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# BEST PRACTICES- FOR OFFENSIVE FIRE ATTACK

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Kootenai County Fire Chiefs Association



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Appendix C

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## Introduction

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**Nothing in this document usurps the authority of the Incident Commander to take the action necessary to mitigate the emergency.**

The goal of “Best Practices for Offensive Fire Attack” is to establish a standard approach based on a fire company or unit arrival on scene and the most likely assignment that will be given. The document provides a framework for decision making, enhances interagency cooperation and firefighter safety.

While the Fire Agencies in Kootenai County have historically had excellent working relationships, both on and off the fireground, each has had limited exposure to each other from a training and policy formation perspective.

The creation of *Fireground Best Practices for Offensive Fire Attack* will enhance of the cooperation between agencies. We will collectively look at fire problems and our utilization of resources at these incidents from a more collaborative and consistent approach.

The nine (9) fire agencies have approximately 46 firefighters on duty 24 hours a day. These personnel staff about 10 Engine Companies, 1 Ladder Company, 9 EMS Units, and three (3) Battalion Chiefs. There are over 100 volunteer firefighters in Kootenai County.

Collectively, we protect structures ranging from modest ranchers to mansions, strip malls to large industrial complexes, hospitals, apartment buildings and high-rise buildings to rural farms. Our mission is critical and complex, calling for the utmost in coordination and planning.

Most importantly, we also protect over 150,000 residents and visitors our community. The citizens deserve and expect the highest level of service possible.

## Outline & Intent

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The intent of this document (*Fireground Best Practices for Offensive Fire Attack*) is to provide both an operational and a training platform for a safe and effective multi-agency response to structure fires. Several key points should be understood regarding this document:

- *The procedures outlined in this document are designed for the initial deployment of resources during the first 10 to 15 minutes of an offensive fire attack operation. They will not fit every fire situation, and Incident Commanders are free to adjust them as needed to the situation they are facing.*

It is felt that these are truly “best practices” and will be appropriate for the initial deployment at the vast majority of fires, and deviation from them should not be done without sound reason.

- Where local Standard Operating Procedures conflict with these Best Practices, the local policy should prevail and be communicated; however, it is hoped departments will move towards standardized policies by adjusting both their own Standard Operating Procedures and Best Practices over time to avoid conflicts.
- It is the intent that the Best Practices documents be a “living” document that is open to review and revision, to truly capture what is the best practice as realized over time.
- As individual Company Officers carry out their duties as described in these Best Practices, it is critical that they maintain situational awareness and, if necessary, advise the Incident Commander if their assignment is unsafe, unwise or if there is a higher incident priority that needs to be addressed.
- Ultimately, the incident will be managed by a chief officer or designee in whose jurisdiction it is occurring. This may require an additional transfer of command. That transfer should occur in a manner, and at a time, that does not have a negative impact on the operation of the incident.

# FIREGROUND BEST PRACTICES FOR OFFENSIVE FIRE ATTACK

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This document contains general guidelines on several operational subjects that pertain to operations on all types of structure fires. These are:

*Basic Assignments for Engine Companies, Ladder Companies, and Chief/Command Officers*  
*Designating Hose Lines*  
*Risk Management*  
*Communications*  
*Definitions/Glossary*  
*Managing Two In – Two Out*  
*Multi-Floor Operations*  
*Front Door Tactics*  
*Standpipe Operations*  
*Basement Fire Operations*  
*Attic Fire Operations*  
*Attached Garage Fire Operations*

In addition, there are specific guidelines for offensive fire attack operations within the following occupancies:

Single Family Dwellings

Ranchers/Single-story  
Two-Story Homes/Multi-story  
Split Level Homes  
Homes with Daylight Basements

Multi-Family Dwellings

Garden Apartments  
Town Homes  
Interior Hallway Apartment Buildings (aka Center Hallway)

Commercial Buildings

Strip Malls  
Large Area Buildings  
Multi-Story Office Buildings

Highrise Buildings

**Administration**

- These model procedures will be jointly administered by the Kootenai County Fire Chiefs Association as part of the Model Procedures subcommittee.
- At least annually a meeting will be held between the Training Chiefs, the Deputy Chiefs of Operations, and the Fire Chiefs (as available) or designees to discuss any issues, consider recommended changes, and review overall operational issues associated with both multi-jurisdictional training and Best Practices.
- Administrative revisions, clarifications, and editing shall be completed at the Kootenai County Fire Chiefs Association.
- Recommendations for changes in procedures should be brought forward through the agency's representative for discussion and action as needed.
- The Best Practices document will be made available to all agencies through the North Idaho Fire Chiefs Association website. It will be updated as deemed necessary by the Fire Chiefs after procedural changes have been approved.

## General Guidelines

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As neighboring agencies, we rely on each other to assist with emergency incidents and solve problems on a daily basis. Training to a common Incident Action Plan (IAP) to handle these emergencies enhances incident coordination, safety, and efficiency. Every incident requires a sound IAP to achieve a successful outcome. We do this by training on and implementing common strategies, tactics, and tasks.

Successful incidents require that several actions be accomplished by individuals and companies, often at the same time. To ensure a successful outcome, personnel will rely on their training and an Incident Commander who will direct these companies in their work.

### **Incident Priorities**

- Life Safety
- Incident Stabilization
- Property Conservation

### **Strategic Objectives**

Rescue is the highest priority for all members responding to an emergency. We do this by making an aggressive, coordinated attack on the seat of the fire utilizing the skills and tools of each unit.

### **Tactical Operations**

Tactical objectives are defined as they relate to the type of company.

Engine Company Tactical Objectives include, but are not limited to:

- Size-up [1] the situation and locate the fire.

*[1] Size-up is intended to include a look of enough of the structure as practical to determine the probable location and type of fire [incipient/room & contents/structure], smoke conditions [color/intensity/density], access to the building, possible ventilation points, flow path, occupants, probable hose lay, length of hose lay, route to the fire location, and logical assignments to other units. Essentially, it helps the officer determine if this fire fits the "Best Practices" model for offensive fire*

- Confine the fire – place a hose line between the fire and any known or potential victims.
- Extinguish the fire – selection of the proper hose line and nozzle combination and efficient deployment of the line.

- Protect exposures [2] – eliminate fire extension and evacuate victims.

[2] Exposures refer to both interior and exterior areas that are, or might be, affected by an expanding fire. When given the assignment "Exposures", the first consideration is to life safety and secondly to fire spread.

- Provide a water supply – this is done through appropriate use of hydrants, standpipes, tenders, and sprinkler systems.
- RIT/RIC– readiness to deal with a situation requiring rapid rescue of firefighting personnel.

