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OFFICE OF THE STATE FIRE MARSHAL
Statewide Training and Education Advisory Committee
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Attachment 11

Date: October 11, 2019

To: Ronny J. Coleman, Chairman
Statewide Training and Education Advisory Committee
c/o State Fire Training

From: Kevin Conant, Fire Service Training Specialist III

SUBJECT/AGENDA ACTION ITEM:

FSTEP – Instructor: Live Fire Training – Acquired Structure

Recommended Actions:

Information/Discussion

Background Information:

This curriculum is being presented to STEAC for information, discussion and providing feedback to staff. SFT Staff is continuing to work with stakeholders on the instructor requirements for Fire Control 3: Structural Fire Fighting (2018). SFT will bring back the curriculum to STEAC in January 2020.

This is a new course and is an additional optional prerequisite requirement for instructors teaching the new FSTEP Fire Control 3: Structural Fire Fighting course, when the instructor uses an acquired structure(s).

The concept of developing new FSTEP course curriculum is with the purpose of continuing education and professional development, which was approved by STEAC on April 18, 2014. Accordingly, stakeholders identified the need for the creation of an updated structural live fire training course.

A cadre of experienced subject matter experts with extensive technical expertise in structural live fire training were selected from various agencies and backgrounds with the mission to further develop and validate the content for this FSTEP course.

Cadre Leadership

Kevin Conant, Fire Service Training Specialist III, John Black, Battalion Chief, Santa Clara County Fire Department, Allison Shaw, Cadre Editor, Sacramento State.

Development/Validation Cadre Members

Tim Adams, Battalion Chief, Anaheim Fire Department; Norm Alexander, Captain, Yocha Dehe Fire Department; David Baldwin, Battalion Chief Sacramento Fire Department; Tim Beard, Captain, Sacramento Metro Fire Department; John Flatebo, Firefighter, Corona Fire Department; Josh Janssen, Battalion Chief, CAL FIRE-BDU; James Mendoza, Captain, San Jose Fire Department; Jake Pelk, Captain, Central County FD; Jeff Seaton, Captain, San Jose FD; Mike Taylor, Assistant Chief, Sacramento FD; Kevin Tidwell, Captain, Turlock FD.

Several of the cadre members are State Fire Training Registered Instructors and all have extensive operational experience with structural live fire training. The development of the course required several multi-day sessions, over the course of three years, with additional work by the editor, cadre members and cadre leads to add the finishing touches of editing the course plans. Because this is an FSTEP Course, the development of a Certification Training Standards (CTS) was not required. However, Terminal Learning Objectives (TLO) were established and the supporting Enabling Learning Objectives (ELO) were developed from the authority of the NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019), NFPA 1403: Standard on Live Fire Training Evolutions (2018); FIRESCOPE ICS 500, Structure Fire Operations (2015); and FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (2013), California Health and Safety Code 41801(b), Cal/OSHA (Title 8 CCR 3395) and several others references aided as supporting documents in creating the Course Plan.

Analysis/Summary of Issue:

1. The FSTEP Instructor: Live Fire Training – Acquired Structure (2018) is a 32-hour course, including 8:00 (hours: minutes) of lecture/discussion and 24:00 (hours: minutes) of application/skills
2. NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) and NFPA 1403 Standard on Live Fire Training Evolutions (2018) have addressed significant research and development in the study of fire dynamics: chemistry and physics, structural fire behavior and structural fire attack tactics, providing the knowledge and skills that prepare a fire fighter to locate, control, and extinguish an interior structure fire.
3. These NFPA standards identify the requirement that all firefighters shall demonstrate a live fire job performance requirement, while improving the process and procedure for conducting live fire training evolutions, ensuring the training objectives are achieved and the exposure to health and safety hazards are mitigated and risk is minimized.
4. This course is an optional and additional prerequisite to prepare the instructor for

delivering structural live fire training using an acquired structure.

5. In addressing risk management for the live fire training environment, the NFPA standards increased the minimum requirements for those instructing to include that the instructor-in-charge meet the requirements for Instructor II, the identification and use of a safety officer and increased the required minimum training of the students.
6. Due to the increased emphasis on fire behavior, flow path, fire dynamics, chemistry and physics, additional props, instructor demonstrations and skills exercises were added.
7. Significant site preparation, inspections, notifications and hazard mitigation steps and documentation are included in this curriculum and task book.



Instructor: Live Fire Training – Acquired Structure

Course Plan

Course Details

Description:	This curriculum is an optional, yet additional prerequisite in preparing an instructor to teach Fire Control 3: Live Fire Fighting (2018) using an acquired structure. This course provides the students an opportunity for learning the knowledge and demonstrating the skills for instructing fire fighters in locating, controlling, and extinguishing an interior structure fire using an acquired structure. Key learning areas include an overview of the Fire Control 3: Structural Fire Fighting course plan; an introduction to acquired structure live fire training; preburn planning; fire dynamics; set up and walk through; live fire training evolutions; and postburn procedures.
Designed For:	Individuals who wish to conduct NFPA-compliant live fire training in an acquired structure or qualify to teach State Fire Training’s Fire Control 3: Structural Fire Fighting course
Authority:	NFPA 1403: Standard on Live Fire Training Evolutions (2018) California Health and Safety Code 41801(b) Cal/OSHA (Title 8 CCR 3395)
Prerequisites:	Fire Control 3: Structural Fire Fighting, or Fire Control 3A (2009), or Fire Control 3B (2009) Instructor: Live Fire Training – Fixed Facility Authorization to attend training from fire agency or ALA/ARTP Verification of meeting NFPA 1403 (2018 / 4.3.1) live fire training prerequisite requirements (SFT Fire Fighter 1 certification waives this requirement) Current SCBA fit test documentation Cal/OSHA compliant structural PPE Completed release of liability form
Standard:	Attend all class sessions and complete all mandatory activities and skills
Hours:	Lecture: 8 hours Application: 24 hours

ILFT-AS

Instructional Hours (Total): 32 hours (minimum)

Maximum Class Size: 20

Instructor Level: Primary instructor

Instructor/Student Ratio: Two primary instructors at all times

Additional requirements (per NFPA 1403)

- One instructor for each functional crew of five students
- One instructor for each backup line
- One additional instructor for each additional functional assignment

Restrictions: See Facilities, Equipment, and Personnel requirements (page 6)

SFT Designation: FSTEP

Table of Contents

Table of Contents.....	3
Required Resources	4
Instructor Resources	4
Online Instructor Resources	4
Student (Instructor Trainee) Resources.....	5
Facilities, Equipment, and Personnel	5
Time Table.....	7
Time Table Key	9
Unit 1: Introduction	11
Topic 1-1: Orientation and Administration.....	11
Unit 2: Review of Fire Control 3: Structural Fire Fighting.....	12
Unit 3: Introduction to Live Fire Training	14
Topic 3-1: NFPA Standards and Legal Considerations.....	14
Topic 3-2: Cardiovascular and Thermal Strain of Fire Fighting.....	15
Topic 3-3: Developing an Incident Within an Incident (IWI) Plan.....	16
Unit 4: Preburn Planning.....	17
Topic 4-1: Conducting an Initial Site Evaluation.....	17
Topic 4-2: Developing a Comprehensive Burn Plan (“Burn Book”).....	18
Topic 4-3: Conducting Preburn Preparations	20
Topic 4-4: Preparing an Acquired Structure.....	21
Topic 4-5: Fire Behavior in an Acquired Structure.....	22
Unit 5: Set Up and Walk Through	25
Topic 5-1: Implementing an Incident Action Plan	25
Topic 5-2: Securing a Water Supply.....	25
Topic 5-3: Conducting an Instructor Briefing and Preburn Walk Through	26
Topic 5-4: Building Fuel Packages	27
Topic 5-5: Conducting a Student Preburn Walk Through.....	28
Unit 6: Delivering Live Fire Training Evolutions in an Acquired Structure	30
Topic 6-1: Operating as Instructor in Charge (Command and Control).....	30
Topic 6-2: Safety Operations	30
Topic 6-3: Igniting Fuel Packages	32
Topic 6-4: Reviewing Required Fire Control 3 Skills Exercises in an Acquired Structure.....	33
Topic 6-5: Reviewing Optional Fire Control 3 Skills Exercises in an Acquired Structure.....	34
Unit 7: Postburn Procedures	35
Topic 7-1: Postburn Procedures.....	35
Acknowledgments.....	36
How to Read a Course Plan	38

Required Resources

Instructor Resources

To teach this course, instructors need:

- *Live Fire Training: Principles and Practice*
(Jones & Bartlett Learning, 1st ed. revised, ISBN: 978-1-284-04123-1)
- *3D Fire Fighting: Training, Techniques, and Tactics*
(Fire Protection Publications, Oklahoma State University, 1st ed., ISBN: 0-87939-258-4)

Additional recommended resources:

- *Enclosure Fires* (Lars-Göran Bengtsson)
Available for download at: <https://www.msb.se/en/Products/Publications/Publications-from-the-SRSA/Enclosure-fires/>

