

Tempe Fire Department Policies and Procedures
On-Site Burn Building Fires
408.01
Rev 12-20-96

PURPOSE

The purpose of this procedure is to establish standard guidelines for conducting on-site training fires in the Fire Training Center (FTC) burn building, while complying with NFPA Standard 1403. All other Tempe Fire Department procedures will apply to training fires where applicable.

GENERAL USAGE

Any fire department member or outside agency wishing to use the burn building must first obtain permission from an FTC Chief Officer.

The time and date of the training drill must be scheduled with the FTC staff. Drills involving recruit and departmental training always have first priority.

An officer representing the FTC staff must be on-site for any live fire drills involving the facilities or the burn building. A fee may be charged to outside services/agencies.

Burn buildings have been designed specifically for the purpose of repeated live fire training evolutions and include safeguards that only become unacceptably hazardous through misuse and neglect.

All agencies must comply with all existing Tempe Fire Department procedures relating to live burn training.

COMMAND

One officer on the scene shall be designated as "Command" and will assume the Command functions.

A Command Post shall be established and positioned to afford maximum visibility of the structure, operating companies and fire conditions.

COMMUNICATIONS

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. A radio check will be conducted prior to initiating training fire operations.

SECTORS

To eliminate confusion, and provide adequate scene control, all personnel operating within the fireground perimeter shall operate under the direction of a sector officer. The fireground perimeter shall be defined as the hazardous area surrounding the burn structure and shall be determined by Command following guidelines stated in Fireground Safety.

The following sectors shall be established on all burn building fires.

- Rescue (RIC) - Provide a staffed, charged back-up line for the fire attack team, in position to assist in fire extinguishment and rescue of interior personnel. This sector will be manned by experienced firefighting personnel (not recruit firefighters) and each Rapid Intervention Crew (RIC) shall consist of a minimum of three firefighters. A company officer shall be in charge of each RIC unit.
- Safety- The Safety Officer will be assigned at all structural training fires and will assume safety sector responsibilities. The safety sector 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.
- Other - Sectors will be established as necessary to control training/fire control operations, reduce the span of control, and provide for accountability and fire safety.

SAFETY

Exposing recruit firefighters to live fire conditions presents special safety considerations.

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. The safety officer shall not be assigned other duties that interfere with safety responsibilities. Responsibilities of the Safety Officer(s) will include but not be limited to the prevention of unsafe acts and elimination of unsafe conditions.

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.

All firefighters involved in burn building training fires shall have received training to meet the performance objectives of Firefighter 1, NFPA 1001 in:

- Forcible Entry
- Protective Breathing Apparatus
- Fire Hose, Nozzles and Appliances
- Fire Streams
- Ladders
- Ventilation
- Rescue
- Safety
- Fire Behavior

One officer on the scene shall be designated as an accountability officer and will assume the accountability functions (this may be Command).

To enhance accountability and to improve tracking of firefighters in the Hazard Zone, the "PASSPORT" system shall be used.

Personnel Accountability Report or "PAR" shall be used at the following accountability benchmarks:

- When the second company arrives and the first company has been working in the Hazard Zone
- Any report of a trapped or missing firefighter
- With report of an "All Clear"
- At a report of fire under control
- Upon exiting the structure
- Sudden hazardous event
- Change from offensive to defensive mode
- At the discretion of Command

Passports will remain with the designated accountability officer near the "point of entry" to the Hazard Zone. Upon entry, crews will turn in their PASSPORT. Upon exit, the crew must retrieve their PASSPORT. The accountability status board will contain only the PASSPORTS of those crews in the Hazard Zone. The Hazard Zone shall be clearly marked with fire line tape and understood by all participants.

No fire or civilian personnel shall be permitted to act as a victim(s) during training fires.

To reinforce safety procedures, a protective clothing and equipment inspection shall be conducted on all firefighters immediately prior and after engaging in suppression activities. The inspection shall ensure that all clothing and equipment is serviceable and worn in a manner to provide the maximum personal protection.

REQUIRED FIRE EQUIPMENT AND COMPANIES

Two separate sources of hydrant water supply shall be established. All fire attack hoselines shall be supplied by one pumper with its own hydrant water supply. The RIC unit backup backup hoselines shall be supplied by a separate water supply. All hoselines will be flow tested to confirm a minimum of 95 gpm, immediately prior to igniting the fire.

BURN BUILDING PREPARATION

All doors, windows, ventilation props, and standpipes necessary for the training drill shall be checked and

operated prior to any live fire conditions to ensure correct operation.

Burn buildings shall be left in a safe condition upon completion of each live fire exercise. Debris hindering the access or egress of firefighting personnel shall be removed before continuing further operations.

Obtain approvals from Air Quality Control.

PRE-PLANNING

A pre-fire tour of the burn building is required.

ATTACK PLAN

The Officer in charge shall develop an attack plan based upon information obtained during the pre-plan and building preparation stages.

The Attack Plan shall specify:

- Points of ignition
- Amount of fire load
- Position of entry attack lines
- Position of RIC units
- A Rescue Plan
- Accountability Plan

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.

NOTIFICATION OF TRAINING FIRE ACTIVITIES

Prior to conducting burn building training fires, the following notification must be made:

- Dispatch and Deployment
- Fire Training Center Officer
- On-duty Shift Commander

STARTING THE FIRE

The use of flammable or combustible liquids, as defined in NFPA-30, shall be prohibited for use in live fire training evolutions. 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 burn rooms.

The ignition of the fire shall be coordinated through Command so the burn rooms do not become overheated before attack teams make entry.

ON-SITE BURN OPERATIONS CHECKLIST

- Adequate fire apparatus on site
- ALS on-scene
- Separate hydrant water sources
- Fire load; conservative; not excessive
- Ignition location determined
- Safe ignition fuel utilized
- FIRESTARTER in full protective clothing/SCBA
- Protection line in place for FIRESTARTER; manned and charged
- Training Chief Officer (or representative) on-scene
- Safety Officer (or representative) on-scene
- Command and sectors established
- Command location identified and announced
- All radios checked for proper functioning/channel
- Sectors established
 - Rescue (RIC)
 - Safety
 - Sectors as needed
- Accountability officer established
- Attack lines in place, flow tested for a minimum of 95 gpm each
- RIC lines in place, flow tested for a minimum of 95 gpm each
- RIC staffed by minimum of three firefighters
- One RIC unit in place (with hoseline) for each attack entry team
- Attack lines from one pumper, RIC lines from a separate source
- Fire attack entry and RIC units in full protective clothing, PASS and SCBA checked for proper functioning
- Company officers in charge of each attack and RIC unit
- Attack plan established and understood by all
- Walk through briefing conducted for all crews
- Rescue plan established and understood by all
- PASSPORTS and status boards near point of entry
- Rehab established

POST BURN ACTIVITIES

The building shall be cleaned and left in a safe condition upon completion of live fire training. Members shall be rehabed and re-hydrated. Protective clothing and SCBAs shall be rinsed clean.