirements**

1. Choose the correct extinguisher and follow the correct extinguisher-handling techniques to completely extinguish incipient Class A, Class B, and Class C fires.

### **3-18: Operating Portable Electrical Equipment**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.17

#### **Given**

1. Fire service electrical equipment
2. An assignment

#### **Requisite Knowledge and Skills**

1. *Discuss* safety principles and practices *for portable electrical equipment*
2. *Identify* power supply capacity and limitations
3. *Describe* light deployment methods
4. Operate department power supply and lighting equipment
5. Deploy cords and connectors
6. Reset ground-fault interrupter (GFI) devices
7. Locate lights for best effect

#### **Job Performance Requirements**

1. Illuminate designated areas of the emergency scene and operate all illumination equipment within the manufacturers' listed safety precautions.

### **3-19: Securing Utilities**

#### **Authority**

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.18

#### **Given**

1. Tools
2. An assignment
3. *Personal protective equipment*

#### **Requisite Knowledge and Skills**

1. *Describe* properties, principles, and safety concerns for electricity systems
2. *Describe* properties, principles, and safety concerns for gas systems
3. *Describe* properties, principles, and safety concerns for water systems
4. *Identify* utility disconnect methods
5. *Discuss* dangers associated with utility disconnect methods
6. *Describe* use of required safety equipment
7. Identify utility control devices
8. Operate control valves or switches
9. Assess for related hazards

#### **Job Performance Requirements**

1. Turn off building utilities in order to safely complete an assignment.

### **3-20: Working with Ropes and Knots**

#### **Authority**

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.20
2. Office of the State Fire Marshal

#### **Given**

1. Personal protective equipment
2. Tools
3. Ropes
4. *Webbing*
5. An assignment

#### **Requisite Knowledge and Skills**

1. *Identify the types and uses of ropes*
2. *Identify the types and uses of knots*
3. *Describe* the difference between life safety and utility rope
4. *Identify* reasons for placing rope out of service
5. *List* types of knots to use for given tools
6. *List* types of knots to use for given ropes
7. *Describe* types of knots to use for given situations
8. *Describe* hoisting methods for tools and equipment
9. *Discuss the use of rope(s)* to support response activities
10. *Tie knots*
11. Hoist tools using specific knots based on the type of tool

#### **Job Performance Requirements**

1. Tie a knot appropriate for hoisting tools securely and as directed.

## Section 4: Preparedness and Maintenance

### 4-1: Cleaning and Maintaining Tools and Equipment

#### Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.5.1

#### Given

1. Cleaning tools
2. Cleaning supplies
3. An assignment

#### Requisite Knowledge and Skills

1. *Describe* types of cleaning methods for various tools and equipment
2. *Discuss* the correct use of cleaning solvents
3. *Identify* manufacturers' or departmental guidelines for cleaning equipment and tools *and removal from service*
4. Select correct tools *to maintain* various parts and pieces of equipment
5. Complete recording and reporting procedures

#### Job Performance Requirements

1. Clean and maintain ladders, ventilation equipment, a self-contained breathing apparatus, ropes, salvage equipment, and hand tools according to manufacturers' or departmental guidelines; record equipment maintenance; and place equipment in a ready state or report otherwise.

## 4-2: Cleaning and Maintaining Hose

### Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.5.2
2. Office of the State Fire Marshal

### Given

1. Washing equipment
2. Water
3. Detergent
4. Tools
5. Replacement gaskets

### Requisite Knowledge and Skills

1. *Describe* departmental procedures for *inspecting a hose according to manufacturer's guidelines*, noting *any defects*, and removing it from service
2. *Discuss* cleaning *and maintenance* methods
3. *Describe types of* hose rolls and loads
4. Clean different types of hose
5. Operate hose washing and drying equipment
6. Mark defective hose
7. Replace coupling gaskets
8. Roll hose
9. Reload hose

### Job Performance Requirements

1. Clean, inspect, and place fire hose in a ready state for service, and note and correct any damage.

## Section 5: Wildland Suppression

### 5-1: Utilizing Wildland Personal Protective Equipment

#### Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.1.1
2. Office of the State Fire Marshal

#### Given

1. Wildland personal protective clothing
2. New generation fire shelter

#### Requisite Knowledge and Skills

1. *Describe* the use and limitations of *required wildland* personal protective clothing
2. *Describe* the use, limitations, inspection, and care of *new generation fire shelter*
3. *Discuss* agency policy on fire shelter use
4. *Don wildland personal protective ensemble*
5. *Deploy new generation fire shelter*
6. *Describe* basic verbal communications

#### Job Performance Requirements

1. Don wildland personal protective ensemble within 60 seconds so that all elements of the ensemble are worn according to the manufacturer's guidelines, and deploy a new generation fire shelter within 30 seconds, while using basic verbal communications.

## **5-2: Cleaning and Maintaining Wildland Personal Protective Clothing**

### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.3.2
2. Office of the State Fire Marshal

### **Given**

1. *Wildland personal protective clothing*

### **Requisite Knowledge and Skills**

1. *Describe* maintenance of *wildland* personal protective clothing
2. *Describe* the inspection of *wildland* personal protective clothing
3. Recognize unserviceable items among *wildland* personal protective clothing
4. Demonstrate the proper cleaning procedures for *wildland* personal protective clothing

### **Job Performance Requirements**

1. Maintain wildland personal protective clothing so that it is serviceable and available for use on the fireline; recognize defects and report them to a supervisor.

### **5-3: Maintaining Wildland Hand Tools and Equipment**

#### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.3.3
2. Office of the State Fire Marshal

#### **Given**

1. Tools
2. Equipment
3. Agency maintenance specifications

#### **Requisite Knowledge and Skills**

1. *Describe* the inspection of tools
2. *Describe* the inspection of assigned suppression equipment
3. Recognize unserviceable items
4. *Perform* required maintenance techniques
5. *Sharpen* assigned suppression equipment
6. *Perform* other maintenance techniques for assigned suppression equipment
7. Use required maintenance equipment

#### **Job Performance Requirements**

1. Maintain assigned suppression hand tools and equipment so that assigned equipment is serviceable; recognize defects and report them to a supervisor.

## **5-4: Responding to an Incident**

### **Authority**

NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012

- Paragraph 5.5.2

### **Given**

1. An assembly location
2. An assignment
3. Incident location
4. Mode of transportation
5. Time requirements

### **Requisite Knowledge and Skills**

1. *Identify* equipment requirements
2. *Discuss* agency time standards
3. *Identify* special transportation considerations (weight limitations)
4. *Discuss* agency safety *response guidelines*
5. *Describe* operational procedures for various transportation modes

### **Job Performance Requirements**

1. Assemble and prepare for response so that arrival at the incident with the required personnel and equipment meets agency guidelines.

## **5-5: Recognizing Hazards and Unsafe Situations during Wildland Suppression**

### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.5.3
2. Office of the State Fire Marshal

### **Given**

1. A wildland or wildland urban interface fire
2. Standard safety policies and procedures of the AHJ

### **Requisite Knowledge and Skills**

3. *Describe* basic wildland fire safety
4. *Describe* basic wildland fire behavior
5. *Describe* basic wildland suppression methods

### **Job Performance Requirements**

1. Recognize hazards and unsafe situations, promptly communicate hazard(s) and unsafe condition(s) to a supervisor, and take appropriate action.

## 5-6: Constructing a Fireline

### Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.5.4
2. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
  - Paragraph 5.3.19
3. Office of the State Fire Marshal

### Given

1. A wildland fire
2. Agency line construction standards
3. Suppression tools
4. Water or other suppression agents
5. Equipment

### Requisite Knowledge and Skills

1. *Describe* the principles, *techniques*, and *standards* of fireline construction
2. Use hand tools correctly
3. Apply fire streams
4. *Apply fire fighting* agents

### Job Performance Requirements

1. Construct a fireline that conforms to the construction standard.

## **5-7: Reinforcing a Fireline**

### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.5.5
2. Office of the State Fire Marshal

### **Given**

1. A wildland fire
2. Suppression tools, water, or other suppression agents
3. Equipment

### **Requisite Knowledge and Skills**

1. *Describe* line improvement techniques
2. *Identify* safety considerations when burning out
3. *Describe the types of basic ignition devices*
4. Use basic ignition devices

### **Job Performance Requirements**

1. Locate and abate burning materials and unburned fuels that threaten the fireline's integrity.

## **5-8: Operating in the Wildland Urban Interface**

### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.5.6
2. Office of the State Fire Marshal

### **Given**

1. A wildland or wildland urban interface fire
2. Suppression tools
3. Equipment

### **Requisite Knowledge and Skills**

1. *Describe wildland fire behavior within the wildland urban interface*
2. *Describe wildland fuel removal for structure preparation*
3. *Identify structure defense methods*
4. *Identify equipment and personnel capabilities within the wildland urban interface*
5. *Conduct structure defense within the wildland urban interface*

### **Job Performance Requirements**

1. Describe methods of reducing the threat of fire exposure to improved properties in order to protect them.

## **5-9: Conducting Mop-up Operations**

### **Authority**

NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012

- Paragraph 5.5.7

### **Given**

1. A wildland fire
2. Suppression tools
3. Water or other suppression agents
4. Equipment

### **Requisite Knowledge and Skills**

1. *Describe principles, techniques, and standards for mop-up*
2. Use basic tools to perform mop-up operations
3. Use basic techniques to perform mop-up operations

### **Job Performance Requirements**

1. Mop up a fire area, locating and extinguishing burning fuels that threaten escape.

## **5-10: Conducting Patrols**

### **Authority**

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
  - Paragraph 5.5.8
2. Office of the State Fire Marshal

### **Given**

1. A wildland fire
2. Suppression tools
3. Equipment

### **Requisite Knowledge and Skills**

1. *Describe the principles, techniques, and standards of patrol*

### **Job Performance Requirements**

1. Patrol and maintain control of the fire area.

## **. Section 6: Hazardous Materials for Fire Fighters**

### **6-1: Recognizing Hazardous Materials/WMDs**

#### **Authority**

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
  - Chapter 4
  - Chapter 5
2. Office of the State Fire Marshal

#### **Given**

1. *A hazardous materials/WMD incident*
2. *The DOT Emergency Response Guidebook or equivalent guide*
3. *Shipper/manufacturer papers and contacts*
4. *Material safety data sheets*
5. *An assignment*

#### **Requisite Knowledge and Skills**

1. *Define hazardous materials (4.2.1-1)*
2. *Describe the risks associated with hazardous materials (4.2.1-3)*
3. *Recognize the presence of hazardous materials in an emergency (4.2.1; 4.2.2; 4.1.1.1)*
4. *Identify the hazardous materials involved (4.2.3; 4.2.2)*
5. *Recognize the presence of WMDs (4.2.1)*
6. *Identify procedures in the event of a WMD incident (4.4.1)*
7. *Identify the potential outcomes associated with an emergency when hazardous materials are present (5.1.2.2)*
8. *Identify the types of additional resources for a hazardous materials response (4.4.1-5)*
9. *Identify mandatory notifications in accordance with AHJ (4.4.2)*
10. *Describe the role of the fire fighter in the AHJ's emergency response plan, including site security and control zones (4.4.1)*
11. *Describe the components of the DOT Emergency Response Guidebook or equivalent guide (4.2.1-3)*
12. *Identify shipper/manufacturer papers and contacts (4.2.1-10)*
13. *Identify hazardous materials, their potential hazards, and appropriate personal protective actions using material safety data sheets (4.2.1-10; 5.2.2)*
14. *Describe the process to preserve evidence (5.4.2)*
15. *Initiate protective actions to secure the area (4.4.1)*
16. *Make appropriate notifications as directed by the AHJ (4.1.2.2; 4.2.3)*
17. *Use the DOT Emergency Response Guidebook or equivalent guide (4.2.1-10)*

18. *Use material safety data sheets to identify hazardous materials, their potential hazards, and appropriate personal protective actions (5.4.2)*

### **Job Performance Requirements**

1. *Recognize the presence of hazardous materials and the indicators of a hazardous materials incident, correctly identify the materials involved, take personal protective actions, initiate the appropriate notification process, and secure the area.*

## 6-2: Identifying and Analyzing a Hazardous Materials/WMD Incident

### Authority

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
  - Chapter 3
  - Chapter 5
2. Office of the State Fire Marshal

### Given

1. *A hazardous materials incident*
2. *Recognized hazardous materials*
3. *Fire department standard operating procedures*
4. *Equipment readily available to personnel*
5. *An assignment*

### Requisite Knowledge and Skills

1. *Define basic hazardous materials terms (3.3; 3.4)*
2. *Define health hazards and physical and chemical properties of hazardous materials (5.2.3)*
3. *Describe basic hazard and risk assessment techniques (5.2.1; 5.2.3; 5.2.4)*
4. *Describe procedures for initial hazardous materials/WMD response (5.3.1; 5.3.2)*
5. *Describe the incident command system used in hazardous materials incidents (5.4.3)*
6. *Discuss standard operating procedures according to AHJ (5.1.2.2)*
7. *Identify the containers and materials involved using the DOT Emergency Response Guidebook or equivalent guide (5.2.1.1)*
8. *Identify damaged containers and the effects of release (5.2.3)*
9. *Describe the process of evacuation and/or shelter in place (5.4.1)*
10. *Determine if these materials have been released (5.2.1)*
11. *Evaluate the status of each incident response objective at a hazardous materials/WMD incident (5.5.1)*
12. *Communicate the status of a hazardous materials/WMD incident (5.5.2)*
13. *Limit access to the area (5.4.1)*

### Job Performance Requirements

1. *Protect persons, property, and the environment from further harm, initiate the appropriate communications process, and secure the area.*

### **6-3: Performing Emergency Decontamination**

#### **Authority**

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
  - Chapter 5
2. Office of the State Fire Marshal

#### **Given**

1. *A hazardous material incident*
2. *An individual contaminated by a hazardous material that can be decontaminated by fire fighters in personal protective equipment*
3. *Equipment readily available to fire fighters*
4. *Standard operating procedures*
5. *An assignment*

#### **Requisite Knowledge and Skills**

1. *Identify capabilities and limitations of the personal protective equipment provided by the AHJ (5.3.3; 5.4.4)*
2. *Identify ways that people, personal protective equipment, apparatus, tools, and equipment become contaminated (5.3.4)*
3. *Explain the importance and limitations of emergency decontamination procedures (5.3.4)*
4. *Describe standard operating procedures for emergency decontamination (5.3.4)*
5. *Prepare an emergency decontamination area (5.3.4)*
6. *Perform emergency decontamination (5.3.4; 5.4.1)*

#### **Job Performance Requirements**

1. *Perform emergency decontamination procedures, use appropriate personal protective equipment based on the hazard, protect exposures, avoid hazards, decontaminate victims and responders, and identify contaminated items and products of contamination for subsequent control.*

## **6-4: Mitigating a Hazardous Materials/WMD Incident**

### **Authority**

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
  - Chapter 6
2. Office of the State Fire Marshal

### **Given**

1. *A hazardous materials incident*
2. *Recognized hazardous materials*
3. *Department standard operating procedures*
4. *Equipment readily available to personnel*
5. *An assignment*
6. *Personal protective equipment*

### **Requisite Knowledge and Skills**

1. *Describe product control operations including absorption, adsorption, damming, diking, dilution, retention, remote valve shutoff, and vapor dispersion (6.6.3.1)*
2. *Identify tools and equipment for product control (6.6.4.1)*
3. *Explain the technical decontamination process, according to AHJ (6.4.2.2)*
4. *Perform basic control, containment, and confinement operations within the capabilities of the AHJ's resources and personal protective equipment (6.6.4.1)*

### **Job Performance Requirements**

*Perform basic control, containment, and confinement techniques to control hazardous materials release, and protect fire fighters from contamination.*

## State Fire Training Content

### Code Key

#### Blocks

- G = Given
- RKS = Requisite Knowledge and Skills
- JPR = Job Performance Requirements
- NCTS = New certification training standard

#### Sources

- [ACRONYM = Title]
- [ACRONYM = Title]
- [ACRONYM = Title]

### Certification: Fire Fighter I

CTS	Block	Addition	Justification	Source/Reference
[#-#]	[Code]	[Text]	[Text]	[Text]



# Fire Fighter I

## Course Plan

### Course Details

<b>Certification:</b>	Fire Fighter I
<b>CTS Guide:</b>	Fire Fighter I Certification Training Standards Guide
<b>Description:</b>	This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of <u>NFPA 1001 Standard for Fire Fighter Professional Qualifications</u> , the 2012 edition of <u>NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications</u> , and the 2008 edition of <u>NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents</u> . The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD.
<b>Designed For:</b>	Entry level fire fighter
<b>Prerequisites:</b>	Minimum of Public Safety First Aid and CPR (CA Health and Safety Code 1797.182)
<b>Corequisites:</b>	Confined Space Awareness (CA Code of Regulations, Title 8, Section 5157) Introduction to the Incident Command System (ICS-100), FEMA National Incident Management System, An Introduction (IS-700.A), FEMA
<b>Standard:</b>	Complete all activities and formative tests. Complete all summative tests with a minimum score of 80%. Complete all mandatory skills testing.
<b>Hours:</b>	Lecture: 126:30 Activities/Skills: 240:00

