

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

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**ATTACHMENT 4**

Date: August 20, 2015

To: State Board of Fire Services

From: Mark Romer, Fire Service Training Specialist III

**SUBJECT/AGENDA ACTION ITEM:
Approval of 2015 Fire Control 4 Curriculum**

**Recommended Actions:
(Discussion/Actions)**

Seeking SBFS approval of the new 2015 Fire Control 4 curriculum, to include the Course Plan and Skills exercises, and instructor task books

Background Information:

Fire Control 4A (Flammable Gas Fires – FC4A) and Fire Control 4B (Flammable Liquids Fire – FC4B) Fire Service Training and Education Program (FSTEP) courses were written in 1996. The FC4A was designed to instruct students on how to handle flammable gases. The current first half of this class is 3-hours of classroom information and covers the subject of characteristics of flammable gases, their hazards, and the tactics of handling these types of incidents. The rest of the class included 3-hours of live fire exercises for a total of 6 hours of training. The current FC4B class uses the same format as FC4A but covers flammable liquid incidents for a total of 6 hour. In most cases the classes are delivered as a combined program in a 12 hour format.

Analysis/Summary of Issue:

The 2015 version of Fire Control 4 is written to the 2013 NFPA 1001 Standard for Firefighter Professional Qualification, Chapter 6 (Firefighter II) job performance requirements (JPR's).

From these JPRs a course plan was developed to include an additional section to cover elements of pipeline safety addressing the potential incidents across the State. The new course now meets the requirements for fighter II and personnel coming out of the program can now have their FFII task book signed off.

All three of the identified manuals used for firefighter I and II can now be used for this course. The manual's section on pipeline emergencies, along with the instructional materials were developed for the DOT and the National Association of Fire Marshals and is included in the student manual and instructor resource.

The cadre discussed whether to develop a train-the-trainer course or move to the use of an instructor task book. The cadre agreed, since all of the other programs similar to FC4 use a task book, we would develop and use a task book for this program as well. A primary and senior task book was developed and the formatting of this new task book will become SFT format for all task books in the future.

The Statewide Training and Education Advisory Committee (STEAC) have approved the new curriculum at the July meeting.



Controlling Ignitable Liquids and Gases

Course Plan

Course Details

- Description:** This course provides the knowledge and skills that prepare a firefighter to extinguish an ignitable liquid fire, control a flammable gas fire, and develop an incident action plan for a pipeline emergency.
- Designed For:** Individuals pursuing SFT Firefighter II certification
- Authority:** NFPA 1001: Standard for Fire Fighter Professional Qualifications (2013), paragraphs 6.3.1 and 6.3.3
California Government Code (CGC) Sections 51010-51019.1
- Prerequisites:** SFT Firefighter I (completion of education requirements)
SFT First Responder Hazmat Operational (FRO) (or equivalent)
- Corequisites:** None
- Standard:** Complete all activities and skills
- Hours:** Lecture: 6:30 / Activities: 1:30 / Skills: 8:00
- Hours (Total):** 16:00
- Maximum Class Size:** Determined by instructor/student ratio
- Instructor Level:** Primary instructor and senior instructor
- Instructor/Student Ratio:** Lecture: 1 registered primary instructor
Skills: 1 registered senior instructor (cannot be included in the 1:5 student ratio), 1 registered primary instructor, and as many assistant instructors as needed to meet a 1:5 student ratio
- Restrictions:** See Facilities, Equipment, and Personnel requirements (page 3)
- SFT Designation:** FSTEP

Required Resources

Instructor Resources

To teach this course, instructors need:

- One of the following three texts:
 - *Fundamentals of Fire Fighter Skills* (including Instructor's Toolkit DVDs) (Jones & Bartlett Learning, 3rd edition, ISBN: 978-4496-7085-6)
 - *Essentials of Fire Fighting and Fire Department Operations* (Stowell, Frederick M., Murnane, Lynne, Brady Publishing, a division of Pearson Education, 6th edition, ISBN: 978-013-3140804)
 - *Fire Engineering's Handbook for Fire Fighter I and Fire Fighter II* (including Instructor Guide and Sample Skills Drills DVDs) (Corbett, Glenn, PennWell Corporation, 1st edition, ISBN: 978-1-59370-135-2)
- *Pipeline Emergencies* (Noll, Gregory G., Hildebrand, Michael S., Red Hat Publishing Company, Inc., 2nd edition, ISBN: 1-932235-08-6)
- *Emergency Response Guide* (U.S. Department of Transportation, current edition)
- Full structural personal protective equipment (including SCBA)