Ladder Company Tactical Objectives (if no Ladder Company by an Engine Company or EMS Unit) include, but are not limited to:

- Search & Rescue – most often accomplished during a primary search and sometimes as part of a coordinated Vent-Enter-Search [VES].
- Ventilation – accomplished through various ventilation methods [vertical, horizontal Outside Vent and mechanical].
- Ladders – the provision of ladders, both ground and aerial, to assist with access, egress, and rescue operations.
- Forcible Entry – techniques to provide access to the building/area and operations intended to soften a structure during offensive suppression operations.
- Overhaul – assisting with the location and mitigation of hidden fire through the opening of walls, pulling of ceilings and other methods.
- Salvage – the saving of property, reduction of damage, and preparing the building for return to the responsible party.
- Utilities – securing water, natural gas/propane, and electric ty.

#### *Ladder Company Assignment by Priority*

Ladder Companies are capable of a wider variety of fireground operations than Engine Companies. The following should be considered the priorities for Ladder Companies:

- 1<sup>st</sup> Priority – Search & Rescue and Ventilation
- 2<sup>nd</sup> Priority – Forcible Entry and Ladders
- 3<sup>rd</sup> Priority – Utilities, Overhaul, and Salvage

## Duties of Engine Companies

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Engine Companies are normally expected to address the following issues during initial fire suppression operations:

- Locate, confine, and extinguish
- Water supply
- Exposures
- Could be assigned as an ‘on deck’ company available for immediate deployment
- RIT /RIC

### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company on a first alarm shall normally be responsible for establishing Incident Command (unless established prior to arrival), the initial fire attack, and addressing a water supply unless circumstances of the incident indicate the need for other actions. Initial fire attack may involve:

- An aggressive interior fire attack
  - Locate, confine, and extinguish the fire. In an occupied structure, the first crew must place a line between the victims and the fire.

If an Engine Company elects to lay their own supply, three-person Engine Companies are encouraged to wrap the hydrant and allow another unit to make the hydrant so that the nozzle person and officer are available to perform initial fire ground operations. Engine Companies responding with an EMS or Medic Unit (four or five personnel) and making a forward lay are encouraged to wrap the hydrant and leave one person to make the hydrant so that the initial attack crew arrives together at the fire on the engine.

### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company shall normally support the efforts of the first arriving engine in order of priority:

- Confirm water supply to the attack engine.
- Assist with initial fire attack and hose line advancement.
- Staff standby team and maintain two in – two out.
- Deploy a backup line to protect egress.

### **3<sup>rd</sup> Arriving Engine Company**

Level 1 Staging or will normally be responsible for exposure protection in adjoining occupancies or floor above.

- Lay an exposure line.
- Advise the I.C. of conditions, actions and needs (CAN).
- May be assigned as the ‘on deck’ company

### **4<sup>th</sup> Arriving Engine Company**

Level 1 Staging or will be responsible for RIT/RIC unless otherwise directed by the I.C.

## Duties of Ladder Companies

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Duties of Ladder companies are comprised of the following objectives: Primary Search and Ventilation. A company or personnel assigned to complete ladder company duties will have to consider prioritizing a single, most critical objective.

### **1<sup>st</sup> Arriving Ladder**

Primary search is the primary duty of the 1<sup>st</sup> Arriving Ladder. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations include no life hazard, heavy smoke/heat conditions, top floor fire, or commercial structure.

### **2<sup>nd</sup> Arriving Ladder**

Level 1 staging or if immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

### **Definitions**

**Complete Horizontal Ventilation:** More comprehensive horizontal ventilation completed in a timely manner after a more thorough size-up of fire conditions, location, and overall ventilation needs. This may involve the use of mechanical ventilation (fans/blowers).

**Interior Ladder Operations:** The tasks of searching, accessing voids [pulling ceilings], complete horizontal ventilation, addressing utilities, and other tasks required to support life safety, fire extinguishment, and property conservation.

**Primary Search:** A rapid and effective search of the fire building, either before or during fire suppression operations, for victims who have not exited the building.

**Secondary Search:** A thorough and systematic search of the fire building, conducted after the primary search, for any victims still in the building.

## Duties of Chief /Command Officers

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### **1<sup>st</sup> Arriving Chief/Command Officer**

The first arriving Chief/Command Officer will assume command from the initial Incident Commander either via radio or face-to-face communication.

Ultimately, the incident will be managed by the Chief/Command Officer in whose jurisdiction it is occurring. This may require an additional transfer of command than would normally be made. This transfer should occur in a manner and time that does not have a negative impact on the operations.

### **2<sup>nd</sup> Arriving Chief Officer**

The second arriving Chief Officer is often best assigned to manage a major Division or Group, or Safety. There are a couple benefits to this action:

- A chief officer is present at a critical operational area or at the Command Post.
- Company Officers will remain with their companies to supervise tasks.

### **Chief 100**

A Chief 100 response will provide additional chief officers to the fire scene to assist the Incident Commander as needed (See Model Procedures, Section 2)

### **Assigning a Command Post Aide**

- Command Post Aides can be assigned to the I/C and Division/Group Supervisors as soon as possible. This is especially critical when managing multiple radio channels.

## Designating Hose Lines

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On the fireground, there are three (3) basic functions or assignments for a hand line:

1. Attack Line
2. Back Up
3. Exposure Line

Utilizing these terms when assigning a hose line will assist the Company being assigned in understanding the mission of the line and contribute to brevity in radio traffic; task, location and objective (TLO). For example:

*“E2 from 4<sup>th</sup> St. Command”*

*“E2”*

*“Exposure Line, Floor 2”*

*“E2, Exposure Line to Floor 2”*

*“Affirmative”*

### **Line Functions**

An **Attack Line** is intended for a direct attack on the fire, either offensively or defensively.

A **Back-Up Line** protects the egress of the initial Attack Line.

An **Exposure Line** is intended to protect either internal or external exposures from fire extension.

## Risk Management

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The concept of risk management shall be utilized on the basis of the following principles:

- Given a special situation, activities that present a significant risk to the safety of members shall be limited to situations where there is a high potential to save endangered lives. **Risk a lot to save a lot.**
- Given a special situation, activities that are routinely employed to protect property shall be recognized as inherent risks to the safety of members, and actions shall be taken to reduce or avoid these risks. No significant risks to the safety of members shall be taken in efforts to knowingly save property alone. **Risk a little to save a little.**
- Given a specific situation, no known risk to the safety of members shall be acceptable when there is no possibility to save lives or property. **Risk nothing to save nothing.**

The goals of fire suppression operations shall be to save lives and reduce suffering of people endangered by fire, including firefighters, to control and extinguish fires quickly and effectively, and to minimize property damage from fire and the effects of fire control operations to the extent consistent with firefighter safety.