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Testing: 36:00

**Hours (Total):** 402:30

**Maximum Class Size:** 50

**Instructor Level:** Training Instructor 1A and 1B

**Instructor/Student Ratio:** 1: 50 (Lecture); 1:10 (Skills)

**Restrictions:** None

**SFT Designation:** CFSTES

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## Required Resources

### Instructor Resources

To teach this course, instructors need:

- Fundamentals of Fire Fighter Skills (Includes Instructor's Toolkit DVDs) (Jones and Bartlett Learning, Third Edition, ISBN: 978-1-4496-7085-6), or:
- Essentials of Fire Fighting and Fire Department Operations (Stowell, Frederick M., Murnane, Lynne, Brady Publishing, a division of Pearson Education, Sixth Edition, ISBN: 978-013-3140804), or:
- Fire Engineering's Handbook for Fire Fighter I and Fire Fighter II (Includes Instructor Guide and Sample Skills Drills DVDs) (Corbett, Glenn, PennWell Corporation, First Edition, ISBN: 978-1-59370-135-2)
- Wildland Firefighting Fundamentals (Teie, William C, Deer Valley Press, Second Edition, ISBN: 978-1931301268)
- IS-100 Introduction to Incident Command System, I-100, Instructor Guide (<http://training.fema.gov/EMIweb/IS/is100lst.asp>)
- IS-700 National Incident Management System, An Introduction, Instructor Guide (<http://training.fema.gov/EMIWeb/is/is700alst.asp>)

### Online Instructor Resources

The following instructor resources are available online at

<http://osfm.fire.ca.gov/training/instructorscorner.php>:

- Skill Sheets

### Student Resources

To participate in this course, students need:

- Fundamentals of Fire Fighter Skills (Jones and Bartlett Learning, Third Edition, ISBN: 978-1-4496-7085-6), or:
- Essentials of Fire Fighting and Fire Department Operations (Stowell, Frederick M., Murnane, Lynne, Brady Publishing, a division of Pearson Education, Sixth Edition, ISBN: 978-013-3140804), or:
- Fire Engineering's Handbook for Fire Fighter I and Fire Fighter II (Corbett, Glenn, PennWell Corporation, First Edition, ISBN: 978-1-59370-135-2)
- Wildland Firefighting Fundamentals (Teie, Willam C, Deer Valley Press, Second Edition, ISBN: 978-1931301268)
- IS-100 Introduction to Incident Command System, I-100, Student Manual (<http://training.fema.gov/EMIweb/IS/is100lst.asp>)
- IS-700 National Incident Management System, An Introduction, Student Manual (<http://training.fema.gov/EMIWeb/is/is700alst.asp>)
- Full structural and wildland personal protective equipment

### Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

- **Appliances and tools:** 1 ½-inch fog nozzle, 2 ½ - 1 1/8-inch straight tip nozzle, wildland nozzles and appliances, cap, double female fittings, double male fittings, hose clamps, hose jacket, hose roller, hose strap, rope, or chain, nozzle selection as determined by AHJ, plug, master stream device, traffic and scene control devices, reducer or increaser (fittings), Siamese, spanner wrenches, and gated wye
- **Extinguishers and supplies:** Dry chemical extinguisher, (ordinary base or multi-purpose) 20 pounds, CO<sub>2</sub> extinguisher, pump tank water extinguisher, Class A fuel for live burns, Class B fuel for live burns, and metal pan – minimum 16 square feet
- **Hose:** 1-, 1 ½- or 1 ¾-inch fire hose (300-foot minimum), 2 ½- or 3-inch fire hose (500-foot minimum), large diameter hose (LDH) (300-foot minimum), handline with fog nozzle, hard suction (intake) hose and strainer, hose and nozzles capable of flowing a minimum of 95 GPM, and soft suction hose
- **Hand tools:** Bolt cutters, crowbar/pry bar, flat head axe, halligan tool, hand saw, hydrant wrench, K-tool, pick-head axe, pike pole (8 feet), sledgehammer, flashlight, and wildland hand tools and equipment
- **Ladders:** 10-foot folding ladder, 14-foot roof ladder, 24-foot extension ladder, 35-foot extension ladder, and two straight ladders
- **Power tools:** Electric and gasoline powered fan, chain saw, gasoline powered circular saw, and a generator
- **Protective equipment/clothing:** Full set of protective clothing for structural fire fighting for each trainee, including bunker pants, bunker coat, bunker boots, gloves, helmet, hood, and face piece, self-contained breathing apparatus with charged air cylinder, (one extra fully charged air cylinder), personal alert safety system (P.A.S.S.), safety harness, manufacturer approved cleaning agent (for SCBA), manufacturer approved cleaning equipment (for SCBA), and manufacturer approved sanitizing agent (for SCBA)
- **Rope:** ½-inch rope, safety line, webbing, various lengths and diameters of utility rope, various lengths and diameters of synthetic rope, and various lengths of 1-person or 2-person life safety rope
- **Salvage equipment/materials:** Brooms, buckets, tubs, mops, objects to cover, salvage covers, squeegees, sprinkler stop, and water vacuums
- **Simulation equipment/materials:** Burn building as recommended in NFPA 1403: Standard on Live Fire Training, wood roof prop, smoke-generating equipment, training tower, minimum of two stories in height, gas, water, and electric service cut-off, vehicle fire prop, and a simulated breaching/restricted passageway prop
- **Other supplies/equipment needed:** Fire hydrant, pitot tube and gauge, portable radio, thermal imaging camera, standard above ground fall protection, minimum of two apparatuses equipped with pump and two separate water supplies, fuel and supplies for power equipment, cleaning supplies and equipment, portable lighting equipment, two portable tanks with water transfer equipment and appliances

## Unit 1: Introduction

### Topic 1-1: Orientation and Administration

#### Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

#### Enabling Learning Objectives

1. Identify facility requirements
  - Restroom locations
  - Food locations
  - Smoking locations
  - Emergency procedures
2. Identify classroom requirements
  - Start and end times
  - Breaks
  - Electronic device policies
  - Special needs and accommodations
  - Other requirements as applicable
3. Review course syllabus
  - Course objectives
  - Calendar of events
  - Course requirements
  - Student evaluation process
  - Assignments
  - Activities
  - Required student resources
  - Class participation requirements

#### Discussion Questions

1. What is a formative test? What is a summative test?

#### Activities

1. To be determined by the instructor.

### Topic 1-2: Fire Fighter I Certification Process

#### Terminal Learning Objective

At the end of this topic, a student will be able to identify different levels in the Fire Fighter I certification track, the courses and requirements for Fire Fighter I certification, and be able to describe the capstone task book and testing process.

#### Enabling Learning Objectives

1. Identify the different levels of certification in the Fire Fighter I certification track
  - Fire Fighter I

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- Wildland Fire Fighter I
  - NFPA 472 Awareness/Operations Level Responder: Hazardous Materials/Weapons of Mass Destruction Incidents
2. Identify the courses required for Fire Fighter I
    - Fire Fighter I
    - Wildland Fire Fighter I
    - First Responder Operations
    - Confined Space Awareness
    - IS-100 Introduction to Incident Command System
    - IS-700A National Incident Management System, An Introduction
  3. Identify any other requirements for Fire Fighter I
  4. Describe the capstone task book process
    - Complete all prerequisites and course work
    - Submit application and fees to request capstone task book
    - Complete all job performance requirements included in the task book
    - Must have identified evaluator verify individual task completion via signature
    - Must have Fire Chief or authorized representative verify task book completion via signature
    - Must be employed by a California Fire Agency in the position prior to submitting completed task book to State Fire Training
  5. Describe the capstone testing process
    - Complete course work
    - Schedule online capstone test
    - Schedule skills evaluation test

### Discussion Questions

1. How many levels are there in the Fire Fighter I certification track? What are they?

### Activities

1. To be determined by the instructor.

## Topic 1-3: General Knowledge Requirements

### Terminal Learning Objective

At the end of this topic, a student, given AHJ policies and procedures, will be able to define the role of Fire Fighter I in the fire department, identify the mission of the fire service, follow standard operating procedures and rules and regulations of the fire department, and access the department's member assistance program.

### Enabling Learning Objectives

1. Describe the organization of the fire department
  - Equal Employment Opportunity
  - Harassment
  - Diversity
2. Define the role of Fire Fighter I in the organization

## Fire Fighter I

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3. Describe the mission of the fire service
4. Describe fire department standard operating procedures and rules and regulations as they apply to the Fire Fighter I
5. Identify the role of other agencies as they relate to the fire department
6. Identify aspects of the fire department's member assistance program
7. Locate information in departmental documents and standard or code materials

### Discussion Questions

1. What is an employee assistance program?
2. How would you define the role of a fire fighter in today's fire service?

### Activities

1. Ask students to develop a mission statement for a fire department.

### CTS Guide Reference:

1-1

## Unit 2: Fire Fighter Safety

### Topic 2-1: Health and Safety

#### Terminal Learning Objective

At the end of this topic, a student, given an assignment, will be able to identify common types of accidents and injuries, ways to maintain a healthy and physically fit lifestyle, and maintain life safety initiatives in the line of duty.

#### Enabling Learning Objectives

1. List common types of accidents or injuries and their causes
2. Discuss the importance of physical fitness and a healthy lifestyle to the performance and duties of a fire fighter
3. Define the critical aspects of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
4. Discuss the value of fire and life safety initiatives in support of the fire department's mission to reduce fire fighter line-of-duty injuries and fatalities

#### Discussion Questions

1. What is the importance of physical fitness as it pertains to the duties of a fire fighter?
2. What are the components of physical fitness as it pertains to the job of a fire fighter?
3. What is the importance of a nutritious diet as it pertains to the performance of a fire fighter?
4. What is the importance of psychological stability in the fire service?
5. What are the benefits of grief counseling in the event of a line-of-duty death, serious injury, etc.?

#### Activities

1. Ask students to prepare a physical fitness plan.
2. Ask students to develop a nutritious menu plan for one week.

#### CTS Guide Reference:

1-1; 3-11

## Topic 2-2: Structural Personal Protective Ensemble

### Terminal Learning Objective

At the end of this topic, a student, given structural personal protective ensemble, will be able to don a structural personal protective ensemble so that all elements of the ensemble are worn according to manufacturers' guidelines, within 60 seconds.

### Enabling Learning Objectives

1. Identify the components of structural personal protective ensemble
2. Describe the protection provided by structural personal protective ensemble
3. Explain the importance of standards for structural personal protective ensemble
4. Describe the limitations of structural personal protective ensemble
5. Identify the proper method for inspecting, cleaning, and maintaining structural personal protective ensemble
6. Don structural personal protective ensemble
7. Doff structural personal protective ensemble and prepare for reuse

### Discussion Questions

1. What are the different components of a structural personal protective ensemble and its importance as it pertains to safety?
2. What are the safety features of a structural personal protective ensemble?
3. What is the importance of knowing your equipment as it pertains to the structural personal protective ensemble?
4. What are the limitations of the structural personal protective ensemble?
5. What are the benefits of inspecting, cleaning, and maintaining structural personal protective ensemble?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-1

## Topic 2-3: Self-Contained Breathing Apparatus

### Terminal Learning Objective

At the end of this topic, a student, given a self-contained breathing apparatus and other personal protective equipment, will be able to use a self-contained breathing apparatus during emergency operations, correctly don and activate a self-contained breathing apparatus within 60 seconds, use controlled breathing techniques, activate emergency techniques and procedures if the self-contained breathing apparatus fails, recognize low-air warnings, avoid intentionally compromising respiratory protection, and exit hazardous areas prior to air depletion.

### Enabling Learning Objectives

1. Identify conditions requiring respiratory protection
  - NFPA 1500
  - Code of Federal Regulations 29, 1910.134
  - California Code of Regulations Title 8, 5144K

2. Describe potential long-term consequences of exposure to products of combustion
3. Describe the uses and limitations of a self-contained breathing apparatus
4. Identify the components of a self-contained breathing apparatus
5. Describe operational inspection for a self-contained breathing apparatus
6. Describe different donning procedures
7. Describe different breathing techniques
8. Describe indications for and emergency procedures used with a self-contained breathing apparatus
9. Identify physical requirements of the self-contained breathing apparatus wearer
10. Demonstrate different controlled breathing techniques
11. Replace self-contained breathing apparatus air cylinders
12. Use a self-contained breathing apparatus to exit through restricted passages
13. Initiate and complete emergency procedures in the event of self-contained breathing apparatus failure or air depletion
14. Perform operational inspection for a self-contained breathing apparatus
15. Complete donning procedures to include:
  - Coat
  - Over-the-head
  - Seat mounted

### Discussion Questions

1. What conditions require respiratory protection?
2. What are the limitations of the self-contained breathing apparatus?
3. What are the major components of the self-contained breathing apparatus and their functions?
4. What are some possible human errors and equipment failures of the self-contained breathing apparatus?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-2; 3-11

## Topic 2-4: Responding on an Apparatus

### Terminal Learning Objective

At the end of this topic, a student, given personal protective clothing, other necessary personal protective equipment, and an apparatus, will be able to respond on an apparatus to an emergency scene, correctly mount and dismount the apparatus, use seat belts while the vehicle is in motion, and correctly use other personal protective equipment.

### Enabling Learning Objectives

1. Describe mounting and dismounting procedures for riding an apparatus
2. Identify hazards associated with riding an apparatus and ways to avoid them
3. Describe prohibited practices
4. Identify different types of department personal protective equipment and their use(s)

- Hearing protection
  - Seat belts
  - Safety gates
5. Use each piece of provided safety equipment

### Discussion Questions

1. What safety equipment is used when riding on an apparatus?
2. What is the importance of using safety equipment to protect against hearing and vision loss?
3. What are some outcomes when safety equipment is not used?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-3

## Topic 2-5: Operating at an Emergency Scene

### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards, downed electrical wires, an assignment, standard operating procedures, and an apparatus, will be able to establish and operate in work areas at emergency scenes, follow procedures, wear protective equipment, establish protected work areas as directed using traffic and scene control devices, and perform assigned tasks in established protected work areas.

### Enabling Learning Objectives

1. Identify potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions
2. Describe proper procedures for mounting and dismounting an apparatus in traffic
3. Describe procedures for safe operation at emergency scenes
4. Identify the personal protective equipment available for members' safety on emergency scenes and work zone designations
5. Use personal protective equipment
6. Deploy traffic and scene control devices
7. Dismount an apparatus
8. Operate in protected work areas as directed

### Discussion Questions

1. What are some potential hazards to fire fighters while operating at an emergency incident and how can they limit exposure and injury?
2. What are the different types of personal protective equipment used by fire fighters on the scene of an emergency and what are their uses?
3. What are the hazards of mounting and dismounting a fire apparatus?

### Activities

1. Given a simulated incident, ask students to develop an emergency scene work zone.

### CTS Guide Reference

3-4

## Unit 3: Communications

### Topic 3-1: Operating a Phone in a Non-emergency Situation

#### Terminal Learning Objective

At the end of this topic, a student, given a fire department phone, will be able to receive a telephone call using correct procedures for answering the phone and relaying information.

#### Enabling Learning Objectives

1. Describe fire department procedures for answering non-emergency phone calls
2. Operate fire station telephone and intercom equipment

#### Discussion Questions

1. What are the different fire station telephone and intercom equipment?
2. What are some proper ways of answering a business phone at the fire station?

#### Activities

1. Ask students to answer a fire department phone and relay specific information to another person who is not on the call.

#### CTS Guide Reference:

2-2

### Topic 3-2: Initiating a Response to an Emergency

#### Terminal Learning Objective

At the end of this topic, a student, given the report of an emergency, fire department standard operating procedures, and communications equipment, will be able to initiate the response to a reported emergency, obtain all necessary information, correctly operate all communications equipment, and promptly and accurately relay information to the dispatch center.

#### Enabling Learning Objectives

1. Explain the procedures for reporting an emergency
2. Identify department standard operating procedures for taking and receiving alarms
3. Identify radio codes, procedures, and clear text for communications
4. List information needs of dispatch center
5. Identify the different types of fire department communications equipment
6. Operate fire department communications equipment
7. Relay information
8. Record information

#### Discussion Questions

1. What are the different types of emergency and non-emergency calls?
2. What is the information needed to dispatch a call and why is it needed?

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### Activities

1. Ask students to take a report from a reporting party and transfer the information to a simulated dispatch center.

### CTS Guide Reference:

2-1

## Topic 3-3: Operating Fire Department Radios

### Terminal Learning Objective

At the end of this topic, a student, given a fire department radio and fire department standard operating procedures, will be able to transmit and receive messages via the fire department radio and relay accurate, clear information within the time established by the AHJ.

### Enabling Learning Objectives

1. Describe fire department procedures and etiquette for routine radio traffic
2. Describe fire department procedures and etiquette for emergency radio traffic
3. Describe fire department procedures and etiquette for emergency radio evacuation signals
4. Identify basic types and operations of fire department radios
5. Operate fire department radios and equipment
6. Identify the difference between routine and emergency radio traffic

### Discussion Questions

1. What are the different components of a fire department radio?
2. What are the different uses for fire department radios?
3. What is the proper etiquette for routine and emergency radio traffic?
4. What are the emergency evacuation signals and when are they used?
5. What is emergency traffic and in what situations would it be used?

### Activities

1. Given simulated situations, ask students to find different channels on a fire department radio.

### CTS Guide Reference:

2-3

## Unit 4: Fire Tools and Equipment

### Topic 4-1: Ropes and Knots

#### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, tools, ropes, webbing, and an assignment, will be able to tie a knot appropriate for hoisting tools securely and as directed.

