

FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Approved and Adopted by the
Office of State Fire Marshal



Recommended for adoption by the Statewide
Training and Education Advisory Committee
and the
State Board of Fire Services



COURSE GUIDE

September 2009



FIRE CONTROL 3B

STRUCTURAL FIRE FIGHTING IN LIVE-FIRE SIMULATORS

C O U R S E G U I D E



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Mission Statement

Mission Statement

The mission of State Fire Training is to enable the California fire service to safely protect life and property through education, training, and certification.

Fire Service Training and Education Program

The Fire Service Training and Education Program (FSTEP) was established to provide specific training needs of local fire agencies in California. State Fire Training coordinates the delivery of this training through the use of approved curricula and registered instructors.

The FSTEP series is designed to provide both the volunteer and career fire fighter with hands-on training in specialized areas such as fire fighting, extrication, rescue, and pump operations. All classes are delivered through registered instructors and can be tailored by the instructor to meet your department's specific need. Upon successful completion of an approved FSTEP course, participants will receive an Office of State Fire Marshal course completion certificate.



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Acknowledgments

Acknowledgments

State Fire Training coordinated the development of the material contained in this guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this guide for adoption by the State Fire Marshal (SFM). This guide is appropriate for fire service personnel and for personnel in related occupations.

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Mike Richwine Chief, State Fire Training	Ron Coleman Chair, STEAC

Special acknowledgement and thanks are extended to the following members of State Fire Training for their diligent efforts and contributions that made the final publication of this document possible.

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Ray Russell State Fire Training (Retired)	

"We gratefully acknowledge the hard work and accomplishments of those before us who built the solid foundation on which this program continues to grow."



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Structural Fire Fighting in Live-fire Simulators



Section 1: Course Description

Section 1: Course Description

The Fire Control 3B (FC 3B) course is designed to develop fundamental skills in combating structure fires by providing the students with a thorough understanding of fire behavior. The opportunity to reinforce the student's understanding of fire behavior is provided in all of the exercises to be conducted during the delivery of a FC 3B class. In many cases, this will be the fire fighter's first exposure to live structural fire fighting, yet it can also serve as an educational tool for the seasoned fire fighter.

Many training scenarios can be done in a live-fire simulator. Exercises using the simulator to conduct a FC 3B class are not limited to the standards set forth in this manual. When conducted in an organized and safe manner, this training is one of the most valuable classes a fire fighter, especially a new fire fighter, can experience.

The authority to conduct Fire Control 3B classes can be found in Health & Safety Code §41801(b).

Fire Control 3B Course and NFPA 1403

The National Fire Protection Association (NFPA) is not a legal authority unless a state's Occupational Safety and Health Administration (OSHA) or a local jurisdiction has adopted its standards. Cal/OSHA has not adopted NFPA 1403 "Live-fire Training Evolutions." FC 3B Primary and Senior Coordinators should be familiar with the "Notice and Disclaimer of Liability" statement found on the inside cover of NFPA 1403. In the disclaimer, NFPA clearly notes that they are not responsible for the accuracy of the information published within the 1403 document. The State Fire Training FC 3B registered Senior and Primary Coordinators shall have direct access to the current publication of NFPA 1403 document, be familiar with its contents, and be able to apply those items that will be of assistance in conducting a safe FC 3B course. The California State Fire Training manual on "Fire Control 3" was used to create the original NFPA 1403 document.

**Students Must Be Familiar With The Layout Of The Simulator.
Conduct A Walk Through Pointing Out The Exits And Egress.**

Section 2: Staff and Student Organization

Organization and management of the class should be considered as part of the overall training process.

Staff Identification

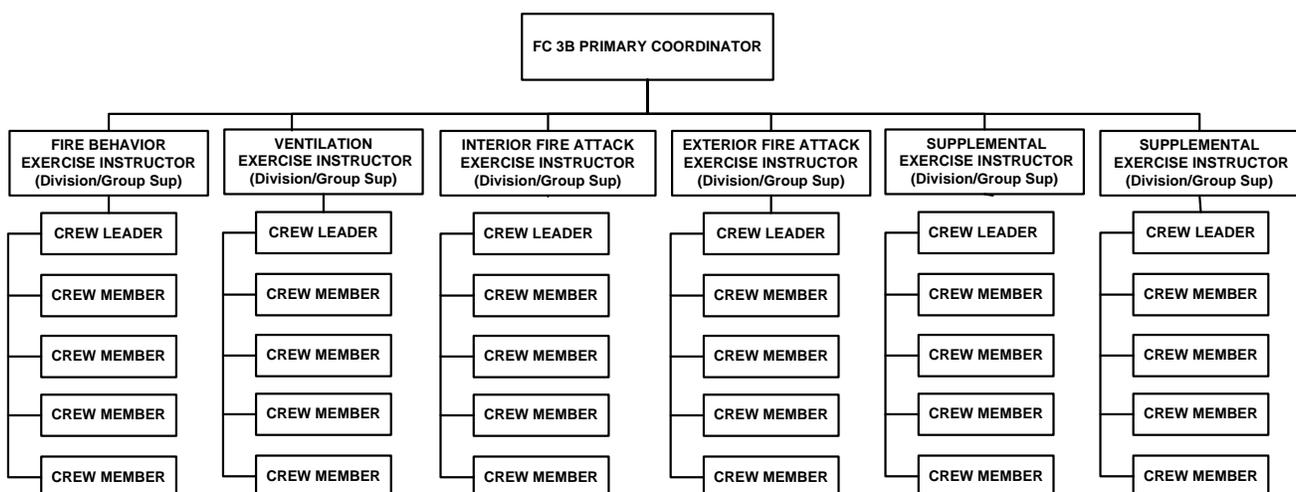
A means of identifying by responsibility level all students and staff will be used on a FC 3B class. All other people (visitors, photographers, and news media) should also be identified. This will help control unauthorized people from entering the site.

Student Organization

To help organize the students into workable units, it is recommended that they be divided into crews. Span of control shall be maintained throughout the entire class. Within the Incident Command System (ICS), the optimum span of control is five to one. The maximum recommended span of control is seven to one.

Crew Leaders are given specific assignments for the exercise. For example, one crew on interior fire attack, a second crew on backup, a third crew works ventilation, and a fourth crew takes care of fueling the burn. The Exercise Instructor then rotates the crew through the various assignments until all have completed the exercise.

When finished, the crew is released by the Exercise Instructor and reports to the Staging Area Manager for reassignment. This procedure works very well and ensures that students have an opportunity to be involved in all training exercises.



Crew Leaders are responsible for keeping the team involved in all phases of the class, conducting critiques with the other instructional staff, ensuring the crew is conforming to safety regulations, and taking their crew to the staging area immediately after being released by the Division/Group Supervisor. A method to document the crew rotation is shown below and in Appendix C.

Crew	1	2	3	4	5
Fire Behavior	Delivered in a Single Session				
Ventilation Techniques		X	/		
Interior Fire Attack			X	/	
RIC				X	/
Rehab	/				X
Exterior Fire Attack	Delivered in a Single Session				

Crew is **currently** training at this station

Crew has **finished** training at this station

Staff Positions

The Incident Command System (ICS) should be utilized and integrated with the required State Fire Training staff for the organizational framework for managing the class. The following positions have been described as they apply to a complex Fire Control 3B course. Filling each of these positions is optional depending upon the size and needs of the burn. Each position may have additional responsibilities. Again, you decide what will work for your class.



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Structural Fire Fighting in Live-fire Simulators

Section 2: Staff and Student Organization



Incident Commander

The Incident Commander (IC) is usually from the authority having jurisdiction (AHJ) where the class is located. Any position not filled in the ICS is the IC's responsibility.

Roles and Responsibilities

- Acts as the liaison with the Fire Control Senior Coordinator and the jurisdiction hosting the Fire Control 3B class.

Fire Control 3B Senior Coordinator

FC 3B classes must have a designated FC 3B Senior Coordinator who is registered with State Fire Training on-site during the entire class.

Staffing

- Reports to the IC.
 - May serve as the IC at the discretion of the authority having jurisdiction.
- Supervises the Primary Coordinator.
- May also serve as the Primary Coordinator on a basic FC 3B class involving all of the following:
 - A class with no more than 30 students attending the live-fire training.
 - The class will only teach the four mandatory exercises.
 - The SFT Deputy assigned to your area will contact you prior to class approval.

Roles and Responsibilities

- Is responsible for all activities and/or omissions in a FC 3B class.
- Liaison to State Fire Training.
- Acts as advisory and support to the Primary Coordinator.
- Reviews of all preburn planning.
- Maintains an open-line of communication with the Primary Coordinator.
- Ensures that a safety plan has been developed for the class.
 - All safety precautions are identified, planned for, noted, and adhered to.
- Reviews all documentation prior to the FC 3B class for accuracy and completeness.
- Has the authority to cancel or stop a FC 3B class when the scope of the course is violated.
 - Notifies the IC, Primary Coordinator, AHJ, and Chief of State Fire Training.
- May evaluate the performance of a Senior Coordinator Trainee and document on the FC 3B Senior Coordinator Trainee Task Book.
- May evaluate the performance of a Primary Coordinator Trainee and document on the FC 3B Primary Coordinator Trainee Task Book.



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Structural Fire Fighting in Live-fire Simulators

Section 2: Staff and Student Organization



Fire Control 3B Primary Coordinator [Operations Section Chief (OSC)]

FC 3B classes must have a designated FC 3B Primary Coordinator who is registered with State Fire Training on-site during the entire class.

Staffing

- Reports to the FC 3B Senior Coordinator.
- Supervises all mandatory and optional Exercise Instructors.

Roles and Responsibilities

- Plans and manages the class.
- Assigns all other positions utilized during the class.
- Coordinates all required documents.
 - State Fire Training.
 - Requests course approval.
 - Submits all required SFT documentation within 15 days of class completion.
 - Incident documentation.
- Completes or oversees the Incident Action Plan (IAP).
- Compiles incident documentation for archiving.
 - Coordinates with the AHJ.
- Oversees completion of all FC 3B Primary Coordinator Trainee Task Books.
- Conducts the exercise critique.
 - Individual exercise critiques conducted as time permits or as required.
 - Discuss any safety issues that may occurred during the exercise delivery.
 - Highlight what went right.
 - Discuss any modifications that may need to made.
 - Conduct a post class critique with all involved FC 3B staff.
 - Discuss any safety issues that may have occurred during the FC 3B class.
 - Have the instructors and staff highlight the "lessons learned" during their delivery.
 - Discuss any follow-up paperwork issues.
- Stops all exercises in the event of a serious injury until proper care is provided.
 - Conducts a safety briefing for all staff and participants to review procedures and prevent further injuries during the exercise.
- May evaluate the performance of a Primary Coordinator Trainee and document on the FC 3B Primary Coordinator Trainee Task Book.



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Structural Fire Fighting in Live-fire Simulators

Section 2: Staff and Student Organization



Branch Director (OPBD)

Roles and Responsibilities

- Implements the portion of the Incident Action Plan (IAP) appropriate to the branches.

Exercise Instructor [Division/Group Supervisor (DIVS)]

FC 3B classes must have a designated instructor for each mandatory and optional exercise. The designated Exercise Instructor ***is not required to be registered*** with State Fire Training.

The FC 3B Senior and Primary Coordinators cannot serve as a designated Exercise Instructor due to the demands of their positions. If qualified, an Exercise Instructor may be designated as the instructor for more than one exercise if, in the judgment of the Primary Coordinator, the class can be safely and properly delivered.

Staffing

- Reports to the Primary Coordinator.
- Supervises the Adjunct Instructors assisting with the exercise.

Role and Responsibilities

- Teaches the exercise due to their subject-matter expertise ***without supervision***.
- Debriefs the Primary Coordinator.
- Assists with the exercise critique.
- Functions as an additional Safety Officer.

Ignition Officer

Staffing

- Reports to the Primary Coordinator.
- May have assistants.

Roles and Responsibilities

- Provides ignition and burn materials for all burn exercises.

Rapid Intervention Crew [Division/Group Supervisor (DIVS)]

FC 3B classes must have a designated RIC group for any mandatory or supplementary exercise that involves a live fire atmosphere immediately dangerous to life or health (IDLH).

Staffing

- Reports to the Primary Coordinator.

Role and Responsibilities

- To provide rescue for students and/or staff (completed one of the following three options).



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Section 2: Staff and Student Organization



- Minimum of two qualified personnel.
 - Successfully completed a State Fire Training RIC Tactics class.
 - Successfully completed a State Fire Training FC 3B class.
 - Successfully completed a department-specific RIC Tactics training program that meets or exceeds the SFT RIC Tactics curriculum.
- More than one RIC group may be required for large, complex events.
 - Multi-story.
 - Multiple buildings.
- Equipped with a dedicated tool cache as appropriate for conditions.
 - Dedicated radio frequency should be considered on complex burns.

Rehabilitation Officer

Staffing

- Reports to the Primary Coordinator.
- May serve as an Assistant Safety Officer.

Roles and Responsibilities

- Establishes a rest and rehabilitation area.
- Provides medical monitoring.
- Coordinates SCBA refilling and tool caches.

Information Officer (PIO)

Roles and Responsibilities

- Starts his or her operation during the first planning meeting.
- Notifies the news media and the neighbors in the area about the particulars of the class.
- Is available during the entire class to manage the news media and neighbors' inquiries.

Liaison Officer (LOFR)

Roles and Responsibilities

- Answers inquiries from other agencies, i.e., AQMD, fire, police, and water departments, etc.

Safety Officer (SOFR)

Staffing

- Reports to the IC and/or Senior Coordinator.
- Supervises Assistant Safety Officers.



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Structural Fire Fighting in Live-fire Simulators

Section 2: Staff and Student Organization



Roles and Responsibilities

- Reviews the incident action plan and site usage.
- Has authority to stop any exercise where eminent danger is present.
- Assists with the exercise critique.

Assistant Safety Officer (SOFR)

Staffing

- Reports to the Safety Officer.

Roles and Responsibilities

- Reviews the incident action plan and site usage.
- Has authority to stop any exercise where eminent danger is present.
- Assists with the exercise critique.
- Maybe be assigned with specific responsibilities.

Logistics Section Chief (LSC)

Staffing

- Reports to the Primary Coordinator.
- Should have staff for a complex FC 3B class.
 - During a basic FC 3B class, may perform all functions of the Logistics Section.

Roles and Responsibilities

- Operation starts during the first preclass planning session.
- Obtains all materials and services necessary for the class.