Online Instructor Resources

The following instructor resources are available online at <http://osfm.fire.ca.gov/training/instructorresources.php>:

- Not applicable

Student Resources

To participate in this course, students need:

- The firefighter textbook selected by the instructor
- *Pipeline Emergencies* (Noll, Gregory G., Hildebrand, Michael S., Red Hat Publishing Company, Inc., 2nd edition, ISBN: 1-932235-08-6)
- *Emergency Response Guide* (U.S. Department of Transportation, current edition)
- Full structural personal protective equipment (including SCBA)

Facilities, Equipment, and Personnel

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

Facilities

- Classroom environment for lecture
- Training area to accommodate skills and required equipment
 - Adequate hose lines (500' length / 1½" width)
 - Adequate nozzles
 - Standard
 - Foam capable
 - Eductor (must match nozzle)
 - BC fire extinguisher
 - Minimum of two (2) water sources
 - Adequate water supply
 - Adequate Class B foam or foam substitute
 - FLAG trailer or equivalent fixed props
 - Adequate propane supply
 - Air supply (if necessary)
 - Communication equipment (including batteries)
 - Emergency medical equipment (AED recommended)
 - Lavatory and hand washing facilities
 - Site security (if applicable)
 - Rehabilitation area and supplies

Equipment

- Flammable liquids or oil pan (or equivalent)
- Cylinder prop
- Valve/flange and piping prop
- Meter prop

Personnel

- Appropriate instructor/student ratios for lecture and skills

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

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

Enabling Learning Objectives

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

Discussion Questions

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

Activities

1. To be determined by the instructor

Unit 2: Ignitable Liquid Fires

Topic 2-1: Extinguishing an Ignitable Liquid Fire with Foam

Terminal Learning Objective

At the end of this topic, a student, given an assignment, an attack line, personal protective equipment, a foam proportioning device, a nozzle, foam concentrate, and a water supply, will be able to operate as a member of a team to extinguish an ignitable liquid fire by identifying escape routes and safety zones prior to advancing, selecting the correct type of foam concentrate for the given fuel and conditions, applying a properly proportioned foam stream to the surface of the fuel to create and maintain a foam blanket, extinguishing the fire, preventing re-ignition, maintaining team protection, and facing hazards until the team successfully retreats to a safety zone.

Enabling Learning Objectives

1. Discuss methods by which foam prevents or controls a hazard
2. List principles by which foam is generated
3. Identify causes of poor foam generation and corrective measures
 - Mismatched educator and nozzle
 - Air leaks in pick-up tube or hose connection
 - Improper flushing after maintenance or previous use
 - Kinked discharge hose line
 - Too much nozzle elevation
 - Too much hose between educator and nozzle
 - Incorrect inlet pressure to educator
 - Partially closed nozzle shut-off
 - Collapsed or obstructed pick-up tube
 - Pick-up tube too long
 - Improper internal flow meter calibration
4. Describe the difference between hydrocarbon and polar solvent fuels and the concentrates that work on each
5. Identify the characteristics, uses, and limitations of firefighting foams
6. Discuss the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application
7. Describe foam stream application techniques
 - Roll on or bounce
 - Bank down or deflect
 - Rain down
8. List hazards associated with foam use
9. Prepare foam concentrate supply for use
10. Assemble foam stream components
11. Demonstrate foam application techniques

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12. Approach and retreat from spills as part of a coordinated team

Discussion Questions

1. What are some limitations of foam use?
2. What are some hazards of foam use?
3. What are the advantages and disadvantages of smooth bore, fog, and foam nozzles for foam application?
4. What are some alternative extinguishing agents and methods that can be used in conjunction with foam?

