

# NKCTC TACTICAL GUIDELINES



FOR OFFENSIVE FIRE ATTACK  
& COMPANY OPERATIONS

2020

Table of Contents

---

Offensive Fire Attack

***(Note: Ctrl + Click on any topic to jump to that topic.)***

***Introduction ..... 1***

***Outline & Intent ..... 2***

***General Guidelines ..... 5***

***Duties of Engine Companies..... 8***

***Duties of Ladder Companies ..... 12***

***Duties of Chief Officers ..... 14***

***Designating Hoselines ..... 15***

***Risk Management ..... 16***

***Communications..... 18***

***Guidelines for Managing Two-In/Two-Out..... 21***

***Fires in Structures with Multiple Floors ..... 22***

***Front Door Tactics ..... 25***

***Standpipe Operations..... 27***

***Basement Fires ..... 29***

***Attic Fires ..... 31***

***Residential Attached Garage Fires ..... 33***

***Fires in Single-Family Dwellings ..... 35***

***Fires in Multi-Family Dwellings ..... 38***

***Fires in Commercial Buildings ..... 41***

***Fires in High-Rise Buildings ..... 43***

***General MVA Practices ..... 45***

***Definitions/Glossary ..... 52***

***Blue Card Mutual Aid Terminology ..... 56***

## Introduction

---

The creation of Tactical Guidelines *for Offensive Fire Attack & Company Operations* has signaled a new era of cooperation between our agencies. We are now looking at response operations and our utilization of resources for a more collaborative and consistent approach.

North King County Training Consortium (NKCTC) proudly serves 4 agencies, 11 stations, 4 Battalions, 268 firefighters and covers 173,981 citizens over 67.3 square miles.

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

It is the purpose of Tactical Guidelines *for Offensive Fire Attack & Company Operations* to assist all of us in delivering that service in a manner which is as seamless and efficient as possible.

Nothing in this document prevents the authority of the IC (Incident Commander) to take the action necessary to mitigate the emergency.

## Outline & Intent

---

The intent of this document (*Tactical Guidelines for Offensive Fire Attack & Company Operations*) 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 minutes of emergency scene operations. They will not fit every fire situation, and IC are free to adjust them as needed to the situation they are facing.
- These Tactical Guidelines are truly “best practices” and will be appropriate for the initial deployment of initial resources at the vast majority of incidents, to include MVA’s. Deviation from them may be done for sound reasons, based upon the incident conditions or resource limitations and a developed incident action plan.
- Where local Standard Operating Procedures conflict with these Tactical Guidelines, the local policy should prevail and be communicated; however, it is expected that member departments will move towards standardized policies based on King County Model Procedures by adjusting both their own Standard Operating Procedures and Tactical Guidelines over time to avoid conflicts.
- It is the intent that the Tactical Guidelines document be a “living” document that is open to review and revision, to truly capture what is the “best practice” as realized over time and to ensure they are in compliance with King County Model Procedures.
- As individual Company Officers carry out their duties as described in these Tactical Guidelines, it is critical they maintain situational awareness and advise the IC if they have completed their assignment or if they are unable to complete and why and what additional resources they may need to complete.

# NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

---

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 Officers
- Designating Hoselines
- Risk Management
- Communications
- Personnel Accountability
- 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**

- Ramblers
- Two-Story Homes
- Split-Level Homes
- Homes with Daylight Basements

## **Multi-Family Dwellings**

- Garden Apartments
- Townhouse Apartments
- Interior Hallway Apartment Buildings

## **Commercial Buildings**

- Strip Malls
- Large Area Buildings
- Multi-Story Office Buildings

**High-rise Buildings in excess of 75 feet or when high-rise tactics would be beneficial.**

# NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

---

## Administration

- This document will be jointly administered by the Training Divisions of the Agencies that adopt these Tactical Guidelines.
- The Training Chief/Director of those Agencies will work with their Ops Chiefs on revisions and updates. Zone 1 Chiefs will focus their efforts on ensuring that the King County Model Procedures accurately guide Zone 1 and county-wide operations.
- Administrative revisions, clarifications, and editing shall be completed at the Training Division level. A review shall be conducted annually to update the *Tactical Guidelines* document.
- Recommendations for changes in policy shall be brought to the Zone Operations Chiefs by the Training Director for discussion and action as needed.
- The *Tactical Guidelines* document shall be made available to each fire station and Battalion Office within each agency. It will be updated as deemed necessary by the Training Director, after major policy changes have been approved.

## General Guidelines

---

As neighboring departments, we rely on each other to assist with emergency incidents and solve problems daily. Training to these Tactical Guidelines provides a common set of guidelines to handle these incidents in a coordinated, safe, and efficient manner. We do this by training on and implementing common strategies, tactics, and tasks. These Tactical Guidelines are based on minimum staffing levels of 3 personnel per suppression apparatus.