Medical Unit Leader (MEDL)

Staffing

- Reports to the Logistics Section Chief.

Roles and Responsibilities

- Ensures proper medical equipment and personnel are on the training site to care for any illness or injury.
- Arranges for transportation of the sick or injured.
- Assigns an agency liaison for injuries or illnesses requiring transport.
- Advises local hospitals of the possibility of injuries prior to the class.
- Compiles incident emergency medical plan (ICS 206).
- Reports all recordable injuries (see CCR Title 8, Section 14300 for a description of what constitutes a recordable injury).
 - Ensures that all required notifications are made within 24 hours of injury.



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Structural Fire Fighting in Live-fire Simulators

Section 2: Staff and Student Organization



Supply Unit Leader (SUPL)

Staffing

- Reports to the Logistics Section Chief.

Roles and Responsibilities

- Collects all equipment used on scene.
- Ensures proper identification is on the equipment.
- Issues all equipment to burn exercises.
- Accounts for all equipment before returning it to its agency.
- Reports on all damaged or missing equipment.
- Advises as to equipment needs for each class period.

Communications Unit Leader (COML)

Staffing

- Reports to the Logistics Section Chief.

Roles and Responsibilities

- Completes the communication plan (ICS 205).
- Obtains communications equipment.
- Assigns operational prerequisites.
- Issues, collects, and accounts for all radio equipment.
- Ensures that portable radios are recharged for each training period.
- Issues a copy of the communication plan to all staff officers.

Staging Area Manager (STAM)

Staffing

- Reports to the Primary Coordinator.

Roles and Responsibilities

- Maintains accountability of student attendance during the class.
- Coordinates with the DIVS and keeps the students involved.
- Establishes a staging area for support apparatus.
- Assists with perimeter control.
- May perform as Status Check-in Recorder (SCKN).

Planning Section Chief (PSC)

Staffing

- Reports to the Primary Coordinator.
- Supervises the planning section.

Roles and Responsibilities

- Advises personnel of their responsibilities.
- Develops IAP.
- Ensures that all staff is aware of the IAP.
- Conducts the evening planning sessions.
- Maintains all records for the class.

Water Supply Group

Staffing

- Reports to the Planning Section Chief.
- May be filled for only a short time each day.
 - The Water Resource Specialist must be present during the planning session.

Roles and Responsibilities

- Establishes fire flow requirements when planning for the class.
- Advises on locations and amounts of water available.
- Estimates the amount of water necessary for the entire class.
- Supervises the laying of supply lines.
- Establishes pumping apparatus requirements and placement.
- Tests actual fire flow prior to ignition.

Situation Unit Leader (SITL)

Staffing

- Reports to the Planning Section Chief.

Roles and Responsibilities

- Provides display for the Incident Command Post (ICP) of various assignments.
- Makes maps of training area identifying division of assignments and locations for important sites.
 - ICP.
 - Medical station(s).
 - Water supply.

- Communications.
- Rest area(s).
- Provides copies for each DIVS.
- Identifies available structure use for each planning session.

Technical Specialist (THSP)

Staffing

- Reports to the Planning Section Chief.

Roles and Responsibilities

- Provides direction and technical assistance on the proper use of the live-fire simulator.
- Establishes resources needed to operate the live-fire simulator.

Status Check-in Recorder (SCKN)

Staffing

- Reports to the Planning Section Chief.

Roles and Responsibilities

- Sets up the registration site.
- Directs student and staff sign-ups.
- Completes Incident Check-in List (ICS 211).
- Prepares a daily report for the PSC.
- Ensures each student signs class roster and completes SFT Scantron.

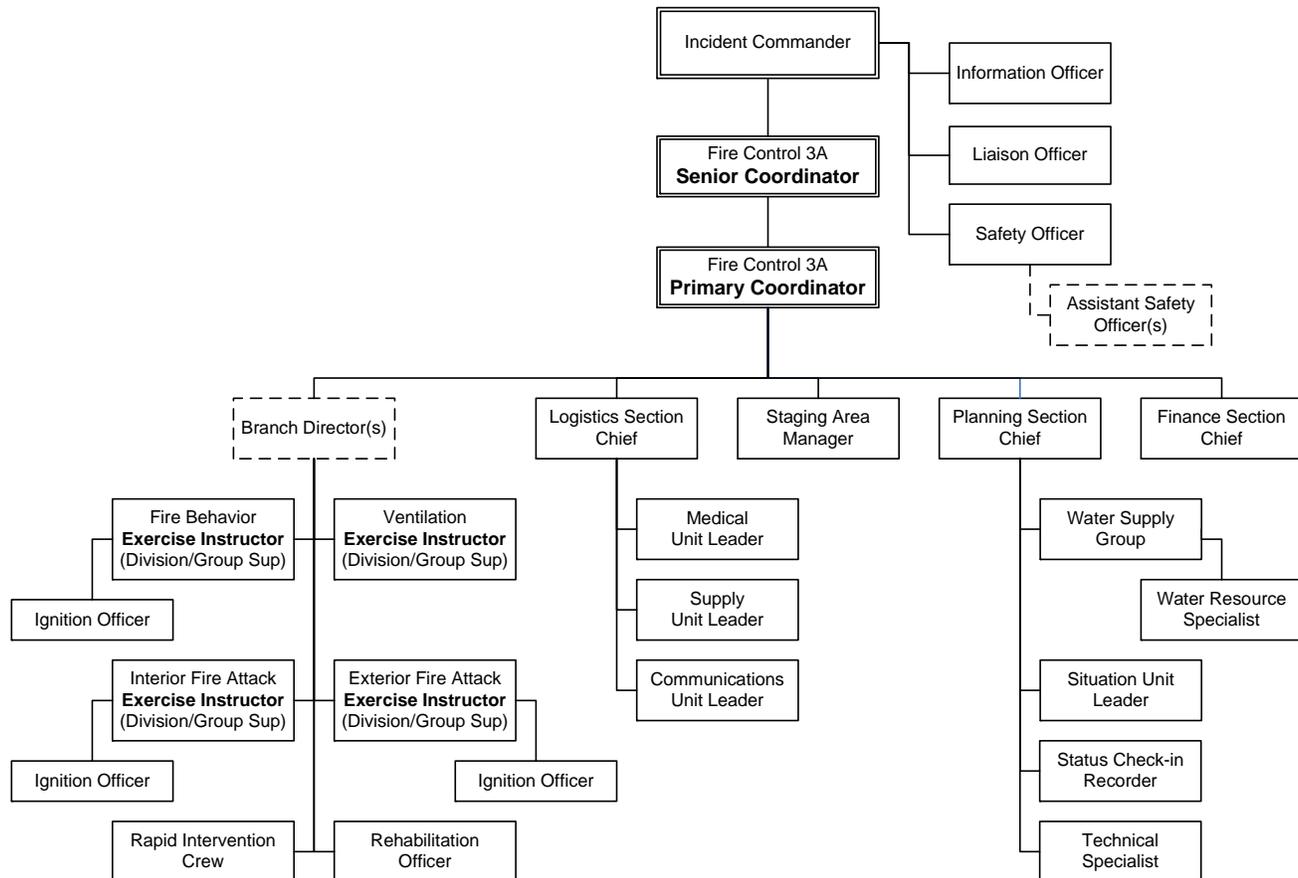
Finance/Administration Section Chief (FSC)

Staffing

- Reports to the Primary Coordinator.
- May have a deputy.
 - The deputy should be informed of all aspects of the class regarding finance requirements.

Roles and Responsibilities

- Accounts for all class costs.
- Establishes fee collection procedures, if applicable.
- Ensures all invoices are paid.
- Develops a final financial report for the class.



ICS Position Task Books can be partially completed on a FC 3B class for all of the listed examples such as Staging Area Manager, Check In/Status Recorder, Division Group Supervisor, Resource Unit Leader, Documentation Unit Leader, Situation/Status Unit Leader, Medical Unit Leader, Branch Director, Safety Officer, Public Information Officer, and Incident Commander. Consider using ICS Trainees as a resource for filling organizational positions.

For further descriptions of these positions, refer to the specific ICS position manual or the ICS Field Operations Guide I-420.



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Structural Fire Fighting in Live-fire Simulators



Section 3: Obtaining, Accepting, and Inspecting Live-fire Simulators

Section 3: Obtaining, Accepting, and Inspecting Live-fire Simulators

There are several methods of obtaining live-fire simulators to use for FC 3B training burns. Some agencies have built fixed facilities and may be willing to allow neighboring departments to access these for training purposes. There are also mobile units available from private and public sources.

There may be costs associated with both fixed and mobile live-fire simulators. These costs are generally used for maintenance of the simulator. There may be additional costs for a Technical Specialist (Live-fire Simulator Operator). Check with local and regional agencies to find what resources may be available. Create a network of instructors and resources that can be shared with neighboring departments.

Acceptance and Inspection

After the simulator has been located, a decision must be made whether or not to accept the offer. This requires a survey of the site and/or facility to inspect the general condition of the simulator and facilities and ensure the four mandatory exercises can be completed.

Most agencies will have a maintenance and inspection program for their live-fire simulator following manufacturer's suggested guidelines. The department operating the live-fire simulator could additionally have their own standard operating guidelines.

- Check with the owner/operator and determine minimum clearances, both overhead and adjacent to the exposures.
- Help limit impact from smoke to surrounding neighbors, roadways, schools, and medical facilities with proper placement.
- Ensure the location will have adequate water, room for apparatus, and fire equipment.

Before each live-fire evolution, the simulator should be visually inspected for any damage by the instructional staff and Technical Specialist. This inspection should include, but not be limited to:

- Entrances.
- Exits.
- Windows.
- Shutters.
- Mechanical equipment.
- Manual or automatic sprinklers.
- Standpipes.

Safety

- The Technical Specialist should guarantee that all equipped safety devices including thermometers, pyrometers, gas monitors, ventilation systems, evacuation alarms, and shutdown devices are fully operational.
 - The Primary Coordinator should address and document all problems and corrective measures that are taken.
- The instructional staff should continuously monitor the facility and look for anything that could injure fire fighters or damage PPE.
- Take corrective action as necessary and document.
- Check for any unexpected exposures and take corrective measures.
- Instructional staff should be familiar with emergency shutdown procedures.

Fuel

Live-fire simulators using LPG fuels may need a refueling source. Class A fueled simulators may have requirements/limitations on the type and BTU yield of the material burned. Work this out in advance to avoid unwanted delays. Using the guidelines from the Technical Specialist or manufacturer's suggestions, stockpile enough fuel for proper operation.

Roles and Responsibilities

Establish roles and responsibilities between the host department and the Technical Specialist.

- Type and quantity of materials to be burned.
- Responsible party for the clean-up of the remaining material.

Water Supply

Find out the status of the water supply. Is there adequate volume and pressure? Will streets and roads have to be closed to protect hoselines? If no local water source is available, consider how far it will be to shuttle water to the burn site. Portable water sources are acceptable as long as they meet fire flow requirements.

A water tender can be used to supply two different pumping engines to develop two separate water supplies for attack and safety lines. Take into consideration fire flow requirements for fire suppression and exposure protection.

Check with the Technical Specialist to determine if there are any requirements for direct water hookups with the simulator, including on board suppression systems, standpipes, or other water needs.

Traffic

Finally, check the traffic conditions. Give consideration to the traffic flow and times of peak usage. If a freeway is near, it may cause serious problems. Training burns have totally disrupted traffic and caused accidents on the freeway system. If necessary, plan to burn only during light periods of traffic. A check with the California Highway Patrol (CHP) can help determine these times. Local and state law enforcement can also help with traffic control and signage. Getting Cal Trans or the city streets department involved will allow access to warning signs and traffic control devices helping motorists navigate around obstacles or slow traffic making a safer environment for all persons involved with the FC 3B program.



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Section 4: Surveying the Live-fire Simulator for Its Training Value

Section 4: Surveying the Live-fire Simulator for Its Training Value

Survey the live-fire burn simulator for possible exercises that could be conducted or hazardous situations that need special attention. Be creative; use the additional elements of instruction to expand your students' knowledge. The Technical Specialist can be a valuable resource on the capabilities and limitations of the simulator.

Determine the students' experience level and adjust the training accordingly. The required elements of a FC 3B class shall be of primary consideration.

Four mandatory exercises must be successfully completed in order for students to receive a SFT FSTEP certificate for Fire Control 3B. There are additional exercises that may be added if resources and time will allow.

Four Mandatory Exercises

1. Fire behavior.
2. Ventilation techniques.
3. Interior fire attack.
4. Exterior fire attack.

Three Supplemental Exercises

Descriptions of the following three supplemental exercises have been included in this document because of their IDLH environments. ***Due to design and limitations of live-fire burn simulators, not all simulators may have these evolutions available.***

1. SCBA confidence.
2. Attic fire attack.
3. Basement fire attack.

Bonus Training and Exercises

Familiarity of the available live-fire burn simulator will determine what bonus exercises can be successfully completed. The object is to take full advantage of this training opportunity within the limitations of your simulator and available resources.

- Exposure protection.
- Forced entry.
- Indirect versus direct attack.
- New equipment testing.
- Overhaul.
- Rapid Intervention Crew (RIC) tactics.
- Use of various nozzles and patterns, including master streams.



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Structural Fire Fighting in Live-fire Simulators



Section 4: Surveying the Live-fire Simulator for Its Training Value

Hazards That Should Be Considered

Fixed and mobile live-fire burn simulators will have their own inherent hazards. Proper placement of mobile live-fire burn simulators will help to minimize many of the exposure hazards.

- Exposures.
 - Other structures, vegetation, and vehicles.
- Overhead wires.
 - Including power, telephone, and cable.
 - Contact appropriate utility company for assistance.
- Trees, shrubs, and other landscaping hazards.
 - Retaining walls and drop offs.
 - Impedes egress and/or visual monitoring of the exercise.
- General condition of the live-fire simulator.
- Weather conditions.
 - Forecasted wind patterns.
 - Temperature inversion.
 - Research temporarily relocating affected occupants during the burning evolution.
 - Spot weather forecast sources.
 - National Weather Service.
 - The Weather Channel.
 - AccuWeather.
- Holes (floor, walls, and roof).
- Septic tanks.
 - There is nothing worse than having an engine buried up to its running boards in a septic tank.
 - Leach lines.
- Neighbors and businesses.
 - Find compromise and help educate citizens of the value and benefits to a well-trained fire suppression team.
 - Explain the rare and unique opportunity for the fire fighters involved.
 - For those citizens who need extra attention to find a comfort level, invite them to the training site.
 - Show and explain to them exactly what training is to take place and the techniques used to increase the knowledge of fire fighters.
- Exits in the live-fire simulator.