Officers shall make tactical and strategic decisions based upon their training, experience, and sound judgment as applied to the circumstances of the incident. This should include the integration of risk management principles into the regular functions of incident command.

At an emergency incident, the Incident Commander shall have the responsibility to:

- Establish, assume, and confirm command.
- Request and release resources for the incident.
- Perform situation evaluations that include risk assessment and survivability profile of possible occupants and operational safety.
- Initiate, maintain, and control incident communications.
- Develop an overall strategy and attack plan and assign units to operationally address the same.
- Develop an effective incident organization by managing resources, maintaining an effective span of control, and maintaining direct supervision over the entire incident by creating geographical and or functional areas as appropriate for the scope and size of the incident.
- Review, evaluate, and revise the operational plan as required, and communicate any deviation from the normally expected company actions.
- Continue, transfer (when appropriate), and terminate command.

Company Officers and Incident Commanders shall evaluate the risk to members with respect to the purpose and potential results of their actions in each situation.

Company Officers and Incident Commanders shall take necessary steps to determine whether or not human life may be endangered.

In addition:

- Firefighters are to use appropriate safety practices, sound judgment, and initiative in emergency situations.
- Officers shall be ever-mindful of their responsibilities for the safety of their subordinates.
- As soon as practical, at significant incidents the Incident Commander shall assign a qualified Safety Officer with the specific authority and responsibility to evaluate hazards and provide direction with respect to the safety of operations.

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## Communications

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### **Communications Model**

A communications model shall be used to ensure the receipt and acknowledgment of critical communications. An example of a company being assigned would be:

*“Engine 13 from Seltice Command”*

*“Engine 13”*

*“Exposure line to Side Charlie”*

*“Engine 13, exposure line to Side Charlie”*

*“Affirmative”*

Every effort should be made to eliminate needless phrases and terminology from transmissions. The elimination of terms such as “upon your arrival”, “please” and “could you” will keep transmissions short and to the point.

It should also be assumed that Company Officers will determine how a task should be completed once assigned. Specific direction of a task should be avoided unless its completion in a specific manner is critical to the incident.

### **Short Reports**

When providing a short report, the initial arriving Company should consider providing basic information that will impact the actions of incoming units as they arrive on the fireground and in consideration of their assignments based upon Best Practices. Critical components are:

- Occupancy Type/Number of Stories
- Fire Location (Floor 1, 2, etc.; “Upper floor might be more appropriate for high-rise events).
- Actions
- Supply
- Operational Mode
- Establish/Name Command

For example, what floor a fire is on in a multi-story building is initially more important than which side of the structure smoke may be showing from, as the fire floor location impacts the actions of later arriving Engine and Ladder Companies.

Consider the following short report: *“E2 on scene of a two story residence with a fire on Floor 1. Engine 2 is stretching the attack line to Side A – Alpha for an offensive attack. We have a supply and are establishing Kathleen Command.”*

With this transmission, the following companies should assume:

- **2<sup>nd</sup> Arriving Engine Company:** Confirm the supply is established.
  - Assist with advancing the attack line.
  - Provide 2 out.
  - Lay Back Up Line.
- **3<sup>rd</sup> Arriving Engine Company:** That the fire is on Floor 1 of a Two-Story, and that we will probably be stretching an attack/exposure line to the 2<sup>nd</sup> floor.
- **4<sup>th</sup> Arriving Engine Company:** RIT unless otherwise directed by the I.C.
- **1<sup>st</sup> Arriving Ladder:** Primary Search
- **2<sup>nd</sup> Arriving Ladder:** Ventilation

**All companies will communicate and confirm their assignment with the Incident Commander prior to deployment.**

### **Progress Reports**

As units operate on the fireground, periodic progress reports to the Incident Commander help paint a picture for determining resource needs and assignments. A format for reporting is the CAN format:

- **Conditions**
- **Actions**
- **Needs**

An example is:

*“Hayden Command from Engine 521”*

*“Command”*

*“Engine 521 is on Floor 3, we have heavy smoke in the hallway (**Conditions**) and are stretching an attack line off the standpipe (**Actions**). We need one additional Engine Company and some ventilation (**Needs**).*

*“Command received, I will be sending you Engine 14, and Ladder 1 is opening the roof now”.*

Command may request a progress (or CAN) report periodically or they should be provided by companies as they operate.

### **FOPS Channel Priorities**

As some of the most critical radio transmissions occur in the early moments of an incident, every effort should be made to keep the tactical channel clear for the first arriving companies and Incident Commander.

## FIREGROUND BEST PRACTICES FOR OFFENSIVE FIRE ATTACK

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Units not on scene should refrain from transmitting on the radio unless the transmission is critical to the incident.

If possible, non-tactical traffic (such as requesting utilities, police) should be completed on another Ops Channel or 1K-Central, especially if requested by units not yet on scene.

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## Definitions/Glossary

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The following terms will be found throughout this document and/or are defined here.

**Attack Line** – a line deployed for the application of water to the fire from an interior or exterior position. This is one of the three types of lines.

**Back-Up Line** – a line used to protect the egress of crews operating on the interior of a structure. Crews staffing back-up lines should operate from an area of relative safety where they can rapidly come to the aid of the personnel they are protecting. This is one of the three types of lines.

**Exposure Line** – a line laid to protect an exposure from the extension of fire. Exposure lines should apply water only when necessary and should not be used to attack fire in areas where personnel are operating attack lines unless additional lines are required for effective fire attack or personnel safety. Exposure lines may be laid to protect interior or exterior exposures. This is one of the three types of lines.

**Rescue Mode** – an offensive operational mode which is focused on immediate actions meant to protect or rescue occupants to prevent serious injury or death. This is one of the three operational modes.

**Defensive Mode** – an operational mode which is defensive in nature involving mainly exterior extinguishment efforts. This is one of the three operational modes.

**Offensive Mode** – an operational mode which is offensive in nature generally involving interior extinguishment efforts. This is one of the three operational modes.

**Transitional Fire Attack (Quick Hit)** – Term used to describe the deployment of a fire attack line to control a large intense fire from the outside.

**Primary Search** – a rapid yet effective search of the fire building, either before or during fire suppression, for victims who have not exited the building.

**Secondary Search** – a thorough and systematic search of the fire building, conducted after the primary search, for any victims still inside the building.

**Size-Up** – an assessment used by personnel to determine the location and extent of the problem in order to be able to formulate an Incident Action Plan that is efficient and in compliance with the Risk vs. Benefit analysis for the given situation. The Incident Commander should see that a complete 360° survey of the structure is completed as soon as practical in order to have as much situational awareness as possible.

**C.A.N.** – an acronym used as a reminder when providing progress reports.

C	=	Conditions
A	=	Actions
N	=	Needs

**Complete Horizontal Ventilation** – generally a progression of the outside vent operation. It is completed in a timely manner after a thorough size-up of fire conditions, location, and overall ventilation needs. This operation may involve the use of fans/blowers.

**Interior Ladder Operations** – the tasks of searching, accessing void spaces, complete horizontal ventilation, addressing utilities and other tasks required to support life safety, fire extinguishment, and property conservation.

**Outside Vent** – the removal of a window (s) in the immediate fire room or area from an outside position to provide relief to the attack crews through natural ventilation. This must be coordinated with the initial fire attack crews to prevent rapid, unchecked fire growth.

**Withdrawal** – To exit the structure or hazardous area, while removing hose lines and emergency equipment, due only to a change in strategy, typically from offensive to defensive.

**Abandon** – The immediate exit of all crews within the hazard zone. Abandonment will be accomplished expeditiously, taking only the equipment necessary to facilitate a safe escape.

**Evacuation** - To remove the occupants or residents (non- firefighting personnel) of a building, mall, or geographical area to an area of refuge or safety.

“On deck” – Is an assignment given to crews who are in a forward position who are out of the IDLH environment , fully equipped and waiting for an assignment.

Level 1 Staging: Primarily used for third and later arriving companies. Defined as a location approximately one block from the incident scene where units standby awaiting tactical assignment.

“Recycle” – Direction given (by their assigned supervisor) to a company that has completed usage of its first SCBA bottle at an incident, indicating that the company should hydrate and perform a mental evaluation (consistent with the Emergency Incident rehab S&O), replace SBA bottles and report directly back to the same supervisor. Also as a “bottle exchange.”

## Guidelines for Managing Two-In/Two-Out

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Federal Law and sound fireground practices requires that when members are operating in a hazard area, two (2) other standby members are available to assist in the event the members operating in the hazard zone become lost, trapped or injured by either the environment or structure.

The methods for providing Two Out should match the incidents degree of potential risk and can evolve as resources become available. Because some fire units are staffed with three (3) members, this guideline is written from that context.

**Exemption:** *The Two-Out standard may be reduced to One-Out when the rescue of a KNOWN occupant or the LIKELIHOOD of an occupant is required. At this point, the One-Out member (the Engineer most often) must have full PPE, with SCBA donned in the standby condition, and have contact with the Two-In members.*

In many cases in our response areas, the second arriving Engine Company is not too far behind the first. Therefore, the intent is for these two Engine Companies (assuming 3-person staffing) to work together to:

- Establish Command.
- Establish a water supply.
- Deploy and staff an attack line.
- Maintain a minimum of two members on the attack line.
- Maintain a minimum of two members on the exterior.
- Deploy a backup line to use as needed to protect interior crews.

One example of a deployment model for these companies is below. This assumes two (2) Officers, two (2) Engineers, and two (2) Firefighters from two Engine Companies are on scene. This model may be altered by the number of personnel on scene. The responsibilities of these companies are:

### **1<sup>st</sup> Arriving Company Officer**

The first arriving Company Officer shall establish Command and implement the initial action plan until relieved.

### **1<sup>st</sup> Arriving Engineer**

The first arriving engineer should focus on charging hose lines and establishing a supply and is best left in that role unless absolutely necessary.

### **The Attack Team**

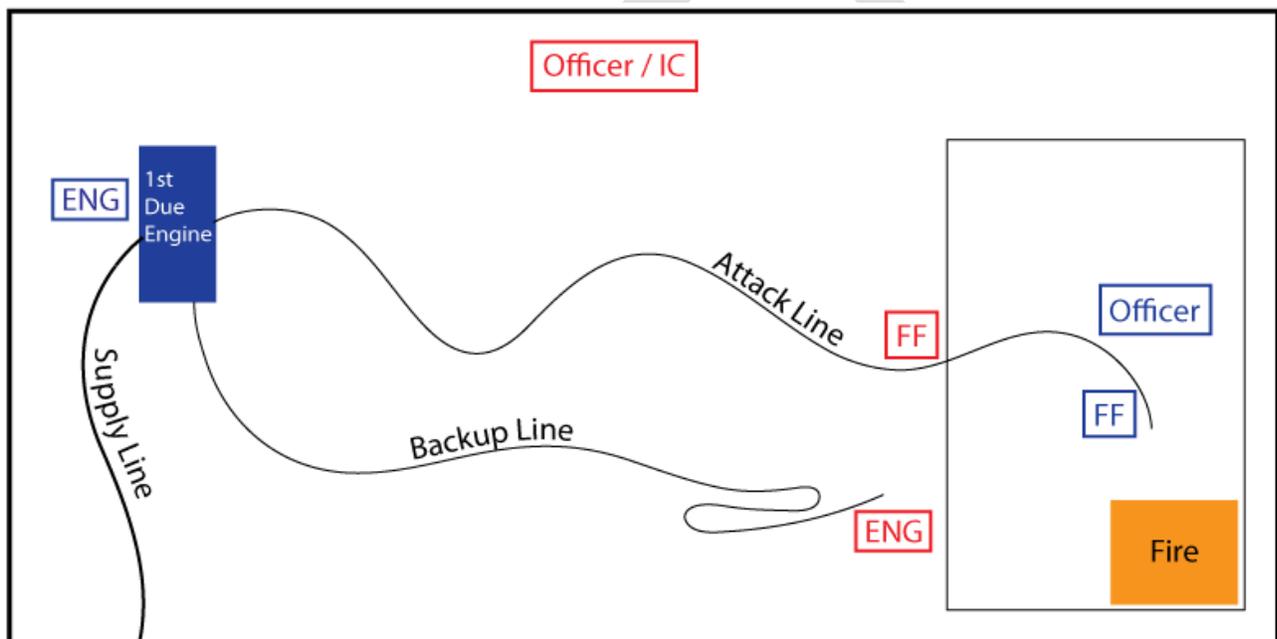
The attack team should consist of a minimum of two (2) members deploying a hose line to locate, confine, and extinguish the fire.

### **Two Outside Members**

- **Door Position.** This position monitors interior conditions, advises the I.C. of any fire condition changes (good or bad) and feeds hose to the attack team and should remain out of the hazard area
- **Second Outside Member:** Assists the first engineer with supply if needed, then lays a backup line. This position is vital to protect the egress of the attack crew by using the backup line as needed.