#### Enabling Learning Objectives

1. Identify the types and uses of ropes
2. Identify the types and uses of knots

3. Describe the difference between life safety and utility rope
4. Identify reasons for placing rope out of service
5. List types of knots to use for given tools
6. List types of knots to use for given ropes
7. Describe types of knots to use for given situations
8. Describe hoisting methods for tools and equipment
9. Discuss the use of rope(s) to support response activities
10. Tie knots
  - Overhand
  - Half hitch
  - Clove hitch
  - Beckett bend
  - Bowline
  - Figure 8
  - Figure 8 on a bight
  - Figure 8 follow through
  - Water
  - Handcuff
11. Hoist tools using specific knots based on the type of tool
  - Axe
  - Pike pole
  - Roof ladder
  - Charged hoseline
  - Uncharged hoseline

### Discussion Questions

1. What are three situations when ropes are applicable for use on the fire ground?
2. What is the difference between static and dynamic rope and which is preferred in the fire service?
3. What are two common uses for rope?
4. What are three common knots and their uses?
5. What are the three parts of a rope?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-20

## Topic 4-2: Hand and Power Tools

### Terminal Learning Objective

At the end of this topic, a student, given various hand and power tools, will be able to safely transport, operate, and maintain them.

### Enabling Learning Objectives

1. Describe types of and uses for hand and power tools

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2. Transport and operate hand and power tools

### Discussion Questions

1. What are the differences between a two stroke and a four stroke engine and how are they each identified?
2. What are some examples of prying tools?
3. What are some examples of striking tools?
4. What are some examples of pushing and pulling tools?
5. What are some examples of cutting tools?

### Activities

1. Given various tools contained within an engine company toolbox, ask students to identify each tool and its use.

### CTS Guide Reference:

3-5

## Topic 4-3: Portable Electric and Lighting Equipment

### Terminal Learning Objective

At the end of this topic, a student, given fire service electrical equipment and an assignment, will be able to illuminate designated areas of the emergency scene and operate all illumination equipment within the manufacturers' listed safety precautions.

### Enabling Learning Objectives

1. Discuss safety principles and practices for portable electrical equipment
2. Identify power supply capacity and limitations
3. Describe light deployment methods
4. Operate department power supply and lighting equipment
5. Deploy cords and connectors
6. Reset ground-fault interrupter (GFI) devices
7. Locate lights for best effect

### Discussion Questions

1. What is the purpose of portable lighting at an emergency scene?
2. What are some limitations of portable lighting?
3. What are some safety concerns when using portable lighting at an emergency scene?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-18

## Topic 4-4: Maintenance

### Terminal Learning Objective

At the end of this topic, a student, given cleaning tools, cleaning supplies, and an assignment, will be able to clean and maintain ladders, ventilation equipment, self-contained breathing apparatuses, ropes, salvage equipment, and hand tools according to

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manufacturers' or departmental guidelines, record equipment maintenance, and place equipment in a ready state or report otherwise.

### Enabling Learning Objectives

1. Describe types of cleaning methods for various tools and equipment
  - Ladders
  - SCBAs
  - Ventilation equipment
  - Hand tools
  - Salvage equipment
  - Ropes
2. Discuss the correct use of cleaning solvents
3. Identify manufacturer or departmental guidelines for cleaning equipment and tools, and removal from service
4. Select correct tools to maintain various parts and pieces of equipment
5. Complete recording and reporting procedures

### Discussion Questions

1. What is the purpose of inspecting, cleaning, and maintaining fire service tools and equipment?
2. Why is attention to small details important when inspecting fire service tools and equipment?

### Activities

1. Given tools that have been taken out of service due to safety concerns, ask students to inspect the tools/equipment and identify their deficiencies.

### CTS Guide Reference:

4-1

## Unit 5: Structural Fire Suppression

### Topic 5-1: Building Construction and Related Hazards

#### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, tools, ladders (when needed), and an assignment, will be able to describe common building materials and construction types, and identify dangerous building conditions created by fire.

#### Enabling Learning Objectives

1. Describe common building materials and construction types
2. Identify the effects of each construction type and elapsed time under fire conditions on structural integrity
3. Identify dangerous building conditions created by fire
4. Describe basic construction of typical doors, windows, walls, and roofs within the department's community or service area

#### Discussion Questions

1. Why is it important for fire fighters to understand building construction?

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2. What are some indicators of potential building collapse?
3. What is the difference between legacy and modern construction/conventional and lightweight?

### Activities

1. Locate a building under construction and complete a walk through, while identifying different components of building construction.
2. Identify different structural components on a given diagram.

### CTS Guide Reference:

3-5; 3-11; 3-12

## Topic 5-2: Fire Behavior

### Terminal Learning Objective

At the end of this topic, a student, given a fire within a structure, will be able to identify and mitigate dangerous fire behavior conditions, while ensuring fire fighter safety.

### Enabling Learning Objectives

1. List physical states of matter in which fuels are found
2. Describe the stages of fire
3. Describe the classifications of fire
4. Describe the methods of heat transfer
5. Describe the relationship of oxygen concentration to life safety and fire growth
6. Describe fire behavior in a structure
  - Energy efficient buildings
  - High rise structures
  - Below-grade structures
  - Wind-driven environments
7. Describe the principles of thermal layering within a structure fire
8. List the products of combustion found in a structure fire
9. Identify the signs, causes, effects, and prevention of backdraft/smoke explosion
10. Identify the signs, causes, effects, and prevention of flashover

### Discussion Questions

1. What are the components of the fire tetrahedron?
2. What are the stages of fire growth and what are some indicators of each stage?
3. What are signs of flashover, backdraft, and smoke explosion?
4. How have modern building materials contributed to an increase of rapid fire development?
5. How does wind affect fire in a structure?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-11, 3-12, 3-13, 3-17

## Topic 5-3: Fire Extinguishers

## Fire Fighter I

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### Terminal Learning Objective

At the end of this topic, a student, given a selection of portable fire extinguishers and personal protective equipment, will be able to choose the correct extinguisher and follow the correct handling techniques to completely extinguish incipient Class A, Class B, and Class C fires.

### Enabling Learning Objectives

1. Identify the types of, rating systems for, and risks associated with, each class of fire extinguisher
2. Discuss the operating methods and limitations of portable extinguishers
3. Operate portable fire extinguishers
  - Stored water pressure
  - Dry chemical
  - CO<sub>2</sub>
4. Select an appropriate extinguisher based on the size and type of fire
5. Safely carry portable fire extinguishers
6. Approach fire with portable fire extinguishers

### Discussion Questions

1. Why does the fire service use different types of fire extinguishers?
2. What does "P.A.S.S." stand for?
3. What does the rating "2A/10BC" represent?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-17

## Topic 5-4: Water Supply Systems

### Terminal Learning Objective

1. At the end of this topic, a student, given supply or intake hose, hose tools, a fire hydrant, portable water tank, or static water source, an apparatus, and personal protective equipment, will be able to connect a fire department engine to a water supply, ensuring tight connections and an unobstructed water flow, as a member of a team.

### Enabling Learning Objectives

1. Describe types and components of municipal and rural water systems
2. Discuss loading and off-loading procedures for a mobile water supply apparatus
3. Describe fire hydrant operations
4. Identify suitable static water supply sources
5. Describe procedures and protocols for connecting to various water sources
6. Deploy portable water tanks and the equipment necessary to transfer between and draft from them
7. Fully open and close the hydrant

### Discussion Questions

1. What are the different water sources available to fire departments?

2. What are the components of a water supply system?
3. What are three ways water is collected for a water supply system?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-16

## Topic 5-5: Fire Hose

### Terminal Learning Objective

At the end of this topic, a student, given tools, a hose, nozzles, personal protective equipment, and an engine, will be able to place a hose into service on an assigned engine according to AHJ procedures, place nozzles on attack lines, and inspect, maintain, and place hose in or out of service.

### Enabling Learning Objectives

1. Identify the principles of fire streams
2. Describe different types, design, operation, nozzle pressure effects, and flow capabilities of nozzles
3. Identify types, designs, and uses of fire hoses
4. Identify fittings, tools, and appliances
5. Describe the application of each size and type of attack line
6. Describe types of hose rolls, loads, and deployments
7. Describe departmental procedures for inspecting a hose according to the manufacturer's guidelines, noting any defects, and removing it from service
8. Discuss cleaning and maintenance methods
  - Hose
  - Nozzles
  - Appliances
9. Identify precautions to be followed when advancing hose lines to a fire
10. Describe observable results that a fire stream has been properly applied
11. Open, close, and adjust nozzle flow and patterns
12. Prevent water hammer when shutting down nozzles
13. Couple and uncouple various handline connections
  - Coupling hose – One fire fighter foot tilt method
  - Coupling hose – Two fire fighters
  - Uncoupling hose knee press
  - Uncoupling hose – Two fire fighter stiff-arm
14. Roll hose
  - Single roll
  - Donut roll
  - Twin donut roll
  - Self-locking twin donut roll
15. Carry hose

- Deploy minute-man load
  - Deploy triple fold
  - Deploy preconnected flat load
  - Deploy working line drag method
  - Deploy shoulder load method
  - Deploy hose bundle (agency specific)
  - Deploy wyed lines
16. Reload hose
- Flat load
  - Minute-man load
  - Triple fold
  - Accordion
  - Horse shoe
  - Hose bundles (agency specific)
17. Replace burst hose sections
18. Hand lay a supply hose
19. Connect a supply hose to a hydrant
20. Make hydrant-to-engine hose connections for forward and reverse lays
21. Connect and place hard suction hose for drafting operations
22. Clean different types of hose
23. Operate hose washing and drying equipment
24. Replace coupling gaskets
25. Mark defective hose

### Discussion Questions

1. What are the different types of hose used by the fire department?
2. Why is it important to clean, inspect, load, roll, and store fire hose?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-11, 3-16, 4-2

## Topic 5-6: Utility Control at Emergencies

### Terminal Learning Objective

At the end of this topic, a student, given tools and personal protective equipment, will be able to turn off building utilities in order to safely complete an assignment.

### Enabling Learning Objectives

1. Describe properties and principles of, and safety concerns for, electricity systems
  - Primary electrical service
  - Secondary electrical service
  - Alternative energy services
2. Describe properties and principles of, and safety concerns for, gas systems
3. Describe properties and principles of, and safety concerns for, water systems

4. Identify utility disconnect methods
5. Discuss associated dangers with utility disconnect methods
6. Describe use of required safety equipment
7. Identify utility control devices
8. Operate control valves or switches
9. Assess for related hazards

### Discussion Questions

1. What are some safety considerations at electrical emergencies?
2. What are some safety considerations at gas/propane emergencies?

### Activities

1. Complete a survey of the community so students can observe control techniques for gas, propane, electrical, and photovoltaic utilities.

### Instructor Notes

1. Fundamentals of Photovoltaics for the Fire Service, California State Fire Training

### CTS Guide Reference:

3-19

## Topic 5-7: Ground Ladder Operations

### Terminal Learning Objective

At the end of this topic, a student, given single and extension ladders, an assignment, team members (if needed), and personal protective equipment, will be able to set up ground ladders, assess hazards, ensure ground ladders are stable and their angles are correct for climbing, extend extension ladders to the necessary height and lock their flies, place the tops of the ladders against reliable structural components, and accomplish the assignment.

### Enabling Learning Objectives

1. Identify the types, parts, and construction features of ground ladders
2. Identify the uses of ground ladders
3. Identify types of lifts and carries
  - High shoulder – Single/two fire fighter
  - Low shoulder – Single/two/three fire fighter
  - Flat shoulder method – Three/four fire fighter
  - Suitcase or arms length carry – Single/two fire fighter
4. Describe methods used to secure ground ladders
5. Describe proper climbing techniques
6. Describe safety limits to the degree of angulation
7. Identify different angles for various tasks
8. Describe methods to safely work off ground ladders
9. Describe the hazards associated with setting up ladders
10. Define what constitutes a stable foundation for ladder placement
11. Describe what constitutes a reliable structural component for top placement
12. Tie off a halyard
13. Lift and carry ladders

## Fire Fighter I

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- High shoulder – Single fire fighter
  - Low shoulder – Single/two/three fire fighter
  - Flat shoulder method – Three/four fire fighter
  - Suitcase or arms length carry – Single/two fire fighter
14. Raise and move ladders
    - Flat raise – Single/two/three/four fire fighter
    - Beam raise – Single/two/three fire fighter
    - High shoulder – Single fire fighter
  15. Extend and lock flies
  16. Demonstrate proper climbing techniques
  17. Demonstrate proper methods to safely work off ground ladders
  18. Demonstrate leg lock method
  19. Secure ground ladders
  20. Determine that a wall and roof will support the ladder
  21. Judge extension ladder height requirements
  22. Place the ladder to avoid obvious hazards

### Discussion Questions

1. What are some of the general uses of ground ladders?
2. How would you place a ladder on a building for rescue, search, or ventilation purposes?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-7

## Topic 5-8: Forcible Entry

### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, tools, an assignment, and doors, windows, and walls, will be able to remove barriers and produce an opening that is safe and ready for use by forcing entry into a structure using tools as designed.

### Enabling Learning Objectives

1. Describe basic construction of typical doors, windows, and walls within the department's community or service area
  - Residential
  - Commercial
2. Describe types and uses of hand and power tools used in forcible entry
3. Describe operation of doors, windows, and locks
4. Identify the dangers associated with forcing entry through doors, windows, and walls
5. Transport and operate hand and power tools used in forcible entry
6. Force entry through doors, locks, windows, and walls using assorted methods and tools

### Discussion Questions

1. How would you size up a door for forcible entry purposes?
2. What are indicators of an inward versus an outward swinging door?
3. What are appropriate tools used to force entry through a residential door versus a roll-up door at a commercial structure?
4. What are some safety considerations during forcible entry operations?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-5

## Topic 5-9: Structure Fire Search and Rescue Operations

### Terminal Learning Objective

At the end of this topic, a student, given an assignment, obscured-vision conditions, personal protective equipment, a flashlight, forcible entry tools, hose lines or guide lines, a thermal image camera, and ladders (when necessary), will be able to conduct search and rescue in a structure, maintain team integrity, correctly place ladders when used, search all assigned areas, locate and remove all victims, and avoid compromising team members' safety, including respiratory protection, operating as a member of a team.

### Enabling Learning Objectives

1. Define primary and secondary search techniques
2. Describe the use of thermal imaging cameras and other search tools
3. Identify team members' roles and goals in search and rescue operations within a structure
4. Identify considerations related to respiratory protection
5. Describe methods to determine if an area is tenable
6. Define methods to use and indicators of finding victims
7. Identify psychological effects of operating in obscured conditions and ways to manage them
8. Describe the use of forcible entry tools during rescue operations
9. Describe the use of ground ladders for rescue operations
10. Describe victim removal methods (including various carries)
11. Use a self-contained breathing apparatus to exit through restricted passages
12. Set up and use different types of ladders for various types of rescue operations
  - Balcony
  - Fire escape
  - Roof
  - Window
13. Remove the victim down a ladder
  - Conscious
  - Unconscious
14. Demonstrate victim removal methods (including various carries)

15. Rescue a fire fighter whose respiratory protection is not functioning
16. Rescue a person who has no respiratory protection
17. Assess areas to determine tenability
18. Demonstrate a primary and secondary search

### Discussion Questions

1. When conducting a search in a residential structure, what area should be searched first, second, third, etc.?
2. What tools and equipment will make room/area searches more efficient?
3. What is the difference between a primary search and a secondary search?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-10

## Topic 5-10: Structural Fire Fighting Operations

### Terminal Learning Objective

At the end of this topic, a student, given an attack line (1<sup>1</sup>/<sub>2</sub>-inch or larger), ladders (when needed), personal protective equipment, tools, and an assignment, will be able to attack an interior structure fire, maintain team integrity, deploy the attack line for advancement, correctly place ladders when used, gain access into the fire area, effectively apply water, correctly approach the fire using attack techniques that facilitate suppression given the level of the fire, locate and control hidden fires, maintain the correct body posture, recognize and manage hazards, and bring the fire under control, operating as a member of a team.

### Enabling Learning Objectives

1. Identify precautions to be followed when advancing hose lines to a fire
2. Identify principles of exposure protection
  - Exterior
  - Interior
3. Define the role of the backup team in fire attack situations
4. Describe attack and control techniques for below, at, and above grade level *fires*
5. Identify methods for locating and exposing hidden fires
6. Apply water using direct, indirect, and combination attacks
7. Advance charged and uncharged hand lines of 1½-inch diameter or larger up ladders and up and down interior and exterior stairways
8. Operate charged hand lines of 1½-inch diameter or larger while secured to a ground ladder
9. Attack fires below, at, and above grade level
10. Locate and suppress interior wall and subfloor fires

### Discussion Questions

1. What are critical fireground factors to consider prior to and during fire suppression operations?
2. What is the difference between a second line and a backup line?

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3. What are important factors to consider when engaging in overhaul efforts?
4. What are indicators of a below grade fire?
5. What hazards are associated with below grade fires?