- Fuel types.
 - LPG.
 - Natural gas.
 - Class A materials.

After the survey has been made, exercises identified, and hazards indicated, the IC should turn this information over to the Planning Section Chief to determine the resources needed and develop a map of the training site. The mapping procedures are discussed in Section 8.



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Structural Fire Fighting in Live-fire Simulators



Section 5: Recommended Procedures for Working with the Local Air Quality Management District (AQMD)

Section 5: Recommended Procedures for Working with the Local Air Quality Management District (AQMD)

The local Air Quality Management District (AQMD) must be contacted early in the planning phase of the class. It is recommended to have AQMD personnel be part of the burn planning and organization. Include that staff member in the communications circle, and invite them to witness the FC 3B class.

A positive and professional interaction between FC 3B personnel and AQMD is essential for the success of the program. AQMD representatives should be told specifically what the desired results of the training are. Explain specifically what types of fuels are to be used, the anticipated size and duration of each burn, as well as contingency plans for the days training. Welcome them to observe the burn; leave no room for AQMD staff to be surprised by the training burn in any way.

When appropriate, ascertain if a variance is necessary. A variance will allow for burning on a "No Burn" day. AQMD should be approached on this matter only after a burn permit has been obtained. Try to burn during the time of year when a low smog period would likely occur. If the class is conducted on a "No Burn" day without a variance, a citation may be issued by AQMD. "Spare the Air" days are exempt from a variance, and all burning must be cancelled.

The AQMD must be notified regardless of fuel type being utilized.

Apply for a permit that covers the maximum time frame allowed by AQMD, such as annually. Contact State Fire Training if AQMD denies a permit.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Section 6: Documentation for Related Paperwork, Records, and Reports

Section 6: Documentation for Related Paperwork, Records, and Reports

Local AQMD guidelines will dictate the necessary documentation and permits required for live-fire simulator training. All paperwork should be kept as a permanent record by the agency conducting the class, with copies provided to the AHJ should any questions regarding the training exercise ever arise.

Incident Action Plan

The Incident Action Plan (IAP) is the organizational tool for delivering a safe and effective Fire Control 3B class. At a minimum, the IAP will consist of the following components:

- Incident Objectives with Safety and Weather Information (ICS 202).
- Organization Assignments (ICS 203).
- Division/Group Assignments (ICS 204).
- Communications Plan (ICS 205).
- Emergency Medical Plan (ICS 206).
- Maps.

An Incident Briefing form (ICS 201) may be used as appropriate for small incidents.

From The Agency Responsible For The Live-fire Simulator

- A written agreement regarding liability and insurance for the use of the live-fire simulator.
- Makes arrangements for a Technical Specialist.

From The Person Responsible For Conducting the Training Burn (FC 3B Primary Coordinator)

- A burning permit from the jurisdiction in which the training is taking place.
 - May be obtained by the department hosting the class.
- A FSTEP Course Request submitted within six weeks prior to the class date.
 - State Fire Training is available to assist you with a complex Fire Control 3B class.
 - For additional assistance, please submit a letter or email to the State Fire Training representative for your area that includes the date(s) of the burn, description of the course, the location, and contact information.
 - A SFT representative will contact you for an appointment.
- Written notification to the AHJ and to other participating agencies.
 - Where the burn is located.
 - When the burn is going to take place.
 - Incident Commander's name and contact information.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Section 6: Documentation for Related Paperwork, Records, and Reports

- Senior Coordinator's name and contact information.
- Primary Coordinator's name and contact information.
- Safety Officer's name and contact information.
- A short description of the specific burn objectives.
- An agenda of the actual burn.
- A list of all the agencies participating.

From the Student's Department

- Authorization to attend the training, including a statement of insurance for participant.
 - Submit a letter stating that the student has demonstrated competency up to the SFT Fire Fighter I level in donning SCBA, donning personal protective equipment, 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 fit test documentation.
- Participant's agency must also provide the student with a minimum of Cal/OSHA compliant PPE in good repair.

From the Adjunct Instructor's Department

- Authorization to attend the training, including a statement of insurance for participant.
 - If the class will be coordinated through a community college, the college may provide additional insurance for participants and instructional staff.
- Current fit test documentation (if required for participation).
- Adjunct Instructor's agency must also provide the adjunct instructor with a minimum of Cal/OSHA compliant PPE in good repair (if required for participation).

From the Department Hosting the Fire Control 3B Class

- Approval from the local AQMD.
- AQMD confirmation of a training variance in the presence of a "No Burn" day.
- A burning permit from the jurisdiction in which the training is taking place.
 - May be obtained by the Primary Coordinator.

Section 7: Notification Information

When planning a FC 3B training exercise, all agencies, citizens, and news media directly or remotely associated with the training should be notified. These may include, but not be limited to:

- Board of Supervisors area representative.
- CAL FIRE.
- California Highway Patrol.
- City Manager.
- Coastal Commission.
- Historical Society (for structures greater than fifty years old).
- Local ambulance transporting agency for a possible standby.
- Local airport.
- Local AQMD.
- Mayor.
- Nearby schools, churches, and parks.
- Neighboring residents and businesses.
- News media.
- Police and fire agencies in the local area.
- Public works department.
- U.S. Forest Service.
- Utility companies.
- Water department.

Notice to Neighboring Properties

The notice should be given to everyone needing notification, both industrial as well as residential and include the following information:

- Nature of the activity.
- Reasons for the activity.
- Location of the activity.
- Schedule of the activity.
- Department contact for information.

Failure to notify those concerned can cause embarrassment and unnecessary problems to the agency having jurisdiction. A meeting of area residents and businesses will help alleviate their concerns (see Appendix C).

Section 8: Mapping the Burn Site

The Planning Section Chief (PSC) is responsible for developing a map showing all pertinent information for the burn. The PSC may assign a Situation Unit Leader.

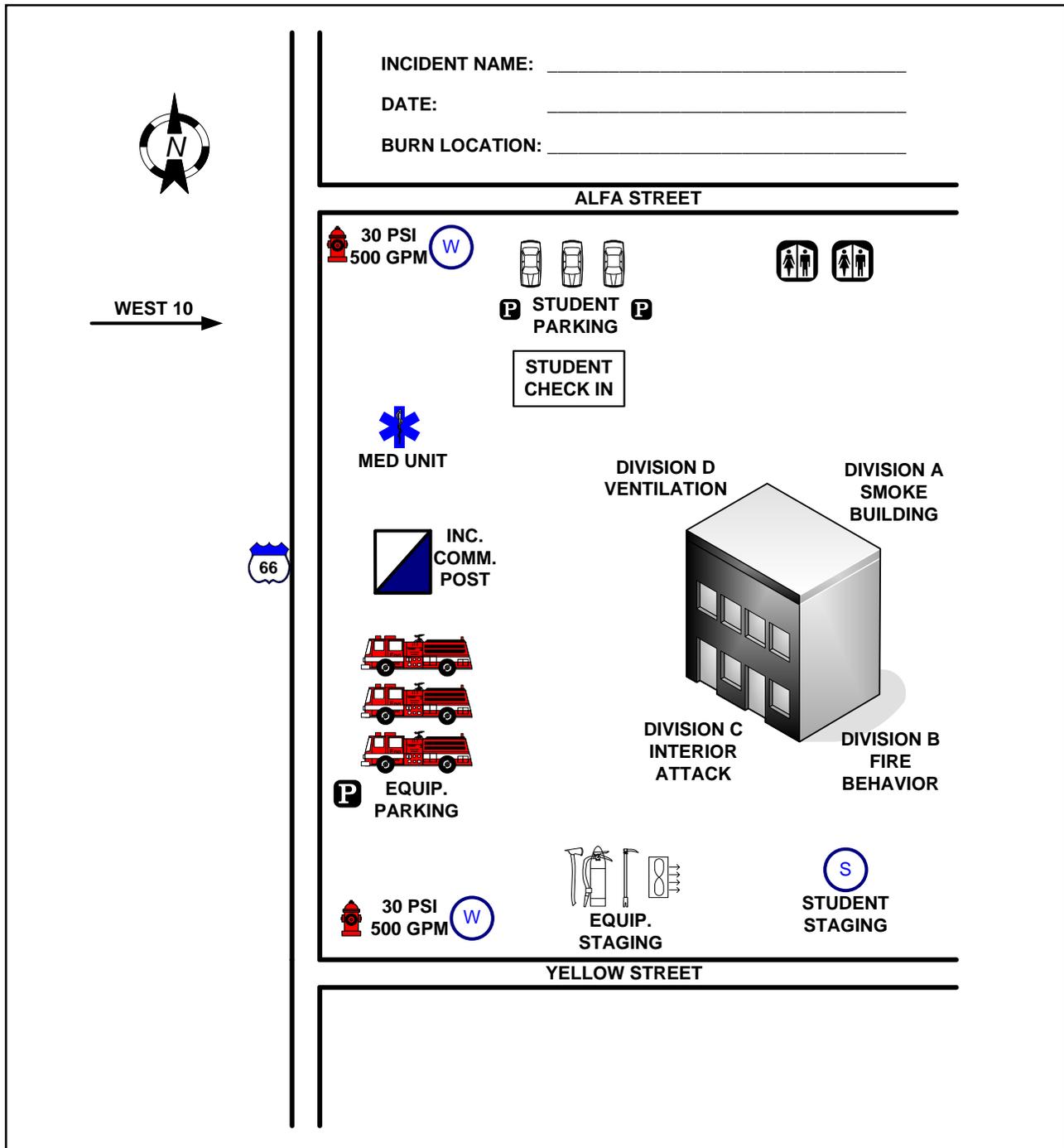
List of Considerations for All Structure Sites

- Identify all exposures.
 - Power lines, vegetation, trees, other structures.
 - Flammable liquid storage areas.
- Property boundaries.
- Roads and access to the burn site.
 - Include traffic plan.
- Check-in site.
- Incident Command Post (ICP).
- Staging area.
- Water supply.
 - Hydrants with sufficient gpm available.
 - Location of portable water supply placement (fold-a-tanks, large tanks, etc.).
- Locate septic tanks and wells.
- Supply Unit Leader location.
- Medical Unit Leader location.
- Rehab.
- Student parking.

Additional items to map should include exits of the burn structures and any potential hazards.

Once this map is completed, it should be reproduced as both a large map and many small maps. The large map will hang in the ICP for reference. The small maps should be attached to the IAP for utilization by Command Staff, Exercise Instructors, and Crew Leaders for a ready reference.

Section 8: Mapping the Burn Site



A large map might also be posted in the staging area for directions or orientation for students. It is a good idea to cover these large maps with Mylar® to protect them. This will allow note taking to be done on the map with a grease type marker.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Section 9: Fire Behavior Exercise



Section 9: Fire Behavior Exercise

This is the first live-fire exercise the students will attend and is the foundation for the class. This exercise in a Fire Control 3B class will be the foundation of all fire behavior witnessed by students for the rest of the class.

Planning

The instructor for this exercise shall be capable of providing planned, expected, and desired fire behavior before being assigned to this exercise. The Fire Behavior Instructor should attempt to illustrate as many aspects of fire behavior to the students as possible in order to build upon them throughout the class.

The number of students in the class will determine the potential need for more than one fire behavior lecture.

Inspection

The training room will be dark and potentially dangerous; all measures must be taken to remove all hazards prior to the exercise.

Room Set-up

- The room needs to allow all students to access the fire behavior lecture and demonstration.
- Ensure there is a minimum of two exits.
- Remove all hazards that could harm students or damage their PPE.
- Identify exits and egress.
- Ensure the water supplies for both the attack and safety lines come from two different sources.
 - Unless water system is properly engineered with adequate flows for fire suppression with an automatic back-up system.
- Utilize shutters, doors and/or windows to allow air flow and vertical/horizontal ventilation to be demonstrated.

Required Elements

- Adjunct instructor staffing near all exits.
- Attack line.
 - Shall not be staffed by students.
- Safety line from a separate water source.
 - Shall not be staffed by students.
- Fire extinguishers.
 - Pressurized water or hand-pump.

- Ignitions Officer.
- Rapid Intervention Crew.
 - Must be on standby any time live-fire training is being conducted.
 - Dedicated tool cache.
 - Dedicated radio frequency should be considered on complex burns.
- Personal accountability report (PAR).

Fuel

If using Class A fuels, lumber, pallets, excelsior, or hollow core feed hay (HCFH) may be used. When using hay, the best type is HCFH since feed hay does not have chemicals present. When purchasing the hay, be sure to specifically ask for feed hay.

Caution: Paper used for fuel has the potential to become airborne.

HCFH will last for several minutes and makes a crackling sound that adds realism to the situation. HCFH can also be moistened on the top layers to produce a very smoky atmosphere. One of the best tools to use for wetting the hay is the hand pump fire extinguisher. Several methods can be used with this system to achieve various effects.

DO NOT USE RICE STRAW. The shaft of this type of straw contains a minute spore which is not destroyed during combustion. In fact, the spore becomes airborne and can cause damage to the lungs much the same as "valley fever."

Fuel Cribs

The use of shopping carts containing fuels for various exercises can be used for smoke training or interior attack and are very effective for developing a fuel crib. Shopping carts can be obtained by asking a local supermarket.

Other items to consider for use as a fuel crib include a military bedspring and frame, 55-gallon drum, or any device that will allow adequate airflow into the crib.

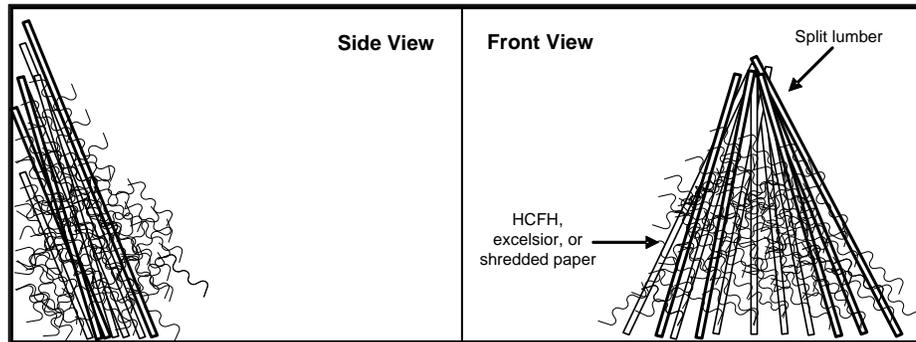
Never Use Flammable Or Combustible Liquids When Conducting A FC 3B Class!