Online Instructor Resources

The following instructor resources are available online at

<http://osfm.fire.ca.gov/training/resources>

- Fire Control 3: Structural Fire Fighting course plan (and supporting documentation)
 - Instructor Demonstration 1 – Dust Explosion
 - Instructor Demonstration 2 – Combustion
 - Instructor Demonstration 3 – Pyrolysis
 - Props and Structures – Matrix
 - Props and Structures – Acquired Structure
 - Props and Structures – Container (Class A)
 - Props and Structures – Fixed Facility (Class A)
 - Props and Structures – Gas-Fired Prop
 - Props and Structures – Scalable Burn Prop
 - Skills Exercise 1 – Combustion
 - Skills Exercise 2 – Risk Assessment and Door Entry
 - Skills Exercise 3 – Stretching, Flaking, and Advancing and Attack Line
 - Skills Exercise 4 – Water Application
 - Skills Exercise 5 – Fire Attack
 - Skills Exercise 6 – Transitional Fire Attack
 - Skills Exercise 7 – Interior Attic Fire Attack
 - Skills Exercise 8 – Below Grade (Basement) Fire Attack
 - Skills Exercise 9 – VEIS
 - Skills Exercise 10 – Ventilation
 - Skills Exercise 11 – Portable Water Extinguisher Attack
- Documents
 - Cal/OSHA Employer Sample Procedures for Heat Illness Prevention
 - FIRESCOPE – ICS 910: Firefighter Incident Safety and Accountability Guidelines

- ILFT-AS - Live Fire Training Burn Plan Outline
- Videos
 - Normalisation of Deviance – IAFF – Part I (Mike Mullane)
 - Normalisation of Deviance – IAFF – Part II (Mike Mullane)
- Activities
 - Activity 5-4: Building Fuel Packages for Fire Behavior Evolutions
 - Activity 5-4: Building Fuel Packages for Fire Attack Evolutions

Student (Instructor Trainee) Resources

To participate in this course, all instructor trainees need:

- NFPA 1403: Standard on Live Fire Training Evolutions (current edition)
- *Live Fire Training: Principles and Practice* (Jones & Bartlett Learning, 1st Edition Revised, ISBN: 978-1-284-04123-1)
- A copy of his or her agency's heat and illness prevention plan
- Full structural PPE and SCBA

Instructor trainees participating in this course through their academy or agency in-house training will have all documentation, PPE, and SCBA verification provided by the AHJ.

Instructor trainees participating in this course through open enrollment must provide:

- Authorization to attend the training, including a statement of insurance for participant
 - Submit a letter verifying demonstrated competency in donning SCBA, donning PPE, and hose handling skills
 - If the class will be coordinated through a community college, the college may provide additional insurance for participants and instructional staff
- Current SCBA fit test documentation
- A minimum of Cal/OSHA compliant PPE in good repair (provided by the participant's agency)
- Release of liability

Facilities, Equipment, and Personnel

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

Equipment*

- **Apparatus:** A minimum of one fully outfitted NFPA compliant engine (type I or type 3)
- **Appliances and tools:** Thermal imager (optional); nozzle selection (determined by AHJ) capable of flowing a minimum 95 gallons per minute (GPM)
- **Extinguishers:** Pressurized water extinguisher; water-pressurized garden sprayer
- **Fuels:** Class A materials (non-gas-fired props)
- **Hose:** 1", 1½", or 1¾" fire hose; 2½" or 3" fire hose

- **Hand tools:** Flat head axe; Halligan tool; hydrant wrench; pick head axe; long handle tool (pike pole, roof hook, rubbish hook); sledgehammer; flashlight
- **Ladders:** 10' folding ladder; 14' roof ladder; 24' extension ladder
- **Power tools:** Blower; chainsaw; generator; air compressor with fittings (or equivalent)
- **Protective equipment/clothing:** Full set of protective clothing for structural fire fighting for each student, including: bunker pants, coat, and boots; gloves and helmet; flash hood; face piece; self-contained breathing apparatus (SCBA), two fully-charged air cylinders, and manufacturer-approved SCBA sanitizing agent and cleaning agent; personal alert safety system (PASS)
- **Salvage equipment/materials:** Salvage covers or Visqueen; brooms; scoop shovels; buckets; tubs
- **Simulation equipment/materials:** Live fire training structure compliant with NFPA 1403 (2018); smoke-generating equipment (synthetic/Class A); burn barrels (modified for smoke or crib set)
- **Other supplies/equipment:** Radios; fuel and supplies for power equipment; cleaning and decontamination supplies and equipment; handheld propane torch; dumpster; power cords; lights; hammer; nails; staple gun; nail gun (optional); circular saw; reciprocating saw; fuses/road flares; construction spray paint; tape measure; drill, bits, and screws
- **Rehabilitation:** Shade; water; chairs; SCBA refill capabilities (extra cylinders or refill as needed); decontamination body wipes; soap and water; brushes
- **Water supply:** Adequate water supply per NFPA 1403 (2018) requirements

* See NFPA 1403 (2018 or current edition) for additional equipment and tool requirements.

Facilities

- Standard classroom equipped for 20 students
- Whiteboards or easel pads with appropriate writing implements
- Projector with appropriate laptop connections
- Wi-Fi/Internet access (recommended)
- An acquired structure capable of meeting all learning objectives
 - Structure must be clean, free of biohazards, and structurally sound

Personnel*

- Two primary instructors at all times
- Additional requirements (per NFPA 1403)
 - One instructor for each functional crew of five students
 - One instructor for each backup line
 - One additional instructor for each additional functional assignment

* See NFPA 1403 (2018) paragraph 4.7 for additional information about required personnel.

Time Table

Segment	Lecture	Application	Unit Total
Unit 1: Introduction			
Topic 1-1: Orientation and Administration	0.5	0	
Unit 1 Totals	0.5	0	0.5
Unit 2: Review of Fire Control 3: Structural Fire Fighting			
Topic 2-1: Key Elements of Delivering Fire Control 3: Structural Fire Fighting	1.0	0	
Unit 2 Totals	1.0	0	1.0
Unit 3: Introduction to Live Fire Training			
Topic 3-1: NFPA Standards and Legal Considerations	0.25	0	
Topic 3-2: Cardiovascular and Thermal Strain of Fire Fighting	0.25	0	
Topic 3-3: Developing and Incident within an Incident (IWI) Plan	0.25	0.25	
Unit 3 Totals	0.75	0.25	1.0
Unit 4: Preburn Planning			
Topic 4-1: Conducting an Initial Site Evaluation	0.5	1.0	

Segment	Lecture	Application	Unit Total
Topic 4-2: Developing a Comprehensive Burn Plan (“Burn Book”)	1.5	1.0	
Topic 4-3: Conducting Preburn Preparations	0.5	2.0	
Topic 4-4: Preparing an Acquired Structure	0.5	8.0	
Topic 4-5: Fire Behavior in an Acquired Structure	0.5	2.0	
Unit 4 Totals	3.5	14.0	17.5
Unit 5: Set Up and Walk Through			
Topic 5-1: Implementing an Incident Action Plan	0.25	0.25	
Topic 5-2: Securing a Water Supply	0.25	1.0	
Topic 5-3: Conducting an Instructor Briefing and Preburn Walk Through	0.25	1.0	
Topic 5-4: Building Fuel Packages	0.25	1.0	
Topic 5-5: Conducting a Student Preburn Walk Through	0.25	1.0	
Unit 5 Totals	1.25	4.25	5.5
Unit 6: Delivering Live Fire Training Evolutions in an Acquired Structure			

Segment	Lecture	Application	Unit Total
Topic 6-1: Operating as Instructor in Charge (Command and Control)	0.25	0	
Topic 6-2: Safety Operations	0.25	0.5	
Topic 6-3: Igniting Fuel Packages	0	0.25	
Topic 6-4: Reviewing Required Fire Control 3 Skills Exercises in an Acquired Structure	0	2.75	
Topic 6-5: Reviewing Optional Fire Control 3 Skills Exercises in an Acquired Structure	0	1.0	
Unit 6 Totals	0.5	4.5	5.0
Unit 7: Postburn Procedures			
Topic 7-1: Postburn Procedures	0.5	1.0	
Unit 7 Totals	0.5	1.0	1.5
Summative Assessment			
There is no summative assessment	0	0	
Assessment Totals	0	0	0
Course Totals	8.0	24.0	32.0

Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.

3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled and the acquired structure selected for training. The Application time documented is based on the maximum class size identified in the Course Details section.

Final Draft

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, an instructor trainee will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements.

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. Determined by instructor

Application

1. Determined by instructor

Instructor Notes

1. None

Unit 2: Review of Fire Control 3: Structural Fire Fighting

Topic 2-1: Key Elements of Delivering Fire Control 3: Structural Fire Fighting

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a course plan and requirements, will be able to identify the goals and objectives for students enrolled in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course and the requirements for instructor training and student participation.