### Activities

1. To be determined by the instructor.

### Instructor Notes

1. Fire Control 3A or 3B, California State Fire Training

### CTS Guide Reference

3-11

## Topic 5-11: Horizontal Ventilation Operations

### Terminal Learning Objective

At the end of this topic, a student, given an assignment, personal protective equipment, ventilation tools, equipment, and ladders, will be able to perform horizontal ventilation on a structure, free ventilation openings of obstructions, use tools as designed, place ladders and ventilation devices correctly, and clear structure of smoke, as a part of a team.

### Enabling Learning Objectives

1. Describe the principles, advantages, limitations, and effects of horizontal ventilation
  - Natural
  - Mechanical
  - Hydraulic
2. Describe safety considerations when venting a structure
3. Transport and operate ventilation tools and equipment and ladders
4. Break windows and door glass and remove obstructions
5. Horizontally ventilate a structure
  - Mechanical
    - Negative
    - Positive
  - Hydraulic

### Discussion Questions

1. What situations call for horizontal ventilation?
2. What are appropriate actions to take when implementing horizontal ventilation?
3. What are different ways to complete horizontal ventilation?
4. What are some safety considerations when using horizontal ventilation?
5. What are the ramifications of opening windows and doors without coordinating with attack crews?

### Activities

1. Ask students to develop several case studies that resulted in fire fighter injury or fatality due to improper ventilation.

### CTS Guide Reference:

3-12

### Topic 5-12: Vertical Ventilation Operations

#### Terminal Learning Objective

At the end of this topic, a student, given an assignment, personal protective equipment, ground and roof ladders, and ventilation tools, will be able to perform vertical ventilation on a structure, position ladders for ventilation, create a specified opening, remove all ventilation barriers, avoid compromising structural integrity, release products of combustion from the structure, and retreat from the area when ventilation is accomplished, as a part of a team.

#### Enabling Learning Objectives

1. Describe the principles, advantages, limitations, and effects of vertical ventilation
2. List the techniques and safety precautions for venting flat roofs, pitched roofs, and basements
3. Identify the effects of construction type and elapsed time under fire conditions on structural integrity
4. Describe basic indicators of potential collapse or roof failure
5. Describe the advantages and disadvantages of vertical and trench/strip ventilation
6. Select, carry, deploy, and secure ground ladders for ventilation activities
7. Deploy roof ladders on pitched roofs while secured to a ground ladder for vertical ventilation
8. Carry ventilation-related tools and equipment while ascending and descending ladders
9. Hoist ventilation tools to a roof
10. Sound a roof for integrity
11. Cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements and retreat from the area as a team when ventilation is accomplished
12. Clear an opening with hand tools

#### Discussion Questions

1. When is vertical ventilation performed versus horizontal ventilation?
2. What safety factors should be considered when performing vertical/top-side ventilation?
3. What are the types of cuts that can be performed to achieve vertical ventilation?
4. What are some indicators that a roof is not safe for operations?
5. What are some safety considerations while performing vertical ventilation on different roof types?

#### Activities

1. To be determined by the instructor.

#### CTS Guide Reference

3-13

### Topic 5-13: Property Conservation

### Terminal Learning Objective

At the end of this topic, a student, given an assignment, salvage tools and equipment, and personal protective equipment, will be able to conserve property so that the building and its contents are protected from further damage, acting as a member of a team.

### Enabling Learning Objectives

1. Discuss the purpose of property conservation and its value to the public
2. Describe methods used to protect property
3. List types of and uses for salvage covers
4. Describe operations at properties protected with automatic sprinklers
5. Discuss how to stop the flow of water from an automatic sprinkler head
6. Identify the main control valve on an automatic sprinkler system
7. Describe procedures for protecting possible areas of origin and potential evidence
8. Describe forcible entry issues related to salvage
9. Cluster furniture
10. Deploy covering materials
11. Roll and fold salvage covers for reuse
12. Construct water chutes and catch-alls
13. Remove water
14. Cover building openings, including doors, windows, floor openings, and roof openings
15. Stop the flow of water from a sprinkler with sprinkler wedges or stoppers
16. Operate a main control valve on an automatic sprinkler system

### Discussion Questions

1. What is the importance of property conservation?
2. When does property conservation take place?
3. What are some effective ways to conserve property?
4. What is primary damage?
5. What is secondary damage?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference

3-15

## Topic 5-14: Overhaul

### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, an attack line, hand tools, a flashlight, and an assignment, will be able to overhaul a fire scene without compromising structural integrity, discover all hidden fires, preserve fire cause evidence, and extinguish the fire.

### Enabling Learning Objectives

1. Describe the purposes and methods of overhaul
2. Describe the types of fire attack lines and water application devices most effective for overhaul

3. Discuss water application methods for extinguishment that limit water damage
4. Identify types of tools and methods used to expose hidden fire
  - Senses
  - Hand and power tools
  - Thermal imaging cameras
5. Discuss dangers associated with overhaul
  - Air monitoring
  - Need for respiratory protection
6. Identify reasons for protecting a fire scene
7. Describe obvious signs of area of origin, cause, or arson
8. List techniques for the preservation of fire cause evidence
9. Deploy and operate an attack line for overhaul
10. Apply water for maximum effectiveness
11. Expose and extinguish hidden fires in walls, ceilings, and subfloor spaces
12. Remove floor, ceiling, and wall components to expose void spaces without compromising structural integrity
13. Recognize and preserve obvious signs of area of origin and arson
14. Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination
15. Evaluate for complete extinguishment

### Discussion Questions

1. What safety factors should be considered when performing overhaul operations?
2. What are appropriate tools and equipment used when performing overhaul operations?
3. What are ways to preserve an area for a proper fire investigation prior to and during overhaul operations?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

3-14; 3-9

## Unit 6: Fire Fighter Survival

### Topic 6-1: Structural Fire Fighter Survival

#### Terminal Learning Objective

At the end of this topic, a student, given vision-obscured conditions, personal protective equipment, and the department's standard operating procedures, will be able to activate an emergency call for assistance and exit a hazardous area without endangering others while maintaining team integrity.

#### Enabling Learning Objectives

1. Identify different personnel accountability systems
2. Identify the development of fire fighter survival attitudes

3. Identify emergency communication procedures
4. Identify emergency procedures for loss of air supply
5. Initiate an emergency call in accordance with the AHJ's procedures
6. Use other methods of emergency calls for assistance
7. Describe emergency evacuation methods for fire fighter survival
8. Define what constitutes a safe haven
9. Identify elements that create or indicate a hazard
10. Demonstrate emergency evacuation methods for fire fighter survival
11. Operate as a team member in vision-obscured conditions
12. Locate and follow a guide line
13. Evaluate areas for hazards
14. Identify a safe haven

### Discussion Questions

1. What are best practices for enhancing fire fighter safety and survival during fire suppression activities?
2. What are common factors that place fire fighters in need of rescue assistance in hazardous conditions?
3. What should a fire fighter do when he/she is trapped, disoriented, or has lost direct contact with the crew?
4. What does "L.U.N.A.R." stand for?

### Activities

1. Ask students to develop case studies based on line-of-duty injuries and deaths that resulted from trapped, missing, or lost fire fighters.

### Instructor Note

1. State Fire Training Fire Fighter Survival or International Association of Fire Fighter's Fire Ground Survival Program

### CTS Guide Reference:

2-4; 3-6

## Unit 7: Suppression of Fires Outside of a Structure

### Topic 7-1: Exterior Fires

#### Terminal Learning Objective

At the end of this topic, a student, given attack lines, hand tools, master stream devices, an assignment, personal protective equipment, and fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior, will be able to extinguish fires in exterior Class A materials, protect exposures, stop the spread of fire, avoid collapse hazards, effectively apply water, extinguish the fire, and preserve signs of the origin area(s) and arson.

#### Enabling Learning Objectives

1. Discuss types of exterior fires

2. Describe the types of attack lines and water streams appropriate for attacking stacked, piled materials, and outdoor fires
3. Identify water application methods for exposure protection and fire extinguishment
4. Identify dangers, such as collapse, associated with stacked and piled materials
5. Describe various extinguishing agents and their effect on different material configurations
6. Identify tools and methods used in breaking up various types of materials
7. Describe the difficulties related to complete extinguishment of stacked and piled materials
8. Describe dangers such as exposure to toxic or hazardous materials associated with storage building and container fires
9. Recognize inherent hazards related to the material's configuration
10. Operate handlines or master streams
  - One fire fighter method (operating a large hand line)
  - Two fire fighter method (operating a large hand line)
  - Master stream
    - Fixed
    - Portable
11. Break up material using hand tools and water streams
12. Evaluate and modify water application for maximum penetration
13. Search for and expose hidden fires
14. Assess patterns for origin determination
15. Evaluate for complete extinguishment

### Discussion Questions

1. What life hazards are presented to fire fighters during exterior fires?
2. What are some concerns presented by outbuildings and dumpster fires and what steps can be taken to ensure fire fighter safety?

### Activities

1. Divide students into groups and ask them to list possible materials found in exterior and outbuilding fires.

### CTS Guide Reference:

3-9

## Topic 7-2: Passenger Vehicle Fires

### Terminal Learning Objective

At the end of this topic, a student, given personal protective equipment, an attack line (1½-inch or larger), hand tools, and a passenger vehicle, will be able to attack a passenger vehicle fire, avoid hazards, identify and control leaking flammable liquids, maintain protection from flash fires, overhaul all vehicle compartments, and extinguish the fire, while operating as part of a team.

### Enabling Learning Objectives

1. Describe principles of fire streams as they relate to fighting passenger vehicle fires

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2. Identify precautions to be followed when advancing hose lines toward a passenger vehicle
3. List observable results that a fire stream has been properly applied
4. Identify the hazards associated with alternative fuels in passenger vehicle fires
5. Describe dangerous conditions created during a passenger vehicle fire
6. Describe common types of accidents or injuries related to fighting passenger vehicle fires and how to avoid them
7. Describe how to access locked passenger, trunk, and engine compartments
8. Identify methods for overhauling a passenger vehicle
9. Identify passenger vehicle fuel types
10. Assess and control fuel leaks
11. Apply water for maximum effectiveness while maintaining flash fire protection
12. Advance 1½-inch or larger diameter attack lines on a passenger vehicle fire
13. Expose hidden fires by opening all passenger vehicle compartments

### Discussion Questions

1. What are the major safety concerns of fire fighters during passenger vehicle fires?
2. What is the proper personal protective equipment associated with fighting passenger vehicle fires?
3. What are the recommended approaches, hoseline selections, and proper procedures for fighting passenger vehicle fires?
4. What are some hazards that hybrid and alternative fuel passenger vehicle fires present?

### Activities

1. Given a fire in one of the three different vehicle compartments, ask students to describe and diagram how to fight each fire and list the different concerns each present to the fire fighter.

### Instructor Note:

1. Alternative Fuel Vehicles, California State Fire Training

### CTS Guide Reference:

3-8

## Unit 8: Wildland Fire Suppression

### Topic 8-1: Wildland Response

#### Terminal Learning Objective

At the end of this topic, a student, given an assembly location, an assignment, an incident location, a mode of transportation, and time requirements, will be able to assemble and prepare for response so that arrival at the incident with the required personnel and equipment meets agency guidelines.

#### Enabling Learning Objectives

1. Identify equipment requirements
2. Discuss agency time standards

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3. Identify special transportation considerations (weight limitations)
4. Discuss agency safety response guidelines
5. Describe operational procedures for various transportation modes

### Discussion Questions

1. What items are necessary for wildland incident response?
2. What steps should be completed at the fire station before a response to a wildland incident?

### Activities

1. Ask students to create a list of items carried in an out-of-county bag.

### CTS Guide Reference:

5-4

## Topic 8-2: Wildland Personal Protective Equipment

### Terminal Learning Objective

At the end of this topic, a student, given wildland personal protective clothing and a new generation fire shelter, will be able to don wildland personal protective clothing and shelter according to the manufacturers' guidelines within 60 seconds; deploy a new generation fire shelter within 30 seconds; ensure serviceability and availability on the fireline; and recognize defects and report them to a supervisor.

### Enabling Learning Objectives

1. Describe the use and limitations of required wildland personal protective clothing
2. Describe the use, limitations, inspection, and care of new generation fire shelter
3. Describe the inspection of wildland personal protective clothing
4. Recognize unserviceable items among wildland personal protective clothing
5. Describe maintenance of wildland personal protective clothing
6. Discuss agency policy on fire shelter use
7. Demonstrate the ability to don wildland personal protective ensemble
8. Demonstrate the ability to deploy new generation fire shelter
  - Standing to sitting method
  - Standing drop-down method
  - Lying down method
9. Demonstrate proper cleaning procedures for wildland personal protective clothing

### Discussion Questions

1. What characteristics make wildland personal protective clothing different from structural personal protective equipment?
2. Why is it important to always wear your personal protective equipment, including your fire shelter?

### Activities

1. Given a recent fire entrapment or shelter deployment, ask students to discuss how personal protective equipment worked to prevent more serious injuries or fatalities.

### Instructor Note:

1. New Generation Fire Shelter DVD, National Wildland Coordinating Group, NFES 2712

### CTS Guide Reference:

5-1; 5-2

### Topic 8-3: Wildland Tools and Equipment

#### Terminal Learning Objective

At the end of this topic, a student, given tools, equipment, and agency maintenance specifications, will be able to recognize defects and report them to a supervisor and maintain assigned suppression hand tools and equipment so that assigned equipment is serviceable.

#### Enabling Learning Objectives

1. Identify wildland fire fighting tools and equipment
  - Fuseses
  - Road flares
  - Drip torches
  - Backpumps
  - Round point shovel
  - Pulaski
  - Mcleod
  - Brush hook
  - Single and double bit axe
  - Wire broom
  - Rhino tool
  - Combi tool
  - Fireline flagging
2. Describe uses for wildland fire fighting tools and equipment
3. Describe the inspection of tools
4. Describe the maintenance and care of tools and equipment
5. Describe the inspection of assigned suppression equipment
6. Recognize unserviceable items
7. Perform required maintenance techniques
8. Sharpen assigned suppression equipment
9. Perform other maintenance techniques for assigned suppression equipment
10. Use required maintenance equipment
11. Assemble and use a back pump

#### Discussion Questions

1. Why is it important to properly maintain wildland tools and equipment?
2. What are some common tools for cutting lines?

#### Activities

1. Given wildland tools that have been taken out of service due to safety concerns, ask students to inspect the tools/equipment and identify the deficiencies.

### CTS Guide Reference:

5-3

### Topic 8-4: Wildland Fire Behavior

#### Terminal Learning Objective

At the end of this topic, a student, given a wildland or wildland urban interface fire and the standard safety policies and procedures of the agency, will be able to describe basic wildland fire behavior.

#### Enabling Learning Objectives

1. Describe basic wildland fire behavior

#### Discussion Questions

1. Why is it important to have a good understanding of weather?
2. How does weather influence fire behavior?
3. Why is it important to monitor the seven wildland fire environment factors?

#### Activities

1. Ask students to discuss how local factors influence fire behavior.
2. Ask students to obtain and review various sources of weather data.
3. Ask students to correctly predict fire behavior using a simulated wildland fire.

#### Instructor Notes:

1. Introduction to Wildland Fire Behavior, S-190, National Wildland Coordinating Group
2. Fire Weather DVD, National Wildland Coordinating Group, NFES 2236

#### CTS Guide Reference:

5-5

### Topic 8-5: Wildland Fire Safety

#### Terminal Learning Objective

At the end of this topic, a student, given a wildland or wildland urban interface fire and the standard safety policies and procedures of the agency, will be able to recognize hazards and unsafe situations, promptly communicate hazard(s) and unsafe condition(s) to a supervisor, and take appropriate action.

#### Enabling Learning Objectives

1. Describe basic wildland fire safety
  - 10 standard fire orders
  - 18 watch-out situations
  - LCES
  - Common denominators
  - Downhill line construction
  - Avoiding fire entrapment
  - Using a vehicle or a structure as refuge
2. Describe hazards associated with working around aircraft
3. Describe hazards associated with working around heavy equipment
4. Assume safe position for an air tanker drop
5. Use fireline flagging
6. Use the Incident Response Pocket Guide (IRPG)

## Fire Fighter I

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### Discussion Questions

1. How is LCES different than the 10 standard orders or 18 watch-out situations?
2. How do the principles of wildland fire behavior factor into avoiding fire entrapment?

### Activities

1. Using small work groups, ask students to identify how to effectively implement the 10 standard fire orders and 18 watch-out situations.
2. Given several fatal fire incidents, ask students to identify violations of the 10 standard fire orders and 18 watch-out situations.

### CTS Guide Reference:

5-5

## Topic 8-6: Human Factors on the Fireline

### Terminal Learning Objective

At the end of this topic, a student, given a wildland or wildland urban interface fire and the standard safety policies and procedures of the agency, will be able to promptly communicate hazard(s) and unsafe condition(s) to a supervisor.

### Enabling Learning Objectives

1. Describe basic verbal communications

### Discussion Questions

1. How do human factors affect fireline safety?
2. How do human factors affect crew cohesion?

### Activities

1. To be determined by the instructor.

### Instructor Notes:

1. Human Factors on the Fireline, L-180, National Wildland Coordinating Group

### CTS Guide Reference:

5-5

## Topic 8-7: Wildland Suppression

### Terminal Learning Objective

At the end of this topic, a student, given a wildland or wildland urban interface fire and the standard safety policies and procedures of the agency, will be able to recognize hazards and unsafe situations, promptly communicate hazard(s) and unsafe condition(s) to a supervisor, and take appropriate action.