Crib Construction

By using proper crib construction, the fire can be knocked down and then allowed to build for the next demonstration. It is recommended that the crib be constructed to allow consistent flow of air through the base of the fire for this portion of the class. This will allow for demonstration of airflow, ventilation, extinguishment, and fire growth.

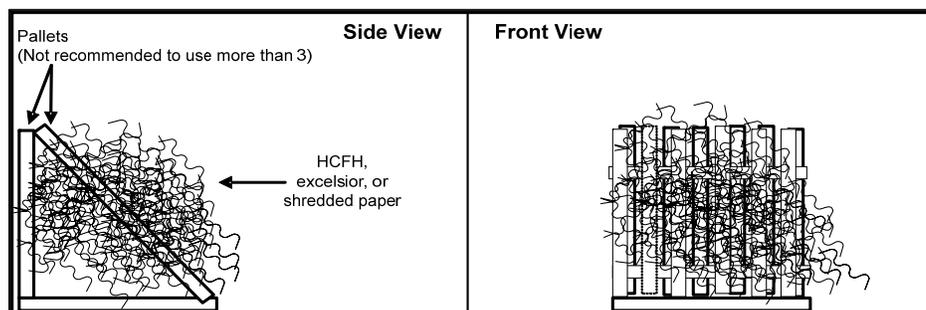
Vertical Crib

The vertical crib affords greater flexibility and assurance of fire behavior demonstration and control of the desired affects.



Pallet Crib

When using pallets, it can be very difficult to get the fire burning again if all the starter fuels are consumed too early. Prior to ignition of the crib, the crib size should be documented on a Form 214 or digital pictures taken and saved.



Tools

- Pike pole.
- Minimum 1½" hoselines.

Safety

The number of pallets or the amount of fuel used for the Fire Behavior Exercise should be appropriate for the size of the room. Do not use more fuel than is necessary to safely demonstrate the desired results. An average residential-sized burn room will require no more than three pallets to safely demonstrate the fire behavior.

Each participant must be protected with full PPE upon ignition.

Communications

Ensure that reliable communications are in place before commencement of operations. Have an operational plan for coordinated suppression and student evacuations in the event the fire extends into the attic or other areas not intended to burn during instruction.

Conducting the Exercise

The Fire Behavior Instructor shall ensure that the speaking points are covered and the information is understood by the students.

The use of LNG or LPG in live-fire simulators for the Fire Behavior Exercise presents a unique challenge in maintaining a thermal balance and realistic smoke conditions.

The students will be exposed to fire from the incipient to the rollover stage. At the same time, the instructor will be demonstrating proper application of various nozzle patterns and the effects of water application (steam production, thermal influence, etc). This is also an opportunity to demonstrate interior ventilation techniques using nozzle streams to demonstrate air movement and its effect on fire travel. Using the pump can and teaching anchor points will demonstrate the small amount of water needed to control fire.

Speaking Points

- Students must be familiar with the layout of the simulator.
 - Conduct a walk through pointing out the exits and egress.
- Anticipated fire behavior of the specific room based on fuel, construction, and all other variables.
 - Illustrate this behavior with examples after ignition.
- Explain what fire behavior the students will see in the specific room chosen.
- With the ignition of the crib, allow the students to watch the fire grow and behave as the instructor has predicted.
- Factors influencing fire behavior.
 - Amount of fuel.
 - Type of fuel.
 - Arrangement of fuel.
 - Ratio of fuel to room or structure.
 - Ventilation.
- Time temperature curve.
- Types of fire classes.
- BTU output.
- Stages of fire.
- Heat transfer.

- Smoke.
- Anchor points for water application.
- Barriers and shielding.
- Nozzle patterns.
- Steam production.
- Air flow.
- Indicators.
- Horizontal and vertical thermal balance.
- Ember production.
- Ash production.
- Flame lengths.
- Flammable gases.
- Overhead or atmosphere control.
- Roll over.
- Flashover.
- Backdraft.

Key points that do not occur during the various demonstrations can be discussed outside following the exercise.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Section 10: Ventilation Techniques Exercise



Section 10: Ventilation Techniques Exercise

The ventilation phase of fire fighting is second in importance only to the application of an extinguishing agent. This exercise is designed to provide the students with proper methods and techniques of ventilation and an opportunity to utilize ventilation equipment, including using both hand tools and power equipment.

Planning

The ventilation exercise should be planned and designed to facilitate the entire class. The instructor for this exercise should have a good working knowledge of the live-fire simulator. It is imperative that ventilation operations be coordinated with the fire behavior and fire attack operations. This is a training exercise and every opportunity to anticipate fire spread and potential problems needs to be addressed prior to starting operations.

Inspection

Most of the time, residential structures are the subject of a ventilation training exercise with the roof becoming the classroom. In a FC 3B class, the fixed or mobile live-fire simulators may have an improvised ventilation prop that may include access to the fire room for realistic ventilation practice.

Roof Set-up

- Remove all overhead obstructions such as wires, trees, etc.
- Ensure there is adequate space to store tools so they will not fall to the ground and possibly injure someone.

Required Elements

- Attack Crew with charged hoseline.
- Safety Crew with charged hoseline.
- Two different water sources for the attack and safety lines.
- Ventilation Crew.
- Ignitions Officer.
- Rapid Intervention Crew.
 - Must be on standby any time live-fire training is being conducted.
 - Dedicated tool cache.
 - Dedicated radio frequency should be considered on complex burns.
- A minimum of two ladders to aid in rapid evacuation.
- A minimum of one Assistant Safety Officer.
- Evacuation signal established.
- Personal accountability report (PAR).

Fuel

- Wood and wood pallets.
- LPG and LNG.
- HCFH.

Tools

The hosting and cooperating agencies attending may influence the type of tools and operational guidelines, or techniques, utilized by their respective agencies. Each student shall be given the opportunity to use each tool. Tools used in this exercise may include:

- Axe.
- Pike pole.
- Power tools.
- Pulaski.
- Roof ladder.
- Rubbish hook.
- Sledgehammer.

Safety

Safety is paramount while burning is conducted beneath the ventilation exercise. A minimum of two ladders shall be in place to aid in rapid evacuation. The addition of at least one Assistant Safety Officer is necessary. The Assistant Safety Officer is responsible for safe operations while conducting ventilation exercises on the roof. Horseplay and/or unsafe acts will not be tolerated.

Each participant must be protected with personal protective equipment. SCBA is required if live fire is present.

Communications

Ensure that reliable communications are in place before commencement of operations. Have an operational plan for coordinated suppression and student evacuations in the event the fire extends into the attic or other areas not intended to burn during instruction.

Conducting the Exercise

When conducting the ventilation techniques exercise, there are many different acceptable methods to deliver the information. The Ventilation Techniques Instructor shall ensure that the speaking points are covered and the information is understood by the students. An example of an acceptable delivery method is outlined below.

Using Conventional (Vertical) Ventilation

Many techniques can be demonstrated during this exercise. Center rafting, rolling rafters, louvering, pull backs, inspection cuts, and kerf/plunge cuts are just a few examples of techniques that can be addressed during the ventilation portion of a FC 3B course. Strip cuts may also be demonstrated if the burn plan accommodates this type of ventilation.

Type of construction, occupancy type, and the tools available for ventilation will all be factors in the exercise set up. Consideration must be given to the amount, size, and location of ventilation cuts necessary to accommodate interior attacks and the final burn.

Using Mechanical Ventilation

It is also possible to conduct this exercise using mechanical ventilation. Charging the structure with smoke and demonstrating positive pressure ventilation may be valuable during the class. ***When utilizing positive pressure ventilation, the smoke blower must be staffed at all times.***

Example: Set up for positive pressure ventilation during interior fire attack. This has to be highly coordinated.

Step 1: With all exterior doors and window openings covered, interior doors open or closed appropriately, a fire is started in the rear of the structure and allowed to burn.

Step 2: At a given signal, the Vent Crew will remove the window covers from the fire room. As this is done, the Attack Crew will coordinate their attack with the implementation of positive pressure ventilation. As the smoke is pushed back to the fire room, the Attack Crew can make entry and extinguish the fire in a more tenable environment.

Note: This is a technique of coordinating interior fire attack and positive pressure ventilation. When correctly implemented, this method of ventilation can be very effective.

This technique will be utilized many times during the day's exercises to remove smoke and heat from rooms that have been used for live-fire attack. Natural ventilation can be demonstrated in this matter if the conditions permit.

Speaking Points

The Ventilation Techniques Exercise lecture must begin while on the ground.

- Students must be familiar with the layout of the simulator.
 - Conduct a walk through pointing out the exits and egress.
- Safety briefing.
 - Communication methods that will be used while power tools are in use including the signal to evacuate.
 - Hazardous areas.

- Structure size-up.
- Building construction features.
- Ventilation principles.
- Ventilation terminology.
- Ladder placement.
- Safe power equipment and tool use.
- Photovoltaic (solar panels or PV panels).
- Vertical ventilation techniques.
 - Center rafting.
 - Rolling rafters.
 - Louvering.
 - Inspection cuts.
 - Kerf/plunge cuts.
 - Pullbacks.
- Key points that did not occur during the exercise discussed outside following the exercise.

Section 11: Interior Fire Attack Exercise

This exercise is designed to provide students with methods and procedures used for direct, indirect, and combination water application on interior structure fires.

Planning

The rooms chosen for this exercise must accommodate the class size.

Inspection

Inspections for building safety and integrity are ongoing throughout the exercise.

Room Set-up

- Remove all hazards that could harm students or damage their PPE.

Required Elements

- Attack Crew with charged hoseline.
- Safety Crew with charged hoseline.
- Ignitions Officer.
- Rapid Intervention Crew.
 - Must be on standby any time live-fire training is being conducted.
 - Dedicated tool cache.
 - Dedicated radio frequency should be considered on complex burns.
- A minimum of one Assistant Safety Officer.
- Coordination with the Ventilation Techniques Instructor.
- Evacuation signal established.
- Personal accountability report (PAR).

Fuel

- Wood.
- Wood pallets.
- HCFH.

Tools

- Minimum 1½" hoselines.

Safety

Prior to starting the exercise, bring the students into the simulator for orientation. Explain what is going to happen, the location of the safety exits, who the Safety Officer is, and any safety precautions you may deem necessary.

STUDENTS MUST BE FAMILIAR WITH THE LAYOUT OF THE LIVE-FIRE SIMULATOR. THERE MUST BE NO SURPRISES.

Communications

Ensure that reliable communications are in place before commencement of operations. Have an operational plan for coordinated suppression and student evacuations in the event the fire extends into the attic or other areas not intended to burn during instruction.

Conducting the Exercise

Assignments may vary for this exercise depending on the type of live-fire simulator used. A Class A fueled live-fire simulator will require different tactics from the Interior Fire Attack Instructor and the students than a gas-fired simulator. For either type of simulator, there is a need for an Attack Crew and a Safety Crew. The use of a Fuel Crew and/or Ventilation Crew will be dependant upon the type of prop used.

When conducting the interior fire attack exercise, there are many different acceptable methods to deliver the information. The Interior Fire Attack Instructor shall ensure that the speaking points are covered and the information is understood by the students. An example of an acceptable delivery method is outlined below.

- Explain the expectations of this exercise during a pre-exercise safety briefing.
- Students must be familiar with the layout of the simulator.
 - Conduct a walk through pointing out the exits and egress.
- The crews shall be fire ready.
 - Under an adjunct instructor's supervision, the students can be checking each other for the PPE donned properly, and the SCBAs have the predetermined amount of minimal air supply.
- The hoselines are from two separate water sources.
 - Minimum 1½" diameter.
 - Placed with no loops on the ground near the entry.
 - Loops in the hose can close during the entry and kink the fire hose.
 - The crew is placed on the same side of the attack lines.
- A recommended checklist should be gone over prior to making entry into the live-fire simulator for the fire attack. For example:
 - Safety Crew is ready.

- Check nozzle patterns (right to fight – left to live).
- Go on air.
- Check entry door for heat.
 - High, and then midlevel.
- Make entry as directed by the Interior Fire Attack Instructor.
 - Right or left hand pattern.
- ☐ The Interior Fire Attack Instructor or adjunct instructor will accompany the Attack Crew in and keep the Safety Crew right behind and in sight.
- ☐ The Attack Crew nozzle operator will pencil the ceiling of each new room they enter.
 - If the water does not come back down to the floor, then it is too hot to enter.
 - Exit the room and provide ventilation.
- ☐ After knocking the fire down, the Attack and Safety Crews back out as per the direction of the Interior Fire Attack Instructor and/or adjunct instructor.
 - Nozzle person always faces the fire while backing out.
 - Crewmembers keep within visual or physical contact.
 - Do not allow any crewmember to stand up until exited from an IDLH atmosphere.
- ☐ Conduct a crew critique of the attack.
- ☐ Rotate crewmembers while the Ignition Officer rebuilds the fire for attack so everyone has a chance at the nozzle.

Speaking Points

- ☐ Heat shielding and barriers.
- ☐ Stages of fire.
- ☐ Indicators.
- ☐ Air flows.
- ☐ Heat transfer.
- ☐ Horizontal and vertical thermal balance.
- ☐ Ember production.
- ☐ Ash production.
- ☐ Flame lengths.
- ☐ Water application.
- ☐ Production of gases.
- ☐ Anchor points.
- ☐ Ventilation.
- ☐ Overhead control.
- ☐ Roll over.
- ☐ Steam production (floor and ceiling).
- ☐ Heat indicators.

- Hose handling techniques.
- Evacuation signal.

Section 12: Exterior Fire Attack Exercise

The fourth mandatory exercise conducted during a FC 3B class is the exterior fire attack exercise. This is usually an all-hands exercise utilizing all the students.

The exterior fire attack exercise familiarizes the student with the fire-fighting tactics required when arriving at a structure fire that can have limited fire involvement from light smoke showing to a fully involved structure. Exterior fire attacks may be the only type of attack that can be accomplished with the resources immediately available. Fire fighters should be trained in and familiar with the appropriate exterior attack techniques necessary for structures with varying fire involvement.

Planning

The Exterior Fire Attack Exercise is limited to stream application through windows, doors, and exposure protection.