Enabling Learning Objectives

1. Identify the key elements and training objectives of the Fire Control 3: Structural Fire Fighting course plan
 - Course Details
 - Required Resources
 - Units and Topics
 - Props and Structures documents
 - Instructor Demonstrations
 - Skills Exercises
2. Identify desirable traits of a live fire training instructor
 - Intrinsic motivation
 - Lifelong learner
 - Humility
 - Good listener
 - Respected by peers
 - Communication skills
 - Problem-solving skills
 - Aptitude for science
3. Identify SFT requirements for Fire Control 3: Structural Fire Fighting instructors
4. Identify requirements for student participation in Fire Control 3: Structural Fire Fighting
 - Authorization to attend training from fire agency or ALA/ARTP
 - Verification of meeting prerequisite requirements
 - SFT Fire Fighter I certification waives this requirement
 - Current SCBA fit test documentation
 - Cal/OSHA compliant structural PPE
 - Components
 - Required use
 - Capabilities and limitations
 - Completed release of liability form

Discussion Questions

1. How does a terminal learning objective differ from an enabling learning objective?
2. Are there any circumstances under which you would let a student who does not meet the course prerequisites participate in live fire training?

3. What must a student have to participate in Fire Control 3: Structural Fire Fighting?

Activities

1. Determined by instructor

Instructor Notes

1. This topic is intended to be a brief review of the content found in Unit 2 of the Instructor: Live Fire Training – Fixed Facility course. For complete content, please reference that course plan.
2. Distribute a copy of the Fire Control 3: Structural Fire Fighting course plan and all supporting documents to all instructor trainees.

Final Draft

Unit 3: Introduction to Live Fire Training

Topic 3-1: NFPA Standards and Legal Considerations

Terminal Learning Objective

At the end of this topic, an instructor trainee, given laws, standards, policies, and procedures, will be able to implement live fire training in an acquired structure in accordance with NFPA 1403, Cal/OSHA, and authority having jurisdiction (AHJ) requirements.

Enabling Learning Objectives

1. Identify the significance of NFPA standards
2. Describe the contents of NFPA 1403
3. Describe how to apply NFPA 1403 to Fire Control 3: Structural Fire Fighting
 - Instructor preparation
 - Student qualifications
 - Site requirements
 - Safety requirements
 - Inspections and notifications
4. Identify legal requirements associated with live fire training
 - Cal/OSHA
 - Property owner
 - AHJ
 - Local air pollution control district (APCD) or air quality management district (AQMD)

Discussion Questions

1. What portions of NFPA 1403 address live fire training in an acquired structures?
2. What additional staffing roles are required by NFPA 1403 for live fire training in an acquired structure?
3. What legal requirements need to be considered when conducting live fire training with acquired structures?

Application

1. Given a copy of NFPA 1403 and a specific chapter assignment, have instructor trainees break into small groups, review their assigned chapter, and report back to group on the key paragraphs.

Instructor Notes

1. Use the activity to have students direct the learning for ELO 2.

Topic 3-2: Cardiovascular and Thermal Strain of Fire Fighting

Terminal Learning Objective

At the end of this topic, an instructor trainee, given PPE, a live fire training evolution, and an acquired structure, will be able to minimize thermal and cardiovascular strain during live fire training.

Enabling Learning Objectives

1. Describe cardiovascular and thermal responses to fire fighting
2. Describe how different components impact cardiovascular and thermal strain
 - Fire fighting activity
 - Turnout gear
 - Weather
3. Describe warning signs for heat illnesses that may occur during live fire activity
4. Describe how to prevent injuries and heat illness during fire fighting training and activity
5. Describe the importance of modifiable risk factors for cardiovascular disease and ways to decrease those factors
6. Describe the dangers associated with exposure to smoke and particulate matter
7. Describe the importance of proper on-site decontamination, hygiene, gear cleaning, and showers

Discussion Questions

1. What are some signs of rhabdomyolysis or other heat-related injuries/illnesses on the training ground?
2. What strategies can prevent thermal insult during live fire training?
3. What cooling activities can you perform to reduce thermal insult during live fire training?

Application

1. Determined by instructor

Instructor Notes

1. This topic is intended to be a brief review of the content found in Topic 3-2 of the Instructor: Live Fire Training – Fixed Facility course. For complete content, please reference that course plan.
2. See the current editions of NFPA 1582: Standard on Comprehensive Occupational Medical Programs for Fire Departments, NFPA 1583: Standard on Health-Related Fitness Programs for Fire Department Members (current edition), NFPA 1584: Rehabilitation Process for Members During Emergency Operations and Training Exercises (current edition), Title 8 California Code of Regulations (T8 CCR) Section 3395 – Heat Illness Prevention Standard for content.
3. Give students a copy of Cal/OSHA’s Employer Sample Procedures for Heat Illness Prevention (current edition).
 - See Online Instructor Resources
4. Use instructor trainee agency heat and illness prevention plans as examples.

Topic 3-3: Developing an Incident Within an Incident (IWI) Plan

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a proposed live fire training evolution, will be able to develop and communicate an incident within an incident (IWI) plan for a live fire training evolution in an acquired structure in accordance with NFPA standards and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Identify factors that contribute to an IWI, line of duty injury, or death during live fire training
2. Describe how to mitigate common factors that can lead to line of duty injury and death during live fire training
3. Describe the purpose of the IWI plan
4. Describe how respond to an IWI, serious injury, or line of duty death

Discussion Questions

1. How has a line of duty injury or death impacted you or your agency?
2. Why is it important to have an IWI plan in place before live fire training?
3. How does your agency handle cell phones and helmet cameras during an IWI?
4. What actions and events need to be documented during and after an IWI?

Application

1. Given a line of duty injury or death report from *Live Fire Training: Principles and Practice*, NIOSH, or another source, have instructor trainees work in small groups to analyze the report and identify the factors that contributed to the injury or death. Have instructor trainees create a presentation to share with the group (on that day or as a homework assignment to present the next day).

Instructor Notes

1. This topic is intended to be a brief review of the content found in Topic 3-3 of the Instructor: Live Fire Training – Fixed Facility course. For complete content, please reference that course plan.
2. Have instructor trainee watch all or portions of the following videos to demonstrate why avoiding complacency and lowered standards is crucial to safety:
 - Normalisation of Deviance – IAFF - Part I (Mike Mullane)
 - Normalisation of Deviance – IAFF – Part II (Mike Mullane)
3. Supporting documentation for ELO 5
 - FIRESCOPE – ICS 910: Firefighter Incident Safety and Accountability Guidelines

Unit 4: Preburn Planning

Topic 4-1: Conducting an Initial Site Evaluation

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a proposed live fire training evolution, will be able to evaluate an acquired structure in order to determine if the site fulfills the training objectives with minimal mitigation requirements in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Identify the requirements of a viable live fire training site
 - Water supply
 - Structural integrity
 - Maintenance and structural stability
 - Visual damage inspection
 - Free of biohazards
 - Site preparation and cleanup
 - Space for logistics
 - Staging area
 - Burn area
 - Rehabilitation area
 - Parking
2. Describe conditions that could impact site use
 - Inadequate water supply
 - Exposure concerns
 - Hazards
 - Weather
 - Public or political impact
 - Environmental impact
 - Smoke mitigation
 - Run off plan
 - Location or proximity
 - Sensitive populations
 - Schools
 - Child care facilities
 - Elder care facilities
 - Protected buildings
 - Transportation corridors
 - Highways
 - Public transit
 - Burn impact and anticipated outcomes
 - Burn project timeline

- Property owner responsibilities
 - Grant deed
 - Title search
 - Proof of cancellation of fire insurance
 - Demolition permit with AHJ
 - Environmental mitigation
- AHJ hold harmless agreement
- 3. Identify site evaluation communication and notification needs
 - Determined by AHJ
 - Vary by structure and location
- 4. Identify site evaluation documentation needs
 - Determined by AHJ
 - Vary by structure and location

Discussion Questions

1. Why is it important to conduct an initial site evaluation?
2. What conditions might deter you from using a live fire training site?
 - What solutions might mitigate these conditions?
3. In your jurisdiction, who needs to be notified before you conduct a live fire training evolution in an acquired structure?

Application

1. Given an acquired structure burn site and a proposed training assignment, have students conduct a site evaluation to answer the following questions.
 - Does it meet the requirements of a viable live fire training site for the assignment?
 - Are there any concerns?
 - What solutions could mitigate these concerns?

Instructor Notes

1. ELO 1: NFPA 1403 has a “Site Inspection Worksheet – Residential Properties” document to use for evaluating a building’s structural integrity and potential hazards.
2. The proposed training assignments for the instructor trainee activity should come from the Instructor Demonstrations or Skills Exercises from Fire Control 3: Structural Fire Fighting.