### A Two-In/Two Out Deployment Model for Two Engine Companies

The diagram below is one example of how to efficiently deploy the staffing of the first two engine companies to get an attack line in place, a back-up line on the ground, and comply with 2 In & 2 Out. The members of the first arriving company are shown in **blue** and the second in **red**. This model for Offensive Fire Attack may be impacted by the following:



- 1) If the first arriving Company consists of five (5) members staffing an Engine and EMS Unit, or a Medic Unit arrives to assist the first arriving Engine.
- 2) While the positions described are critical to a safe operation, who staffs each position is ultimately up to the Incident Commander.
- 3) If 2½" line is utilized, both Companies may be required to staff it.
- 4) The Hazard Area may be deep within a building or on upper floors, requiring a backup line to be deployed to the interior (but still out of the IDLH atmosphere).

As additional companies arrive on scene, a Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC) should be established. At that point the Back-Up line can operate on the interior as a means of protecting firefighter egress or as a second attack line to assist the first.

## Fires in Structures with Multiple Floors (Excluding Highrise)

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Fires in structures with more than one story have a predictable pattern of fire spread. It can be assumed that the fire will travel to upper floors if not controlled quickly, and as such, the floors above need evacuation, search and rescue, and/or exposure lines, as soon as adequate resources are in place on the fire floor.

Coordination between Companies operating on these separate floors is paramount. Prior to a Company ascending above a fire to check for exposures, they must be sure that the Companies engaged in fire attack are having success. If they are, the Exposure Company should ascend. If not, they should advise Command.

When ascending multiple floors, conditions on each floor should be evaluated and communicated to the I.C.

When stairwells are present, the stairwell being used for fire attack should be identified early in the incident. Conversely, the stairwell(s) for evacuation should also be identified.

Standpipe systems should be used when an advantage can be gained from doing so.

Whenever there are Companies operating on multiple floors, the Company(s) operating on the fire floor should be cognizant of protecting egress for the crews on the upper floors.

Interior crews should regularly communicate conditions, progress, or a lack of progress to the I.C.. Likewise, the I.C. must communicate with interior crews if there are any discrepancies between what interior crews report and what the I.C. sees from the exterior.

At least one secondary means of egress should be provided whenever there are ongoing firefighting operations above ground level.

RIT should be staged in the most advantageous position outside of the IDLH/hot zone. In a multi-storied building, this may be in the stairwell or hallway on or below the fire floor.

### **Assignment by Arrival**

Engine and Ladder Companies shall generally be assigned the following duties on arrival at a fire in a building with more than one floor which is also determined to be suitable for offensive operations:

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command when practical, address water supply, and lay the first attack line. Complete a size-up.

#### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company should ensure a water supply and assist with attack line advancement. A backup line may be laid for egress protection.

**3<sup>rd</sup> Arriving Engine Company**

If the initial attack line(s) is making good progress, the third arriving company should continue to the floor above to check for extension, assist with search and evacuation of occupants, and provide exposure protection. If assistance is needed on the fire floor, they should advise the I.C. and assist as needed.

**4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority in a multi-story building is primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations may be no life hazard, heavy smoke/heat conditions, top floor fire, or commercial structure.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

## Front Door Tactics

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The primary entry point for most offensive attack situations in both private dwellings and multi-family occupancies is the front door. Reasons for this are:

- 1) If a citizen is going to try to escape from a structure, they will probably try to use the primary routes of egress. These routes are the hallways and stairs leading to the front door from most places in the house. Utilizing the front door is the most expeditious route to these areas and decreases the time it may take to reach a victim.
- 2) Most stairs to upper levels (bedrooms) and lower levels are immediately inside the front door. Whether used to access upper floors for fire attack or search, or lower floors in a basement fire (or to position a line at the top of the stairs to keep the fire in the basement), the front door again is probably the best option for the initial line on fires in these building types.

Items 1 and 2 above are valid reasons why we want to use front door tactics as a starting point on most fire attacks; however, we do not want to do this without a complete size-up of the fire building.

### **Completing a Size-Up**

It is important for the first-in Company Officer/Incident Commander to increase their situational awareness at the fire scene. This can be accomplished by interviewing witnesses, evaluating the building, and monitoring conditions. Committing attack crews can be done when enough information is gained to safely mitigate the fire problem. If it is impractical to complete the 360, one can be done by later arriving chiefs or companies.

When utilizing the concept of the front door as being our primary attack route into a structure, the main purpose of the 360° survey is to find any reason why this tactic would not work, either due to safety or practicality.

Common reasons why a front door attack may not be utilized are:

- 1) The fire attack strategy is defensive. There is a rescue situation that requires an immediate demand for resources.
- 2) There is an **advanced** basement fire that was not seen from the street, and the need to attack from the “C-Charley” side is evident.
- 3) This is an exterior fire, and the first line does not need to go to the interior of the structure.
- 4) Fire attack will be initiated from the exterior prior to entering (for example: a garage fire or a transitional attack is needed due to staffing concerns).

## Standpipe Operations (Excluding Highrise)

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Standpipes systems allow engine companies to quickly deploy attack lines in the upper floors of multi-story buildings. They are found in apartment complexes, office buildings and highrise buildings.

### **Supplying the System**

When supplying the standpipe, several circumstances will need to be taken into consideration:

- Placement of initial arriving apparatus should not interfere with incoming apparatus.
- If the engine pumping the standpipe cannot meet the system's necessary pressure requirements, a tandem pumping operation will be needed (see High Rise procedures).
- Pump standpipes at 150 psi or the pressure specific to that system.
- The driver shall ensure that they are utilizing multiple hose lines to properly supply standpipe systems.
- For large incidents, multiple supplies to multiple systems should be utilized.

### **Deploying Lines**

Connection to the standpipe outlet should be on the floor below the fire. This allows attack lines to be supplied from a safe area and minimizes hose kinking when lines are charged. Consider wind-driven fire conditions any time there is a fire on the windward side of a building. If the hallways are clear, a dry line stretch is recommended until you are closer to the fire.

Being familiar with buildings prior to a fire will assist in operations, as will a quick survey of the floor below during a fire. This knowledge will help determine how much hose is needed for the stretch and working line in the fire room or on the fire floor. Think length *plus* width for adequate estimates.

Personnel should be cognizant of the possibility of standpipe outlets left open by tampering as these will result in loss of pressure in the system.

When utilizing a standpipe system, Engine Companies should notify the I.C. and other responding companies of:

- The stairwell being used for fire attack. Note that the fire attack stairwell may ultimately be different than the one initially used to access the upper floors.
- The size of hose being deployed.
- The floor the fire is on.
- If a water supply to the system has been made or is needed.

**Horizontal Standpipes**

Be aware that standpipes that do not allow the opportunity to anchor in a stairwell or next to an exit door can breed a false sense of security.

If a crew commits to a horizontal standpipe in the middle of a large structure such as in a big box store, parking structure, or on the fire floor of a multi-story building, your attack line will lead you to the standpipe outlet and not an exit.

It is better to stretch your own attack line from an engine rather than utilizing a standpipe away from your exit. If you must use such a standpipe, have a search line tied from your exit door to the standpipe. If conditions change and you need to exit, you can follow your attack line to the standpipe and the search line to the exit door.

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## Basement Fires

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Basement fires present a special challenge and need special tactical considerations. Recognition of a basement fire is critical; an accurate size-up must be performed to identify the type (enclosed basement or daylight basement) and location of the fire. Heat and smoke conditions on Floor 1 with no visible fire may indicate a basement fire. As a general rule, the investigation for the fire location should begin on the lowest floor showing smoke.

Advanced fires in a daylight basement should be attacked from the lower level, typically Side C of the structure, with an exposure line stretched to the floor above to check for fire spread. Ventilation in the daylight basement can be accomplished through the large doors or window openings on the ground or lower level. A tactic to consider which will assist in first floor exposure protection is to provide positive pressure to the floor above the fire. This will help reduce smoke and fire spread to the upper floors. It is critical to use this tactic in coordination with the fire attack.

Enclosed basements are more difficult to control due to limited access and egress and limited ventilation points. Attack lines must descend down narrow stairways which will act as chimneys for smoke, fire, and heat. A coordinated attack with ventilation is essential. Basement windows on the opposite side from the attack should be removed to provide ventilation points with PPV behind attack crews. A basement without windows may be vented by a hole in the floor beneath a first floor window accompanied by a hose line for hydraulic ventilation and exposure protection.

Note: When using PPV, care should be taken to ensure openings between floors (stairwell doors) are not open to either drive fire or gasses down on attacking crews or cause unwanted fire spread.

### **Assignment By Arrival**

Engine and Ladder Companies shall generally be assigned the following duties upon arrival at a residential basement fire deemed to be suitable for offensive operations:

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command, address water supply, and lay the first attack line. Complete 360° survey.

#### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company should ensure a water supply and assist with attack line advancement. A backup line may be laid.

#### **3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay a 3<sup>rd</sup> line to be used as an exposure line to the floor above the fire.

#### **4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority in a multi-story building is primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations may be; no life hazard, heavy smoke/heat conditions, top floor fire, or commercial structure.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

## Attic Fires

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A common occurrence at structure fires in all types of occupancies is the fire extending to the attic. If not addressed, this fire can contribute to rapid deterioration of interior conditions and structural failure. It must be assumed that the fire has extended to the attic until proven otherwise by direct examination of the attic space.

Special attention must be paid to commercial occupancies with large, unsupported clear span spaces below the attic. These are often found in establishments such as auto body repair shops, manufacturing shops, and retail spaces where floor space is at a premium. In these types of occupancies, catastrophic structural collapse can occur. Attic spaces in these types of buildings must be checked prior to entering the structure for fire attack or investigation.

In other types of occupancies such as single and multi-family residences, as well as other types of commercial buildings, the risk of a catastrophic collapse is somewhat mitigated by both bearing and non-bearing walls within the structure.

It is critical that companies working on the roof, and companies working inside of the structure, communicate the conditions they are encountering. Any indication of an attic fire found by pulling ceilings or while conducting vertical ventilation must be communicated to the Incident Commander and other companies to ensure that they are aware of the conditions.

### **Hose Line Placement**

Fire attack is best conducted from below with a standard flow hose line operating directly into the attic space. This is best accomplished by pulling ceilings as soon as possible in the operation.

### **Ventilation**

In some cases, vertical ventilation coordinated with fire attack is required. Caution should be used with Positive Pressure Ventilation (PPV) until the fire is controlled and ventilation channels are open.

Thermal imaging cameras can provide a quick and remote heat signature indicating an attic fire. However, the most definitive indicator is quickly opening a ceiling and visually checking for smoke or fire.

### **Assignment By Arrival**

Engine and Ladder Companies shall generally be assigned the following duties upon arrival at a residential attic fire deemed to be suitable for offensive operations:

**1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command, address water supply, and lay the first attack line. Complete an accurate size-up. Be prepared to pull ceilings for quick access to the fire.

**2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company shall ensure a supply, lay a backup/standby line to the front door, and assist the 1<sup>st</sup> Engine Company with staffing attack line, accessing the attic, and maintaining 2 in/2 out.

**3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay a 3<sup>rd</sup> line to be used as an exposure line.

**4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder shall assess roof stability prior to initiating vertical ventilation.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall be assigned primary search or assist the 1<sup>st</sup> arriving Ladder with vertical ventilation, if necessary. Otherwise, provide interior Ladder Company operations.

## Residential Attached Garage Fires

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A fire that originates in an attached garage can grow quickly and spread to living areas of a single family residence if not addressed properly. An attached garage often has a high fuel load. In fact, the garage can be compared to a small warehouse filled with combustible and flammable material.

The garage is often separated by a rated fire door between the garage and the rest of the house. If kept in the closed position, this door will provide adequate protection from fire spread.

While a fire-rated wall is required between the garage and living areas, it should be assumed that this wall is compromised by homeowner modifications until proven otherwise. This would allow fire spread to the attic or upper floor areas, and these areas should be checked as soon as possible.

For the reasons listed above, an accurate size-up of the structure is crucial, with close attention to interior rooms and evidence of smoke from the eaves. The attached garage fire is one scenario where the 360° may indicate that front door tactics should be delayed. If smoke conditions in the living area or eaves are non-existent or limited, the initial attack on the fire by way of the garage overhead or mandoor will make sense. If it is determined that the fire has spread to the living area or attic (due to the presence of smoke in the living area or eaves) front door/attic fire tactics will be appropriate in order to stop the spread of the fire. Whichever tactic is deployed, situational awareness of fire conditions throughout the incident is critical.

Personnel should use caution operating under open garage doors due to the potential of them coming down or collapsing. Crews must take steps to secure an open garage door in order to prevent it from closing on top of or behind them. Also, the danger of overhead storage in garage rafters should be considered.