- Exposure protection.
- Fire behavior.
- Multiple fire attacks from the doors and windows in the exterior walls.
- Stream management.
- Smoke management.
- High heat tactics (combined fog and straight stream methods).

Fuel Load Size and Placement

Anticipated fire behavior specific to the live-fire simulator must be considered for placement and size of the fuel load. Fuel load should always be prepared based upon the burn plan and placed to accommodate predetermined objectives and predicted visual impact. Consult AQMD for guidance as to the use of furnishings for fire load.

Exposure Protection

Exposure protection training may be a division/group involving discussions of using master stream appliances, medium-size attack (blitz) lines, combination of small and medium attack lines, and strategy/tactics of exposure protection.

Weather

Continually monitor the wind speed and direction, humidity, and temperature for changes that can negatively influence fire behavior and exposure potential.

Smoke Drift

When using a smoke producing type of live-fire simulator, be cognizant of smoke drift and exposure issues downwind.

- Airports.
- Commercial occupancies.
- Convalescent hospitals and homes.
- Neighbors.
- Traffic.

Adjunct Instructor Briefing

Prior to ignition, the Exterior Fire Attack Instructor shall brief all adjunct instructors on the burn plan.

- Line placement.
- Assignment of instructors to student crews.
- Instructions for the application of water to the burn and teaching tips specific to the live-fire simulator.
 - Awareness of opposing streams.
- Site-specific hazards and or exposures.
- Communications.

Required Elements

- Attack Crews with charged hoselines.
 - Master stream appliance prepositioned.
- Ignitions Officer.
- A minimum of one Assistant Safety Officer.
- Personal accountability report (PAR).

Fuel

- Explain to the students what the burn plan is.
 - This will help them to understand the load placement and water application to accommodate the plan.
- Utilize the students to load the live-fire simulator.
 - Use caution not to overload the live-fire simulator.
 - Could cause a rapid and unexpected build up of excessive heat.
 - Can damage the live-fire simulator.

Do Not Use Accelerants.

The Use of Flammable/Combustible Liquids during Live-fire Training is Strictly Forbidden.

Tools

- Master stream appliance.

Safety

- Monitor personnel for signs of heat illness.
- Watch for crossing streams.
- Watch for other activity in the area.

Communications

Ensure that reliable communications are in place before commencement of operations.

Conducting the Exercise

When conducting the exterior fire attack exercise, there are many different acceptable methods to deliver the information. The Exterior Fire Attack Instructor shall ensure that the speaking points are covered and the information is understood by the students. An example of an acceptable delivery method is outlined below.

- Place instructional staff with student crews during the burn.
 - This is an opportunity for students to watch a fire start and spread, and to witness how long it takes to become well involved.
 - It is also a valuable time for the instructors to answer questions about the buildup, growth, and spread of fire.
 - This is the perfect opportunity for instructors to predict fire behavior as it occurs in the presence of the students.
- Conduct as many window and door exterior attacks as safely possible.
- Do not extinguish the fire during any of the attacks.
- The burn is a point in the instruction to show the effectiveness of various streams, including master streams.
 - Adequate amounts of hose streams for all four sides of the fire and any exposures must be available.
 - There should be a system of control to coordinate all hose streams.

Types of Attacks

Advance attack lines, knock down the fire, and back out. As the fire builds each time, demonstrate various attack methods. These include direct, indirect, combination, and the blitz attack utilizing a 2½" hoseline or master stream. The instructor should verbalize the desired effect prior to the application of water through the various attack methods so the students may also look for this effect as they advance lines and apply water. Line size should be discussed at this time as well as discussing applications to different scenarios.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Section 12: Exterior Fire Attack Exercise

Take the time to discuss the effects of stream management and its effect of the fire's behavior. Demonstrate the ability to push fire using a fog stream, extend the reach of a straight stream, and use of deflection methods.

Coach the students to control the fire. Do not allow them to completely extinguish the fire. This will only create unnecessary delay in the exercise. Take the opportunity to critique each attack while waiting for the fire to rebuild.

Speaking Points

- Fire spread and behavior.
- Exterior attack for various fire locations.
- Straight stream and fog patterns.
- Construction and its influence on fire behavior.
- Flashover.
- Exposure protection.
- Various methods of exterior attack.
- Heat shielding.
- Smoke management.
- Adjacent structures (outbuildings, garages, next-door properties, etc.).
- Overhead power and communication lines.
- Vegetation (wildland or residential).
- Traffic hazards (freeways, highways, etc.).
- Downwind influences.
 - Hospitals or convalescent homes.
 - Schools.
 - Airports or air traffic.
 - Sensitive commercial occupancies.
- Propane tanks.

Section 13: SCBA Confidence Exercise

This exercise is designed to provide fire fighters an opportunity to experience basic performance evolutions while utilizing self-contained breathing apparatus (SCBA). This exercise is not designed to teach proper donning and doffing of SCBA. All students should be proficient in SCBA prior to participating in a FC 3B class. This exercise will teach interior fire-fighting survival by allowing the students the opportunity to gain confidence in proven survival techniques with emphasis on remaining calm and creating a heightened awareness in a fire-fighting environment. It will also assist fire fighters in getting the maximum performance from an SCBA.

Planning

Choose one or more rooms that will facilitate a smoky environment. The course should take approximately 15 minutes for a two-person crew to complete. Depending on the rooms' configuration, the SCBA Confidence Exercise Instructor will determine how many students can move through the course at any one time.

Inspection

Before the room is used, it must be clean and all debris removed from the floor. After your course is built, ensure that it is sturdy and can withstand the day's training.

Room Set-up

- The structure or room should accommodate walkways to allow Assistant Safety Officers to monitor student progress.
- The structure or room should have more than one exit and an escape route large enough to move several students.
- The area should be dark, even before the smoke is introduced.
- All props should be of sturdy construction.
- All vertical and horizontal openings should be covered.
- Cover the windows, if necessary.
 - Covering should be placed on the opening without tacking for easy removal if ventilation becomes necessary.
- Cut one corner of the door out so it can be closed over the hoseline if desired.
 - Smaller and/or more tightly sealed rooms will allow for less smoke generation to achieve the desired effect.

Required Elements

- Charged hoseline staffed by either the SCBA Confidence Exercise Instructor or Primary Coordinator Trainee.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Section 13: SCBA Confidence Exercise



- An appropriate number of Assistant Safety Officers inside to assist the students if problems develop.
- Ignitions Officer with hook or Adjunct Instructor assigned to smoke producer.
- Rapid Intervention Crew.
 - Must be on standby any time live-fire training is being conducted.
 - Dedicated tool cache.
 - Dedicated radio frequency should be considered on complex burns.
- Evacuation signal established.
- Personal accountability report (PAR).
- Mask cleaning station, per Cal/OSHA.
 - Students must use this station as part of the exercise.

Fuel

A crib or shopping carts are examples of acceptable methods of producing smoke. Burn materials should be both wet and dry HCFH.

Other Methods of Obscuring Students' Vision

- A safe chemical smoke.
- Reversing a Nomex hood (not utilizing live fire).
- Stuffing the mask with paper (not utilizing live fire).
- Covering the mask face piece.

Do not use flammable or combustible liquids in any form during a FC 3B course.

Tools

Usually no hand tools are needed to conduct the class. However, during course construction the SCBA Confidence Exercise Instructor will need typical hand and power tools used in the construction trade: air compressor, generator, power saw, nail gun, hammer, screw gun, nails, screws, and other common items used in building construction.

Safety

The SCBA Confidence Exercise Instructor will accompany the students at all times when they are engaged in the course. A charged hoseline will be in the room at all times to be used by either the SCBA Confidence Exercise Instructor or a Primary Coordinator Trainee. At least one Adjunct Instructor will be in the room to act as the Assistant Safety Officer and to check, monitor, and cool the fire as necessary

All instructors, the Assistant Safety Officer, and students should don full PPE prior to entering the smoke room. All PPE will be assessed prior to allowing students to participate in the exercise.

Safety in this exercise is of paramount importance and will receive priority over all else.

Communications

Ensure that reliable communications are in place before commencement of operations. Have an operational plan for coordinated suppression and student evacuations in the event the fire extends into the attic or other areas not intended to burn during instruction.

Conducting the Exercise

When conducting the SCBA confidence exercise, there are many different acceptable methods to deliver the information. The SCBA Confidence Exercise Instructor shall ensure that the speaking points are covered and the information is understood by the students. An example of an acceptable delivery method is outlined below.

- Prepare the room prior to the students' arrival.
- Fill the room with smoke using either chemical smoke or live fire.
- Direct the students to use a right- or left-handed search pattern.
 - Pointing out light indicators, identifying sounds, and maintaining situational awareness of their location.
- Have the students enter the room in a crawl position and continue to move through the course until they complete the exercise.
- Keep track of the students' entry and exit times as well as how efficiently they utilized their air.
 - As the students exit the drill, give them this information. This will give the students an indication of how they utilized their air. This also serves as a form of accountability.
- If time permits, let students having difficulty with the exercise go through the course a second time.

Use of a Course

One method of conducting the SCBA Confidence Exercise is to use a course setup in an existing structure and using a charged hoseline for the students to follow. Pallets can be used to construct the course. Moving floors, wire entanglements, diminishing ceilings, and restricted opens can be effectively used as methods of preparing students for the realities of interior fire fighting. Be creative, but do not create unsafe conditions.

The exercise starts when the student is instructed on how to follow the course by keeping contact with the hose. If a simulated victim is used, the "victim" must be located and retrieved

by the students during each evolution. The students are finished when they exit with the simulated victim.

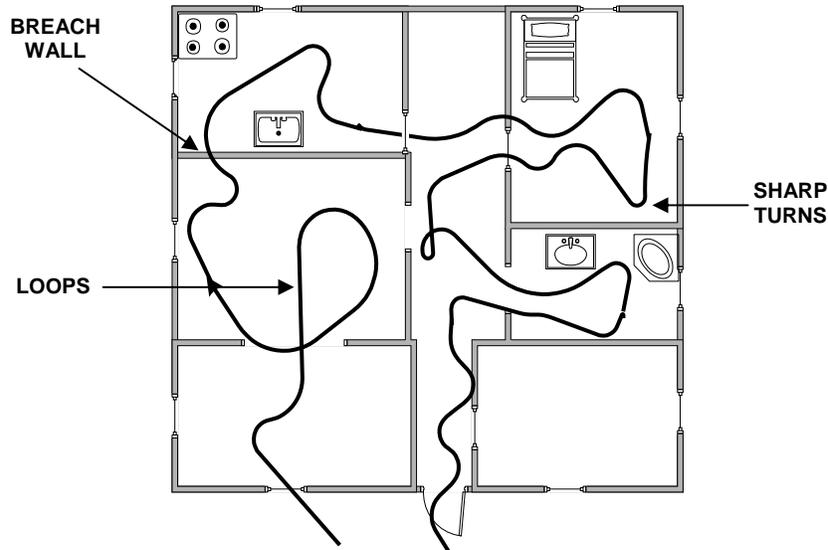
An additional discussion point is to tell the students to determine how much hose is in the course while they are completing the search. This will give them an opportunity to think while they are traversing the course.

Speaking Points

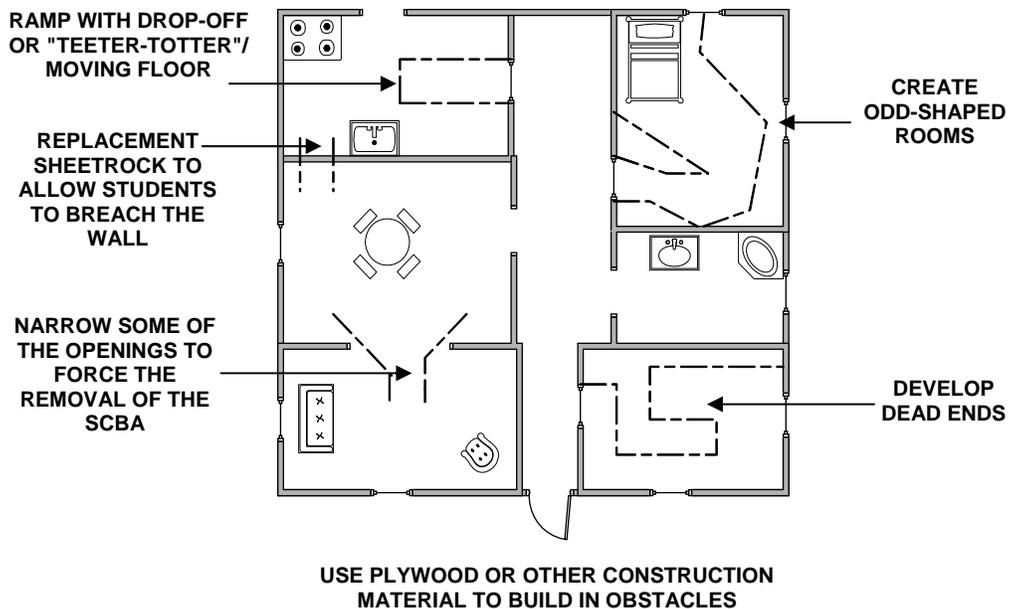
- Donning and doffing the SCBA inside a structure.
- Search techniques.
- Search tools.
- Changing profile.
- Buddy breathing.
- Loss of air techniques.
- Entanglement hazards and techniques.
- Forcible exiting.
- SCBA emergency procedures.
- Visual and audible indicators.
- RIC tactics.
- Situational awareness.
- Self awareness.
- Controlled breathing techniques.