Topic 4-2: Developing a Comprehensive Burn Plan (“Burn Book”)

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a live fire training evolution, will be able to assemble a comprehensive burn plan (often referred to as a “burn book”) that contains all documentation necessary to conduct a live fire training evolution in an acquired structure in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe the purpose of a live fire burn plan
 - Ensures that no part of the training process is overlooked

- Promotes fire and life safety
 - Fulfills NFPA, SFT, and AHJ requirements
 - Demonstrates due diligence
 - Limits liability
2. Identify the components of a live fire burn plan (“burn book”)
- SFT course-related documents
 - Burn information
 - Written plans
 - Incident Action Plan (IAP)
 - Incident Within an Incident (IWI) (emergency plan)
 - Preburn
 - Smoke
 - Rehabilitation
 - Visual plans
 - Property/site
 - Structure
 - Permits
 - Notifications
 - Insurance
 - Permissions/approvals
 - Checklists
 - Maps
 - Policies
 - Reports
 - Critical correspondence
3. Identify records-retention requirements for burn plans
- SFT policies
 - AHJ policies
 - Exposure
 - Time of employment + 30 years (Title 8 CCR Section 3204)
 - Medical records = 30 years (OSHA)
 - Injury / Line of duty death
 - Cal/OSHA 300 Log = 5 years
 - Cal/OSHA 301 Incident Report = 5 years
 - Medical records = 30 years (OSHA)

Discussion Questions

1. What is the purpose of a comprehensive burn plan?
2. What should you include in a burn plan?
3. How long are you required to keep the burn plan after training?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Use the Live Fire Training Burn Plan Outline document as an example. Distribute it to the students to use as a checklist when developing their own burn book.
2. ELO 3: OSHA recordkeeping requirements (29 CFR 1904)
3. Bring sample burn books for instructor trainees to review

Topic 4-3: Conducting Preburn Preparations

Terminal Learning Objective

At the end of this topic, an instructor trainee, given an acquired structure and a live fire training evolution, will be able to develop a preburn plan and conduct preburn planning requirements in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Identify basic components of a preburn plan
 - Site plan drawings including all exposures
 - Floor plan detailing all rooms, hallways, exterior openings
 - Command post location
 - Apparatus positions
 - Hose and backup line positions
 - Emergency escape route locations
 - Emergency evacuation assembly area location
 - Ingress and egress routes for emergency vehicles
2. Describe preburn planning requirements
 - Develop preburn plan
 - Identify required number of instructors
 - Identify proper fuel loads
 - Determine available water supply
 - Additional requirements per NFPA 1142
 - Percentage involved
 - Exposure calculation
 - Additional floors
 - Determine required fire flow for the acquired structure and exposure buildings
 - National Fire Academy (NFA) fire flow calculation = $(\text{length} \times \text{width})/3 \times \text{percent involvement}$
 - Iowa rate of flow formula = $(\text{length} \times \text{width} \times \text{height})/100$
 - Determine required reserve flow (50 percent of fire flow)
 - Obtain apparatus pumps that meet or exceed required fire flow for building and exposures
 - Establish separate water sources for attack and backup hose lines
 - Obtain weather reports and update with changes
 - Designate and mark parking areas

- Establish communication plan and obtain radios
- Establish medical plan
- Establish decontamination plan
- Complete any other AHJ requirements

Discussion Questions

1. How do you determine appropriate water supply?
2. How do you determine the appropriate instructor numbers for a live fire training evolution in an acquired structure?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Most of the ELO content comes from “Preburn Planning” on the “Live Fire Evolution Sample Checklist” from NFPA 1403.

Topic 4-4: Preparing an Acquired Structure

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a live fire training evolution, will be able to prepare an acquired structure for live fire training in order to fulfill training objectives in accordance with NFPA standards and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe how to prepare an acquired structure for live fire training
 - Complete visual damage inspection
 - Secure utilities and have meters pulled by utility company
 - Check and operate windows and doors, open or close as needed
 - Check and operate other training structure components
 - Implement Cal/OSHA fall protection requirements
 - Eliminate or mitigate hazards
 - Biohazards, hives, and vermin
 - Exterior hazards
 - Trash
 - Trees and brush
 - Surrounding vegetation
 - Chimney
 - Fuel tanks and closed vessels
 - Cisterns, wells, and cesspools/septic systems
 - Porches and outside steps
 - Interior Hazards
 - Wall, window, and ceiling coverings
 - Furniture and appliances
 - HVAC, dead loads, and chimneys
 - Glass (including windows)

- Staircases
 - Toxic materials
 - Any other exterior and interior hazards
- Protect structural members by covering holes in walls and ceilings
- Place erosion control measures (if applicable)
- Provide site markings for visual communication and hazard identification
 - Photo document all interior and exterior prep and markings prior to burn
- Identify building features
 - Flow paths
 - Extension avenues
 - Attic extension
 - Wind impact
 - Stairwell control
- Identify ventilation profiles
- Prepare fuel package
 - Size at approved locations
- Complete any other AHJ requirements
- Complete required documentation

Discussion Questions

1. How much time does it take to prepare an acquired structure in your AHJ?
2. Who approves fuel packages in your AHJ?
 - How do you document a fuel package?
3. What type of structural integrity issues need to be mitigated before qualifying an acquired structure?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Most of the ELO content comes from the acquired structure requirements and worksheets in NFPA 1403.

Topic 4-5: Fire Behavior in an Acquired Structure

Terminal Learning Objective

At the end of this topic, an instructor trainee, given knowledge of fire chemistry and physics, a live fire training evolution, and an acquired structure, will be able to anticipate how fire will move through an acquired structure in order to plan appropriate safety and suppression tactics and know when a fire has grown beyond the scope of the training evolution.

Enabling Learning Objectives

1. Describe how physical states of matter influence fire behavior
 - Gases
 - Solids
 - Liquids
2. Identify products of combustion

- Heat
 - Smoke
3. Identify methods of heat transfer
 - Conduction
 - Convection
 - Radiation
 4. Describe the impact of oxygen concentration on life safety and fire growth
 5. Identify the components of the fire triangle and fire tetrahedron
 6. Describe the stages of fire
 - Traditional/legacy (time vs. temperature curve)
 - Ventilation-limited (time vs. temperature curve)
 7. Identify factors that influence fire behavior
 - Fuel
 - Air
 - Weather
 - Fire compartment
 - Burn regime
 8. Describe hostile fire events
 - Fire gas ignition
 - Black fire
 9. Describe the composition of smoke
 - Particulates
 - Gases
 - Aerosols
 10. Describe the attributes of smoke
 - Volume
 - Velocity
 - Density
 - Color
 11. Identify the hazards of smoke
 - Cold smoke
 - Black fire
 - Smoke as fuel
 - Smoke as poison
 12. Identify concepts associated with water as an extinguishing agent
 - Heat
 - Specific heat of water
 - Specific heat of steam
 13. Describe how water and steam impact the fire tetrahedron
 - Removes (transfers) heat (heat)
 - Stops pyrolysis (fuel)

- Reduces oxygen percentage (oxygen)
 - Interrupts chemical chain reaction (chemical chain reaction)
14. Describe gas cooling
- Droplet size
 - Hang time
 - Flow rate
 - Attack angle
 - Cone angle
 - Application duration
15. Describe surface cooling
- Stop pyrolysis
 - Extinguish smoldering combustion
16. Describe cooling capacity
- Raising water to vaporization temperature
 - Vaporization of water
17. Describe gas expansion and contraction
- Fire gas/smoke
 - Steam

Discussion Questions

1. What actions can you take to minimize heat transfer?
2. How do different construction techniques, materials, furnishings, and interiors impact fire behavior?
3. How can recognizing the attributes of smoke assist in tactical decision making?
4. How do you avoid exposure to CO and HCN?
5. Can you push fire with water application?
 - Why or why not?
6. What value does steam production have in fire attack?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. This topic is intended to be a brief review of the content found in Unit 5 of the Instructor: Live Fire Training – Fixed Facility course. Direct the content toward anticipating fire behavior in an acquired facility. For in-depth fire behavior content, please reference that course plan.

Unit 5: Set Up and Walk Through

Topic 5-1: Implementing an Incident Action Plan

Terminal Learning Objective

At the end of this topic, an instructor trainee, given ICS forms and live fire training evolutions, will be able to develop and implement an incident action plan (IAP) for a live fire training course in an acquired structure in accordance with the policies and the procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe how to complete the ICS forms that make up an IAP
 - ICS 201: Incident Briefing
 - ICS 204: Assignment List
 - ICS 205: Incident Radio Communications Plan
 - ICS 206: Medical Plan
 - ICS 215: Operational Planning Worksheet
 - ICS 215A: Incident Action Plan Safety Analysis

Discussion Questions

1. How does the complexity of an acquired structure impact an IAP?
2. How does the IAP differ from the comprehensive burn plan (“burn book”)?

Application

1. Given a proposed live fire training course with multiple evolutions and an acquired structure, divide the class into groups and have each group complete one ICS form. Have students share their results with the group.

