

Falmouth Fire-EMS Operating Guideline

LIVE FIRE TRAINING

Objective:

To establish a minimum level of staffing and operational procedures for conducting any live fire training on behalf of Falmouth Fire-EMS.

General Information:

Live fire training is often an excellent, realistic means of structural firefighting training. It is also inherently dangerous. Steps will be made to make the training safe and organized.

Guidelines:

Staffing Requirements;

Incident Command / Lead Instructor

Safety Officer

1 Fire Instructor per team(s)

2 Interior Safety Officers / Igniters

2 Pump operators (main and backup)

1 EMS Provider

RIT Team

Note: These positions are not normally filled with students unless they are experienced firefighters

Responsibilities of Staff Positions

Incident Command / Lead Instructor

1. Oversees fire training evolutions
2. Maintains constant situational awareness of all obvious hazards and depends upon safety staff and other firefighters to make any other hazardous conditions known
3. Ensures accountability for all personnel all the time
4. Monitors building integrity prior to each fire set
5. Requests authorization of the Safety Officer prior to ordering ignition of fires
6. Orders evacuation signal in the event of a MAY DAY situation

7. Monitors condition of all staff
8. Assures that all lines are charged, bled and operational before evolution

Safety Officer

1. Responsible for maintaining a safe training environment
2. Evaluates conditions of training building and working personnel before giving permission to Command to order ignition
3. Works within the command structure, but may report minor problems directly to firefighters
4. Empowered to take or order any action to resolve unsafe acts he/she feels necessary and then notify the Command as soon as possible
5. Is responsible for maintaining the accountability system (or to delegate responsibility) throughout the training event

Fire Instructors / Leaders

1. Commands the crew while they perform their assigned task (attack, backup, search and rescue, etc.)
2. Ensures the attack line is a sufficient diameter and length to reach and control the fire
3. Ensures the attack line is charged, bled and flowed before beginning each evolution
4. Ensures all students PPE/SCBA/Tools are assembled and ready (worn correctly)
5. Assess interior conditions and provide the IC with timely situation and status reports
6. Notifies Command when entering the structure, when fire is knocked down, all clear in the burn room
7. Oversees the crew performing overhaul
8. Leads the crew out off the burn building with the attack line and ensures all crew has safely exited the building
9. Maintains accountability of the crew at all times
10. Maintains safe but effective training for the crew

Interior Safety Officers / Ignitor

1. Always operates in minimum crew size of two.
2. Operates inside the training building in and around the fire rooms
3. Responsible for maintaining a safe training environment
4. Evaluates conditions of training building and working personnel before requesting permission from Incident Command to ignite the burn.
5. Shall **always have a designated hose line** assigned for his/her use
6. Operates under protection of the backup crew and/or Safety Officer.
7. Empowered to take or order any action to resolve unsafe acts he/she feels necessary and then notify the Command as soon as possible
8. Work as a team to build and provide safe fires

9. Works closely with Incident Command to evaluate progress of training burns.
10. Ignites fires only after being ordered to do so by Command
11. Notifies Command after fire has been lit
12. Monitors fire progress and notifies command when to bring in crews, at the same time may use protection line to keep fire in check and in room of origin until attack crew arrives

Water Supply/Pump Operators

1. Ensure adequate water supply for all fire and exposures.
2. Ensures all Pump apparatus are ready and operational with all lines charged, bled and flowed to required GPM needed per Fire flow calculation.
3. Ensure attack line and back up lines are off separate water supplies.
4. Ensure the readiness of all pump apparatus and operator at beginning of each evolution.

EMS

1. There shall be a designated EMS unit assigned to the training site at all times that a live fire training is ongoing.
2. The EMS providers must be licensed to at least the EMT-Basic level.
3. The EMS providers may be rotated among the other positions but there will be 1 provider available at all times.
4. The EMS provider will also assist in setting up and monitoring the Rehab area and watching participants for signs of heat illness.
5. Depending on the location of the ambulance, stretcher, jump kit, oxygen and heart monitor may need to be staged in Rehab.

RIT

1. There will always be an assigned RIT at all times that a live fire training is ongoing.
2. Members of the RIT must be trained in RIT operations.
3. RIT team members may rotate into other positions.

Pre-Burn Preparation

1. When conducting any live fire training the IC, Safety Officer or Lead Instructor will perform and fill out a pre-burn checklist (attached) prior to the start of any burn training.
2. There shall be a minimum of ten (10) Firefighter's to fill these staff positions; IC, Safety Officer, Interior Safety/Igniters, RIT, pump operators/ water supply, and EMS.
3. There shall be additional Firefighters to be the instructors for each additional team function that will be used during each fire evolution; i.e. search, vent.

- a. The State of Maine requires that any student under 18 years old must have an instructor with them at all times at a live burn.
 - b. The Incident Command will ensure an instructor is with each student under 18 years old while operating at a live burn.
4. All staff and students shall be “tagged” into the accountability system prior to any burns commencing.