SCBA CONFIDENCE COURSE

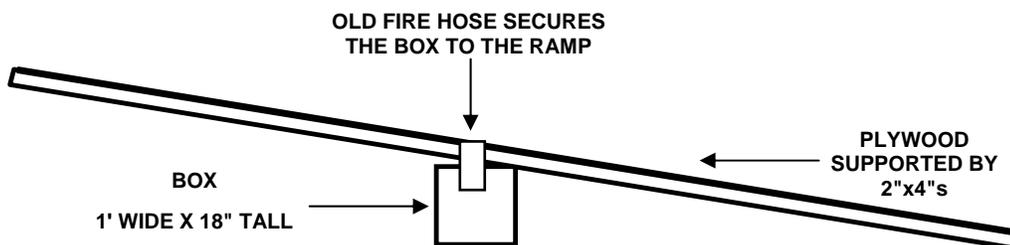
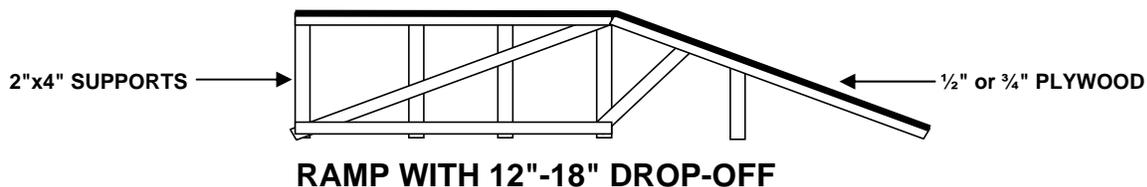
HOSE-ASSISTED SEARCH



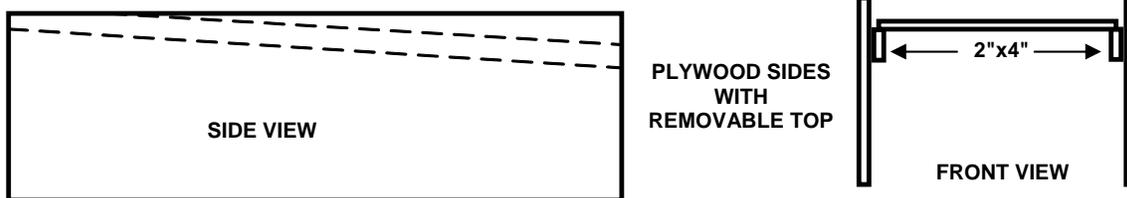
SEARCH WITH OBSTACLES



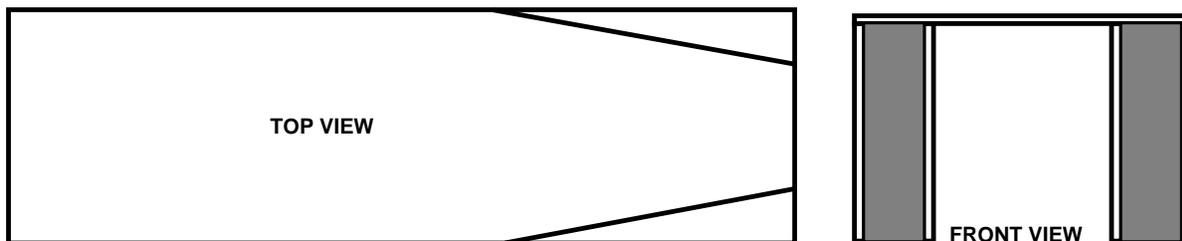
EXAMPLES OF VARIOUS OBSTACLE PROPS



TEETER-TOTTER OBSTACLE/SIMULATED MOVING FLOOR



CHUTE – DIMINISHING CEILING/SIMULATED ATTACK



CHUTE – NARROWING HALL

Section 14: Attic Fire Attack Exercise

The Attic Fire Attack Exercise is dependent upon the capabilities of the live-fire simulator. Meet with the Technical Specialist to determine if this exercise is feasible.

Section 15: Basement Fire Attack Exercise

The Basement Fire Attack Exercise is dependent upon the capabilities of the live-fire simulator. Meet with the Technical Specialist to determine if this exercise is feasible.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Appendix A: NFPA 1403

Appendix A: NFPA 1403

(INSERT YOUR COPY OF THE LATEST EDITION OF NFPA 1403, available at NFPA, Cal Chiefs Bookstore or other bookstore locations)

Appendix B: ICS Forms

ICS 201: Incident Briefing

ICS 202: Incident Objectives

ICS 203: Organization Assignment List

ICS 204: Division Assignment List

ICS 205: Incident Radio Communications Plan

ICS 206: Medical Plan

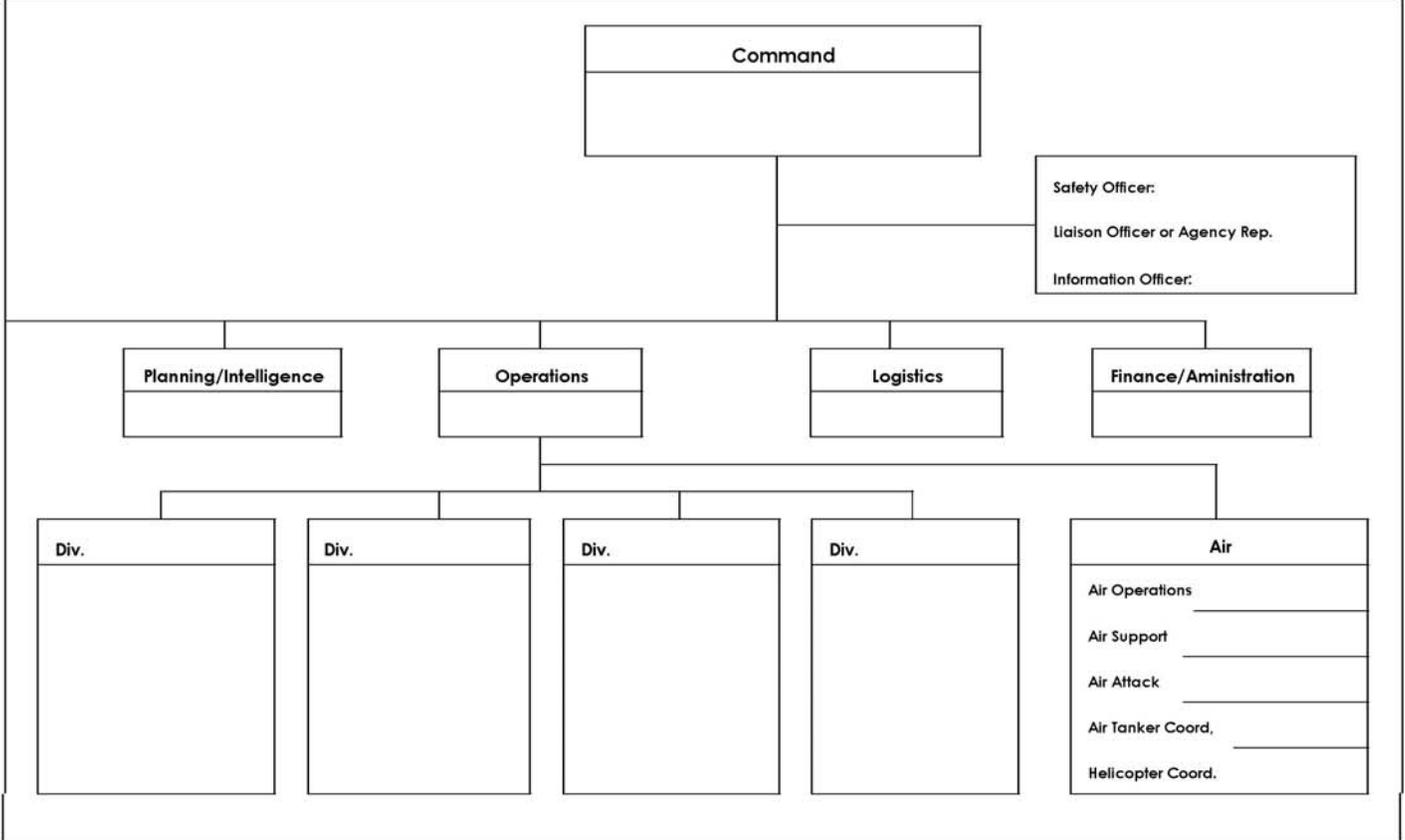
ICS 211: Incident Check-in List

ICS 214: Unit Log

INCIDENT BRIEFING	1. Incident Name	2. Date	3. Time
--------------------------	------------------	---------	---------

4. Map Sketch

5. Current Organization



Page 1 of	6. Prepared by (Name and Position)
------------------	------------------------------------

ORGANIZATION ASSIGNMENT LIST		9. Operations Section	
1. Incident Name		Op's Chief	
2. Date		Deputy	
3. Time		a. Branch I	
4. Operational Period		Branch Director	
		Deputy	
Position	Name	Division/Group	
5. Incident Commander and Command Staff		Division/Group	
Incident Commander		Division/Group	
Deputy		Division/Group	
Safety Officer		Staging Area	
Information Officer			
Liaison Officer		b. Branch II	
6. Agency Representative		Branch Director	
Agency	Name	Deputy	
		Division/Group	
		Staging Area	
7. Planning/Intelligence Section		c. Branch III	
Plans/Intel Chief		Branch Director	
Deputy		Deputy	
Resources Unit		Division/Group	
Situation Unit		Division/Group	
Documentation Unit		Division/Group	
Demobilization Unit		Division/Group	
Technical Specialists		Division/Group	
Human Resources		d. Air Operations Branch	
Training		Air Operations Branch Director	
GIS		Air Tactical Supervisor	
		Air Support Supervisor	
		Helicopter Coordinator	
		Air Tanker Coordinator	
8. Logistics Section		10. Finance/Administration Section	
Logistics Chief		Finance/Admin. Chief	
Deputy		Deputy	
Supply Unit		Time Unit	
Facilities Unit		Procurement Unit	
Ground Support Unit		Compensation/Claims Unit	
Communications Unit		Cost Unit	
Medical Unit		Prepared by (Resource Unit Leader)	
Food Unit			

INCIDENT RADIO COMMUNICATIONS PLAN				Incident Name		Date/Time Prepared		Operational Period Date/Time			
Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	TX Tone/NAC	Mode A, D or M	Remarks
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
Prepared by (Communications Unit)				Incident Location		County		State		Latitude N Longitude W	

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

MEDICAL PLAN	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED	4. OPERATIONAL PERIOD		
5. INCIDENT MEDICAL AID STATION						
MEDICAL AID STATIONS	LOCATION			PARA MEDICS? YES		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
6. TRANSPORTATION						
A. AMBULANCE SERVICES						
NAME	ADDRESS	PHONE	PARA MEDICS? YES			
			<input type="checkbox"/>			
			<input type="checkbox"/>			
			<input type="checkbox"/>			
			<input type="checkbox"/>			
			<input type="checkbox"/>			
B. INCIDENT AMBULANCES						
NAME	LOCATION			PARA MEDICS? YES		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. HOSPITALS						
NAME	ADDRESS	PHONE	TRAVEL TIME	TRAUMA CENTER?	HELIPAD ?	BURN CENTER?
				YES	YES	YES
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. MEDICAL EMERGENCY PROCEDURES						
9. PREPARED BY (MEDICAL UNIT LEADER)				10. REVIEWED BY (SAFETY OFFICER)		



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Appendix C: Forms and Information

Appendix C: Forms and Information

Crew Rotation

Public Information Officer Log

Notice to Neighboring Properties

Permit/Notification Quick Reference Matrix

CREW ROTATION

Crew	1	2	3	4	5
Fire Behavior	Delivered in a Single Session				
Ventilation Techniques					
Interior Fire Attack					
RIC					
Rehab					
Exterior Fire Attack	Delivered in a Single Session				



Crew is **currently** training at this station



Crew has **finished** training at this station

NOTICE TO NEIGHBORING PROPERTIES

This is to inform you that your fire department will be conducting a live-fire safety training exercise(s) involving:

Vehicle Vegetation Structural

on the property located at:

The date(s) for the training are _____ ,
from the hours of _____ to _____ .

This type of training is essential to providing this community with well-trained fire fighters. The exercise will allow our personnel a chance to enhance their skills in suppression activities and to work safely in a controlled environment for future fire and life safety needs.

Please note that smoke and flame may be visible from time to time. All precautions have been made for the safety of surrounding properties.

We sincerely hope this training opportunity does not cause any disruption of your normal activities.

Thank you, for your indulgence and cooperation.

For further information contact: _____
Live-fire Safety Training Exercise Coordinator

Contact Numbers:

Office: (_____) _____

Cell: (_____) _____

PERMIT/NOTIFICATION QUICK REFERENCE MATRIX

Permit and Notification Requirements	Type of Training Burn		
	Vehicle	Vegetation	Structure
<i>U.S. EPA</i>	NESHAP applies the same as structure notification	No requirement	NESHAP applies; fire agency notification 10 working days before burn plus obtain copy of asbestos report from owner
<i>California Air Resources Board</i>			
<i>Local AQMD</i>	Fire agency obtain burn permit		Fire agency obtain burn permit with copy of asbestos report from owner
<i>Local Building Department</i>	No requirement		Owner obtain demolition permit
<i>Local Historical Society/Planning Department</i>	No requirement		Owner contacts society or department; if structure is over 50-years-old, a determination of historical significance is required
<i>California Department of Forestry and Fire Protection (CAL FIRE)</i>	Notification to the Administrative Unit if in or near the State Responsibility Area (SRA)		
<i>Community</i>	Door-to-door, or telephone affected neighbors	Letters of notification should be sent to all affected areas and the media	Letters of notification should be sent to all affected area homes and businesses, including the media
<i>Local Water Agency</i>	No requirement		Possible permit required, depending on the estimated total gallons to be used
<i>State Fire Training</i>	No requirement		Request approval 6 weeks prior to the beginning date in order to issue Fire Control 3B certificates

This reference matrix is not intended to be accurate for every county or jurisdiction with in California. It should only to be used as a guide.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



Appendix D: Primary Coordinator Trainee Task Book

- Qualifications
 - Primary Coordinator Trainee
 - Evaluator
- Responsibilities
 - Primary Coordinator Trainee
 - Evaluator
- Instruction for Completing the Task Book
- Student Evaluation Sheets
- Evaluator Summary Sheets



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



Appendix D: Primary Coordinator Trainee Task Book

The Fire Control 3B Primary Coordinator Trainee Task Book lists every performance requirement (task) in a format that allows the trainee to be evaluated against written guidelines. Successful performance of all tasks must be observed and recorded by **three different Fire Control 3B Primary and/or Senior Coordinators (Evaluator)**. Evaluation and confirmation of the trainee's performance of all the tasks shall involve three separate evaluators on one or more Fire Control 3B training burns. It is essential that a trainee's performance be critically evaluated and accurately recorded by each Evaluator.

After the Primary Coordinator Trainee has demonstrated competency in each area and the task book is complete, he or she may apply to become a registered Fire Control 3B Primary Coordinator with State Fire Training once the educational, course work, and experience criteria have been met.

QUALIFICATIONS

Primary Coordinator Trainee

- Successfully completed a Fire Control 3 or 3B class.
- Successfully completed Instructor Training [one (1) of the following five (5) options]:
 - Have attended and passed the qualifying SFT Instructor courses.
 - Have a valid community college teaching credential.
 - Completed the UC/CSU 60-hour Techniques of Teaching course.
 - Completed the NFA's Fire Service Instructional Methodology course.
 - Completed four semester units of upper division credit in educational materials, methods, and curriculum development.