### Enabling Learning Objectives

1. Describe basic wildland strategy and tactics
2. Describe basic wildland suppression methods
  - Hose lays
  - Line construction
    - Hand line
    - Dozer line
    - Retardant line

- Mobile attack
- 3. Use and carry wildland tools
  - Brush hook
  - Pulaski
  - Single and double bit axe
  - Round point shovel
  - Mcleod
  - Wire broom
  - Rhino tool
  - Combi tool
  - Procedures for passing hand tools
- 4. Construct handline
  - Build a control line using the bump up or one lick method
  - Build a cup or trench while constructing handline
- 5. Perform mobile attack
- 6. Perform progressive hoselay
  - Two person minimum
- 7. Retrieve hose
  - Single-section drain and carry
  - Figure 8 drain and carry

### Discussion Questions

1. How is a simple hoselay different from a progressive hoselay?
2. How wide should a fireline be?
3. What are the safety considerations when building a fireline?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference

5-5; 5-6

## Topic 8-8: Reinforcing a Fireline

### Terminal Learning Objective

At the end of this topic, a student, given a wildland fire, suppression tools, water or other suppression agents, and equipment, will be able to locate and abate burning materials and unburned fuels that threaten the fireline's integrity.

### Enabling Learning Objectives

1. Describe line improvement techniques
2. Identify safety considerations when burning out
3. Describe the types of basic ignition devices
4. Use basic ignition devices
  - How to ignite and extinguish road flares and fussees
  - How to assemble and use a drip torch

## Fire Fighter I

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### Discussion Questions

1. What tools might be used to burnout a fireline?
2. What safety factors must be mitigated before burning is done?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

5-7

## Topic 8-9: Wildland Urban Interface

### Terminal Learning Objective

At the end of this topic, a student, given a wildland or wildland urban interface fire, suppression tools, and equipment, will be able to describe methods of reducing the threat of fire exposure to improved properties in order to protect them.

### Enabling Learning Objectives

1. Describe wildland fire behavior within the wildland urban interface
2. Describe wildland fuel removal for structure preparation
3. Identify structure defense methods
4. Identify equipment and personnel capabilities within the wildland urban interface
5. Prepare a structure for structure defense
6. Conduct structure defense within the wildland urban interface

### Discussion Questions

1. How can the S-FACTS be used to improve safety when operating in the wildland urban interface?
2. Why is it acceptable to leave a structure that is threatened by a wildland fire?
3. How is a TRA different from a safety zone?

### Activities

1. Ask students to complete an assessment of structures and determine triage category and appropriate tactics to protect them.
2. Ask students to fill out a wildland placard ICS 231.

### Instructor Notes:

1. Wildland Urban Interface Operations Handbook, CalFire
2. Field Operations Guide, Chapter 15, Firescope

### CTS Guide Reference:

5-8

## Topic 8-10: Mop-up Operations

### Terminal Learning Objective

At the end of this topic, a student, given a wildland fire, suppression tools, water or other suppression agents, and equipment, will be able to mop up a fire area, locating and extinguishing burning fuels that threaten escape.

### Enabling Learning Objectives

1. Describe principles, techniques, and standards for mop-up

## Fire Fighter I

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- Dry mop-up
  - Wet mop-up
2. Use basic tools to perform mop-up operations
  3. Use basic techniques to perform mop-up operations

### Discussion Questions

1. What are some critical elements of mop-up operations?
2. How will different fuels influence mop-up operations?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

5-9

## Topic 8-11: Conducting Patrols

### Terminal Learning Objective

At the end of this topic, a student, given a wildland fire, suppression tools, and equipment, will be able to patrol and maintain control of the fire area.

### Enabling Learning Objectives

1. Describe the principles, techniques, and standards of patrol

### Discussion Questions

1. What should a fire fighter look for during patrol operations?
2. What is the importance of conducting patrol operations?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

5-10

## Unit 9: Hazardous Materials/WMD

### Topic 9-1: Recognizing Hazardous Materials/WMD

#### Terminal Learning Objective

At the end of this topic, a student, given a hazardous materials incident, the DOT Emergency Response Guidebook or equivalent guide, shipper/manufacturer papers and contacts, material safety data sheets, and an assignment, will be able to recognize the presence of hazardous materials and the indicators of a hazardous materials incident, correctly identify the materials involved, take personal protective actions, initiate the appropriate notification process, and secure the area.

#### Enabling Learning Objectives

1. Define hazardous materials
2. Describe the risks associated with hazardous materials
3. Recognize the presence of hazardous materials in an emergency
4. Identify the hazardous materials involved
  - Placards

- Labels
  - Containers
5. Recognize the presence of weapons of mass destruction
  6. Identify procedures in the event of a WMD incident
  7. Identify the potential outcomes associated with an emergency when hazardous materials are present
  8. Identify the types of additional resources for a hazardous materials response
  9. Identify mandatory notifications in accordance with AHJ
  10. Describe the role of the fire fighter in the AHJ's emergency response plan, including site security and control zones
  11. Describe the components of the DOT Emergency Response Guidebook or equivalent guide
  12. Identify shipper/manufacturer papers and contacts
  13. Identify hazardous materials, their potential hazards, and appropriate personal protective actions using material safety data sheets
  14. Describe the process to preserve evidence
  15. Use the DOT Emergency Response Guidebook or equivalent guide
  16. Initiate protective actions to secure the area
  17. Make appropriate notifications as directed by the AHJ
  18. Use material safety data sheets to identify hazardous materials, their potential hazards, and appropriate personal protective actions

### Discussion Questions

1. What factors might indicate a hazardous materials/WMD incident?
2. What role does the DOT Emergency Response Guidebook play in identifying a hazardous materials incident?

### Activities

1. Divide students into groups and ask them to list different factors that may indicate a hazardous materials incident in different methods of commercial transport.
2. Ask students to outline factors related to recognizing WMD incidents during initial response.

### CTS Guide Reference:

6-1

## Topic 9-2: Identifying/Analyzing Hazardous Materials/WMD Incidents

### Terminal Learning Objective

At the end of this topic, a student, given a hazardous materials incident, recognized hazardous materials, department standard operating procedures, equipment readily available to personnel, and an assignment, will be able to protect persons, property, and the environment from further harm, initiate the appropriate communications process, and secure the area.

### Enabling Learning Objectives

1. Define basic hazardous materials terms

2. Define health hazards and physical and chemical properties of hazardous materials
3. Describe basic hazard and risk assessment techniques
4. Describe procedures for initial hazardous materials/WMD response
5. Describe the incident command system used in hazardous materials incidents
6. Discuss standard operating procedures according to AHJ
7. Identify the containers and materials involved using the DOT Emergency Response Guidebook or equivalent guide
8. Identify damaged containers and the effects of release
9. Describe the process of evacuation and/or shelter in place
10. Determine if materials have been released
11. Evaluate the status of each incident response objective at a hazardous materials/WMD incident
12. Communicate the status of a hazardous materials/WMD incident
13. Limit access to the area

### Discussion Questions

1. Given a chemical release, what are the important safety concerns related to weather and time of day for both fire fighters and the general public?
2. What are the basic roles and responsibilities of the fire fighter in a hazardous materials incident response?
3. What types of WMD agents might a fire fighter respond to?
4. What factors do you consider when deciding between evacuation and shelter in place?

### Activities

1. Using the DOT Emergency Response Guidebook, ask students to identify proper emergency response practices when independently given a cargo container description, a four digit ID number, and a chemical name.

### CTS Guide Reference:

6-2

## Topic 9-3: Emergency Decontamination

### Terminal Learning Objective

At the end of this topic, a student, given a hazardous material incident, an individual contaminated by a hazardous material that can be decontaminated by fire fighters in personal protective equipment, equipment readily available to fire fighters, standard operating procedures, and an assignment, will be able to perform emergency decontamination procedures, use appropriate personal protective equipment based on hazard, protect exposures, avoid hazards, decontaminate victims and responders, and identify contaminated items and products of contamination for subsequent control.

### Enabling Learning Objectives

1. Identify capabilities and limitations of personal protective equipment provided by the AHJ
2. Identify ways that people, personal protective equipment, apparatuses, tools, and equipment become contaminated

3. Explain the importance and limitations of emergency decontamination procedures
4. Describe standard operating procedures for emergency decontamination
5. Prepare an emergency decontamination area
6. Perform emergency decontamination

### Discussion Questions

1. What is the importance and proper methods of emergency decontamination for mass casualty incidents?
2. What consequences can arise from improper decontamination procedures?

### Activities

1. To be determined by the instructor.

### CTS Guide Reference:

6-3

## Topic 9-4: Mitigating a Hazardous Materials/WMD Incident

### Terminal Learning Objective

At the end of this topic, a student, given a hazardous materials incident, recognized hazardous materials, department standard operating procedures, equipment readily available to personnel, an assignment, and personal protective equipment, will be able to perform basic control, containment, and confinement techniques to control hazardous materials release, and protect emergency responders from contamination.

### Enabling Learning Objectives

1. Describe product control operations including absorption, adsorption, damming, diking, dilution, retention, remote valve shutoff, and vapor dispersion
2. Identify tools and equipment for product control
3. Explain the technical decontamination process, according to AHJ
4. Perform basic control, containment, and confinement operations within the capabilities of the AHJ's resources and personal protective equipment

### Discussion Questions

1. What are some different methods of control, containment, and confinement operations and how might these cause harm to fire fighters, the general public, and the environment?
2. What is the importance of containment and control during incidents near waterways, storm drains, and other routes of major water systems?
3. How is a WMD incident contained and the scene preserved for law enforcement?

### Activities

1. Divide students into groups and assign each group a disaster. Given weather, topography, and their assigned disaster, ask students to outline a response and create a plan to control and contain the incident.

### CTS Guide Reference:

6-4

# Fire Fighter I

## Time Table

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
<b>Unit 1: Introduction</b>			
Topic 1-1: Orientation and Administration			
Lecture	00:30		
Activity 1-1		00:00	
Topic 1-2: Fire Fighter I Certification Process			
Lecture	00:30		
Activity 1-2		00:00	
Topic 1-3: General Knowledge Requirements			
Lecture	3.00		
Activity 1-3		00:00	
<b>Unit 1 Totals</b>	<b>4:00</b>	<b>00:00</b>	<b>4:00</b>
<b>Unit 2: Fire Fighter Safety</b>			
Topic 2-1: Health and Safety			
Lecture	4:00		
Activity 2-1		00:00	
Topic 2-2: Structural Personal Protective Ensemble			
Lecture	2:00		
Activity 2-2		00:00	
Skills		5:00	
Topic 2-3: Self-Contained Breathing Apparatus			
Lecture	4:00		
Activity 2-3		00:00	
Skills		12:00	
Topic 2-4: Responding on an Apparatus			
Lecture	00:30		
Activity 2-4		00:00	
Skills		01:00	
Topic 2-5: Operating at an Emergency Scene			
Lecture	00:45		
Activity 2-5		00:15	
Skills		01:00	
<b>Unit 2 Totals</b>	<b>11:15</b>	<b>19:15</b>	<b>30:30</b>
<b>Unit 3: Communications</b>			
Topic 3-1: Operating a Phone in a Non-emergency Situation			
Lecture	00:15		

# Fire Fighter I

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Activity 3-1		00:10	
Skills		00:10	
Topic 3-2: Initiating a Response to an Emergency			
Lecture	00:45		
Activity 3-2		00:10	
Skills		00:30	
Topic 3-3: Operating Fire Department Radios			
Lecture	1:00		
Activity 3-3		00:30	
Skills		00:30	
<b>Unit 3 Totals</b>	<b>2:00</b>	<b>2:00</b>	<b>4:00</b>
<b>Unit 4: Fire Tools and Equipment</b>			
Topic 4-1: Ropes and Knots			
Lecture	2:00		
Activity 4-1		00:00	
Skills		6:00	
Topic 4-2: Hand and Power Tools			
Lecture	2:00		
Activity 4-2		00:30	
Skills		2:00	
Topic 4-3: Portable Electric and Lighting Equipment			
Lecture	1:00		
Activity 4-3		00:00	
Skills		2:00	
Topic 4-4: Maintenance			
Lecture	2:00		
Activity 4-4		00:00	
Skills		6:00	
<b>Unit 4 Totals</b>	<b>7:00</b>	<b>16:30</b>	<b>23:30</b>
<b>Unit 5: Structural Fire Suppression</b>			
Topic 5-1: Building Construction and Related Hazards			
Lecture	3:00		
Activity 5-1		1:00	
Topic 5-2: Fire Behavior			
Lecture	4:00		
Activity 5-2		00:00	

## Fire Fighter I

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Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Topic 5-3: Fire Extinguishers			
Lecture	2:00		
Activity 5-3		00:00	
Skills		5:00	
Topic 5-4: Water Supply Systems			
Lecture	2:00		
Activity 5-4		00:00	
Skills		6:00	
Topic 5-5: Fire Hose			
Lecture	8:00		
Activity 5-5		00:00	
Skills		36:00	
Topic 5-6: Utility Control at Emergencies			
Lecture	1:30		
Activity 5-6		00:00	
Skills		00:30	
Topic 5-7: Ground Ladder Operations			
Lecture	4:00		
Activity 5-7		00:00	
Skills		36:00	
Topic 5-8: Forcible Entry			
Lecture	2:00		
Activity 5-8		00:00	
Skills		6:00	
Topic 5-9: Structure Fire Search and Rescue Operations			
Lecture	2:00		
Activity 5-9		00:00	
Skills		8:00	
Topic 5-10: Structural Fire Fighting Operations			
Lecture	4:00		
Activity 5-10		00:00	
Skills		20:00	
Topic 5-11: Horizontal Ventilation Operations			
Lecture	1:30		
Activity 5-11		00:30	
Skills		4:00	
Topic 5-12: Vertical Ventilation Operations			
Lecture	4:00		

# Fire Fighter I

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Activity 5-12		00:00	
Skills		8:00	
Topic 5-13: Property Conservation			
Lecture	2:00		
Activity 5-13		00:00	
Skills		8:00	
Topic 5-14: Overhaul			
Lecture	2:00		
Activity 5-14		00:00	
Skills		4:00	
<b>Unit 5 Totals</b>	<b>42:00</b>	<b>143:00</b>	<b>185:00</b>
<b>Unit 6: Fire Fighter Survival</b>			
Topic 6-1: Structural Fire Fighter Survival			
Lecture	4:00		
Activity 6-1		00:00	
Skills		12:00	
<b>Unit 6 Totals</b>	<b>4:00</b>	<b>12:00</b>	<b>16:00</b>
<b>Unit 7: Suppression of Fires Outside of a Structure</b>			
Topic 7-1: Exterior Fires			
Lecture	1:45		
Activity 7-1		00:15	
Skills		6:00	
Topic 7-2: Passenger Vehicle Fires			
Lecture	3:00		
Activity 7-2		00:00	
Skills		5:00	
<b>Unit 7 Totals</b>	<b>4:45</b>	<b>11:15</b>	<b>16:00</b>
<b>Unit 8: Wildland Fire Suppression</b>			
Topic 8-1: Wildland Response			
Lecture	00:30		
Activity 8-1		00:15	
Topic 8-2: Wildland Personal Protective Equipment			
Lecture	1:30		
Activity 8-2		00:30	
Skills		2:00	
Topic 8-3: Wildland Tools and Equipment			
Lecture	1:30		

## Fire Fighter I

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Activity 8-3		00:30	
Skills		1:15	
Topic 8-4: Wildland Fire Behavior			
Lecture	8:00		
Activity 8-4		00:00	
Topic 8-5: Wildland Fire Safety			
Lecture	6:00		
Activity 8-5		2:00	
Skills		1:00	
Topic 8-6: Human Factors on the Fireline			
Lecture	4:00		
Activity 8-6		00:00	
Topic 8-7: Wildland Suppression			
Lecture	4:00		
Activity 8-7		00:00	
Skills		14:00	
Topic 8-8: Reinforcing a Fireline			
Lecture	2:00		
Activity 8-8		00:00	
Skills		1:00	
Topic 8-9: Wildland Urban Interface			
Lecture	3:00		
Activity 8-9		00:00	
Skills		1:00	
Topic 8-10: Mop-up Operations			
Lecture	00:30		
Activity 8-10		00:00	
Skills		00:30	
Topic 8-11: Conducting Patrols			
Lecture	00:30		
Activity 8-11:		00:00	
<b>Unit 8 Totals</b>	<b>31:30</b>	<b>24:00</b>	<b>55:30</b>
<b>Unit 9: Hazardous Materials/WMD</b>			
Topic 9-1: Recognizing Hazardous Materials/WMD			
Lecture	3:00		
Activity 9-1		1:00	
Skills		2:00	

## Fire Fighter I

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Topic 9-2: Identifying/Analyzing Hazardous Materials/WMD Incidents			
Lecture	4:00		
Activity 9-2		1:00	
Skills		1:00	
Topic 9-3: Emergency Decontamination			
Lecture	2:00		
Activity 9-3		00:00	
Skills		2:00	
Topic 9-4: Mitigating a Hazardous Materials/WMD Incident			
Lecture	3:00		
Activity 9-4		1:00	
Skills		4:00	
<b>Unit 9 Totals</b>	<b>12:00</b>	<b>12:00</b>	<b>24:00</b>
<b>Lecture, Activity, and Unit Totals:</b>	<b>126:30</b>	<b>240:00</b>	<b>366:30</b>

### Course Totals

Total Lecture Time (LT)	126:30
Total Skills/Activity Time (AT)	240:00
Testing Time	
• Fire Fighter I	24:00
• Wildland Fire Fighter I	8:00
• Hazardous Materials/WMD	4:00
<b>Total Testing Time</b>	<b>36:00</b>
<b>Total Course Time</b>	<b>402:30</b>

**Note:** Skills and activity time will vary depending on the number of students in the program. It is important to remember that the suggested skill hours are for up to 50 students. The following is a breakdown of what a program might look like if there were fewer students. These are just estimates, times may need to be adjusted based on student abilities.