Activities

1. To be determined by the instructor

Unit 3: Flammable Gas Fires

Topic 3-1: Controlling a Flammable Gas Fire

Terminal Learning Objective

At the end of this topic, a student, given an assignment, a cylinder outside of a structure, an attack line, personal protective equipment, and tools, will be able to operate as a member of a team to control a flammable gas cylinder fire by maintaining crew integrity, identifying contents, identifying escape routes and safety zones prior to advancing, closing any open valves, and extinguishing flames only when leaking gas is eliminated, the cylinder is cooled, cylinder integrity is evaluated, hazardous conditions are recognized and acted upon, and the cylinder is faced during approach and retreat.

Enabling Learning Objectives

1. Identify characteristics of pressurized flammable gases
2. List elements of a gas cylinder
3. Describe effects of heat and pressure on closed cylinders
4. Describe boiling liquid expanding vapor explosion (BLEVE) signs and effects
5. Identify methods for identifying contents
6. Describe how to identify escape routes and safety zones before approaching flammable gas cylinder fires
7. Describe water stream usage and demands for pressurized cylinder fires
8. Describe what to do if the fire is prematurely extinguished
9. Identify valve types and their operation
10. Discuss alternative actions related to various hazards and when to retreat
11. Describe how techniques used to control flammable gas fires in cylinders can apply to fire control in gas delivery and distribution systems
 - Meters
 - Pipes (above and below ground)
12. Execute effective advances and retreats
13. Apply various water application techniques
14. Assess cylinder integrity and changing cylinder conditions
15. Operate control valves

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16. Choose effective procedures when conditions change

Discussion Questions

1. What signs indicate a potential BLEVE?
2. What changes in conditions might occur during fire impingement on a gas cylinder?
3. What factors or conditions should a firefighter consider when determining appropriate fire stream?
4. How do control tactics differ with a vapor leak versus a liquid leak?

Activities

1. To be determined by the instructor

Instructor Notes

1. Emphasize that techniques for controlling a cylinder fire can be used for any type of flammable gas fire.

Unit 4: Pipeline Emergencies

Topic 4-1: Identifying Pipeline Regulations

Terminal Learning Objective

At the end of this topic, a student, given regulatory documents, will be able to identify pipeline regulations in accordance with state and federal requirements.

Enabling Learning Objectives

1. Describe basic types and categories of pipeline systems
 - Crude oil
 - Liquid
 - Natural gas
2. Describe the primary federal agencies that regulate pipeline operations
 - Department of Transportation, Pipeline and Hazardous Materials Safety Administration
3. Describe the primary state agencies that regulate pipeline operations
 - Office of the State Fire Marshal, Pipeline Safety Division
4. Identify the rules and regulations that govern the design, construction, operation, safety, and maintenance of interstate pipelines
 - 49 Code of Federal Regulations (CFR) Parts 190-199 (federal)
 - California Government Code (CGC) Sections 51010-51019.1 (state)
5. Identify the primary causes of pipeline incidents
6. Identify the key players who may become involved in a major pipeline emergency and describe their role in resolving the emergency

Discussion Questions

1. Who regulates pipeline operations at the federal level?
2. Who regulates pipeline operations in California?
3. What are the major causes of pipeline incidents?

Activities

1. To be determined by the instructor

Topic 4-2: Identifying Pipeline Operations

Terminal Learning Objective

At the end of this topic, a student, given sample pipeline markers, a transportation chain overview, and basic design and construction features, will be able to identify pipeline operations within a jurisdiction by identifying markers, transportation chains, and basic pipeline design and construction features.

Enabling Learning Objectives

1. Describe the pipeline transportation chain
2. Identify where pipelines are located within California
3. Identify different types of pipeline markers found along a pipeline corridor
4. Identify the following information on a pipeline marker:
 - Product
 - Owner
 - Emergency telephone number
5. Describe the purpose of pipeline rights-of-way
6. Identify clues that, in the absence of markers, may indicate the presence of an underground pipeline
7. Identify basic design and construction features of a pipeline system
 - Piping
 - Pumps and compressors
 - Meters
 - Valves
 - Manual
 - Automatic
 - Emergency shutdown
 - Pressure relief

Discussion Questions

1. Where are pipelines located within California?
2. What information should a pipeline marker include?
3. What are some indicators of a pipeline right-of-way?

Activities

1. To be determined by the instructor

Topic 4-3: Identifying Hazards Associated with Liquid Pipeline Products

Terminal Learning Objective

At the end of this topic, a student, given a list of pipeline products and Safety Data Sheets (SDS), will be able to identify hazards associated with liquids transported through a pipeline in accordance with the SDS for each product.

Enabling Learning Objectives

1. Describe how different liquid pipeline products behave during an uncontrolled release
 - Crude oil / Bakken oil

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- Flammable and combustible liquids
 - Anhydrous ammonia
 - Carbon dioxide
 - Liquid petroleum gas (LPG)
 - Hydrogen
2. Identify indicators of a leaking liquid pipeline
 - Visual
 - Olfactory
 - Auditory
 3. Define “highly volatile liquid” (HVL) and identify common HVLs transported by pipelines
 4. Describe danger areas of a liquefied petroleum gas (LPG) release

Discussion Questions

1. What is Bakken oil? What hazards are associated with it? How is it transported in California?
2. What hazards are associated with non-flammable liquids transported through pipelines?
3. Which products used primarily in their gaseous state transport through pipelines as liquids?

Activities

1. To be determined by the instructor

Topic 4-4: Identifying Hazards Associated with Gas Pipeline Products

Terminal Learning Objective

At the end of this topic, a student, given a list of pipeline products and Safety Data Sheets (SDS), will be able to identify hazards associated with gases transported through a pipeline in accordance with the SDS for each product.

Enabling Learning Objectives

1. Identify operations of a gas pipeline
 - Gathering systems
 - Processing and treatment facilities
 - Compressor stations
 - Transmission pipelines
 - Service lines
 - Meters
2. Describe how different gas pipeline products behave during an uncontrolled release
 - Natural gas
 - Ethane and ethylene
 - Methane gas
 - Chlorine
3. Identify indicators of a leaking natural gas pipeline
 - Visual
 - Olfactory

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- Auditory

Discussion Questions

1. Why is a flammable gas incident potentially more dangerous than a flammable liquid incident?

Activities

1. To be determined by the instructor

Topic 4-5: Developing an Incident Action Plan

Terminal Learning Objective

At the end of this topic, a student, given a response scenario involving a pipeline, will be able to develop an initial incident action plan by evaluating and implementing critical safety and tactical considerations.

Enabling Learning Objectives

1. Describe general hazard and risk issues to evaluate when responding to a pipeline emergency
2. Describe key considerations to evaluate when developing an initial incident action plan
 - Type of pipeline
 - Product(s) involved
 - Notification
 - Nature of the incident
 - Liquid with fire
 - Liquid without fire
 - Gas with fire
 - Gas without fire
 - Intentional act / terrorism
 - Exposures
 - Evacuation routes and safety zones
 - Initial isolation distance
 - Pipeline isolation or repair
 - Safety considerations
 - Environmental conditions
 - Possible incident escalation
 - Special resource requirements
 - Decontamination

Discussion Questions

1. Why is it important to develop an incident action plan?
2. How would the suspicion of an intentional act or terrorism impact incident response?

Activities

1. Given one of five response scenarios, have students work in small groups to develop an initial incident action plan for an assigned scenario.
 - Use five different scenarios including one intentional act/terrorism scenario
 - Anticipate 30 minutes to develop the plan and 60 minutes for group presentations

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Time Table

Segment	Lecture Time	Activity Time	Total Unit Time
Unit 1: Introduction			
Topic 1-1: Orientation and Administration			
Lecture	0:30		
Activity 1-1: Determined by instructor		0:00	
Unit 1 Totals	0:30	0:00	0:30
Unit 2: Ignitable Liquid Fires			
Topic 2-1: Extinguishing an Ignitable Liquid Fire with Foam			
Lecture	1:00		
Activity 2-1: Determined by instructor		0:00	
Unit 2 Totals	1:00	0:00	1:00
Unit 3: Flammable Gas Fires			
Topic 3-1: Controlling a Flammable Gas Fire			
Lecture	1:00		
Activity 3-1: Determined by instructor		0:00	
Unit 3 Totals	1:00	0:00	1:00
Unit 4: Pipeline Emergencies			
Topic 4-1: Identifying Pipeline Regulations			
Lecture	0:45		
Activity 4-1: Determined by instructor		0:00	
Topic 4-2: Identifying Pipeline Operations			
Lecture	0:45		
Activity 4-2: Determined by instructor		0:00	
Topic 4-3: Identifying Hazards Associated with Liquid Pipeline Products			
Lecture	1:00		
Activity 4-3: Determined by instructor		0:00	
Topic 4-4: Identifying Hazards Associated with Gas Pipeline Products			
Lecture	0:45		
Activity 4-4: Determined by instructor		0:00	
Topic 4-5: Developing an Incident Action Plan			
Lecture	0:45		
Activity 4-5: Recommended by SFT		1:30	
Unit 4 Totals	4:00	1:30	4:30
Lecture, Activity, and Unit Totals:	6:30	1:30	8:00