### **Assignment By Arrival**

Engine and Ladder Companies shall generally be assigned the following duties upon arrival at a residential attached garage fire determined to be suitable for offensive operations:

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command and address water supply. Complete an accurate size-up. Lay first attack line to one of the garage doors or to the front door, depending on findings of the size-up.

**2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company shall ensure a water supply. Lay a line to the front door if the initial fire attack is through the garage, protect the living area from fire spread, and perform search and rescue of the living area. Lay a secondary attack line to the garage if the initial attack line was laid to the front door.

**3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay a backup line to the front door.

**4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority is to perform a primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations might include no life hazard, heavy smoke/heat conditions, or a top floor fire.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

## Fires in Single Family Dwellings

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Fires in single family dwellings are one of the most common structure fires most agencies respond to. They also account for approximately 70% of all civilian fire deaths. When operating in the offensive mode, rapid movement of attack lines is critical, as is the completion of a primary search. Search priorities should be given to bedrooms, escape paths, and the immediate fire area, as these areas account for the locations of most fire victims.

While time of day may increase our *odds* of finding an occupant, it should not be forgotten that parents, children, the sick, elderly, and shift workers may occupy a home during the day and be sleeping at any given time. Hose line deployment, ventilation, and searches should be driven by fire location/conditions. These functions should be carried out regardless of time of day in an offensive fire attack situation.

Single family dwellings can be divided into the following categories:

Rancher/Single-story: This is the typical one-story residential house. These generally have a garage at one end and bedrooms at the opposite end. Kitchen and living areas are generally in the middle of the structure.

Two-Story/Multi-story: These generally have a kitchen, garage, and living areas on the lower level with bedrooms located on the upper level. The interior stairs connecting the lower and upper floors are usually found immediately inside the front door and will contribute to rapid fire and smoke spread from the lower floor to upper floor.

Split-Level: This structure has a stairway immediately inside the front door. A set of stairs goes down to a lower level that has a larger room usually utilized as a family room, a utility room of some type, and an entrance to the garage. In some cases, a bedroom may also exist on the lower level. A fire in the lower floor will spread via the interior stairs. Quite often large windows on the “A” side of the structure may be used to provide quick horizontal ventilation to the lower level.

From the front door, another set of stairs leads to the upper level, which will include the main living room, kitchen, and bedrooms.

Daylight-Basement: Quite often not visible from the front of a rancher or two story residence, a daylight basement is enclosed on two or three sides and open on one or two sides (usually the “C”) with doors and windows. Access to the daylight basement is usually found immediately inside the front door on the 1<sup>st</sup> floor. It is critical that the existence of a basement is made known to all responding units, and if the fire involves the basement area. If the fire does involve the basement, refer to tactics discussed in the Basement Fires section of this document.

## **Tactics for Single-Family Residences**

### **Hose Line Placement**

First line placement for fires involving single family dwellings are generally focused on the front door of the residence. This tactic is beneficial for the following reasons:

- The front door is centrally located to reach all areas of the home quickly.
  - Stairwells to upper and lower floors are also usually located very close to the front door.
- The front door is an escape path for an occupant attempting to flee.
- It is the quickest and easiest access from the street.
- With the use of narrow or solid streams, the fire will not be pushed to other areas of the house if its origin is near the front door.

### **Ventilation**

Ventilation of residential structures will involve a combination of initial horizontal ventilation for immediate relief of conditions and vertical to address attic extension (see Attic Fires) and provide relief to interior crews. Horizontal/hydraulic will be the primary tactic utilized for lower floor fires in multi-story structures absent attic extension.

### **Assignment By Arrival**

Engine and Ladder Companies shall generally be assigned the following duties upon arrival at a residential fire deemed to be suitable for offensive operations:

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command, address water supply, and lay the first attack line. Complete an accurate size-up to confirm tactics and assignments.

#### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company should ensure a water supply and assist with attack line advancement. A backup line may be laid for egress protection.

#### **3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay an exposure line, conduct primary search of exposure areas, and check for extension.

#### **4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority is to perform a primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations might include no life hazard, heavy smoke/heat conditions, top floor fire, or commercial structure.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

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## Fires in Multi-Family Dwellings

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Fires in Multi-Family dwellings can be some of the most challenging and complex incidents we face. These buildings are larger than the typical single-family dwelling and frequently have multiple floors, standpipe systems, and many more civilians in potential jeopardy. Fire spread between floors can be rapid, and if a large common attic is present, horizontal fire spread can be rapid within it.

These buildings can be broken down into three basic types. These types should not be confused with legal definitions; they are more practical definitions for our purposes in an effort to quickly differentiate the layouts of buildings and for use in short reports:

1. Garden Apartments: This is a building with multiple floors, and each unit occupies space on only one of those floors. Access to each apartment is by an exterior stairwell or balcony.
2. Townhouse Apartments: This unit occupies more than one floor and is connected between floors by an interior stairwell within the unit. Bedrooms are typically on upper floors, with kitchen and living areas on the lower floors. Access is via a front door, perhaps along a common walkway that is shared with adjoining units of the same style.
3. Apartment Buildings: Units within these buildings are, like the garden apartments, occupy only one floor of this multi-story building; however, the difference is that an center hallway is utilized to access the front door of each unit. This creates the potential for smoke and heat to accumulate in this hallway during a fire (usually when the tenant leaves the door to the fire unit open). When doors are left open, it compromises both the means of egress for the tenants and the main attack path for firefighters. Ventilation and searching of these hallways, especially on lower floors, is very challenging but critical to the successful management of these incidents.

### **Occupant Rescue vs. Occupant Removal**

Quite often, especially in apartment building fires where the hallway is charged with smoke, occupants may be at balconies or windows. It is critical that the first arriving Incident Commander make the proper judgment regarding these occupants, being mindful that any resources assigned to rescue/removal will be unavailable for suppression activities.

Rescue: Occupants that are in immediate danger and need immediate rescue. These occupants may be at/in the fire apartment, or above it and if not rescued may be forced to jump or attempt escape through a hazardous environment.

Removal: This occupant is probably remote from the actual fire, and while they may not be able to exit via the interior hallway, they are behind a closed (usually one-hour rated) door and will be safe for the immediate future. “Protect in Place” until adequate resources arrive to deal with removal should be strongly considered.

A working fire that involves a large portion of the attic on arrival is an exception. In this case, immediately removing those occupants on the top floor should be a priority as conditions can deteriorate on the top floor very quickly due to the attic involvement.

### **Assignment By Arrival**

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command, address water supply, and lay the first attack line. Complete an accurate size-up to confirm tactics and assignments.

#### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company should ensure a water supply and assist with attack line advancement. A backup line may be laid for egress protection.