40 – 50 Students	240 hours
30 – 40 Students	180 hours
20 – 30 Students	120 hours
1 – 20 Students	60 hours

# Fire Fighter I

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## Capstone Task Book [Month Year]



California Department of Forestry and Fire Protection  
Office of the State Fire Marshal  
State Fire Training

# Fire Fighter I

## Capstone Task Book [Month Year]

**Candidate:** [Click here to enter text.](#)

**SFT ID Number:** [Click here to enter text.](#)

**Fire Agency:** [Click here to enter text.](#)

**Issued By:** [Click here to enter text.](#)

**Issue Date:** [Click here to enter text.](#)

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This Capstone Task Book includes the certification training standards included in Fire Fighter I ([Month Year]) which is based on NFA 1001 Standard for Fire Fighter Professional Qualifications(2013), NFA 1051 Standard for Wildland Fire Fighter Professional Qualifications (2012), and NFA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2008).

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Cover photo courtesy of Dave Boyce, Almanac News

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# Purpose and Process

The State Fire Training capstone task book is a performance-based document. It lists the individual job performance requirements for certification.

## Purpose

Each capstone task book focuses on a single State Fire Training job function certification. A capstone task book identifies the minimum job performance requirements necessary to perform the duties of that certification. Completion of a capstone task book verifies that the candidate has demonstrated the requisite knowledge and skills to obtain that certification.

## Responsibilities

### Candidate Responsibilities

The candidate is the individual pursuing certification.

All candidates shall:

- Complete a block on the Signature Verification page.
- Complete the Experience, Rank, and Job Performance Requirements.
- Accurately record and maintain the capstone task book.
- Submit the completed capstone task book to State Fire Training.
- Retain a copy of the completed capstone task book.

### Evaluator Responsibilities

An evaluator is any individual who verifies that the candidate can satisfactorily execute a job performance requirement. A qualified evaluator is designated by the candidate's fire chief (or authorized designee) and shall possess the equivalent or higher-level certification. If no such evaluator is present within the organization, the fire chief (or authorized designee) shall designate an individual with more experience than the candidate and a demonstrated ability to execute the job performance requirements. A capstone task book may have more than one evaluator.

All evaluators shall:

- Complete a block the Signature Verification page.
- Review and understand the candidate's capstone task book requirements and responsibilities.
- Verify the candidate's successful completion of one or more job performance requirements through observation or review.

## Purpose and Process

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- Sign and/or initial all appropriate lines in the capstone task book to record demonstrated performance of tasks.

### Fire Chief Responsibilities

The fire chief (or authorized designee) is the individual who reviews and confirms the completion of a candidate's capstone task book.

The fire chief (or authorized designee) shall:

- Designate qualified evaluators.
- Complete a block on the Signature Verification page.
- Review the candidate's capstone task book requirements and responsibilities.
- Verify the candidate has obtained the appropriate signatures to verify successful completion of each job performance requirement.
- Sign the fire chief verification statement under Authorities. If signing as an authorized designee, verify that your signature is on file with State Fire Training.

### Completion Process

When you receive your capstone task book:

1. Thoroughly review the Experience, Rank, and Job Performance Requirements segments to make sure that you understand them.
2. Confirm who will evaluate your job performance requirements with your fire agency.
3. Complete the Experience segment.
4. Complete the Rank segment.
5. Complete each task in the Job Performance Requirements segment and ensure that an evaluator signs and dates each one to verify completion.
6. Ask your fire chief (or authorized designee) to verify capstone task book completion by signing the appropriate paragraph under Authorities.
7. Make a copy of the completed capstone task book to retain with your personal records.
8. Mail the original capstone task book to State Fire Training (see address below).

After receipt and review of your completed capstone task book, State Fire Training will authorize the capstone task book and mail your certificate to you. State Fire Training retains the completed, authorized original capstone task book in your career file.

If State Fire Training determines that your capstone task book is incomplete State Fire Training will return your capstone task book with a checklist indicating what needs to be completed.

## Purpose and Process

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**Do not submit this capstone task book until you have completed the Experience and Rank segments and all tasks in the Job Performance Requirements segment and obtained all required signatures.**

### State Fire Training Mailing Address

Office of the State Fire Marshal  
State Fire Training  
Attn: Certification Section  
1131 S Street  
Sacramento, CA 95811

### Completion Timeframe

State Fire Training aims to update capstone task books on a five-year cycle. A capstone task book in process is valid until State Fire Training issues a new capstone task book for the same job function certification.

If a candidate does not complete a capstone task book before the release of a new version, State Fire Training will send the candidate a task book revision supplement identifying any revisions or new requirements. The candidate must fulfill all requirements included in the revision supplement and submit the revision supplement with the original task book.



## Capstone Task Book Requirements

### Experience

The candidate meets the following requirements for experience.

Six months full-time experience as a Fire Fighter in a California fire agency or

Twelve months Volunteer or Reserve Fire Fighter in a California fire agency

Assignment	Agency	Start Date	End Date

Please attach additional pages if more space is needed to describe experience.

### Rank or Position

The candidate meets the following qualifications for rank or position.

Rank or Position	Agency	Appointment Date
Fire Fighter		

## Job Performance Requirements

All job performance requirements must be performed in accordance with the standards of the authority having jurisdiction (AHJ) or the National Fire Protection Association (NFPA), whichever is more restrictive.

### General

1. **OSFM** Operate at a confined space or permit-required confine space and identify when a confined space is present, hazards are recognized and mitigated, equipment is secured, procedures are followed, and Cal/OSHA position are utilized.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

2. **OSFM** Operate within the Incident Command System on an incident, given an incident and an incident action plan so that organizational elements are recognized, positions and responsibilities are identified, facility needs are met, and the incident is managed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

### Fire Department Communications

1. **5.2.1** Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

2. **5.2.2** Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller’s information is relayed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

3. **5.2.3** Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

4. **5.2.4** Activate an emergency call for assistance, given vision-obscured conditions, PPE, and department SOPs, so that the fire fighter can be located and rescued.

Date Completed	Evaluator Verification
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## Fireground Operations

1. **5.1.2** The ability to don personal protective clothing, doff personal protective clothing and prepare for reuse, hoist tools and equipment using ropes and the correct knot, and locate information in departmental documents and standard or code materials.

Date Completed	Evaluator Verification
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2. **5.3.1** Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other personal protective equipment, so that the SCBA is correctly donned, the SCBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

Date Completed	Evaluator Verification
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3. **5.3.2** Respond on apparatus to an emergency scene, given personal protective clothing and other necessary personal protective equipment, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.

Date Completed	Evaluator Verification
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4. **5.3.3** Establish and operate in work areas at emergency scenes, given protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards and downed electrical wires, an assignment, and SOPs, so that procedures are followed, protective equipment is worn, protected work areas are established as directed using traffic and scene control devices, and the fire fighter performs assigned tasks only in established, protected work areas.

Date Completed	Evaluator Verification
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5. **5.3.4** Force entry into a structure, given personal protective equipment, tools, and an assignment, so that the tools are used as designed, the barrier is removed, and the opening is in a safe condition and ready for entry.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

6. **5.3.5** Exit a hazardous area as a team, given vision-obscured conditions, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

7. **5.3.6** Set up ground ladders, given single and extension ladders, an assignment, and team members if needed, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the necessary height with the fly locked, the top is placed against a reliable structural component, and the assignment is accomplished.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

8. **5.3.7** Attack a passenger vehicle fire operating as a member of a team, given personal protective equipment, attack line, and hand tools, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are over- hauled, and the fire is extinguished.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

9. **5.3.8** Extinguish fires in exterior Class A materials, given fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior, attack lines, hand tools and master stream devices, and an assignment, so that exposures are protected, the spread of fire is stopped, collapse hazards are avoided, water application is effective, the fire is extinguished, and signs of the origin area(s) and arson are preserved.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

10. **5.3.9** Conduct a search and rescue in a structure operating as a member of a team, given an assignment, obscured vision conditions, personal protective equipment, a flashlight, forcible entry tools, hose lines, and ladders when necessary, so that ladders are correctly placed when used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety — including respiratory protection — is not compromised.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

11. **5.3.10** Attack an interior structure fire operating as a member of a team, given an attack line, ladders when needed, personal protective equipment, tools, and an assignment, so that team integrity is maintained, the attack line is deployed for advancement, ladders are correctly placed when used, access is gained into the fire area, effective water application practices are used, the fire is approached correctly, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are recognized and managed, and the fire is brought under control.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

12. **5.3.11** Perform horizontal ventilation on a structure operating as part of a team, given an assignment, personal protective equipment, ventilation tools, equipment, and ladders, so that the ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

13. **5.3.12** Perform vertical ventilation on a structure as part of a team, given an assignment, personal protective equipment, ground and roof ladders, and tools, so that ladders are positioned for ventilation, a specified opening is created, all ventilation barriers are removed, structural integrity is not compromised, products of combustion are released from the structure, and the team retreats from the area when ventilation is accomplished.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

14. **5.3.13** Overhaul a fire scene, given personal protective equipment, attack line, hand tools, a flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

15. **5.3.14** Conserve property as a member of a team, given salvage tools, equipment and an assignment, so that the building and its contents are protected from further damage.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

16. **5.3.15** Connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

17. **5.3.16** Extinguish incipient Class A, Class B, and Class C fires, given a selection of portable fire extinguishers, so that the correct extinguisher is chosen, the fire is completely extinguished, and correct extinguisher-handling techniques are followed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

18. **5.3.17** Illuminate the emergency scene, given fire service electrical equipment and an assignment, so that designated areas are illuminated and all equipment is operated within the manufacturer’s listed safety precautions.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

19. **5.3.18** Turn off building utilities, given tools and an assignment, so that the assignment is safely completed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

20. **5.3.20** Tie a knot appropriate for hoisting tool, given personnel protective equipment, tools, ropes, and an assignment, so that the knots used are appropriate for hoisting tools securely and as directed.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

**Preparedness and Maintenance**

1. **5.5.1** Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer’s or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

2. **5.5.2** Clean, inspect, and return fire hose to service, given washing equipment, water, detergent, tools, and replacement gaskets, so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

## Wildland Suppression

1. **5.5.1** Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer’s or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

2. **5.3.2** Maintain assigned personal protective equipment, given the standard equipment issue, so that the equipment is serviceable and available for use on the fireline and defects are recognized and reported to the supervisor.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

3. **5.3.3** Maintain assigned suppression hand tools and equipment, given tools and equipment and agency maintenance specifications, so that assigned equipment is safely maintained and serviceable and defects are recognized and reported to the supervisor.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

3. **5.5.2** Assemble and prepare for response, given an assembly location, an assignment, incident location, mode of transportation, and the time requirements, so that arrival at the incident with the required personnel and equipment meets agency guidelines.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

4. **5.5.3** Recognize hazards and unsafe situations given a wildland or wildland/urban interface fire and the standard safety policies and procedures of the agency, so that the hazard(s) and unsafe condition(s) are promptly communicated to the supervisor and appropriate action is taken.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

5. **5.5.4, 5.3.19** Construct a fireline, given a wildland fire, agency line construction standards, suppression tools, water or other suppression agents, and equipment, so that the fireline conforms to the construction standard.

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

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

6. **5.5.5** Secure the fireline, given a wildland fire and suppression tools, water or other suppression agents, and equipment, so that burning materials and unburned fuels that threaten the integrity of the fireline are located and abated.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

7. **5.5.6** Describe the methods to reduce the threat of fire exposure to improved properties given a wildland or urban/ interface fire, suppression tools, and equipment so that improvements are protected.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

8. **5.5.7** Mop up fire area, given a wildland fire, suppression tools, and water or other suppression agents and equipment, so that burning fuels that threaten escape are located and extinguished.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

9. **5.5.8** Patrol the fire area, given a wildland fire, suppression tools, and equipment, so that control of the fire area is maintained.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

### Hazardous Materials for Fire Fighters

1. **OSFM** Recognize the presence of hazardous materials and the indicators of a hazardous materials incident, given a hazardous materials/WMD incident, the DOT Emergency Response Guidebook or equivalent guide, shipper/manufacturer papers and contacts, material safety data sheets, and an assignment, to correctly identify the materials involved, take personal protective actions, initiate the appropriate notification process, and secure the area.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

- 2. **OSFM** Protect persons, property, and the environment from further harm, given a hazardous materials incident, recognized hazardous materials, fire department standard operating procedures, equipment readily available to personnel, and an assignment, to initiate the appropriate communications process, and secure the area.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

- 3. **OSFM** Perform emergency decontamination procedures, given a hazardous material incident, an individual contaminated by a hazardous material that can be decontaminated by fire fighters in personal protective equipment, equipment readily available to fire fighters, standard operating procedures, and an assignment, to use appropriate personal protective equipment based on the hazard, protect exposures, avoid hazards, decontaminate victims and responders, and identify contaminated items and products of contamination for subsequent control.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

- 4. **OSFM** Perform basic control, containment, and confinement techniques, given a hazardous materials incident, recognized hazardous materials, department standard operating procedures, equipment readily available to personnel, an assignment, and personal protective equipment, to control hazardous materials release, and protect fire fighters from contamination.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Evaluator Verification

## Review and Approval

This section is for State Fire Training use only.

### State Fire Training Review

I have reviewed this capstone task book and verify that it is:

Complete

Incomplete

(See attached form for required revisions or corrective action.)

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State Fire Training Representative's Signature

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Date

### Certification Issued

I verify that the candidate has met all requirements for this job function certification.

---

State Fire Training Representative's Signature

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Date

## Signature Verification

The following individuals have the authority to verify portions of this capstone task book using the signature or initials recorded below.

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Signature Verification**

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**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

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Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

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Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Signature Verification**

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**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)

**Name:** \_\_\_\_\_ (print)

Job Title: \_\_\_\_\_ (print)

Organization: \_\_\_\_\_ (print)

Signature: \_\_\_\_\_ (sign)

Initials: \_\_\_\_\_ (initial)



## FIREFIGHTER I SKILLS TESTING SUMMARY SHEET

Candidate: \_\_\_\_\_ Date: \_\_\_\_\_

ID#: \_\_\_\_\_

<b>STATE REQUIRED FIREFIGHTER I PSYCHOMOTOR SKILL TESTING</b>			
*2-2.1	Don, doff, and prepare structural personal protective equipment for reuse		
*2-3.1	Don and doff SCBA		
*5-4.1	Perform forward hose lay		
*5-7.1	Lift, carry, and raise an extension ladder using high shoulder—single fire fighter (20 or 24 foot extension)		
*5-10.1	Structure fire attack – interior grade level, above, or below		
<b>STATE RANDOM FIREFIGHTER I PSYCHOMOTOR SKILL TESTING</b>			
*1-3.1	Locate information in departmental documents and standard or code materials		
*2-3.2	Use SCBA during emergency operations		
*2-3.3	Inspect SCBA		
*2-3.4	Replace air cylinder		
*2-4.1	Respond to an emergency scene on an apparatus		
*2-5.1	Operate at an emergency scene		
*3-1.1	Receive a telephone call		
*3-2.1	Initiate a response		
*3-3.1	Operate a fire department radio to transmit information		
*4-1.1	Tie knots		
*4-1.2	Hoist tools		
*4-2.1	Transport and operate hand and power tools		
*4-3.1	Light a scene		
*4-4.1	Clean and check equipment		
*5-3.1	Select, carry, and operate a portable fire extinguisher and approach a fire		
*5-4.2	Deploy portable water tanks and the equipment necessary to transfer water and draft from them		
*5-5.1	Load, deploy and advance an attack line		
*5-5.2	Load supply hose		



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*5-5.3	Clean and maintain hose and mark defective hose		
*5-5.4	Build hose rolls		
*5-5.5	Couple, extend, or replace hose		
*5-6.1	Control utilities		
*5-8.1	Force entry through doors, windows, and walls using assorted methods and tools		
*5-9.1	Search and rescue of a victim with no respiratory protection		
*5-9.2	Rescue a fire fighter		
*5-9.3	Use ladders for rescue		
*5-10.2	Structure fire attack – exterior stairwell above or below		
*5-10.3	Operate a charged 1 ½-inch or larger handline while secured to a ground ladder		
*5-10.4	Locate and suppress an interior wall and sub floor fires		
*5-11.1	Transport and operate tools, equipment, and ground ladders for horizontal ventilation		
*5-12.1	Transport and operate tools, equipment, and ground ladders for vertical ventilation on a flat roof or floor		
*5-12.2	Transport and operate tools, equipment, and ground ladders for vertical ventilation on a pitched roof		
*5-13.1	Perform salvage of room and contents		
*5-13.2	Remove water from the interior of a structure		
*5-13.3	Control the flow of water in a sprinkler system		
*5-13.4	Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination		
*5-13.5	Cover building openings (doors, windows, floor, or roof openings)		
*5-14.1	Overhaul a fire scene		
*6-1.1	Exit a hazardous area as a team and determine a safe haven and initiate a call for emergency assistance		
*7-1.1	Exterior fire attack		
*7-1.2	Large handline operations – one fire fighter		
*7-1.3	Operate portable master stream		
*7-2.1	Attack a passenger vehicle fire		