Evaluator

- Be a registered Fire Control 3B Primary and/or Senior Coordinator in good standing with State Fire Training.

RESPONSIBILITIES

Primary Coordinator Trainee

- Review and understand all site requirements, equipment standards, and the material in the Fire Control 3B Course Guide and the NFPA 1403: Standard on Live Fire Training Evolutions.
- Review and understand the process for completing a Primary Coordinator Trainee Task Book.
- Ensure the Primary Coordinator Trainee Task Book is accurately recorded and maintained.
- Successfully complete the Primary Coordinator Trainee Task Book within three (3) years of beginning the task book process.
- Retain a completed copy of his or her Primary Coordinator Trainee Task Book in their personal and/or career records.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



Evaluator

- Be qualified and proficient.
- Explain to the Primary Coordinator Trainee the purpose of and process for completing the task book.
- Explain to the Primary Coordinator Trainee his or her responsibilities.
- Meet with the Primary Coordinator Trainee and determine past experiences, current qualifications, and desired objectives/goals.
- Confirm with the Primary Coordinator Trainee, prior to his or her performance, which tasks will be evaluated.
- Accurately evaluate each task being performed by the Primary Coordinator Trainee.
- Document each task completed by the trainee on the Primary Coordinator Trainee Task Book.
 - Performance shall be documented by the evaluator directly on the task book.
 - SFT's assigned class code.
 - Date performance occurred.
 - Evaluator's initials.
- Document your final evaluation of the Primary Coordinator Trainee on the Evaluation Summary page.

INSTRUCTION FOR COMPLETING THE TASK BOOK

The Fire Control 3B Primary Coordinator Trainee Task Book allows the Evaluator to record a Primary Coordinator Trainee's performance for delivering all aspects of a Fire Control 3B class. These evaluations are made by observing the Primary Coordinator Trainee's administrative skills, presentation abilities, and manipulative performance techniques.

Task Book Headings

Primary Coordinator Trainee:	Enter the trainee's name.
Tasks:	Lists every component required of a Primary Coordinator in the Fire Control 3B Course Guide.
Code:	Lists when the task needs to be completed or performed.
Grade:	Area to record the Primary Coordinator Trainee's performance.
Section:	Lists the section referenced from the Fire Control 3B Course Guide.
Date Observed:	The Evaluator enters the date the Primary Coordinator Trainee was assessed.
Evaluator's Initials:	The Evaluator enters his or her initials.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

Tasks	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
ADMINISTRATION								
1. Understands all site requirements	1	P						
2. Understands all equipment standards	1	P						
3. Understands the material in the FC 3B Course Guide	1	P						
4. Understands the information in NFPA 1403: Standard on Live Fire Training Evolutions	1	P						
5. Understands the process for becoming a registered Fire Control 3B Primary Coordinator	1	P						
6. FC 3B course approval secured from State Fire Training	2	P						
STAFF ASSIGNMENTS								
1. Staff assignments made based on the needs of the burn	2	P						
QUALIFYING THE SIMULATOR								
1. Inspect for damage	3	P						
2. Adequate water supply determined	3	P						
3. Traffic conditions considered	3	P						
4. Training value determined	3	P						
SURVEYING THE SIMULATOR								
1. Exposures	4	P						
2. Overhead wires	4	P						
3. Trees, shrubs, and other landscaping	4	P						
4. Condition of the live-fire simulator	4	P						
5. Weather conditions	4	P						
6. Holes in the floor, walls, and roof	4	P						
7. Septic tanks	4	P						
8. Neighbors and businesses	4	P						
9. Exits	4	P						
10. Fuel types	4	P						
DOCUMENTATION								
1. All required documents coordinated with SFT	2	P						
2. Incident Action Plan developed	2,6	P						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators



Appendix D: Primary Coordinator Trainee Task Book

PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

Tasks	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
3. Incident documentation compiled for archiving	2	P						
<i>Received From the Agency Responsible for the Simulator</i>								
4. Written agreement regarding liability and insurance	6	P						
5. Arrangements made for a Technical Specialist	6	P						
<i>Received From the Primary Coordinator</i>								
6. Burning permit from the jurisdiction in which the training is taking place (may be obtained by the department hosting the class)	6	P						
7. FSTEP Course Request submitted within six weeks prior to the class date and approval received from SFT	6	P						
8. Written notification to AHJ and participating agencies	6	P						
▪ Where the burn is located	6	P						
▪ When the burn is going to take place	6	P						
▪ IC's, Senior Coordinator's, Primary Coordinator's, Safety Officer's name and contact information	6	P						
▪ A short description of the specific burn objectives	6	P						
▪ An agenda of the actual burn	6	P						
▪ A list of all the agencies participating	6	P						
<i>Received From the Students' Department</i>								
9. Authorization to attend the training, including statements of insurance; if coordinated through a college, the college may provide additional insurance for participants and instructional staff	6	P						
10. Current fit test documentation	6	P						
11. Each student's agency has provided the student with a minimum of Cal/OSHA compliant PPE in good repair	6	P						
<i>Received From the Adjunct Instructors' Department</i>								
12. Authorization to attend the training, including statements of insurance ▪ Letter stating student has demonstrated competency up to the SFT Fire Fighter I level in donning SCBA, donning personal protective equipment, and hose handling skills ▪ If coordinated through a college, the college may provide additional insurance for participants and instructional staff	6	P						
13. Current fit test documentation (if required for participation)	6	P						
14. Each Adjunct Instructor's agency has provided the adjunct instructor with a minimum of Cal/OSHA compliant PPE in good repair (if required)	6	P						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

Tasks	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Received From the Department Hosting the Class								
15. Coordinates with the AHJ	2	P						
16. Approval from the local AQMD	6	P						
17. AQMD confirmation of a training variance in the absence of a "No Burn" day	6	P						
18. A burning permit from the jurisdiction in which the training is taking place (may be obtained by the Primary Coordinator)	6	P						
Notifications								
19. AQMD notified	7	P						
20. Neighboring properties notified	7	P						
Mapping the Burn Site								
21. Map developed showing all pertinent information	8	P						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

FIRE BEHAVIOR EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Planning and Inspection								
1. Fire behavior room accommodated the class size	9	P						
2. Fire behavior room safe for the students	9	P						
Room Set-up								
3. Room had a minimum of two exits	9	P						
4. Hazards that could harm students or damage PPE removed	9	P						
5. Exits and egress identified	9	P						
6. Water supplies for both the attack and safety lines come from two different sources	9	P						
7. Shutters, doors, and/or windows used to allow air flow and vertical/horizontal ventilation	9	P						
Required Elements								
8. Adjunct instructor staffed near all exits	9	D						
9. Attack line in place (not be staffed by students)	9	D						
10. Safety line from a separate water source in place (not be staffed by students)	9	D						
11. Fire extinguishers, pressurized water or hand-pump, available	9	D						
12. Ignitions Officer in place	9	D						
13. Rapid Intervention Crew in place <ul style="list-style-type: none"> ▪ Dedicated tool cache ▪ Dedicated radio frequency on complex burns 	9	D						
14. Personal accountability report (PAR)	9	D						
Fuel								
15. Appropriate type and amount of fuel used	9	D						
Fuel Crib								
16. Appropriate type and size built	9	D						
Tools								
17. Necessary tools available for the exercise	9	D						
Safety								
18. Amount of fuel used appropriate for the room size	9	D						
19. Each participant protected with full PPE upon ignition	9	D						
20. Stopped the exercise in the event of a serious injury until proper care is provided	2	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

FIRE BEHAVIOR EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
21. Conducted a safety briefing for all staff and participants to review procedures and prevent further injuries during the exercise	2	D						
Communications								
22. Reliable communications in place	9	D						
Conducting the Exercise								
23. All speaking points covered	9	D						
▪ Anticipated fire behavior of the specific room based on fuel, construction, and all other variables explained	9	D						
▪ Factors influencing fire behavior explained	9	D						
▪ Time temperature curve	9	D						
▪ Types of fire classes	9	D						
▪ BTU output	9	D						
▪ Stages of fire	9	D						
▪ Heat transfer	9	D						
▪ Smoke	9	D						
▪ Anchor points for water application	9	D						
▪ Barriers and shielding	9	D						
▪ Nozzle patterns	9	D						
▪ Steam production	9	D						
▪ Air flow	9	D						
▪ Indicators	9	D						
▪ Horizontal and vertical thermal balance	9	D						
▪ Ember production	9	D						
▪ Ash production	9	D						
▪ Flame lengths	9	D						
▪ Flammable gases	9	D						
▪ Overhead or atmosphere control	9	D						
▪ Roll over	9	D						
▪ Flashover	9	D						
▪ Backdraft	9	D						
24. Key points that did not occur during the exercise discussed outside following the exercise	9	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

VENTILATION TECHNIQUES EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Planning and Inspection								
1. Exercise planned and designed to facilitate the entire class	10	P						
2. Operations coordinated with the fire behavior and fire attack operations	10	P						
Roof Set-up								
3. Overhead obstructions removed	10	P						
4. Adequate area to store tools	10	P						
Required Elements								
5. Attack Crew with charged hoseline in place	10	D						
6. Safety Crew with charged hoseline in place	10	D						
7. Two different water sources for the attack and safety lines	10	D						
8. Ventilation Crew in place	10	D						
9. Ignitions Officer in place	10	D						
10. A minimum of one Assistant Safety Officer in place	10	D						
11. Evacuation signal established	10	D						
12. Rapid Intervention Crew in place <ul style="list-style-type: none"> ▪ Dedicated tool cache ▪ Dedicated radio frequency on complex burns 	10	D						
13. A minimum of two ladders in place to aid in rapid evacuation	10	D						
14. Personal accountability report (PAR)	10	D						
Fuel								
15. Appropriate type and amount of fuel used	10	D						
Tools								
16. Necessary tools available for the exercise	10	D						
Safety								
17. Each participant protected with full PPE upon ignition	10	D						
18. Stopped the exercise in the event of a serious injury until proper care is provided	2	D						
19. Conducted a safety briefing for all staff and participants to review procedures and prevent further injuries during the exercise	2	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

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GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

VENTILATION TECHNIQUES EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Communications								
20. Reliable communications in place	10	D						
Conducting the Exercise								
21. All speaking points covered	10	D						
▪ Safety briefing	10	D						
▪ Travel and escape routes on the structure	10	D						
▪ Communication methods that will be used while power tools are in use including the signal to evacuate	10	D						
▪ Hazardous areas	10	D						
▪ Structure size-up	10	D						
▪ Building construction features	10	D						
▪ Ventilation principles	10	D						
▪ Ventilation terminology	10	D						
▪ Ladder placement	10	D						
▪ Safe power equipment and tool use	10	D						
▪ Photovoltaic (solar panels or PV panels)	10	D						
▪ Vertical ventilation techniques	10	D						
▪ Center rafting	10	D						
▪ Rolling rafters	10	D						
▪ Louvering	10	D						
▪ Inspection cuts	10	D						
▪ Kerf/plunge cuts	10	D						
▪ Pullbacks	10	D						
22. Crewmembers rotated so everyone has a chance at the nozzle	10	D						
23. Crew critique of the exercise conducted	10	D						
24. Key points that did not occur during the exercise discussed outside following the exercise	10	D						
After the Exercise								
25. Critique of the exercise conducted with the Exercise Instructor	2	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

INTERIOR FIRE ATTACK EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Planning and Inspection								
1. Rooms accommodated the class size	11	P						
2. Building safety/integrity was ongoing throughout the exercise	11	D						
Room Set-up								
3. All hazards removed	11	P						
Required Elements								
4. Attack Crew with charged hoseline in place	11	D						
5. Safety Crew with charged hoseline in place	11	D						
6. Ignitions Officer in place	11	D						
7. A minimum of one Assistant Safety Officer	11	D						
8. Coordination with the Ventilation Techniques Instructor	11	D						
9. Evacuation signal established	11	D						
10. Rapid Intervention Crew in place <ul style="list-style-type: none"> ▪ Dedicated tool cache ▪ Dedicated radio frequency on complex burns 	11	D						
11. Personal accountability report (PAR)	11	D						
Fuel								
12. Appropriate type and amount of fuel used	11	D						
Tools								
13. Necessary tools available for the exercise	11	D						
Safety								
14. Each participant protected with full PPE upon ignition	11	D						
15. Orient the students to the structure	11	D						
▪ Explain what is going to happen	11	D						
▪ The location of the safety exits	11	D						
▪ Who the Safety Officer is	11	D						
▪ Other safety precautions deemed necessary	11	D						
16. Stopped the exercise in the event of a serious injury until proper care is provided	2	D						
17. Conducted a safety briefing for all staff and participants to review procedures and prevent further injuries during the exercise	2	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

INTERIOR FIRE ATTACK EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Communications								
18. Reliable communications in place	11	D						
Conducting the Exercise								
19. All speaking points covered	11	D						
▪ Heat shielding and barriers	11	D						
▪ Stages of fire	11	D						
▪ Indicators	11	D						
▪ Air flows	11	D						
▪ Heat transfer	11	D						
▪ Horizontal and vertical thermal balance	11	D						
▪ Ember production	11	D						
▪ Ash production	11	D						
▪ Flame lengths	11	D						
▪ Water application	11	D						
▪ Production of gases	11	D						
▪ Anchor points	11	D						
▪ Ventilation	11	D						
▪ Overhead control	11	D						
▪ Roll over	11	D						
▪ Steam production (floor and ceiling)	11	D						
▪ Heat indicators	11	D						
▪ Hose handling techniques	11	D						
▪ Evacuation signal	11	D						
20. Crewmembers rotated so everyone has a chance at the nozzle	11	D						
21. Crew critique of the exercise conducted	11	D						
22. Key points that did not occur during the exercise discussed outside following the exercise	11	D						
After the Exercise								
23. Critique of the exercise conducted with the Exercise Instructor	2	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

