

Santa Barbara City Fire Department - Standard Operating Procedures Training Operations		Code: T-IX-4
Live Fire Training/Drager Burn Props		
Chpt: IX Training Administration	Revised: 7/13/2016	Pages: 6

I. PURPOSE

- A. The purpose of this procedure is to establish standard guidelines for conducting structural training fires while complying with NFPA Standard 1403.
- B. The objective of a training fire is to provide realistic fire ground training under actual fire conditions for recruit and uniformed firefighters while providing high levels of safety and minimizing risk to firefighters.
- C. Training fires will be designed to minimize the risk and to control the fire conditions so that firefighters are not unnecessarily exposed to hazards or injuries.
- D. Training fires present the same hazards as those encountered at actual field incidents. The Incident Command System employed at actual fire incidents will be Standard Operating Procedure at all structural training fires. (See E-Ops)

II. COMMAND

- A. One officer on the scene shall be designated as "Command" and will assume the Command functions.
- B. A Command Post shall be established and positioned to afford maximum visibility of the structure, operating companies and fire conditions.

III. COMMUNICATIONS

- A. Command is responsible for establishing radio communications with each company officer or training officer involved in the drill. Channel assignment must be coordinated with Dispatch and Deployment and all companies involved. Companies operating at the training fire will continuously monitor the assigned radio channel. All radios will be checked for proper functioning and correct channel prior to initiating training fire operations.

IV. SAFETY

- A. The Safety Officer (or a safety representative) will be in attendance at all structural training fires and will assume safety responsibilities. The safety will monitor personnel and fire conditions, and work with Command to ensure all safety procedures are complied with, and that risk to personnel is minimized.
- B. The Safety Officer shall have full authority to intervene and control or stop any aspect of the operations when in his/her judgment, a potential or real risk to personnel exists.

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- They will not be assigned other duties that would distract from their safety responsibilities.
- C. Additional Safety Officers may be assigned to the training fire if the conditions dictate. Responsibilities of the Safety Officer(s) will include but not be limited to the prevention of unsafe acts and elimination of unsafe conditions.
 - D. Company officers acting as instructors will be responsible for the direct supervision of assigned students and their safety and welfare, including the prevention of unsafe acts and the elimination of unsafe conditions.
 - E. Fire Department personnel will not be permitted to operate on the roof during active fire conditions in the building.
 - F. Exposing recruit firefighters to structural training fires presents special safety considerations. All officers should anticipate that a recruit firefighter's exposure to interior fire conditions may be less than orderly. To reduce the possibility of injury, the span of control for interior operations shall not exceed two recruits for each company or training officer.
 - G. No personnel shall be permitted to act as a victim(s) during live training fires.
 - H. To reinforce safety procedures, a protective clothing and equipment inspection shall be conducted on all firefighters immediately prior to and after engaging in suppression activities. The inspection shall insure that all clothing and equipment is serviceable and worn in a manner to provide the maximum personal protection.
 - I. The Safety Officer will be responsible for completing the safety checklist prior to initiating the training exercise.
 - J. One officer on the scene shall be designated as an accountability officer and will assume the accountability functions.
 - K. To enhance accountability and to improve tracking of firefighters in the Hot Zone, the "PASSPORT" system shall be used,
- V. REQUIRED FIRE EQUIPMENT AND COMPANIES**
- A. Two separate sources of hydrant water supply shall be established (two Engine Companies minimum).
 - B. All fire attack hoselines shall be supplied by one pumper. The RIC unit backup hoseline shall be supplied by a second pumper.
 - C. An on-duty battalion chief or company officer shall be on scene to supervise the overall operation.

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D. Access to the scene shall be controlled to permit emergency access to and from the site.

VI. STARTING THE FIRE

A. The use of any flammable or combustible liquids shall be prohibited for use in live fire training evolutions.

B. Only Class A materials shall be used in live fire training. The ignition process will be conducted under the direct supervision of the Safety Officer. Command shall assign an experienced firefighter to become "FIRESTARTER" It is the responsibility of the FIRESTARTER to initially ignite the fire. FIRESTARTER shall also regulate the fuel load for each evolution to maintain a tenable atmosphere inside the training fire rooms. The RIC unit shall be in place with a charged hoseline prior to ignition.