Training Site Pre-Burn Preparation

1. Location of Command
2. Position of all apparatus
3. Position of all fire streams
4. Position of all exposures, lines and appliances
5. Position of Rehab and Rescue
6. Conduct a pre-burn tour for all personnel
7. Charge all lines and test flows of each
8. Attack engine and back up engine shall be supplied by separate, independent water supplies
9. Position ladders around building to two means of egress on each floor, if possible, each side
10. Test evacuation signal and procedure for all personnel
11. The IC will complete a PAR check and status check to make sure all crews are ready by radio prior to each burn

General Fire Attack Procedures

1. All attack and back-up lines will be properly manned by adequately protected personnel operating under the direct supervision of the IC
2. Each attack line will be backed up by a line equal to or greater in size, supplied by an adequate water source, independent of the attack line source
3. Only after receiving permission from the safety and command will the igniter light the fire
4. The use of Gasoline, low flash point fuels, volatile combustibles, and tires is prohibited by NFPA 1403
5. Any incipient or free burning fires shall be adequately ventilated so that no one enters during advanced stage of combustion
6. Only one fire shall be allowed to propagate at a time.

Concluding Operations

1. The fire building will be fully overhauled prior to pick up of hose lines.
2. Complete a final PAR check and return participants tags as they “tag out”.
3. There should be a post operation analysis to discuss lessons learned and allow questions about practices observed.
4. Return all apparatus and equipment back in-service.
5. Upon completion of the burn, the first floor level will be secured to discourage persons from entry. Keep out signs or fire line tape will be used to warn persons to stay out.

Pre-Burn Check List

- ☐ Property owner of the acquired structure has signed off on the property to conduct the fire training and released liability to burn the structure and a copy filed with the Training Deputy.
- ☐ Maine Outdoor open burning permit obtained.
- ☐ Permission from Portland Water District to utilize hydrants.
- ☐ Notify Dispatch, Police and Public Works of training and potential for road closures.
- ☐ Notify owners of adjacent properties of date and time of live fire training.
- ☐ Conduct a visual survey of the structure and determine the structure to be sound for intended purpose.
- ☐ Survey the work area surrounding this property and correcting any hazards (i.e., wells, large hole, tree hazards, utility pole and lines, etc.).
- ☐ Prepare site plan showing burn building, exposures, apparatus spotting, access roads, parking area, rehab area, water supply sources, command location, etc.
- ☐ Location of EMS vehicles and allow for arriving and departing Rescues.
- ☐ Prepare burn building floor plan(s) with key structural details, dimensions, egress, exits, emergency escape routes, and potential hazards.
- ☐ Calculate water supply needs.
- ☐ Obtain apparatus, equipment and water supply for the burn building and exposures, as well as providing for independent water supply source for water for the attack line and back up lines.
- ☐ Identify all hazards and set up spectator barriers (if needed).
- ☐ Identify and establish fire ground radio communications frequencies.
- ☐ Obtain a weather forecast for the training day and prepare location of rehab near EMS area in the shade and out of the heat or in a warm structure in cold weather depending on season. Plenty of drinking water and food if longer than four hours of training.

Building/Site Preparation

- ☐ Emergency escape paths are identified.
- ☐ All utilities are disconnected.
- ☐ All extraordinary interior and exterior hazards have been removed.
- ☐ Highly combustible interior and exterior ceiling covering were removed.
- ☐ All holes in floor, walls, and ceilings are patched or otherwise safely secured.
- ☐ Dead loads were removed from all floors or roof.
- ☐ All vertical ventilation openings were pre-cut (min 4'X 4' opening for each separate or divided roof section.) Trench cut as needed.
- ☐ Fire room sets are to be Class A combustibles only (No flammable or combustible liquids).
- ☐ All window openings closed with the exception of the fire room and egress windows.
- ☐ Doors were checked to ensure they will open and close completely; lock sets should be removed or rendered inoperable.
- ☐ Stairways were made safe with railings in place.
- ☐ All inside debris cleaned up.
- ☐ All outside debris moved away from building.
- ☐ All outside porch, decks, and steps are secured and safe.
- ☐ Cistern, cesspool, wells, or other such ground openings were filled or otherwise protected.
- ☐ All fuel tanks that are not removed have been checked to ensure they are emptied and vented.
- ☐ Insect hives removed.
- ☐ Exposures protected or removed.
- ☐ No friable asbestos building materials were identified. If so, removed by state licensed professionals.

Burn Checklist

- ☐ Create full roster or accountability list of all participating personnel.
- ☐ ICS established and specific assignments are made.
- ☐ Briefing will be held by IC to detail the training goals, safety producers, evacuation signal and any other safety measures.
- ☐ Crews are given a tour of the building and secondary escape routes identified.
- ☐ Full PPE will be used throughout training by **all** personnel on the site.
- ☐ Ladders will be placed to window openings for egress if needed.
- ☐ Caution has been used in placement of exposure protection lines.
- ☐ No personnel above the fire floor unless directed by the IC.
- ☐ All crews withdrawn from the building and a PAR taken prior to master stream/exterior attack commencing.
- ☐ If evacuation is ordered a PAR will be done to ensure structure is clear.

Staffing Assignments

Incident Command _____

Safety Officer _____

Interior Safety Officer/Ignitor _____

Interior Safety Officer/Ignitor _____

Attack Engine Operator _____

Back-up Engine Operator _____

EMS Crew _____, _____

RIT Company _____, _____,
_____, _____

Team 1
Leader _____

Students _____

Team 2
Leader _____

Students _____

Team 3
Leader _____

Students _____

Team 4
Leader _____

Students _____

Team 5
Leader _____

Students _____

Acknowledgements:

Date: _____

Burn Location: _____

Member completing Burn check sheet: _____

IC or Lead Instructor: _____

Chief Officer: _____

Safety Officer: _____

Training Site Sketch

Wind Direction
Wind Speed

Submit this form to the Training Officer upon completion of training.

These guidelines may be changed or altered by the Fire-EMS Chief at any time.