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<b>FIREIFGHTER I TRAINING STATE REQUIRED INSTRUCTIONAL SKILLS</b>			
<b>1-1</b>	<b>Orientation and Administration</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>1-2</b>	<b>Certification Process</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>1-3</b>	<b>Fire Service Orientation</b>	<b>DATE</b>	<b>INITIAL</b>
*1-3.1	Locate information in departmental documents and standard or code materials		
<b>2-1</b>	<b>Health and Safety</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>2-2</b>	<b>Structural Personal Protective Equipment</b>	<b>DATE</b>	<b>INITIAL</b>
*2-2.1	Don, doff, and prepare structural personal protective equipment for reuse		
2-2.2	Don structural personal protective clothing		
2-2.3	Doff personal protective clothing		
<b>2-3</b>	<b>Self Contained Breathing Apparatus (SCBA)</b>	<b>DATE</b>	<b>INITIAL</b>
*2-3.1	Don and doff SCBA		
*2-3.2	Use SCBA during emergency operations		
*2-3.3	Inspect SCBA		
*2-3.4	Replace air cylinder		
2-3.5	Don SCBA from an apparatus seat mount		
2-3.6	Don SCBA using the over-the-head method		
2-3.7	Don SCBA using the sling coat method		
2-3.8	Demonstrate controlled breathing techniques		
2-3.9	Don a face piece		
2-3.10	Doff SCBA		
2-3.11	Replace SCBA cylinder		
2-3.12	Replace SCBA cylinder on another fire fighter		
2-3.13	Refill SCBA from a cascade system		
2-3.14	Clean SCBA		
2-3.15	Demonstrate emergency procedures in the event of SCBA failure or air depletion		
<b>2-4</b>	<b>Responding on Apparatus</b>	<b>DATE</b>	<b>INITIAL</b>
*2-4.1	Respond to an emergency scene on an apparatus		

[Month, Year]



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2-4.2	Mount and ride an apparatus		
2-4.3	Dismount a stopped apparatus		
<b>2-5</b>	<b>Operating at an Emergency Scene</b>	<b>DATE</b>	<b>INITIAL</b>
*2-5.1	Operate at an emergency scene		
2-5.2	Deploy traffic and scene control devices		
2-5.3	Don a safety reflective vest		
2-5.4	Operate in a protected work area as directed		
<b>3-1</b>	<b>Operating a Phone in a Non Emergency Situation</b>	<b>DATE</b>	<b>INITIAL</b>
*3-1.1	Receive a telephone call		
3-1.2	Operate a fire station phone and intercom system		
<b>3-2</b>	<b>Initiating a response to an emergency</b>	<b>DATE</b>	<b>INITIAL</b>
*3-2.1	Initiate a response		
3-2.2	Initiate a response to a simulated emergency		
3-2.3	Operate fire department communications equipment to record and relay information		
<b>3-3</b>	<b>Operating a Fire Department Radio</b>	<b>DATE</b>	<b>INITIAL</b>
*3-3.1	Operate a fire department radio to transmit information		
3-3.2	Operate radio equipment		
3-3.3	Discriminate between routine and emergency traffic		
<b>4-1</b>	<b>Ropes and Knots</b>	<b>DATE</b>	<b>INITIAL</b>
*4-1.1	Tie knots		
*4-1.2	Hoist tools		
4-1.3	Clean fire department ropes		
4-1.4	Place a life safety rope in a rope bag		
4-1.5	Tie a safety knot		
4-1.6	Tie an overhand knot		
4-1.7	Tie a half hitch		
4-1.8	Tie a clove hitch in the open		
4-1.9	Tie a clove hitch around an object		
4-1.10	Tie a figure eight knot		
4-1.11	Tie a figure eight on a bight		
4-1.12	Tie a figure eight with a follow through		
4-1.13	Tie a figure eight bend		
4-1.14	Tie a bowline		

[Month, Year]



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4-1.15	Tie a sheet or becket bend		
4-1.16	Tie a water knot		
4-1.17	Tie a handcuff knot		
4-1.18	Hoist an axe		
4-1.19	Hoist a pike pole		
4-1.20	Hoist a ladder		
4-1.21	Hoist a charged line		
4-1.22	Hoist an uncharged line		
4-1.23	Hoist an exhaust fan or power tools		
<b>4-2</b>	<b>Hand and Power Tools</b>	<b>DATE</b>	<b>INITIAL</b>
*4-2.1	Transport and operate hand and power tools		
<b>4-3</b>	<b>Portable Electric and Lighting Equipment</b>	<b>DATE</b>	<b>INITIAL</b>
*4-3.1	Light a scene		
4-3.2	Operate department power supply and lighting equipment		
4-3.3	Deploy cords and connectors		
4-3.4	Reset ground-fault interrupter (GFI) devices		
4-3.5	Locate lights for best effect		
<b>4-4</b>	<b>Maintenance</b>	<b>DATE</b>	<b>INITIAL</b>
*4-4.1	Clean and check equipment		
4-4.2	Select correct tools to maintain various and pieces of equipment		
4-4.3	Follow guidelines		
4-4.4	Complete recording and reporting procedures		
<b>5-1</b>	<b>Building Construction and Related Hazards</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>5-2</b>	<b>Fire Behavior</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>5-3</b>	<b>Fire Extinguishers</b>	<b>DATE</b>	<b>INITIAL</b>
*5-3.1	Select, carry, and operate a portable fire extinguisher and approach a fire		
5-3.2	Transport a fire extinguisher		
5-3.3	Attack a Class A fire with a stored water pressure extinguisher		
5-3.4	Attack a Class B fire with a dry chemical extinguisher		
5-3.5	Attack a Class B fire with a stored pressure foam extinguisher		
5-3.6	Operate a carbon dioxide extinguisher		

[Month, Year]



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5-3.7	Use a dry powder fire (Class D) extinguisher		
5-3.8	Use a wet chemical (Class K) fire extinguisher		
<b>5-4</b>	<b>Water Supply Systems</b>	<b>DATE</b>	<b>INITIAL</b>
*5-4.1	Perform forward hoselay		
*5-4.2	Deploy portable water tanks and the equipment necessary to transfer water and draft from them		
5-4.3	Ability to hand lay a supply hose		
5-4.4	Connect and place hard suction hose for drafting operations		
5-4.5	Operate a fire hydrant and fully open and close the hydrant		
5-4.6	Make hydrant to pumper hose connections for forward and reverse lays		
5-4.7	Connect supply hose to a hydrant		
5-4.8	Deploy portable water tanks and the equipment necessary to transfer water and draft from them		
5-5.9	Attach hose to a four way hydrant valve		
<b>5-5</b>	<b>Hose</b>	<b>DATE</b>	<b>INITIAL</b>
*5-5.1	Load, deploy and advance an attack line		
*5-5.2	Load supply hose		
*5-5.3	Clean and maintain hose and mark defective hose		
*5-5.4	Build hose rolls		
*5-5.5	Couple, extend, or replace hose		
5-5.6	Extend hose		
5-5.7	Replace a swivel gasket		
5-5.8	Build single or straight roll		
5-5.9	Build single donut roll		
5-5.10	Build double donut roll		
5-5.11	Build self-locking twin donut roll		
5-5.12	Build coupling hose – one fire fighter foot tilt method		
5-5.13	Build coupling hose – two fire fighters		
5-5.14	Build uncoupling hose – knee press		
5-5.15	Build uncoupling hose – two fire fighter stiff-arm		
5-5.16	Build uncoupling hose with a spanner wrench		
5-5.17	Clean different types of hose		
5-5.18	Operate hose washing and drying equipment		
5-5.19	Mark defective hose		

[Month, Year]



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5-5.20	Bed a flat load		
5-5.21	Bed a minute-man load		
5-5.22	Bed a triple fold load		
5-5.23	Bed an accordion load		
5-5.24	Bed a horse shoe load		
5-5.25	Bed hose bundles (agency specific)		
5-5.26	Deploy a flat load		
5-5.27	Deploy a minute-man load		
5-5.28	Deploy a triple fold		
5-5.29	Deploy preconnected flat load		
5-5.30	Deploy working line drag method		
5-5.31	Deploy shoulder load method		
5-5.32	Deploy hose bundle (agency specific)		
5-5.38	Deploy wyed lines		
5-5.39	Open, close, and adjust nozzle flow and patterns		
5-5.40	Prevent water hammers when shutting down nozzles		
5-5.41	Replace burst hose sections		
5-5.42	Drain hose		
5-5.43	Connect hose to a fire department connection		
5-5.44	Advance a hose line up a stairwell		
5-5.45	Advance a hose line down a stairwell		
5-5.46	Advance an uncharged hose line up a ladder		
5-5.47	Operate a hose stream from a ladder		
5-5.48	Connect and advance an attack line from a standpipe		
5-5.49	Operate a smooth bore nozzle		
5-5.50	Operate a fog stream nozzle		
5-5.51	Apply foam with the blanketed method		
<b>5-6</b>	<b>Utility Control at Emergencies</b>	<b>DATE</b>	<b>INITIAL</b>
*5-6.1	Control utilities		
5-6.2	Identify and operate control valves or switches		
5-6.3	Assess for related hazards		
<b>5-7</b>	<b>Ladders</b>	<b>DATE</b>	<b>INITIAL</b>
*5-7.1	Lift, carry, and raise an extension ladder using high shoulder—single fire fighter (20 or 24 foot extension)		

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5-7.2	Inspect, clean, and maintain a ladder		
5-7.4	Lift and carry a ladder high shoulder—single fire fighter		
5-7.5	Lift and carry a ladder low shoulder—single fire fighter		
5-7.6	Lift and carry a ladder low shoulder—two fire fighter		
5-7.7	Lift and carry a ladder low shoulder—three fire fighter		
5-7.8	Lift and carry a ladder suitcase or arms length beam—single fire fighter		
5-7.9	Lift and carry a ladder suitcase or arms length flat—two fire fighter		
5-7.10	Lift and carry a ladder suitcase or arms length beam—two fire fighter		
5-7.11	Lift and carry a ladder flat high shoulder – three fire fighter		
5-7.12	Raise ladder flat—single firefighter		
5-7.13	Raise ladder flat—two fire fighter		
5-7.14	Raise ladder flat—three fire fighter		
5-7.15	Raise ladder flat—four fire fighter		
5-7.16	Raise ladder on beam—single fire fighter		
5-7.17	Raise ladder on beam—two fire fighter		
5-7.18	Extend and lock fly		
5-7.19	Tie off a halyard		
5-7.20	Determine that a wall and roof will support a ladder		
5-7.21	Judge extension ladder height requirement		
5-7.22	Place ladder avoiding obvious hazards		
5-7.23	Climb ladder		
5-7.24	Use a leg lock to work off ground ladder		
5-7.25	Secure ground ladder		
5-7.26	Deploy a roof ladder		
5-7.27	Climb a ladder while carrying a tool		
<b>5-8</b>	<b>Forcible Entry</b>	<b>DATE</b>	<b>INITIAL</b>
*5-8.1	Force entry through doors, windows, and walls using assorted methods and tools		
5-8.1	Force entry into an inward opening door		
5-8.2	Force entry into an outward opening door		
5-8.3	Open an overhead garage door using a triangle cut		
5-8.4	Force entry through a wooden double hung window		
5-8.5	Force entry through a casement window		
5-8.6	Force entry through a projected window		

[Month, Year]



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5-8.7	Force entry using a K-tool		
5-8.8	Force entry using an A-tool		
5-8.9	Force entry by unscrewing the lock		
5-8.10	Force entry through a roll up door		
5-8.11	Force entry through a sliding door		
5-8.12	Force entry through a sliding window		
5-8.13	Force entry through security bars		
5-8.14	Breach a wood frame wall		
5-8.15	Breach a masonry wall		
5-8.16	Breach a floor		
<b>5-9</b>	<b>Structure Fire Search and Rescue Operations</b>	<b>DATE</b>	<b>INITIAL</b>
*5-9.1	Search and rescue of a victim with no respiratory protection		
*5-9.2	Rescue a fire fighter		
*5-9.3	Use ladders for rescue		
5-9.4	Assess area to determine tenability		
5-9.5	Conduct a primary search		
5-9.6	Conduct a secondary search		
5-9.7	Perform a one person walking assist		
5-9.8	perform a two person walking assist		
5-9.9	Remove victim using two-person extremity carry		
5-9.10	Remove victim using two-person seat carry		
5-9.11	Remove victim using two-person chair carry		
5-9.12	Remove victim using cradle in arms carry		
5-9.13	Remove victim using blanket drag		
5-9.11	Remove victim using clothes drag		
5-9.12	Remove victim using standing drag		
5-9.13	Remove victim using webbing sling drag		
5-9.14	Remove victim using fire fighter drag		
5-9.15	Use ladder to rescue victim from balcony		
5-9.16	Use ladder to rescue victim from a fire escape		
5-9.17	Use ladder to rescue victim from a roof		
5-9.18	Use ladder to rescue victim from a window		
5-9.19	Remove unconscious victim down a ladder		

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5-9-20	Remove conscious victim down a ladder		
5-9.21	Remove victim using fire fighter carry		
5-9.22	Remove victim using long backboard rescue		
5-9.23	Rescue a fire fighter with functioning respiratory protection		
5-9.24	Rescue fire fighter who has no respiratory protection		
5-9.25	Rescue a person who has no respiratory protection		
<b>5-10</b>	<b>Structural Fire Fighting Operations</b>	<b>DATE</b>	<b>INITIAL</b>
*5-10.1	Structure fire attack – interior grade level, above, or below		
*5-10.2	Structure fire attack – exterior stairwell above or below		
*5-10.3	Operate a charged 1 ½-inch or larger handline while secured to a ground ladder		
*5-10.4	Locate and suppress an interior wall and sub floor fires		
5-10.5	Apply water using direct attack method		
5-10.6	Apply water using indirect attack method		
5-10.7	Apply water using combination attack method		
5-10.8	Advance a charged 1 ½-inch or larger handline up an interior stairway		
5-10.9	Advance a charged 1 ½-inch or larger handline up an exterior stairway		
5-10.10	Advance a charged 1 ½-inch or larger handline up a ladder		
5-10.11	Advance an uncharged 1 ½-inch or larger handline down an interior		
5-10.13	Advance an uncharged 1 ½-inch or larger handline down an exterior		
5-10.14	Operate large handline – one fire fighter method		
5-10.15	Operate large handline – two fire fighter method		
5-10.16	Operate a deck gun		
5-10.17	Attack a fire at grade level		
5-10.18	Attack a fire below grade level		
<b>5-11</b>	<b>Horizontal ventilation Operations</b>	<b>DATE</b>	<b>INITIAL</b>
*5-11.1	Transport and operate tools, equipment, and ground ladders for horizontal ventilation		
5-11.2	Break glass and remove obstructions using hand tools		
5-11.3	Break window and remove obstructions using a ladder		
5-11.4	Break door glass and remove obstructions using handtools		
5-11.5	Use negative pressure to horizontally ventilate a structure		
5-11.6	Use positive pressure to horizontally ventilate a structure		
5-11.7	Use hydraulic pressure to horizontally ventilate a structure		



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<b>5-12 Vertical Ventilation Operations</b>		<b>DATE</b>	<b>INITIAL</b>
*5-12.1	Transport and operate tools, equipment, and ground ladders for vertical ventilation on a flat roof or floor		
*5-12.2	Transport and operate tools, equipment, and ground ladders for vertical ventilation on a pitched roof		
5-12.3	Select, carry, deploy, and secure a ground ladder for ventilation activities		
5-12.4	Deploy a roof ladder on a pitched roof while secured to a ground ladder for vertical ventilation		
5-12.5	Carry ventilation related tools and equipment up a ladder		
5-12.6	Carry ventilation related tools and equipment down a ladder		
5-12.7	Hoist ventilation tools to a roof		
5-12.8	Sound a roof for integrity		
5-12.9	Perform a readiness check on a saw		
5-12.10	Operate a power saw		
5-12.11	Make a rectangular or square cut		
5-12.12	Make a louvre cut		
5-12.13	Make a triangle cut		
5-12.14	Make a peak cut		
5-12.15	Maintain a power saw		
5-12.16	Cut roofing material on a pitched roof for ventilation		
5-12.17	Cut roofing material on a flat roof for ventilation		
5-12.18	Cut flooring material to ventilate in a basement		
5-12.19	Clear and opening with hand tools		
5-12.20	Cut roofing material on a flat roof for ventilation		
5-12.21	Cut flooring material to ventilate in a basement		
5-12.22	Clear an opening with hand tools		
<b>5-13 Property Conservation</b>		<b>DATE</b>	<b>INITIAL</b>
*5-13.1	Perform salvage of room and contents		
*5-13.2	Remove water from the interior of a structure		
*5-13.3	Control the flow of water in a sprinkler system		
*5-13.4	Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination		
*5-13.5	Cover building openings (doors, windows, floor, or roof openings)		
5-13.1	Use a sprinkler stop		