Course Totals

Total Lecture Time (LT)	6:30
Total Activity Time (AT)	1:30
Total Skills Time (ST)	8:00
Total Testing Time (TT)	0:00
Total Course Time	16:00

Note: Skills and activity time will vary depending on the number of students in the program. It is important to remember that the suggested skill hours are for a 1:5 student ratio.

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.

Cadre Leadership

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Partners

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Fire Control 4

Primary Instructor Task Book

[Month Year]



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

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Primary Instructor Task Book

The Fire Control 4 Primary Instructor Task Book lists every performance requirement (task) in a format that allows State Fire Training (SFT) to evaluate the candidate against written guidelines.

Three different evaluators must observe and record the candidate successfully performing all of the tasks during three different training events. It is essential that the evaluators critically evaluate and accurately record the candidate's performance of each task.

After the primary instructor candidate meets all instructor requirements, demonstrates competency in each area and completes their task book, he or she may apply to become a registered SFT Fire Control 4 primary instructor.

Qualifications

Primary Instructor Candidate

- Meets all primary instructor requirements as identified by the *SFT Procedures Manual*
- Successfully completes identified in the Fire Control 4 Primary Instructor Task Book

Evaluator

- Is a registered SFT Fire Control 4 senior instructor in good standing

Responsibilities

Primary Instructor Candidate

All candidates shall:

- Review and understand all site requirements, equipment standards, and material in the Fire Control 4 Course Plan
- Review and understand the process for completing the Primary Instructor Task Book
- Accurately record and maintain the Primary Instructor Task Book
- Successfully complete the Primary Instructor Task Book within three years of task book initiation
- Retain a completed copy of the Primary Instructor Task Book in their personal and/or career records

Evaluator

All evaluators shall:

- Be qualified and proficient

Purpose and Process

- Explain to the candidate the purpose of and process for completing the Primary Instructor Task Book
- Explain to the candidate his or her responsibilities
- Meet with the candidate to determine past experience, current qualifications, and goals/objectives
- Confirm with the candidate, prior to performance, which tasks will be evaluated
- Accurately evaluate each task performed by the candidate
- Document successful completion of each task in the Primary Instructor Task Book
 - The evaluator shall document the following directly on the task book:
 - SFT's assigned class code
 - Date of performance
 - Evaluator's initials
- Document final evaluation of the candidate on the Evaluation Summary portion of the Primary Instructor Task Book

Completion Timeframe

A primary instructor candidate has three years from the time of task book initiation to complete the Primary Instructor Task Book.

Task Book Requirements

Fire Control 4 Tasks

Primary Instructor Candidate: _____

Performance Standard

- The primary instructor candidate must perform all tasks and the evaluator must evaluate them.
- All job performance requirements must be performed in accordance with the standards of the authority having jurisdiction (AHJ) or the National Fire Protection Association (NFPA), whichever is more restrictive.

Code

- P = must be completed prior to the course
- D = must be completed during the course

Grade

- P = candidate successfully met the performance standard
- F = candidate did not meet the performance standard

Task	Code	Observation #1			Observation #2			Observation #3		
		Date	Initials	Pass/Fail	Date	Initials	Pass/Fail	Date	Initials	Pass/Fail
1. Administration a. Describe facility requirements b. Secure resources: <ul style="list-style-type: none"> • Fuel • Foam or foam substitute • Props/FLAG trailer c. Confirm that equipment is serviceable <ul style="list-style-type: none"> • PPE (including SCBA) • Props • Nozzles, hoses, etc. d. Describe contents of Fire Control 4 course plan e. Describe NFPA 1403: <u>Standard on Live Fire Training Evolutions</u> (chapter 8 – Exterior Class B Fires) requirements f. Describe process for becoming a registered SFT Fire										