EXTERIOR FIRE ATTACK EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
Planning and Inspection								
1. Exposure protection	12	P						
2. Fire behavior	12	P						
3. Multiple fire attacks from exterior doors and windows	12	P						
4. Stream management	12	P						
5. Smoke management	12	P						
6. High heat tactics (combined fog/straight stream method)	12	P						
Fuel Load Size and Placement								
7. Anticipated fire behavior specific to the structure considered for placement and size of the fuel load	12	P						
8. Fuel load prepared based upon the final burn plan	12	P						
9. Fuel load placed to accommodate predetermined objectives and predicted visual impact	12	P						
Exposure Protection								
10. Division/group involving discussions of using master stream appliances, medium-size attack (blitz) lines, combination of small and medium attack lines, and strategy/tactics of exposure protection	12	P						
Weather								
11. Wind speed and direction monitored continuously	12	P						
12. Humidity and temperature monitored continuously	12	P						
Smoke Drift								
13. Smoke drift monitored continuously	12	P						
Adjunct Instructor Briefing								
14. Line placement	12	P						
15. Assignment of instructors to student crews	12	P						
16. Instructions for the application of water to the final burn and teaching tips specific to the structure	12	P						
17. Site-specific hazards and or exposures	12	P						
18. Communications	12	P						
Required Elements								
19. Attack Crew with charged hoseline in place	12	D						
20. Master stream appliance prepositioned	12	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

EXTERIOR FIRE ATTACK EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
21. Ignitions Officer in place	12	D						
22. A minimum of one Assistant Safety Officer in place	12	D						
23. Personal accountability report (PAR)	12	D						
Fuel								
24. Burn plan explained to the students	12	D						
25. Students utilized to load the structure	12	D						
Tools								
26. Necessary tools available for the exercise	12	D						
Safety								
27. Each participant protected with full PPE upon ignition	12	D						
28. Watched for crossing streams	12	D						
29. Watched for other activity in the area	12	D						
30. Stopped the exercise in the event of a serious injury until proper care is provided	2	D						
31. Conducted a safety briefing for all staff and participants to review procedures and prevent further injuries during the exercise	2	D						
Communications								
32. Reliable communications in place	12	D						
Conducting the Exercise								
33. All speaking points covered	12	D						
▪ Fire spread and behavior	12	D						
▪ Exterior attack for various fire location	12	D						
▪ Straight stream and fog patterns	12	D						
▪ Construction and its influence on fire behavior	12	D						
▪ Flashover	12	D						
▪ Exposure protection	12	D						
▪ Various methods of exterior attack	12	D						
▪ Heat shielding	12	D						
▪ Smoke management	12	D						
▪ Adjacent structures	12	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



PRIMARY COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Primary Coordinator Trainee and evaluated by a Fire Control 3B Primary or Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

EXTERIOR FIRE ATTACK EXERCISE TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
▪ Overhead power and communication lines	12	D						
▪ Vegetation (wildland or residential)	12	D						
▪ Traffic hazards (freeways, highways, etc.)	12	D						
▪ Downwind influences	12	D						
▪ Propane tanks	12	D						
34. Crewmembers rotated so everyone has a chance at the nozzle	12	D						
35. Crew critique of the exercise conducted	12	D						
36. Key points that did not occur during the exercise discussed outside following the exercise	12	D						
After the Exercise								
37. Critique of the exercise conducted with the Exercise Instructor	2	D						
AFTER THE EXERCISES TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
1. Verified and documented students' completion of the class	---	D						
2. Signed and distributed SFT course completion certificates to students successfully completing the class	---	D						
3. Performed a final walk around of the entire site	---	D						
4. Directed the class critique	2	D						
5. Completed a final interview/critique with the Senior Coordinator	2	D						
6. Returned class materials required by SFT in the appropriate time frame.	---	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix D: Primary Coordinator Trainee Task Book



◆ PRIMARY COORDINATOR TRAINEE ◆ ADDITIONAL EVALUATOR SUMMARY (IF NEEDED) ◆

Primary Coordinator Trainee: _____

Department: _____

Contact Phone Number: _____

Evaluator: _____ (Must be a Registered Primary or Senior Coordinator)

Department: _____

Contact Phone Number: _____

SFT Class Code: _____ Class Dates: _____

The above named Primary Coordinator Trainee performed Fire Control 3B tasks initialed and dated by me under my supervision. As a result, I verify that this Trainee:

Successfully performed all tasks and should be considered for advancement.

Did not successfully complete certain tasks (see below); additional supervision and training is required.

Evaluator's Signature: _____ Date: _____

Comments: _____

Appendix E: Senior Coordinator Trainee Task Book

- Qualifications
 - Primary Coordinator Trainee
 - Evaluator
- Responsibilities
 - Primary Coordinator Trainee
 - Evaluator
- Instruction for Completing the Task Book
- Student Evaluation Sheets
- Evaluator Summary Sheets



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



Appendix E: Senior Coordinator Trainee Task Book

The Fire Control 3B Senior Coordinator Trainee Task Book lists every performance requirement (task) in a format that allows the trainee to be evaluated against written guidelines. Successful performance of all tasks must be observed and recorded by **three different Fire Control 3B Senior Coordinators (Evaluator)**. Evaluation and confirmation of the trainee's **performance of all the tasks shall involve three separate evaluators on three separate Fire Control 3B training burns**. It is essential that a trainee's performance be critically evaluated and accurately recorded by each Evaluator.

After the Senior Coordinator Trainee has demonstrated competency in each area and the task book is complete, he or she may apply to become a registered Fire Control 3B Senior Coordinator with State Fire Training once the educational, course work, and experience criteria have been met.

QUALIFICATIONS

Senior Coordinator Trainee

- Be a registered Fire Control 3B Primary Coordinator in good standing with State Fire Training.

Evaluator

- Be a registered Fire Control 3B Senior Coordinator in good standing with State Fire Training.

RESPONSIBILITIES

Senior Coordinator Trainee

- Review and understand all site requirements, equipment standards, and the material in the Fire Control 3B Course Guide and the NFPA 1403: Standard on Live Fire Training Evolutions.
- Review and understand the process for completing a Senior Coordinator Trainee Task Book.
- Ensure the Senior Coordinator Trainee Task Book is accurately recorded and maintained.
- Successfully complete the Senior Coordinator Trainee Task Book within three (3) years of beginning the task book process.
- Retain a completed copy of his or her Senior Coordinator Trainee Task Book in the personal and/or career records.

Evaluator

- Be qualified and proficient.
- Explain to the Senior Coordinator Trainee the purpose of and process for completing the Fire Control 3B Senior Coordinator Trainee Task Book.
- Explain to the Senior Coordinator Trainee his or her responsibilities.
- Meet with the Senior Coordinator Trainee and determine past experiences, current qualifications, and desired objectives/goals.
- Confirm with the Senior Coordinator Trainee, prior to his or her performance, which tasks will be evaluated.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



- Accurately evaluate each task being performed by the Senior Coordinator Trainee.
- Document each task completed by the trainee on the Fire Control 3B Senior Coordinator Trainee Task Book.
 - Performance shall be documented by the evaluator directly on the task book.
 - SFT's assigned class code.
 - Date performance occurred.
 - Evaluator's initials.
- Document your final evaluation of the Senior Coordinator Trainee on the Evaluation Summary page.

INSTRUCTION FOR COMPLETING THE TASK BOOK

The Fire Control 3B Senior Coordinator Trainee Task Book allows the Evaluator to record a Senior Coordinator Trainee's performance for delivering the required aspects of a Fire Control 3B class. These evaluations are made by observing the senior Coordinator Trainee's skills, abilities, and techniques.

Task Book Headings

Senior Coordinator Trainee:	Enter the trainee's name.
Tasks:	Lists every component required of a Senior Coordinator in the Fire Control 3B Course Guide.
Code:	Lists when the task needs to be completed or performed.
Grade:	Area to record the Senior Coordinator Trainee's performance.
Section:	Lists the section referenced from the Fire Control 3B Course Guide.
Date Observed:	The Evaluator enters the date the Senior Coordinator Trainee was assessed.
Evaluator's Initials:	The Evaluator enters his or her initials.



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



SENIOR COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Senior Coordinator Trainee and evaluated by a Fire Control 3B Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

AFTER THE EXERCISES TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
ADMINISTRATION								
1. Demonstrates a working knowledge all site requirements	1	P						
2. Demonstrates a working knowledge of all equipment standards	1	P						
3. Utilizes the material in the FC 3B Course Guide	1	P						
4. Utilizes the information in NFPA 1403: Standard on Live Fire Training Evolutions	1	P						
5. Is familiar with the process for becoming a registered Fire Control 3B Senior Coordinator	App E	P						
STAFF ASSIGNMENTS								
1. Continuously met and conferred with the Primary Coordinator throughout the class planning and delivery	2	P,D						
2. Approved the staff assignments made by the Primary Coordinator	2	P						
3. Acted as liaison with State Fire Training	2	P						
4. Performed as a Technical Specialist to the Primary Coordinator when required	2	P						
QUALIFYING THE SIMULATOR								
1. No performance required								
SURVEYING THE SIMULATOR								
1. Approved the survey of the simulator	2	P						
DOCUMENTATION								
1. Approved Incident Action Plan (if listed as the IC)	2	P						
2. Verified the IAP provides adequate overhead, resources, and safety	2	P						
Received From the Agency Responsible for the Simulator								
3. Verified written agreement regarding liability and insurance								
4. Verified arrangements made for a Technical Specialist								
Received From the Primary Coordinator								
5. Verified the burning permit from the jurisdiction in which the training is taking place (may be obtained by the department hosting the class)	---	P						
6. Verified the written notification to AHJ and participating agencies	---	P						
Received From the Students' Department								
7. Verified the authorization to attend the training, including a statement of insurance for participant	---	P						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



SENIOR COORDINATOR TRAINEE:

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CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

AFTER THE EXERCISES TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
8. Verified current fit test documentation	---	P						
9. Verified each student's agency has provided the student with a minimum of Cal/OSHA compliant PPE in good repair	---	P						
Received From the Adjunct Instructors' Department								
10. Verified authorization to attend the training, including a statement of insurance for participant	---	P						
11. Verified current fit test documentation (if required for participation)	---	P						
12. Verified each Adjunct Instructor's agency has provided the adjunct instructor with a minimum of Cal/OSHA compliant PPE in good repair (if required for participation)	---	P						
Received From the Department Hosting the Class								
13. Established contact with the Chief Officer of the AHJ	---	P						
14. Established contact with the local AQMD	---	P						
15. Verified the burning permit from the jurisdiction in which the training is taking place (may be obtained by the Primary Coordinator)	---	P						
Notifications								
16. Established contact with the community college (if needed)	---	P						
17. Evaluated the AQMD notification	---	P						
18. Evaluated the neighboring properties notification	---	P						
Burn Site Mapping								
19. Approved map developed showing all pertinent information	---	P						
FIRE BEHAVIOR EXERCISE								
1. Established an appropriate visual position for viewing the exercise and communicating with the Primary Coordinator	--	D						
2. Performed a walk around of the exercise site	---	D						
3. Confirmed the possible hazards with the Primary Coordinator	---	D						
4. Reviewed the Fire Behavior Exercise Plan; determined any needs for amending the plan	---	D						
5. Approved the Fire Behavior Exercise Plan	---	D						
6. Directed the Fire Behavior Exercise Safety and Coordination Briefing	---	D						
VENTILATION TECHNIQUES EXERCISE								
1. Established an appropriate visual position for viewing the exercise and communicating with the Primary Coordinator	---	D						
2. Performed a walk around of the exercise site	---	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



SENIOR COORDINATOR TRAINEE:

PERFORMANCE STANDARD: All tasks must be demonstrated by the Senior Coordinator Trainee and evaluated by a Fire Control 3B Senior Coordinator. Tasks graded "P" must be functional and safe according to the Fire Control 3B Course Guide.

CODE: "P" - Must be completed *prior* to the class.

"D" - Must be completed *during* the class.

GRADE: "P" - Successfully met the performance standard.

"F" - Did not meet the performance standard.

AFTER THE EXERCISES TASKS	§	Code	Date Observed			Grade (P/F) & Evaluator's Initials		
			E#1	E#2	E#3	E#1	E#2	E#3
3. Confirmed the possible hazards with the Primary Coordinator	---	D						
4. Reviewed the Ventilation Techniques Exercise Plan; determined any needs for amending the plan	---	D						
5. Approved the Ventilation Techniques Exercise Plan	---	D						
6. Directed the Ventilation Techniques Exercise Safety and Coordination Briefing	---	D						
INTERIOR FIRE ATTACK EXERCISE								
1. Established an appropriate visual position for viewing the exercise and communicating with the Primary Coordinator	---	D						
2. Performed a walk around of the exercise site	---	D						
3. Confirmed the possible hazards with the Primary Coordinator	---	D						
4. Reviewed the Interior Fire Attack Exercise Plan; determined any needs for amending the plan	---	D						
5. Approved the Interior Fire Attack Exercise Plan	---	D						
6. Directed the Interior Fire Attack Exercise Safety and Coordination Briefing	---	D						
EXTERIOR FIRE ATTACK EXERCISE								
1. Conducted a Plans Briefing with the Primary Coordinator prior to the Exterior Fire Attack Exercise	---	D						
2. Established an appropriate visual position for viewing the exercise and communicating with the Primary Coordinator	---	D						
3. Performed a walk around of the exercise site	---	D						
4. Confirmed the possible hazards with the Primary Coordinator	---	D						
5. Reviewed the Exterior Fire Attack Exercise Plan; determined any needs for amending the plan	---	D						
6. Approved the Exterior Fire Attack Exercise Plan	---	D						
7. Directed the Exterior Fire Attack Exercise Safety and Coordination Briefing	---	D						
AFTER THE EXERCISES								
1. Performed a final walk around of the entire site	---	D						
2. Participated in the class critique	---	D						
3. Completed a final interview/critique with the Primary Coordinator	---	D						
4. Contacted the Chief Officer of the AHJ	---	D						



FIRE CONTROL 3B

Structural Fire Fighting in Live-fire Simulators

Appendix E: Senior Coordinator Trainee Task Book



◆ SENIOR COORDINATOR TRAINEE ◆ EVALUATOR #2 SUMMARY ◆

Senior Coordinator Trainee: _____

Department: _____

Contact Phone Number: _____

Evaluator: _____ (Must be a Registered Senior Coordinator)

Department: _____

Contact Phone Number: _____

SFT Class Code: _____ Class Dates: _____

The above named Senior Coordinator Trainee performed Fire Control 3B tasks initialed and dated by me under my supervision. As a result, I verify that this Trainee:

- Successfully performed all tasks and should be considered for advancement.
- Did not successfully complete certain tasks (see below); additional supervision and training is required.

Evaluator's Signature: _____ Date: _____

Comments:
