

Building Fire (Residential)

CHAPTER 8.5

Issued:

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Approved by:

GOALS AND OBJECTIVES

- To provide an outline of initial company assignments for response to residential building fires
- To coordinate fire suppression activities in a safe, organized and efficient manner
- To provide a means of suppressing fires when they occur within a residential structure
- To establish guidelines in which all personnel have a clear understanding at all emergency scenes.

EQUIPMENT

- Response complement as defined in the department response matrix
 - FSAA response area
 - 2 Engines
 - 1 Tower/Quint/Truck
 - 1 Squad
 - 1 Rescue
 - 2 District Chiefs

ACFR Rural Hydrant Area

- 3 Engines
- 1 Rescue
- 1 District Chief

ACFR Rural Non-Hydrant Area

- 2 Engines
- 1 Tanker
- 1 Rescue
- 1 District Chief

Consider additional resources

- Additional manpower
 - Apparatus staffing (3 person staffing vs 4 person)
 - Contract station staffing/certification
 - Extreme weather conditions (Heat/environment)

- Firefighter rehab
- Additional water supply apparatus
- Specialized units
- Aerial apparatus
- Light & Air apparatus (Squad)
- Rehab (Red Cross, Rescue, MSU 24)
- Additional alarms

OPERATIONAL MODES

- **Investigative Mode:** Situation which requires investigation by the first arriving unit
- **Offensive Mode:** Interior attack and related support directed towards quickly conducting search for victims and bringing the fire under control
- **Defensive Mode:** Exterior attack directed to first reduce fire extension and then bring the fire under control, while protecting exposures
- **Ventilation Mode:** Removal of heat and toxic gases from the structure by mechanical, natural, or hydraulic removal
- **Salvage and Overhaul:** Stopping loss by limiting smoke and water damage, locating and extinguishing hidden fire
- **Search and Rescue:** Searching for victims and removing them from hazardous conditions

SIZE UP & COMMAND

- The first arriving fire rescue unit will provide an initial size up of the scene and assume command over the radio. Size up should include:
 - Unit ID
 - Scene/Building description
 - Number of floors
 - Construction type
 - Occupancy type
 - Approximate square footage
 - Description of hazard/conditions visible
 - Operational mode
 - Assumption and name of command

Example: "E21 on scene, single story, ordinary construction, residential structure, smoke and flames visible on the "C" side, establishing 147th Ave command".

- Command will generally be transferred to the highest-ranking officer on scene.

Size up considerations

- COAL WAS WEALTH

- Construction
- Occupancy
- Apparatus and Manpower
- Life Hazard
- Water Supply
- Auxiliary Appliances
- Street Conditions
- Weather
- Exposures
- Area and Height
- Location and Extent
- Time
- Hazmat
- Good communication and proper coordination are essential at a structure fire
- Incident command must provide a necessary coordination of the various fire ground activities
- The Incident command must communicate all instructions and vital information clearly to those on the fire ground.

ASSIGNMENTS

The following is a general outline of duties for initial alarm units. Assignments may be changed or reassigned by command as dictated by needs on scene

First Engine Company Assignment

- The initial arriving company officer should conduct a 360 of the structure, identifying the location of the fire, potential access/egress points, assessing for imminent threats to life, securing utilities and relaying the findings to other responding apparatus
- Duties of the first engine company should follow the fire ground priorities of Life Safety, Property Conservation, Incident Stabilization
- Address any imminent life threats
- Locate, Confine and Extinguish the fire
- Place the first hose line on the unburned side and push to the burn side
- Choose the proper hose size to attack the fire, minimum of 1 ¾" hose with at least 150 gpm
- A second hose line of at least the same capacity of the initial attack line should be deployed as a safety/backup line
- Must have at least two personnel on the interior attack hose line
- Unless there is a suspected imminent life threat, there must be at least 2 personnel outside the IDLH before an interior team may enter. A designated RIT team should be assigned as soon as resources are available.
- Deploy supply hoses in preparation for securing a sustained water supply

forward lay, reverse lay, or rural hitch

- Initial engine may wish to self-lay a supply line from a nearby hydrant if secondary engine has an extended response time (i.e.: rural areas)
- Deploy hose lines to protect exposures as needed

Second Engine Company Assignment

- Secure water supply and assist the initial attack engine with finalizing water supply connections
 - Lay supply line from hydrant
 - Provide tank water to initial attack engine via rural hitch
 - Prepare for and initiate a draft from static source
- Assist with conducting a primary search
- Deploy safety/back up attack line, if not already deployed
- Report to IC for the next assignment

Squad Company Assignment

- Provide lighting at the fire scene

Fill air bottles

Assist with primary/secondary search as directed

Any other related duties assign by the IC

Rescue Company Assignment

- Provide Advanced Life Support (ALS)
- Place unit out for tactical advantage
- Bunker out in full PPE gear
- Proceed to the scene command post with the following items.
 - Stretcher
 - ALS and Airway bag
 - Cardiac Monitor
 - Backboard and CID
- Check with the IC and await further assignment
- Unit may be assigned additional duties
- Firefighting
 - Rehab/medical unit
 - RIT

Tower/Quint/Truck/3rd Engine

- Assist with forcible entry if needed
- Prepare for ventilation as directed by command
- Secure utilities
- Provide for roof/upper story access/egress through the use of ground ladders and/or aerial

Tanker

- Provide water supply to the incident through the most effective method as directed by command/water supply officer
- Nurse tanker operation through the rural hitch
- Dump tank operations
- Manpower restrictions may require the tanker driver to assist with active firefighting operations. The engine driver/operator(s) should be prepared to assume operations of the tanker if needed.

District Chief

- The first arriving District Chief should assume command
- Face to face pass on is preferred
- Command transition should be announced via radio to inform all units of the change
- The second arriving District Chief should assume the duties of incident safety officer unless otherwise directed by command

COMMAND CONSIDERATIONS

Due to the differences in initial alarm assignment for fires based upon location, the following assignments should be considered and assigned as needed by command.

WATER SUPPLY

- Water supply is one of the most important aspects of managing a fire scene
- The attack engine Driver/Operator is responsible for coordinating set up of a sustained water supply
- A water supply officer should be assigned if tanker/drafting operations are utilized to help streamline the operation

VENTILATION

- Ventilation must be coordinated with interior attack crews

- Ventilation may be mechanical, natural or hydraulic
- Positive pressure horizontal ventilation is the most common
- PPV MUST be coordinated with interior crews
- DO NOT START the vent fan and pressurize the structure until directed by interior crews
- During PPV, interior and exterior crews must monitor smoke conditions for indication of fire growth
- Vertical vent holes should be at least 4' x 4' and located as close to the seat of the fire as possible
- Vertical ventilation should be conducted with at least 3 personnel, one of which should act as a safety officer while on the roof
- 2 means of egress must be in place when conducting roof operations
- Roof crews should have all necessary hand tools, a roof ladder, and charged hose line in place during vent operations

SEARCH AND RESCUE

- Search and rescue operations must be conducted in a timely manner. This duty may be assigned to any unit based upon manpower availability and circumstances on scene.
- Initial attack crews should perform a cursory search while placing hose lines to confine/extinguish the fire
- A full primary search must be conducted unless conditions prohibit
- A primary search is conducted as soon as possible, usually concurrent with active firefighting efforts
- A secondary search should be conducted by a different crew than the crew who completed the primary search, if manpower permits
- Secondary search is a methodical search conducted after the fire is located and under control.

RAPID INTERVENTION TEAM

- A RIT team should be established as soon as manpower resources permit.
- The RIT team should be fully outfitted with PPE, including SCBA and ready to deploy immediately.
- RIT teams may be assigned secondary duties, so long as they are able to deploy without delay
- “Soften” the building
- Deploy ground ladders
- Stage tools at the entrance
- If a Rescue is assigned to the RIT team, a secondary Rescue should be requested for EMS/Rehab duties

SALVAGE AND OVERHAUL

- Locate and extinguish all hot spots and hidden fire on the fire ground.
- Salvage personal belongings from the residence
- Tools for the job; i.e., Salvage covers, wash tubs, shovels, pike polls, axes, ladders, chain saws and other tools as needed.

REHAB

- Rehab will be established on all working fires.
- Rehab must be anticipated and requested early in the event.
- Extreme temperatures or extended operations require special attention to firefighter rehab

SAFETY CONSIDERATIONS

- Everyone is expected to act as a safety officer while operating on scene
- A designated incident safety officer should be assigned to any high hazard operation or extended duration operation
- Must maintain at least 2 firefighters outside while interior crews are operating, in accordance to the 2 in 2 out rule. A dedicated RIT Team is preferred
- Must wear all PPE while on fire ground

POST INCIDENT REVIEW

- All working fires should be reviewed through post incident analysis
- All units/personnel involved should participate in the review

VEHICLE PLACEMENT

- The first in engine shall pull past the structure.
- The first in Truck shall have the front side of the building and at least one corner of the structure.
- Second in engine shall stage at the closet hydrant and await orders
- Rescue will stage with access to scene and egress away from scene.
- Squad will be place in a manner is suitable for lighting.
- Additional apparatus shall stage in an area which does not block access into the scene.
- Water supply apparatus should remain on a hard surface and pump water to the scene through hose lines instead of committing to a narrow drive/road.