<p>Control 4 primary instructor</p> <p>g. Obtain SFT course approval</p> <p>h. Secure applicable permits and/or approvals</p> <p>i. Notify applicable parties</p> <p>j. Delivers course in accordance with <i>SFT Procedures Manual</i></p>										
<p>2. Incident Action Plan (IAP)</p> <p>a. Develop IAP for operational period using applicable ICS forms</p>										
<p>3. Classroom Lecture</p> <p>a. Develop teaching materials based on Fire Control 4 course plan</p> <ul style="list-style-type: none"> • Lesson plans • Audio/visual presentations • Activities (if applicable) • Handouts (if applicable) <p>b. Deliver lecture and activity portions of Fire Control 4 course plan</p>										
<p>4. Prop Set Up and Operations</p> <p>a. Demonstrate correct prop set up based on facility requirements</p> <p>b. Demonstrate safe operation of individual props prior to instruction</p>										
<p>5. Exercise Set Up and Placement (Liquid)</p> <p>a. Establish two water supply sources</p> <p>b. Set up proper hose lines</p> <ul style="list-style-type: none"> • Attack lines • Safety lines • Personnel <p>c. Confirm hose line pressure and flow</p>										
<p>6. Skills Training (Liquid)</p> <p>a. Prepare foam concentrate supply for use</p> <p>b. Assemble foam stream components</p> <p>c. Demonstrate various foam application techniques</p> <ul style="list-style-type: none"> • Roll on or bounce • Bank down or deflect • Rain down 										

d. Approach and retreat from spills as part of a coordinated team										
7. Exercise Set Up and Placement (Gas)										
a. Establish two water supply sources										
b. Set up proper hose lines <ul style="list-style-type: none"> • Attack lines • Safety lines • Personnel 										
c. Confirm hose line pressure and flow										
8. Skills Training (Gas: Pressure Cylinder)										
a. Execute effective advances and retreats										
b. Apply various water application techniques										
c. Assess cylinder integrity and changing cylinder conditions										
d. Operate control valves										
e. Choose effective procedures when conditions change										
9. Skills Training (Gas: Piping and Valves)										
a. Execute effective advances and retreats										
b. Apply various water application techniques										
c. Operate control valves										
d. Choose effective procedures when conditions change										
10. Skills Training (Gas: Meters)										
a. Execute effective advances and retreats										
b. Apply various water application techniques										
c. Operate control valves										
d. Choose effective procedures when conditions change										
11. Demobilization										
a. Demobilize props										
b. Demobilize equipment										
c. Demobilize personnel										
12. Post-incident Analysis (PIA)										
a. Conduct post-incident analysis										
b. Complete applicable required reports										

Fire Control 4

Senior Instructor Task Book

[Month Year]



California Department of Forestry and Fire Protection
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State Fire Training

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Senior Instructor Task Book

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Three different evaluators must observe and record the candidate successfully performing all of the tasks during three different training events. It is essential that the evaluators critically evaluate and accurately record the candidate's performance of each task.

After the senior instructor candidate meets all instructor requirements, demonstrates competency in each area and completes their task book, he or she may apply to become a registered SFT Fire Control 4 senior instructor.

Qualifications

Senior Instructor Candidate

- Meets all senior instructor requirements as identified by the *SFT Procedures Manual*
- Successfully completes identified in the Fire Control 4 Senior Instructor Task Book

Evaluator

- Is a registered SFT Fire Control 4 senior instructor in good standing

Responsibilities

Senior Instructor Candidate

All candidates shall:

- Review and understand all site requirements, equipment standards, and material in the Fire Control 4 Course Plan
- Review and understand the process for completing the Senior Instructor Task Book
- Accurately record and maintain the Senior Instructor Task Book
- Successfully complete the Senior Instructor Task Book within three years of task book initiation
- Retain a completed copy of the Senior Instructor Task Book in their personal and/or career records

Evaluator

All evaluators shall:

- Be qualified and proficient

Purpose and Process

- Explain to the candidate the purpose of and process for completing the Senior Instructor Task Book
- Explain to the candidate his or her responsibilities
- Meet with the candidate to determine past experience, current qualifications, and goals/objectives
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Completion Timeframe

A primary instructor candidate has three years from the time of task book initiation to complete the Primary Instructor Task Book.