#### **3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay an exposure line, conduct primary search of exposure areas, and check for extension.

#### **4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

#### **1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority is to perform a primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> due Ladder or assigned to other company by the Incident Commander. Considerations might include no life hazard, heavy smoke/heat conditions, or a top floor fire.

#### **2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

## Commercial Fires

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Commercial buildings can range in size from small to large and can vary in construction type to include older structures of wood, heavy timber, or masonry, or newer structures of steel and concrete. Commercial buildings are often grouped together forming commercial districts. These buildings can be stand-alone, with street access, or buried in a cluster of other buildings in an industrial complex.

Commercial buildings can fall into many types, including: “Big box” stores; concrete tilt-ups; strip malls or shopping malls; office buildings; and highrise. Because of the complexity of these buildings, a fire burning deep inside can be difficult to locate and reach due to limited access.

Remodels and occupant changes can increase life safety concerns due to limited or unfamiliar exits. Changes can create concealed spaces, multiple ceilings, unprotected sprinkler coverage, compromised compartmentalization or fire stops, heavy HVACs which increase roof loads, and new plumbing or duct work penetrating floors to allow fire extension from floor to floor.

### **Tactics for Commercial Buildings**

The importance of locating, confining, and extinguishing the fire remains the same in commercial buildings as it does in residential structures. The difference with commercial buildings is that they may have limited access to windows and long distances to reach an exterior door. The potential to get lost or disoriented is very real. When not operating on a hose line, a rope should be considered to ensure a safe means of egress. Unknown-type storage and high fire loads piled to the ceiling may limit the capability of the sprinkler system. The ability of using 2½-inch hose lines to knock down a large volume of fire while cooling the area is essential. Advancing and maneuvering a 2½” attack line in large open areas may not be a problem for the first two companies. However, in restricted areas containing shelving and narrow aisles, along with multiple “doors & corners”, a sufficient number of firefighters will be needed to advance the line, requiring multiple companies to work together.

Both horizontal and vertical ventilation are key and must be coordinated to assist advancing hose lines. This can often be accomplished by breaking windows on the fire floor or opening exterior doors such as metal overhead rolling doors. Additionally, roof scuttles, skylights, or hatches should be opened – in addition to vertical ventilation roof cut – to provide adequate ventilation.

### **Assignment By Arrival**

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall establish Command, address water supply, and lay the first attack line. Complete an accurate size-up to confirm tactics and assignments.

**2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company should ensure a water supply and assist with attack line advancement. A backup line may be laid for egress protection.

**3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall lay an exposure line, conduct primary search of exposure areas, and check for extension.

**4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible for RIT unless otherwise directed by the I.C.

**1<sup>st</sup> Arriving Ladder**

The first arriving Ladder's first priority is to perform a primary search. If immediate ventilation is needed for the fire attack and primary search to take place, primary search may be passed to the 2<sup>nd</sup> arriving Ladder or assigned to other company by the Incident Commander.

Considerations might include no life hazard, heavy smoke/heat conditions, top floor fire, or commercial structure.

**2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall perform ventilation, if not already initiated.

Other Ladder Company functions to support fireground operations will include

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage

## Highrise Fires

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### **Assignments by Arrival**

#### **1<sup>st</sup> Arriving Engine Company**

The first arriving Engine Company shall be responsible to:

- Transmit a short report.
- Take control of the alarm room/panel.
- Capture all elevators.
- Indicate the status of the elevators.
- Indicate to the I.C. – or Fire Dispatch if the first arriving officer is the I.C. – the means of accessing the fire/alarm floor.
- Investigate.
- Prepare for fire attack in the appropriate stairwell. If a Ladder Company has arrived simultaneously, the Ladder should have assumed the investigation duties.

#### **2<sup>nd</sup> Arriving Engine Company**

The second arriving Engine Company shall be responsible to:

- Report to Staging, if it has been established.
- Assist the investigation/attack team, or
- Initiate action as directed by I.C.

#### **3<sup>rd</sup> Arriving Engine Company**

The third arriving Engine Company shall be responsible to:

- Supply the fire department connection [FDC].
- Establish Lobby Control and announce its location to the I.C.
- Bring 2 ½” /1¾” bundles to Lobby.
- Perform any functions as indicated by the I.C.

#### **4<sup>th</sup> Arriving Engine Company**

The fourth arriving Engine Company shall be responsible to organize Base and assist with tandem pumping for “High Pressure” buildings.

#### **1<sup>st</sup> Arriving Ladder**

The first arriving Ladder shall be responsible to support the investigation/fire attack company.

#### **2<sup>nd</sup> Arriving Ladder**

The second arriving Ladder shall be responsible to standby at the Lobby if on the initial dispatch unless otherwise assigned by the IC.

**1<sup>st</sup> Arriving Aid Unit**

The first arriving Aid Unit shall be responsible to attach itself to the first arriving Engine Company unless otherwise directed.

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## Abandonment/Withdrawal/Evacuation

### **Abandonment**

In the event a building requires abandonment (immediate exit of all crews within the hazard zone taking only the equipment necessary to facilitate a safe escape.), the following procedure may be requested:

1. When the Incident Commander recognizes the need to abandon the structure, the IC will request Central Dispatch to sound the abandonment tone.
2. Upon receipt of the abandonment order from the IC, the Dispatcher will immediately activate the abandonment tone for a duration of six (6) seconds on the assigned Ops Channel.
3. The abandonment tone will only be done one time unless otherwise directed by the IC.
4. The IC may request one or all of the Ops Channels receive the tone.

Following the tone, the Dispatcher will announce the abandonment message as received from the IC on the assigned Ops Channel and all other appropriate Ops Channels. **This transmission will be repeated two (2) times.**

Firefighting and Dispatch personnel must restrict radio traffic to emergency traffic only and close the Ops Channel for radio traffic only related to the abandonment. Restricted radio traffic will be maintained to allow for Roll Call/PAR of on-scene firefighting personnel.

Apparatus Engineers who are in their vehicles at the incident shall utilize their air horns as outlined in Section 10.

The IC will initiate unit roll call per Department/District policy or procedures.

### **Withdrawal**

To exit the structure or hazardous area, while removing hose lines and emergency equipment, due only to a change in strategy, typically from offensive to defensive.

### **Evacuation**

Evacuation refers to the removal of occupants or residents (not firefighting personnel) of a building, mall, or geographical area to an area of refuge or safety as designated by the IC or supervising officer.

It is important for Firefighting personnel and Incident Commanders to understand and utilize the proper term to avoid any confusion regarding assignments.