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5-13.2	Use a sprinkler wedge		
5-13.3	Operate a main control valve on an automatic sprinkler system		
5-13.4	Operate a post indicator valve		
5-13.5	Fold a salvage cover for use – one fire fighter		
5-13.6	Fold a salvage cover for use – two fire fighters		
5-13.7	Perform a one person salvage cover roll		
5-13.8	Perform a one person shoulder toss		
5-13.9	Perform a balloon toss		
5-13.10	Cluster furniture		
5-13.11	Construct a water chute		
5-13.12	Construct a catch-all		
5-13.13	Remove water from an interior area		
<b>5-14</b>	<b>Overhaul</b>	<b>DATE</b>	<b>INITIAL</b>
*5-14.1	Overhaul a fire scene		
5-14.2	Deploy and operate an attack line for overhaul		
5-14.3	Remove flooring to expose void spaces without compromising structural integrity		
5-14.4	Remove ceiling material to expose void spaces without compromising structural integrity		
5-14.5	Remove wall components to expose void spaces without compromising structural integrity		
5-14.6	Expose and extinguish hidden fires in walls		
5-14.7	Expose and extinguish hidden fires in ceilings		
5-14.8	Expose and extinguish hidden fires in subfloor spaces		
5-14.9	Recognize and preserve obvious signs of area of origin and arson		
5-14.10	Evaluate an area for complete extinguishment		
5-14.11	Apply water for maximum effectiveness		
<b>6-1</b>	<b>Structural Fire Fighter Survival</b>	<b>DATE</b>	<b>INITIAL</b>
*6-1.1	Exit a hazardous area as a team and determine a safe haven and initiate a call for emergency assistance		
6-1.2	Initiate a mayday or call for help		
6-1.3	Perform a self rescue		
6-1.4	Locate a door or window for emergency exit		
6-1.5	Open a wall to escape		



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6-1.6	Escape from an entanglement		
6-1.7	Operate as a team member in vision obscured conditions		
6-1.8	Locate and follow a guideline or hose out of a hazardous area		
6-1.9	Don SCBA and exit through restricted passage		
6-1.10	Evaluate areas for hazards and identify a safe haven		
6-1.11	Ability to use other methods of emergency calls for assistance		
<b>7-1</b>	<b>Exterior Fires</b>	<b>DATE</b>	<b>INITIAL</b>
*7-1.1	Exterior fire attack		
*7-1.2	Large handline operations – one fire fighter		
*7-1.3	Operate portable master stream		
7-1.4	Large handline operations – two fire fighter		
7-1.5	Operate fixed master stream		
7-1.6	Recognize inherent hazards related to the material’s configuration		
7-1.7	Break up material using hand tools or water streams		
7-1.8	Evaluate for complete extinguishment		
7-1.9	Operate hose lines and other water application devices		
7-1.10	Evaluate and modify water application for maximum penetration		
7-1.11	Search for and expose hidden fires		
7-1.12	Assess patterns for origin determination		
<b>7-2</b>	<b>Passenger Vehicle Fires</b>	<b>DATE</b>	<b>INITIAL</b>
*7-2.1	Attack a passenger vehicle fire		
7-2.2	Advance a 1 ½-inch or larger diameter attack line on a passenger vehicle fire		
7-2.3	Apply water for maximum effectiveness while maintaining flash fire protection		
7-2.4	Expose hidden fires by opening all passenger vehicle compartments		
7-2.5	Identify automobile fuel types		
7-2.6	Assess and control fuel leaks		

Final Evaluator

Date

Candidate

Date



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## WILDLAND FIREFIGHTER I SKILLS TESTING SUMMARY SHEET

Candidate: \_\_\_\_\_ Date: \_\_\_\_\_

ID#: \_\_\_\_\_

STATE REQUIRED WILDLAND FIREFIGHTER I SKILL TESTING			
*8-2.1	Don and doff wildland personal protective equipment		
*8-2.2	Deploy fire shelter lying down method		
*8-5.1	Assume the safe position for an airtanker drop		
*8-7.1	Perform progressive hoselay – two person 500 feet		
STATE RANDOM WILDLAND FIREFIGHTER I SKILL TESTING			
*8-3.1	Inspect, maintain, and sharpen hand tools		
*8-3.2	Assemble and use a back pump		
*8-52	Use the Incident Response Pocket Guide (IRPG)		
*8-7.2	Use handtools to construct fireline		
*8-7.3	Mobile pumping		
*8-8.1	Ignite and extinguish road flares and fuses		
*8-8.2	Assemble and use a drip torch		
*8-9.1	Prep and defend a structure in the wildland urban interface		
*8-10.1	Perform wet or dry mop-up operations		
*8-11.1	Demonstrate patrol principles, techniques, and standards		



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<b>WILDLAND FIRE FIGHTER I STATE REQUIRED INSTRUCTIONS SILLS</b>			
<b>8-1</b>	<b>Wildland Response</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>8-2</b>	<b>Wildland Personal Protective Equipment</b>	<b>DATE</b>	<b>INITIAL</b>
*8-2.1	Don and doff wildland personal protective equipment		
*8-2.2	Deploy fire shelter lying down method		
8-2.3	Inspect and maintain wildland personal protective equipment		
8-2.4	Deploy fire shelter –standing to sitting method		
8-2.5	Deploy fire shelter – standing drop down method		
8-2.6	Deploy fire shelter – lying down method		
8-2.7	Assemble, attach, and maintain a head lamp (required S-130 skill)		
<b>8-3</b>	<b>Wildland Tools and Equipment</b>	<b>DATE</b>	<b>INITIAL</b>
*8-3.1	Inspect, maintain, and sharpen hand tools		
*8-3.2	Assemble and use a back pump		
8-3.3	Inspect, use, maintain, and sharpen a brush hook		
8-3.4	Inspect, use, maintain, and sharpen a shovel		
8-3.5	Inspect, use, maintain, and sharpen a single axe		
8-3.6	Inspect, use, maintain, and sharpen a pulaski		
8-3.7	Inspect, use, maintain, and sharpen a McLeod		
8-3.8	Inspect, use, maintain, and sharpen a rhino tool		
8-3.9	Inspect, use, maintain, and sharpen a combi tool		
8-3.10	Inspect, use, and maintain a wire broom		
<b>8-4</b>	<b>Wildland Fire Behavior</b>	<b>DATE</b>	<b>INITIAL</b>
	No skills for this topic		
<b>8-5</b>	<b>Wildland Safety</b>	<b>DATE</b>	<b>INITIAL</b>
*8-5.1	Assume the safe position for an airtanker drop		
*8-5.2	Use the Incident Response Pocket Guide (IRPG)		
8-5.3	Use fireline flagging		
<b>8-6</b>	<b>Human Factors on the Fireline</b>	<b>DATE</b>	<b>INITIAL</b>
8-6.1	Demonstrate basic verbal communications		
<b>9-7</b>	<b>Wildland Suppression</b>	<b>DATE</b>	<b>INITIAL</b>
*8-7.1	Perform progressive hoselay – two person 500 feet		
*8-7.2	Use handtools to construct fireline		



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*8-7.3	Perform mobile pumping		
8-7.4	Carry and pass handtools		
8-7.5	Build a control line using the bump up or one lick method		
8-7.6	Build a cup or trench while constructing a fireline		
8-7.7	Retrieve a fire hose using single section drain and carry		
8-7.8	Retrieve a fire hose using a figure 8 drain and carry		
8-7.9	Perform a progressive hoselay – three fire fighter		
8-7.10	Demonstrate fire stream practices, water use, and agent application		
<b>8-8</b>	<b>Reinforcing a Fireline</b>	<b>DATE</b>	<b>INITIAL</b>
*8-8.1	Ignite and extinguish road flares and fuses		
*8-8.2	Assemble and use a drip torch		
8-8.3	Demonstrate follow-up procedures for wet line, retardant line, or treated area		
<b>8-9</b>	<b>Wildland Urban Interface</b>	<b>DATE</b>	<b>INITIAL</b>
*8-9.1	Prep and defend a structure in the wildland urban interface		
<b>8-10</b>	<b>Mop Up Operations</b>	<b>DATE</b>	<b>INITIAL</b>
*8-10.1	Perform wet or dry mop-up operations		
8-10.2	Use basic tools		
8-10.3	Perform wet mop up		
8-10.4	Perform dry mop up		
<b>9-11</b>	<b>Conducting Patrols</b>	<b>DATE</b>	<b>INITIAL</b>
*8-11.5	Demonstrate patrol principles, techniques, and standards		

Final Evaluator

Date

Candidate

Date



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**Office of State Fire Marshal**  
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## FIREFIGHTER I HAZARDOUS MATERIALS SKILLS TESTING SUMMARY SHEET

Candidate: \_\_\_\_\_ Date: \_\_\_\_\_

ID#: \_\_\_\_\_

<b>STATE REQUIRED HAZARDOUS MATERIALS SKILL TESTING</b>			
*9-1.1	Identify hazardous materials, their potential hazards and appropriate personal protective equipment.		
<b>STATE RANDOM HAZARDOUS MATERIALS MANIPULATIVE SKILL TESTING</b>			
*9-2.1	Implement a hazardous materials response		
*9-3.1	Perform emergency decontamination		
*9-3.2	Perform mass decontamination		
*9-4.1	Perform control, containment, and confinement operations in the event of a hazardous materials incident		



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HAZARDOUS MATERIALS FIRST REPONDER OPERATIONS SKILL SHEETS			
<b>10-1</b>	<b>Recognizing Hazardous Materials/WMD</b>	<b>DATE</b>	<b>INITIAL</b>
*9-1.1	Identify hazardous materials, their potential hazards and appropriate personal protective equipment.		
9-1.2	Initiate protective actions to secure an area during a hazardous materials/WMD incident		
9-1.3	Use the DOT emergency response guidebook		
9-1.4	Use material safety data sheets to identify hazardous materials, their hazards, personal protective equipment, and protective actions		
9-1.5	Make appropriate notifications as directed by the AHJ		
<b>10-2</b>	<b>Identifying and Analyzing Hazardous Materials/WMD Incidents</b>	<b>DATE</b>	<b>INITIAL</b>
*9-2.1	Implement a hazardous materials response		
9-2.2	Initiate the incident command system		
9-2.3	Establish and enforce scene control procedures		
9-2.4	Establish control zones		
9-2.5	Establish evidence preservation		
9-2.6	Evaluate the status of the actions taken in accomplishing response objectives		
9-2.7	Communicate the status of the planned response		
<b>9-3</b>	<b>Emergency Decontamination</b>	<b>DATE</b>	<b>INITIAL</b>
*9-3.1	Perform emergency decontamination		
*9-3.2	Perform mass decontamination		
<b>9-4</b>	<b>Mitigating A Hazardous Materials/WMD Event</b>	<b>DATE</b>	<b>INITIAL</b>
*9-4.1	Perform control, containment, and confinement operations in the event of a hazardous materials incident		
9-4.2	Perform absorption operations		
9-4.3	Perform adsorption operations		
9-4.4	Perform damming		
9-4.5	Perform diking		
9-4.6	Perform diluting		
9-4.7	Perform diversion		
9-4.8	Perform retention		
9-4.9	Perform remote valve shut off		
9-4.10	Perform vapor dispersion		
9-4.11	Perform vapor suppression		

[Month, Year]



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9-4.12	Demonstrate the application of foam or agent on a spill or fire involving hazardous materials/WMD		
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Final Evaluator

Date

Candidate

Date



# California State Fire Training

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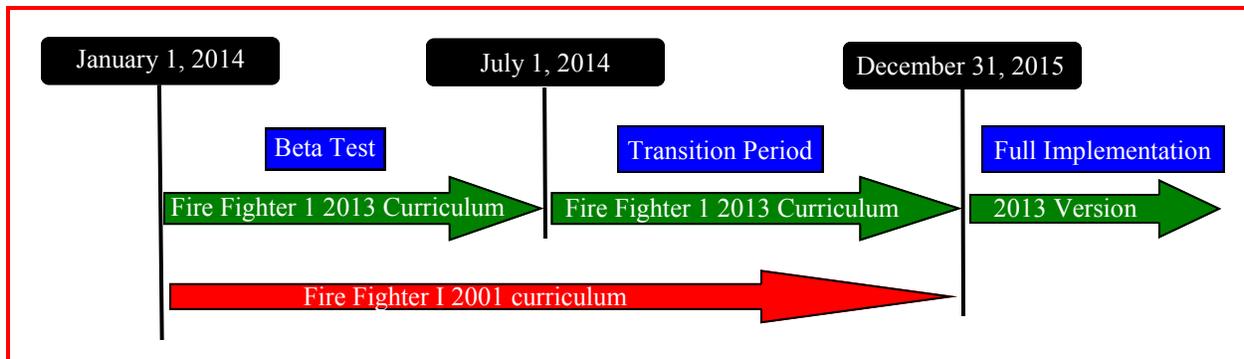
## Fire Fighter I Certification Implementation of New Curriculum and Certification Requirements

This document is intended to provide information for all State Fire Training (SFT) stakeholders on changes to Fire Fighter I curriculum and certification requirements. Stakeholders are encouraged to study this information carefully and seek clarification from SFT if questions arise.

**New Fire Fighter I (2013)** will be phased in as the new Fire Fighter I curriculum for the California Fire Service Training and Education System. A new Certification Training Standard (CTS) and Course Plan has been developed based on current National Fire Protection Association (NFPA) Standards which includes NFPA 1001, Fire Fighter I Professional Qualifications, NFPA 1051, Wildland Fire Fighter I Professional Qualifications, NFPA 472, Competencies for First Responder Operations, Hazardous Materials. The CTS and Course Plan are available on the SFT website.

**Certification Examination:** SFT has been pursuing accreditation from both IFSAC and Pro Board with Fire Fighter I as the initial offering. A Certification Examination are required by IFSAC and Pro Board and include both a written test and skills testing. Certification Examinations will become a standardized process statewide to insure compliance with IFSAC and Pro Board requirements and uniformity. Certification Examinations are required with implementation of this new curriculum.

### Fire Fighter I Curriculum Change Time Line



**Beta Test** ..... **January 1, 2014 – July 1, 2014**

**The Fire Fighter I (2013)** curriculum will be beta tested at the Sierra College Accredited Regional Training Program Fire Academy to insure that SFT Certification Examination procedures will fully satisfy IFSAC and Pro Board requirements and that the curriculum fully satisfies the aforementioned professional qualification standards and meets the needs of the California Fire Service for content and delivery.

**Task Books/Application Form:** In addition to required Certification Examinations, implementation of the new Fire Fighter I (2013) requires that candidates complete a comprehensive task book. This task book covers all of the job performance requirements contained in the aforementioned professional qualification standards. A completed task book will replace the current Fire Fighter I training record. The task book will be made available to candidates, agencies, ARTPs

and ALAs on the SFT website. Occupational experience will be verified by the Fire Chief or designee on file signing the task book upon completion. In addition a new application form will be implemented and will replace the current Scantron Fire Fighter I application form.

**TRANSITION PERIOD ..... Effective July 1, 2014 – December 31, 2015**

SFT recognizes that during the Beta Test period Fire Fighter I (2001) curriculum will need to be delivered as the Fire Fighter I (2013) edition will not yet be available. Stakeholders who have scheduled Fire Fighter I course deliveries and are not anticipated to be completed by December 31, 2015 should contact SFT to discuss curriculum options.

**CURRENT FIRE FIGHTER I CERTIFICATION CANDIDATES ..... July 1, 2014 - December 31, 2017**

Candidates pursuing Fire Fighter I Certification under the existing requirements and 2001 curriculum must complete all requirements including occupational experience, and submit their fees and applications to SFT once completed. Beyond December 31, 2017 completion of a certification examination will be required.

**COURSE PHASE OUT ..... Effective December 31, 2015**

Effective December 31, 2015, Fire Fighter I (2001) will no longer be delivered and the curriculum will be retired.

**COURSE PREREQUISITE & COREQUISITE CHANGES..... Effective July 1, 2014**

Effective July 1, 2014 Public Safety First Aid and CPR (minimum) as defined by California Health and Safety Code, Section 1797.182 is a prerequisite for the new Fire Fighter I (2013).

Effective July 1, 2014, Confined Space Awareness (1995), IS-100, Introduction to the Incident Command System (FEMA), IS-700.A, National Incident Management System, an Introduction (FEMA) are corequisites for the new Fire Fighter I (2013).

**INSTRUCTOR REQUIREMENTS ..... Effective July 1, 2014**

Instructor requirements for new Fire Fighter I (2013) continue to be Approved Instructors as defined in the SFT Procedures Manual.

**POTENTIAL AGENCY IMPACTS**

Fire agencies utilizing Fire Fighter I Certification as a minimum qualification for recruitment need to review the new Fire Fighter I (2013) Curriculum to be sure that all agency training needs are being met. If not, the local agency may need to augment the curriculum at the local level. Fire agencies should also research and understand the new task book processing procedures.

Accredited Regional Training Programs (ARTP), Accredited Local Academies (ALA), community colleges and all other local delivery venues need to review the curriculum and seek approval from their curriculum committee / program sponsor, as appropriate. ARTPs should review the new Fire Fighter I (2013) curriculum and discuss with their advisory committees to determine if the curriculum must be expanded to meet local needs. ARTPs and ALAs should insure they are prepared to conduct capstone testing and understand their role in the process.