VII. BUILDING PREPARATION OBTAINING PERMISSION AND PERMITS

A. The training officer coordinating the live structure burn shall be responsible for obtaining all releases, permits and other approvals and releases relating to the training fire. They shall include, but not necessarily be limited to the following:

1. Asbestos survey
2. Demo permit
3. Fire Dept. release of liability
4. Certificate of coverage from risk management

B. SITE PREPARATION

1. Be sure the site is clear of any materials that may cause rapid acceleration of training fire.
2. Confirm proper ventilation of fire area
3. Check for sharp objects, glass or openings in floors and walls that may injure firefighters.

C. ATTACK PLAN

1. The officer in charge shall develop an attack plan based upon information obtained during the pre-plan and building preparation stages.
2. The Attack Plan shall specify:
 - a) Points of ignition

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- b) Amount of fire load
- c) Position of entry attack lines
- d) Position of RIC units
- e) A Rescue Plan

3. All personnel involved in the drill shall be instructed on each element of the attack plan prior to igniting the structure and shall receive a walk through briefing of the building prior to each training fire. An evacuation plan and signal shall be reviewed and agreed upon.

D. NOTIFICATION OF TRAINING FIRE ACTIVITIES

1. Prior to conducting structural training fires, the following notification must be made.
 - a) Dispatch & Deployment--location, time, type of burn, companies being utilized.
 - b) Training officer
 - c) Battalion chief
 - d) Air Quality Control

E. RECORDS AND REPORTS

1. Company captains shall fill out a training report in FireHouse at the completion of live fire training. Be specific in the notes section about what was done and what was learned.

F. ON-SITE TRAINING FIRE OPERATIONS CHECKLIST

1. Adequate fire apparatus on site
2. Two separate hydrant water sources secured
3. Minimum 500 gpm water supply
4. Fire load; conservative; not excessive
5. Ignition location determined
6. Safe ignition fuel utilized
7. Igniter person fully protected with protective clothing/SCBA

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8. Protective line for igniter person; manned and charged
9. Ignition from exterior only
10. Chief Officer or company officer on site as Incident Commander
11. Safety Officer (or representative) on-scene
12. Command established
13. Command location identified and announced
14. All radios checked for proper functioning/channel
15. Safety
16. Attack lines in place, flow tested for a minimum of 95 gpm each
17. RIC unit in place, flow tested for a minimum of 95 gpm each
18. RIC unit staffed by minimum of 2 firefighters
19. Attack lines from one pumper, RIC lines from a separate pumper
20. Fire attack entry and RIC unit fully "suited up" in protective equipment, PASS unit and SCBA checked for proper functioning
21. Company officers in charge of each entry and RIC unit
22. Specific plan of operation established, understood by all
23. Walk through briefing conducted for all crews
24. Rescue plan established, understood by all
25. Emergency evacuation plan and signal determined and agreed upon

G. POST TRAINING FIRE CHECKLIST

1. All personnel accounted for
2. Equipment and clothing checked for damage
3. Remaining fires overhauled/controlled
4. Critique conducted
5. Total extinguishment completed at end of training operations

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6. Building secured or made safe

VIII. DRAGER PHASE I AND PHASE V

A. [Instructor Manual](#)

B. [Drager Power Point](#)

C. Phase I will be considered a classroom type setting. The only training to be conducted in the Phase I prop will be under the direct supervision on an instructor who is part of the SBFD burn cadre. The lead instructor will follow the guidelines in the Instructor manual providing for safety first.

D. Phase V will be considered scenario based training. Live burns will be conducted by SBFD burn cadre members. A safety office will be provided and shall be a SBFD burn cadre member as well. The Duty BC and/or the Training BC will be on site and act as command during the live fire training. This is to ensure a safe training experience.

E. [SBFD Burn Prop Procedures](#)

F. [NFPA 1403-2007](#)

G. [Phase 5 Org Chart](#)

H. [Burn Plan Approval](#)

I. [Hose Plan](#)

J. [Pre-Burn Checklist](#)

K. [SBFD Notice to Neighbors](#)