Instructor Notes

1. None

Topic 5-2: Securing a Water Supply

Terminal Learning Objective

At the end of this topic, an instructor trainee, given an acquired structure and a live fire training evolution, will be able to secure a water supply with sufficient rate and duration for control and extinguishment of the training fire, backup lines to protect personnel, and protection of exposed property.

Enabling Learning Objectives

1. Describe minimum water supply requirements for live fire training evolutions including water for:
 - Control and extinguishment of fire
 - Exposure control
 - Backup line(s) to protect personnel
 - Protecting utilities at property lines
 - Dust abatement
2. Identify hose line placement for live fire training evolutions based on:

- Training objectives
- Fuel package
- Number of evolutions/training stations running simultaneously
- Exposure protection
- Unforeseen situations

Discussion Questions

1. Who is responsible for the ensuring adequate water supply?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. None

Topic 5-3: Conducting an Instructor Briefing and Preburn Walk Through

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a live fire training evolution and an acquired structure, will be able to conduct an instructor briefing and a preburn walk through with all instructors and personnel supporting the live fire training evolution in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe the instructor walkthrough process
 - Identify crew and instructor assignments
 - Incident commander
 - Safety officer
 - Medical team
 - “2 in/2 out”
 - Smoke mitigation plan/impact
 - Instructor in charge
 - Instructor(s)
 - Instructor trainee(s)
 - Fire control team
 - Ignition officer
 - Water supply officer
 - Pump operator(s)
 - Logistics
 - Instructor in charge briefs all participating instructors
 - Incident action plan (IAP)
 - Incident within an incident plan (IWI)
 - Structure layout
 - Extension avenues
 - Attic extension
 - Wind impact
 - Stairwell control

- Crew and instructor assignments
 - Participant rotations
- Safety officer briefs all participating instructors
 - Safety plan
 - Current and anticipated weather
 - Evacuation signal and procedures
 - Review final “Go/No-Go Checklist”
 - Check PPE
 - Check training communications channels
 - Review decontamination plan
- Initiate site plan
 - Command post
 - Logistics
 - Food/water
 - SCBA air
 - Restrooms/hand washing
 - Apparatus
 - Position vehicles
 - Deploy hose lines
 - Rehabilitation/medical
 - Shade/hydration
 - Decontamination
- Issue final notifications and approvals
 - Communications center
 - Adjoining jurisdictions (if applicable)
 - Law enforcement (if applicable)
 - Impacted populations

Discussion Questions

1. What types of weather would impact the decision to burn?
2. When do you make the final “go/no-go” decision?
3. What considerations go into a smoke mitigation plan for live burns in an acquired structure?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. None

Topic 5-4: Building Fuel Packages

Terminal Learning Objective

At the end of this topic, an instructor trainee, given fuel materials, an acquired structure, and a live fire training evolution, will be able to build a fuel load that is sufficient in material, size, and scale for the structure and meets the objectives of the live fire training evolution.

Enabling Learning Objectives

1. Identify authorized fuel materials per NFPA 1403
2. Identify unauthorized fuel materials per NFPA 1403
3. Identify factors (openings, building materials, room size, etc.) that impact fire growth development and spread
 - Select fuel loads to avoid uncontrolled flashover or backdraft conditions
4. Identify appropriate locations for fuel packages
5. Describe how to build fuel packages that are the appropriate type, orientation, and size to meet live fire training evolution objectives

Discussion Questions

1. How do fuel packages used for an acquired structure differ from fuel packages used for a fixed facility or prop?
2. What factors impact the type and size of fuels used to make fuel packages?

Application

1. Activity 5-4: Building Fuel Packages for Fire Behavior Evolutions
2. Activity 5-4: Building Fuel Packages for Fire Attack Evolutions

Instructor Notes

1. For ELO 5, consider breaking the class into groups to address fuel packages appropriate for different rooms in an acquired structure.

Topic 5-5: Conducting a Student Preburn Walk Through

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a live fire training evolution and an acquired structure, will be able to conduct a preburn walk through with all students participating the live fire training evolution in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe preburn “walkthrough” procedures
 - Brief all participants
 - Training objectives
 - Structure layout
 - Demonstrate door and window operations
 - Identify primary and secondary egress
 - Crew and instructor assignments
 - Participant rotations
 - Safety briefing
 - Evacuation signal and procedures
 - Decontamination procedures
 - Check all hose lines
 - Sufficient size for area of fire involvement
 - Adequate number for personnel
 - Charged and test flowed

- Supervised by qualified instructors
 - Student staffing is not permitted
- Position necessary tools and equipment
- Check participants
 - All equipment properly worn
 - SCBA with adequate volume
- Communications check per communications plan
- 2. Identify NFPA 1403 standards related to playing the role of a victim during live fire training
 - No person shall be inside without a partner/buddy system
 - Rescue mannequins in fire fighter PPE shall be specially marked

Discussion Questions

1. Who is responsible for performing PPE checks on Fire Control 3: Structural Fire Fighting students prior to entry into a live fire training?
2. Under what circumstances can you use people as victims during live fire training?
3. What is your AHJ's evacuation signal?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Most of the ELO content comes from "Preburn Procedures" from NFPA 1403.

Unit 6: Delivering Live Fire Training Evolutions in an Acquired Structure

Topic 6-1: Operating as Instructor in Charge (Command and Control)

Terminal Learning Objective

At the end of this topic, an instructor trainee, given an incident action plan, live fire training evolutions, and an acquired structure, will be able to operate as the “instructor in charge” of a live fire training course, supervising instructors and maintaining unity of command and span of control.

Enabling Learning Objectives

1. Describe the qualifications of an instructor in charge
 - NFPA 1403
2. Describe the roles and responsibilities of an instructor in charge
 - Assign instructors to functional crews, backup lines, and functional assignments
 - Rest and rehabilitation of participants and instructors
 - Medical monitoring of participants and instructors
 - Instructor assignments and rotation schedule
 - Verify instructor qualifications to deliver live fire training in acquired structures
 - Assign extra instructors to mitigate extreme weather, large class size, or long class duration
 - Maintain awareness of weather conditions
 - Perform final weather check before ignition
 - Additional requirements for conducting live fire training evolutions with flow path and ventilation-controlled conditions
3. Describe the roles and responsibilities of an instructor
 - Verify PPE is worn according to manufacturers instructions
 - Monitor and supervise students during live fire evolutions

Discussion Questions

1. What are the roles and responsibilities of the instructor in charge?
2. Is the instructor in charge also the incident commander?
3. What is the difference between an instructor and an instructor in charge?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. None

Topic 6-2: Safety Operations

Terminal Learning Objective

At the end of this topic, an instructor trainee, given an incident action plan laws and regulations, and a live fire training evolution, will be able to operate as the safety officer; plan, communicate, and oversee student rotations; and be able to implement the “2 in/2 out” or rapid intervention crew/company (RIC) requirement for a live fire training evolution

so that hazards and associated risks are identified, unsafe acts are prevented, and unsafe conditions are mitigated and the training evolution provides the greatest opportunity for meeting objectives while minimizing student risk.

Enabling Learning Objectives

1. Describe how to operate as a safety officer during a live fire training evolution
 - Qualifications
 - Roles and responsibilities
 - Specialized training
2. Describe how to plan, communicate, and oversee student rotations
 - Planning is impacted by:
 - Number of students
 - Training objectives
 - Structure
 - When to communicate rotations
 - Prior to IDLH conditions
 - What to communicate
 - Timing
 - Tasks
 - Travel routes
 - Primary and secondary egress
 - Order of operations
 - Emergency plans
 - Emergency assembly point
 - Hazards and risks
 - Postburn procedures
 - Meeting location
 - Decontamination
 - Conditions to watch for
 - Panic
 - PPE malfunction or failure
 - Low air alarms
 - Excessive heat release
 - Unintended fire conditions
3. Identify legislation and operations pertaining to “2 in/2 out” requirements
 - 29 CFR 1910.134(g)(4)(i)
 - Conditions that require a “2 out” team
 - Roles and responsibilities of the “2 out” team
 - Type of PPE worn by the “2 out” team
 - Appropriate staging locations for the “2 out” team

Discussion Questions

1. Can a safety officer have other assignments during live fire training?

2. When would it be appropriate to have more than one safety officer during live fire training?
3. Under what conditions should an instructor interrupt a live fire training evolution?
4. Under what conditions would you activate the “2 out” team?
5. How are RIC and “2 out” teams similar or different?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. This topic is intended to be a brief review of the content found in Topics 7-2, 7-3, and 7-4 of the Instructor: Live Fire Training – Fixed Facility course. For complete content, please reference that course plan.
2. Although there is no formal activity for this learning objective, the instructor trainees can practice to implement the “2 in/2 out” or rapid intervention crew/company (RIC) requirement during any live fire activities or demonstrations conducted as part of this course.

Topic 6-3: Igniting Fuel Packages

Terminal Learning Objective

At the end of this topic, an instructor trainee, given NFPA 1403, fuel materials, and an ignition source, will be able to ignite, maintain, and control a live fire and verbally describe the roles and responsibilities of an ignition officer.

Enabling Learning Objectives

1. Identify the members of a fire control team
2. Describe the role and responsibilities of an ignition officer
3. Describe the roles and responsibilities of the other members of a fire control team
4. Describe required PPE for the fire control team
5. Describe hose line requirements for the fire control team
6. Identify who makes the decision to ignite
7. Identify who ignites the fuel package
8. Describe how to light fuel packages based on:
 - Characteristics of room finishes
 - Fuel type
 - Physical arrangement/path of least resistance
 - Lighting sequence
 - Training objectives
9. Identify safety considerations associated with ignition
 - Ensure flame area is clear of personnel prior to ignition
 - Alternate ignition officer responsibilities after each ignition

Discussion Questions

1. To whom does the ignition officer report?
2. What is the minimum number of members for a fire control team?

Application

1. Have students practice ignition using the fuel packages developed during Activity 5-4: Building Fuel Packages for Fire Behavior Evolutions and Activity 5-4: Building Fuel Packages for Fire Attack Evolutions.

Instructor Notes

1. None

Topic 6-4: Reviewing Required Fire Control 3 Skills Exercises in an Acquired Structure

Terminal Learning Objective

At the end of this topic, an instructor trainee, given demonstrations of Fire Control 3: Structural Fire Fighting course plan Skills Exercises and associated equipment and materials, will be able to set up and evaluate students completing the required Fire Control 3: Structural Fire Fighting Skills Exercises in an acquired structure in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Identify the objectives a student must meet in order to successfully complete Skills Exercise 2: Risk Assessment and Door Entry
2. Describe how to set up Skills Exercise 2: Risk Assessment and Door Entry
3. Identify the objectives a student must meet in order to successfully complete Skills Exercise 3: Stretching, Flaking, and Advancing an Attack Line
4. Describe how to set up Skills Exercise 3: Stretching, Flaking, and Advancing an Attack Line
5. Identify the objectives a student must meet in order to successfully complete Skills Exercise 4: Water Application
6. Describe how to set up Skills Exercise 4: Water Application
7. Identify the objectives a student must meet in order to successfully complete Skills Exercise 5: Fire Attack
8. Describe how to set up Skills Exercise 5: Fire Attack

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Demonstrate how to set up and teach each required Fire Control 3: Structural Fire Fighting student skills exercise.
2. Allow time for a question and answer session after each demonstration.

Topic 6-5: Reviewing Optional Fire Control 3 Skills Exercises in an Acquired Structure

Terminal Learning Objective

At the end of this topic, an instructor trainee, given demonstrations of Fire Control 3: Structural Fire Fighting course plan Skills Exercises and associated equipment and materials, will be able to set up and evaluate students completing the optional Fire Control 3: Structural Fire Fighting Skills Exercises in an acquired structure in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Identify the objectives a student must meet in order to successfully complete Skills Exercise 6: Transitional Fire Attack
2. Describe how to set up Skills Exercise 6: Transitional Fire Attack
3. Identify the objectives a student must meet in order to successfully complete Skills Exercise 7: Interior Attic Fire Attack
4. Describe how to set up Skills Exercise 7: Interior Attic Fire Attack
5. Identify the objectives a student must meet in order to successfully complete Skills Exercise 8: Below Grade (Basement) Fire Attack
6. Describe how to set up Skills Exercise 8: Below Grade (Basement) Fire Attack
7. Identify the objectives a student must meet in order to successfully complete Skills Exercise 9: VEIS
8. Describe how to set up Skills Exercise 9: VEIS
9. Identify the objectives a student must meet in order to successfully complete Skills Exercise 10: Ventilation
10. Describe how to set up Skills Exercise 10: Ventilation
11. Identify the objectives a student must meet in order to successfully complete Skills Exercise 11: Portable Water Extinguisher Attack
12. Describe how to set up Skills Exercise 11: Portable Water Extinguisher Attack

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Demonstrate how to set up and teach each optional Fire Control 3: Structural Fire Fighter student skills exercise.
2. Allow time for a question and answer session after each demonstration.

Unit 7: Postburn Procedures

Topic 7-1: Postburn Procedures

Terminal Learning Objective

At the end of this topic, an instructor trainee, given a live fire training evolution and an acquired structure, will be able to conduct postburn procedures in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).

Enabling Learning Objectives

1. Describe postburn procedures
 - Account for all personnel
 - Overhaul remaining fires and confirm extinguishment
 - Decontaminate, inspect, and rehabilitate
 - Personnel
 - PPE
 - Equipment
 - Inspect training facilities for stability and hazards
 - Secure training facilities
 - Conduct training critique (after action review/AAR)
 - Complete records and reports
 - Photo document interior and exterior after each training evolution and again after clean up procedures prior to releasing property to owners
 - Demobilize resources and personnel
 - Complete any other AHJ requirements
 - Release property to owner
 - Close out notifications

Discussion Questions

1. Why is it important to check the students' gear before and after live fire training?
2. How do you document an injury acquired during training?
3. What steps can you take to minimize exposure during decontamination?
4. What records and reports are required after a burn in an acquired structure?

Application

1. Determined by instructor and acquired structure site selection

Instructor Notes

1. Most of the ELO content comes from "Postburn Procedures" on the "Live Fire Evolution Sample Checklist" from NFPA 1403.

Acknowledgments

State Fire Training gratefully acknowledges the following individuals and organizations for their diligent efforts and contributions that made the development and publication of this document possible.

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Partners

State Fire Training also extends special acknowledgement and appreciation to the Conference and Training Services Unit with the College of Continuing Education at California State University, Sacramento, for its ongoing meeting logistics and curriculum development support, innovative ideas, and forward-thinking services. This collaboration is made possible through an interagency agreement between CAL FIRE and Sacramento State.

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to delivery the course.

Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master in order to complete the TLO.

Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Final Draft

Instructor: Live Fire Training Acquired Structure

Instructor Task Book [Month Year]



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

Table of Contents

Table of Contents	1
Purpose and Process	3
Purpose	3
Initiation and Completion Process	3
Candidate Responsibilities	3
Evaluator Responsibilities	4
Registered Instructor Responsibilities.....	4
Fire Chief (or Fire Technology Director) Responsibilities.....	5
Submission and Review Process	5
Task Book Initiation	6
Candidate	6
Task Book Initiation Requirements	6
Task Book Initiation Approval	7
Signature Verification	8
Task Book Requirements	9
Job Performance Requirements	9
Introduction to Fire Control 3: Structural Fire Fighting	11
Introduction to Live Fire Training.....	12
Preburn Planning.....	14
Fire Behavior	16
Set Up and Walk Through	18
Delivering Live Fire Training Evolutions	20
Safety Operations.....	21
Igniting Fuel Packages	22
Set Up and Evaluating Student Skills	23
Postburn Procedures.....	25
Certification	26
Education	26
Position	26
Review and Approval	27
Candidate	27
Candidate's Fire Chief (or Fire Technology Director)	27

Published by: State Fire Training, 2251 Harvard Street, Suite 400, Sacramento, CA 95815
(916) 568-3800

Cover photo courtesy of State Fire Training.

Purpose and Process

Purpose

The State Fire Training Instructor: Live Fire Training – Acquire Structure instructor trainee task book is a performance-based document. It lists the minimum Job Performance, Certification, Education, and Position requirements a candidate must meet in order to teach Fire Control 3: Structural Fire Fighting using an acquired structure.

Initiation and Completion Process

Candidate Responsibilities

The candidate is the individual pursuing instructor registration.

The candidate shall:

1. Complete the “Candidate” and “Task Book Initiation Requirements” sections on the Task Book Initiation page.
 - Please print.
2. Complete a block on the Signature Verification page with an original wet-ink signature.
3. Complete all Experience requirements.
4. Complete all Position requirements.
5. Obtain the registered instructor’s signature as approval to open the task book using the “Task Book Initiation Approval” section on the Task Book Initiation page.
 - A candidate may not obtain evaluation signatures for any job performance requirements completed prior to the registered instructor initiation approval date.
6. Sign and date the “Candidate” verification section on the Review and Approval page with an original wet-ink signature.
7. Complete all Job Performance Requirements.
 - Ensure that an evaluator initials, signs, and dates each task to verify completion.
8. Obtain his or fire chief’s original wet-ink signature on the “Candidate’s Fire Chief” verification section on the Review and Approval page.
9. Create and retain a physical or scanned digital copy of the complete task book.
10. Submit the completed task book and any supporting documentation to State Fire Training when registering to instruct Fire Control 3: Structural Fire Fighting.

It is the candidate’s responsibility to routinely check the State Fire Training website for updates and addendums to open task books. When State Fire Training issues an update or addendum to an open task book, that update, or addendum is required for task book completion.

A candidate should not submit a task book until he or she has completed all requirements and obtained all signatures. State Fire Training will reject and return an incomplete 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 a State Fire Training Registered Instructor in Fire Control 3: Structural Fire Fighting.