Task Book Requirements

Fire Control 4 Tasks

Senior Instructor Candidate: _____

Performance Standard

- The senior instructor candidate must perform all tasks and the evaluator must evaluate them.
- All job performance requirements must be performed in accordance with the standards of the authority having jurisdiction (AHJ) or the National Fire Protection Association (NFPA), whichever is more restrictive.

Code

- P = must be completed prior to the course
- D = must be completed during the course

Grade

- P = candidate successfully met the performance standard
- F = candidate did not meet the performance standard

Task	Code	Observation #1			Observation #2			Observation #3		
		Date	Initials	Pass/Fail	Date	Initials	Pass/Fail	Date	Initials	Pass/Fail
1. Administration a. Demonstrate working knowledge of all facility requirements b. Demonstrate working knowledge of all equipment standards c. Utilize material in the Fire Control 4 course plan d. Utilize information from NFPA 1403: <u>Standard on Live Fire Training Evolutions</u> (chapter 8 – Exterior Class B Fires) e. Describe process for becoming a registered SFT Fire Control 4 senior instructor f. Verify resources secured by primary instructor g. Verify SFT course approval secured by primary instructor h. Verify permits and/or approvals secured by primary instructor										

i. Verify notifications made by primary instructor j. Verify that primary instructor delivers course in accordance with the <i>SFT Procedures Manual</i>										
2. Incident Action Plan (IAP) a. Evaluate IAP documents for accuracy and completeness b. Approve IAP for operational period										
3. Classroom Lecture a. Evaluate teaching materials developed by primary instructor for accuracy and completeness b. Evaluate primary instructor’s lecture and activity delivery										
4. Prop Set Up and Operations a. Verify correct prop set up based on facility requirements b. Verify safe operation of individual props prior to instruction										
5. Exercise Set Up and Placement (Liquid) a. Verify two water supply sources b. Verify proper hose line set up <ul style="list-style-type: none"> • Attack lines • Safety lines • Personnel c. Confirm hose line pressure and flow										
6. Skills Training (Liquid) a. Establish appropriate visual position for viewing the exercise and communicating with the primary coordinator b. Perform a walk around of exercise site c. Confirm possible hazards with primary instructor d. Review ignitable liquid fire exercise plan and determine amendments (if applicable) e. Approve ignitable liquid fire exercise plan f. Direct ignitable liquid fire exercise safety and coordination briefing										
7. Exercise Set Up and Placement (Gas) a. Verify two water supply sources b. Verify proper hose line set up <ul style="list-style-type: none"> • Attack lines • Safety lines 										

<ul style="list-style-type: none"> • Personnel 										
c. Confirm hose line pressure and flow										
8. Skills Training (Gas: Pressure Cylinder) a. Establish appropriate visual position for viewing the exercise and communicating with the primary coordinator b. Perform a walk around of exercise site c. Confirm possible hazards with primary instructor d. Review flammable gas: pressure cylinder exercise plan and determine amendments (if applicable) e. Approve flammable gas: pressure cylinder exercise plan f. Direct flammable gas: pressure cylinder exercise safety and coordination briefing										
9. Skills Training (Gas: Piping and Valves) a. Establish appropriate visual position for viewing the exercise and communicating with the primary coordinator b. Perform a walk around of exercise site c. Confirm possible hazards with primary instructor d. Review flammable gas: piping and valves exercise plan and determine amendments (if applicable) e. Approve flammable gas: piping and valves exercise plan f. Direct flammable gas: piping and valves exercise safety and coordination briefing										
10. Skills Training (Gas: Meters) a. Establish appropriate visual position for viewing the exercise and communicating with the primary coordinator b. Perform a walk around of exercise site c. Confirm possible hazards with primary instructor d. Review flammable gas: meters exercise plan and determine amendments (if applicable) e. Approve flammable gas: meters exercise plan f. Direct flammable gas: meters exercise safety and coordination briefing										
11. Demobilization a. Perform final walk around of entire site b. Verify site security										

12. Post-incident Analysis (PIA) a. Participate in post-incident analysis b. Complete final interview and critique with primary instructor										
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