An instructor task book may have more than one evaluator.

All evaluators shall:

1. Complete a block on the Signature Verification page with an original wet-ink signature.
2. Review and understand the candidate's instructor task book requirements and responsibilities.
3. Verify the candidate's successful completion of one or more job performance requirements through observation or review.
 - A candidate may not obtain evaluation signatures for any job performance requirements completed prior to the fire chief's initiation approval date.
 - Sign all appropriate lines in the instructor task book with an original wet-ink signature or approved digital signature (e.g. DocuSign or Adobe Sign; a scanned copy of a signature is not acceptable) to record demonstrated performance of tasks.

Registered Instructor Responsibilities

The State Fire Training Registered Instructor of the Instructor: Live Fire Training – Acquire Structure course is the individual who reviews and confirms the completion of a candidate's task book initiation requirements.

The registered instructor shall:

1. Review and understand the candidate's instructor task book requirements and responsibilities.
2. Verify that the candidate has met all requirements and prerequisites prior to initiating the candidate's task book.
3. Open the candidate's task book by signing the "Task Book Initiation Approval" section on the Task Book Initiation page with a wet-ink signature.

Fire Chief (or Fire Technology Director) Responsibilities

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

The fire chief (or authorized designee) shall:

4. Review and understand the candidate's instructor task book requirements and responsibilities.
5. Verify that the candidate has met all requirements and prerequisites.
6. Verify that the candidate has obtained the appropriate signatures to verify successful completion of each job performance requirement.
7. Sign and date the "Fire Chief" verification section on the Review and Approval page with an original wet-ink signature.
 - If signing as an authorized designee, verify that your signature is on file with State Fire Training.

Submission and Review Process

A candidate should not submit a task book until he or she has completed all requirements and obtained all signatures. State Fire Training will reject and return an incomplete task book.

Submit the completed task book and any supporting documentation to State Fire Training.

Office of the State Fire Marshal
State Fire Training
Attn: Instructor Registration
2251 Harvard Street, Suite 400
Sacramento, CA 95815

State Fire Training reviews all submitted task books.

If the task book is complete, State Fire Training will authorize the task book and retain a digital copy of the authorized task book in the candidate's career file.

If the task book is incomplete, State Fire Training will return the task book with a notification indicating what needs to be completed prior to resubmission.

Completion of this instructor task book is one step in the instructor registration process. Please refer to the *State Fire Training Procedures Manual* for the complete list of qualifications required to teach Fire Control 3: Structural Fire Fighting in an acquired structure.

Task Book Initiation

The instructor trainee task book may be initiated on the final day of the Instructor: Live Fire Training – Acquire Structure course.

Each JPR shall be conducted, reviewed, and validated after the candidate initiates the task book.

This task book must be completed within three years of initiation.

Candidate

Name: _____

SFT ID Number: _____

Fire Agency: _____

Task Book Initiation Requirements

The following requirements must be completed prior to opening this task book.

Certification

Fire Fighter II or Company Officer

Instructor II, or Current Registered Instructor with State Fire Training

Complete

Education

ICS-300

Safety Officer, S-404, or Safety Officer, L-954, or FDSOA Incident Safety Officer

Fire Control 3A: Structural Fire Fighting in Acquired Structure (2009) or;

Fire Control 3: Structural Fire Fighting (2018)

Instructor: Live Fire Training – Fixed Facility (2018)

Instructor: Live Fire Training – Acquire Structure (2018)

Complete

Position

Fire Fighter for three (3) years full-time, or six (6) years volunteer.

Complete

Signature Verification

The following individuals are SFT registered Fire Control 3: Structural Fire Fighting instructors and have the authority to verify portions of this instructor task book using the signature recorded below.

Please print except for the Signature line. Print and add additional signature pages as needed.

Name: _____	Name: _____
Job Title: _____	Job Title: _____
Organization: _____	Organization: _____
Signature: _____	Signature: _____
Name: _____	Name: _____
Job Title: _____	Job Title: _____
Organization: _____	Organization: _____
Signature: _____	Signature: _____
Name: _____	Name: _____
Job Title: _____	Job Title: _____
Organization: _____	Organization: _____
Signature: _____	Signature: _____
Name: _____	Name: _____
Job Title: _____	Job Title: _____
Organization: _____	Organization: _____
Signature: _____	Signature: _____
Name: _____	Name: _____
Job Title: _____	Job Title: _____
Organization: _____	Organization: _____
Signature: _____	Signature: _____

Task Book Requirements

Job Performance Requirements

This instructor task book includes the training objectives included in the Instructor Live Fire Training – Acquire Structure course plan, which is based on NFPA 1403: Standard on Live Fire Training Evolutions (2018).

The candidate must complete each job performance requirement (JPR) in accordance with the standards of the authority having jurisdiction (AHJ) or the National Fire Protection Association (NFPA), whichever is more restrictive.

Each task must be performed twice.

- The two instances must occur during two different courses.
- The same evaluator cannot sign off on the same task twice.

Examples of correct and incorrect evaluation:

Correct: Task completed during two separate courses and evaluated by two separate individuals.

1. Assemble a comprehensive burn plan (“burn book”) that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ
b. Identify components of a live fire burn plan (“burn book”)	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ

Incorrect: Task completed twice during one course but evaluated by two separate individuals.

1. Assemble a comprehensive burn plan (“burn book”) that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ
b. Identify components of a live fire burn plan (“burn book”)	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ

Incorrect: Task completed during two separate courses but evaluated by the same individual.

1. Assemble a comprehensive burn plan (“burn book”) that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS
b. Identify components of a live fire burn plan (“burn book”)	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS

Job Performance Requirements

Introduction to Fire Control 3: Structural Fire Fighting

2. Identify the goals and objectives for students enrolled in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course.	1st Evaluation			2nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify Course Details						
b. Identify Required Resources						
c. Identify key terminology						
d. Identify Units and Topics						
e. Identify Props and Structures documents						
f. Identify Instructor Demonstrations						
g. Identify Skills Exercises						
3. Identify the State Fire Training (SFT) requirements for becoming a registered SFT Fire Control 3: Structural Fire Fighting instructor.	1st Evaluation			2nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify desirable traits of live fire training instructors						
b. Identify SFT requirements for Fire Control 3: Structural Fire Fighting instructors						

4. Describe student requirements for enrollment in Fire Control 3: Structural Fire Fighting	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Authorization to attend training from fire agency or ALA/ARTP						
b. Verification of meeting prerequisite requirements						
c. Current SCBA fit test documentation						
d. Cal/OSHA compliant structural PPE						
e. Completed release of liability form						

Introduction to Live Fire Training

5. Implement live fire training in accordance with NFPA 1403, Cal/OSHA, and authority having jurisdiction (AHJ) requirements.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify significance of NFPA standards						
b. Describe contents of NFPA 1403						
c. Describe how to apply NFPA 1403 to Fire Control 3: Structural Fire Fighting						
d. Identify legal requirements associated with live fire training						

6. Minimize thermal and cardiovascular strain during live fire training.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe why aerobic fitness is necessary to perform fire fighting activity						
b. Describe cardiovascular and thermal responses to fire fighting						
c. Describe how fire fighting activity and turnout gear impact cardiovascular and thermal strain						
d. Describe how weather impacts cardiovascular and thermal strain						
e. Describe warning signs for heat illnesses that may occur in live fire training and activity						
f. Describe how to prevent injuries and heat illness during fire fighting training and activity						
g. Describe risk factors for cardiovascular disease						
h. Describe importance of modifiable risk factors for cardiovascular disease and ways to decrease those factors						
i. Describe goals of on-site rehabilitation						
j. Describe dangers associated with exposure to smoke and particulate matter						
k. Describe importance of proper on-site decontamination, hygiene, gear cleaning, and showers						

7. Develop and communicate an incident within an incident (IWI) plan for a live fire training evolution in accordance with NFPA standards and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify factors that contribute to an IWI, line of duty injury, or death during live fire training						
b. Describe how to mitigate common factors that can lead to line of duty injury and death during live fire training						
c. Describe purpose of IWI plan						
d. Describe relationship between instructor and AHJ hosting the live fire						
e. Describe how respond to an IWI, serious injury, or line of duty death						

Preburn Planning

8. Evaluate acquired structure training sites in order to select a site that fulfills the training objectives with minimal mitigation requirements in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify requirements of a viable live fire training site						
b. Describe conditions that could impact site use						
c. Identify site evaluation communication and notification needs						
d. Identify site evaluation documentation needs						

9. Assemble a comprehensive burn plan (“burn book”) that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
d. Describe purpose of a live fire burn plan						
e. Identify components of a live fire burn plan (“burn book”)						
f. Identify records-retention requirements for burn plans						
10. Develop a preburn plan and conduct preburn planning requirements for an acquired structure in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify basic components of a preburn plan						
b. Describe preburn planning requirements						
11. Prepare an acquired structure for live fire training in order to fulfill training objectives in accordance with NFPA standards and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to prepare an acquired structure for live fire training						

Fire Behavior

12. Teach students how to identify, define, and describe fire science concepts and appropriately apply them to interior structural fire fighting activities in accordance with content identified in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course plan	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how physical states of matter influence fire behavior						
b. Identify products of combustion						
c. Identify methods of heat transfer						
d. Describe the impact of oxygen concentration of life safety and fire growth						
e. Identify the components of the fire triangle and fire tetrahedron						
13. Teach students how to identify and describe fire growth and development concepts and appropriately apply them to interior structural fire fighting activities in accordance with content identified in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course plan.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe stages of fire						
b. Identify factors that influence fire behavior						
c. Describe hostile fire events						

14. Teach students how to read smoke emanating from a structure and use that reading to identify pre-phenomena conditions, fire location, and spread during interior structural fire fighting activities, in accordance with content identified in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course plan.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe composition of smoke						
b. Describe attributes of smoke						
c. Identify hazards of smoke						
15. Teach students how to identify and describe concepts related to water as an extinguishing agent and apply them to interior structural fire fighting activities in accordance with content identified in the State Fire Training (SFT) Fire Control 3: Structural Fire Fighting course plan.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify concepts associated with water as an extinguishing agent						
b. Describe how water and steam impact fire tetrahedron						
c. Describe gas cooling						
d. Describe surface cooling						
e. Describe cooling capacity						
f. Describe gas expansion and contraction						

Set Up and Walk Through

16. Develop and implement an incident action plan (IAP) for a live fire training course in accordance with the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to complete an ICS 201: Incident Briefing form						
b. Describe how to complete an ICS 204: Assignment List form						
c. Describe how to complete an ICS 205: Incident Radio Communications Plan form						
d. Describe how to complete an ICS 206: Medical Plan form						
e. Describe how to complete an ICS 215: Operational Planning Worksheet form						
f. Describe how to complete an ICS 215A: Incident Action Plan Safety Analysis form						
17. Secure a water supply with sufficient rate and duration for control and extinguishment of the training fire, backup lines to protect personnel, and protection of exposed property.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe minimum water supply requirements for live fire training evolutions						
b. Identify hose line placement for live fire training evolutions						

18. Conduct an instructor briefing and a preburn walk through with all instructors and personnel supporting the live fire training evolution in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to identify crew and instructor assignments						
b. Describe how instructor in charge briefs all participating instructors						
c. Describe how safety officer briefs all participating instructors						
d. Describe how to initiate site plan						
e. Describe how to Issue final notifications and approvals						
19. Build a fuel load that is sufficient in material, size, and scale for the prop or facility and meets the objectives of the live fire training evolution.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify authorized fuel materials per NFPA 1403						
b. Identify unauthorized fuel materials per NFPA 1403						
c. Identify factors that impact fire growth development and spread						
d. Identify appropriate locations for fuel packages						
e. Describe how to build fuel packages that are the appropriate type, orientation, and size to meet live fire training evolution objectives						

20. Conduct a preburn walk through with all students participating the live fire training evolution in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to brief all participants						
b. Describe how to check all hose lines						
c. Describe how to position necessary tools and equipment						
d. Describe how to check participants						
e. Describe how to conduct a communications check per communications plan						
f. Describe how to check all hose lines						
g. Identify NFPA 1403 standards related to playing the role of a victim during live fire training						

Delivering Live Fire Training Evolutions

21. Operate as the “instructor in charge” of a live fire training course, supervising instructors and maintaining unity of command and span of control.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe qualifications of an instructor in charge						
b. Describe roles and responsibilities of an instructor in charge						
c. Describe roles and responsibilities of an instructor						

Safety Operations

22. Operate as the safety officer for a live fire training course so that hazards and associated risks are identified, unsafe acts are prevented, and unsafe conditions are mitigated.	1st Evaluation			2nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe qualifications of a safety officer						
b. Describe roles and responsibilities of a safety officer						
c. Describe specialized training required for a live fire training safety officer						
23. Plan, communicate, and oversee student rotations for a live fire training evolution in a manner that provides the greatest opportunity for meeting objectives while minimizing student risk.	1st Evaluation			2nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to plan student rotations						
b. Describe when to communicate rotations with students						
c. Describe what to communicate to students						
d. Describe conditions to watch for during a live fire training evolution						
24. Implement the “2 in/2 out” or rapid intervention crew/company (RIC) requirement during a live fire training evolution.	1st Evaluation			2nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify legislation that sets “2 in/2 out” requirements						
b. Identify conditions that require a “2 out” team						
c. Describe roles and responsibilities of the “2 out” team						
d. Identify type of PPE worn by the “2 out” team						
e. Identify appropriate staging locations for the “2 out” team						

Igniting Fuel Packages

25. Ignite, maintain, and control a live fire and verbally describe the roles and responsibilities of an ignition officer.	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify members of a fire control team						
b. Describe role and responsibilities of an ignition officer						
c. Describe roles and responsibilities of the other members of a fire control team						
d. Describe required PPE for the fire control team						
e. Describe hose line requirements for the fire control team						
f. Identify who makes the decision to ignite						
g. Identify who ignites the fuel package						
h. Describe how to light fuel packages						
i. Identify safety considerations associated with ignition						

Set Up and Evaluating Student Skills

26. Set up and evaluate students completing the required Fire Control 3: Structural Fire Fighting Skills Exercises in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify objectives a student must meet in order to successfully complete Skills Exercise 2: Risk Assessment and Door Entry						
b. Describe how to set up Skills Exercise 2: Risk Assessment and Door Entry						
c. Identify objectives a student must meet in order to successfully complete Skills Exercise 3: Stretching, Flaking, and Advancing an Attack Line						
d. Describe how to set up Skills Exercise 3: Stretching, Flaking, and Advancing an Attack Line						
e. Identify objectives a student must meet in order to successfully complete Skills Exercise 4: Water Application						
f. Describe how to set up Skills Exercise 4: Water Application						
g. Identify objectives a student must meet in order to successfully complete Skills Exercise 5: Fire Attack						
h. Describe how to set up Skills Exercise 5: Fire Attack						

27. Set up and evaluate students completing the optional Fire Control 3: Structural Fire Fighting Skills Exercises in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Identify objectives a student must meet in order to successfully complete Skills Exercise 6: Transitional Fire Attack						
b. Describe how to set up Skills Exercise 6: Transitional Fire Attack						
c. Identify objectives a student must meet in order to successfully complete Skills Exercise 7: Interior Attic Fire Attack						
d. Describe how to set up Skills Exercise 7: Interior Attic Fire Attack						
e. Identify objectives a student must meet in order to successfully complete Skills Exercise 8: Below Grade (Basement) Fire Attack						
f. Describe how to set up Skills Exercise 8: Below Grade (Basement) Fire Attack						
g. Identify objectives a student must meet in order to successfully complete Skills Exercise 9: VEIS						
h. Describe how to set up Skills Exercise 9: VEIS						
i. Identify objectives a student must meet in order to successfully complete Skills Exercise 10: Ventilation						
j. Describe how to set up Skills Exercise 10: Ventilation						
k. Identify objectives a student must meet in order to successfully complete Skills Exercise 11: Portable Water Extinguisher Attack						
l. Describe how to set up Skills Exercise 11: Portable Water Extinguisher Attack						

Postburn Procedures

28. Conduct postburn procedures in accordance with NFPA 1403 and the policies and procedures of the authority having jurisdiction (AHJ).	1 st Evaluation			2 nd Evaluation		
	Course Code	Date	Initials	Course Code	Date	Initials
a. Describe how to account for all personnel						
b. Describe how to overhaul remaining fires						
c. Describe how to decontaminate, inspect, and rehabilitate						
d. Describe how to inspect training facilities for stability and hazards						
e. Describe how to secure training facilities						
f. Describe how to conduct training critique (after action review/AAR)						
g. Describe how to complete records and reports						
h. Describe how to demobilize resources and personnel						
i. Describe how to complete any other AHJ requirements						
j. Describe how to release property to owner						
k. Describe how to issue close out notifications						

Certification

The candidate meets the following requirements for certification.

- Fire Fighter II or Company Officer
- Instructor II or current SFT registered instructor

Education

The candidate meets the following requirements for education.

- ICS-300 Intermediate ICS for Expanding Incidents
- Safety Officer S-404, or Safety Officer, L-954, or FDSOA Incident Safety Officer
- Fire Control 3A: Structural Fire Fighting in Acquired Structures (2009), or Fire Control 3: Structural Fire Fighting (2018)
- Instructor: Live Fire Training – Fixed Facility
- Instructor: Live Fire Training – Acquired Structure

Position

The candidate meets the following qualifications for position. Performing in an acting capacity does not qualify.

Position	Agency	Appointment Date
Fire Fighter for three (3) years full-time, or six (6) years volunteer		