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 IC who will direct these companies in their work.

### Incident Priorities

- Life Safety
- Firefighter Health and Safety
- Incident Stabilization
- Property Conservation
- Environmental Conservation

### Strategic Objectives

**R.E.C.E.O.V.S.** (Rescue, Exposures, Confinement, Extinguishment, Overhaul, Ventilation, and Salvage) is the acronym used to help identify strategic objectives considered at any fire. Rescue is the highest priority for all members responding to an emergency. We do this by making an aggressive and coordinated attack on the seat of the fire utilizing the skills and tools of each unit.

### Air Management

The objective is to be outside the "Immediate Danger to Life & Health" (IDLH) atmosphere prior to the activation of the low air alarm.

Crew members should maintain an ongoing awareness of their crews and their own air status. Air levels should be checked when entering a new area or going to a new floor. Prior to entry, the company should identify an exit strategy. Instill the mindset to consider transition out of operations when the air is at 50% tank capacity.

## 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 at 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, 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 "Tactical Guidelines" model for offensive fire attack.*

- Confine the fire – Place a hoseline between the fire and any known occupants or possible occupants, but do not delay water application for the sake of ensuring the line is between occupants and the fire.
- Extinguish the fire – Selection of the proper hoseline and nozzle combination and efficient deployment of the line.
- Protect exposures [2] – Eliminate fire extension and evacuate occupants.

*[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. For interior exposures (upper floor, adjacent business, etc.), while not specifically communicated, a Primary Search is expected to be included.*

- Provide a water supply – This is done through appropriate use of hydrants, standpipes, and sprinkler systems. Driver Operator shall advise Command when a water supply has been established.
- RIC – Readiness to deal with a situation requiring rapid rescue of firefighting personnel. A RIC team shall consist of at least 3 firefighters and one must be a company officer or acting company officer.

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

- Search & Rescue – Most often accomplished during a primary search and sometimes as part of a coordinated Vent-Enter-Isolate-Search [VEIS].
- Ventilation – Accomplished through various ventilation methods [vertical, horizontal outside vent, and mechanical/hydraulic].
- 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 operations. These operations shall be communicated and coordinated with command.
- 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 electricity.

#### **Ladder Company Assignment by Priority**

The following should be considered the priorities for Ladder Companies:

- 1<sup>st</sup> Priority – Life Safety
  - Depending upon many factors including building construction/occupancy type, fire and smoke conditions, and safety of other firefighters on scene, ladder companies should conduct a rapid risk benefit analysis as to what tactic is best to maximize life safety for all (citizen and firefighter) and select the best tactic to complete.
- 2<sup>nd</sup> Priority – Ventilation
- 3<sup>rd</sup> Priority – Forcible Entry and Ladders
- 4<sup>th</sup> Priority – Utilities, Overhaul, and Salvage
  - Note: salvage should be placed higher on the list when the truck is being used to prevent water damage to lower level units in the event of a sprinkler-controlled fire or excessive water application during fire attack.

## Duties of Engine Companies

---

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

- Locate, confine, and extinguish the fire
- Conduct a rapid primary search of the fire room or unit
- Water supply (benchmarked on the radio)
- Exposures
- Standby Team (benchmarked on the radio)
- RIC Team (benchmarked on the radio)

Applying water in an efficient, effective, and safe manner is a priority for first arriving engine companies. If this priority requires offensive interior operations within the hot zone, addressing the requirements of 2-in/2-out is an absolute. Strategies for managing this requirement are discussed below. Utilization of a 2-in/1-out may be utilized in the initial stages when a “Rescue Mode” is declared by the first in unit. The Driver Operator must meet all the WAC requirements including full PPE and SCBA.

The following engine company assignments assume staffing of three firefighters per engine. Whether a given incident unfolds according to this assignment order or not, the intent of all King County Fire Chiefs is for their firefighters to comply with Washington Administrative Code (WAC) language, particularly with regard to WAC 296-305-05002. Crews functioning on all incidents involving high hazard (“hot zone”) environments shall comply with all requirements related to two-in/two-out and Rapid Intervention Crew (RIC) as outlined in the WAC.

Appendix D of the WAC provides specific guidance on when to utilize a Standby Team versus a RIC. Among other recommendations, it states:

- A Standby Team is assigned when the IC opts not to assign a RIC. This would be done as a short-term assignment for incidents that can be quickly and safely mitigated because they are contained, limited to contents, and are of minimal risk to responders. Examples include a smoldering mattress, an appliance fire, or a stovetop fire.
- A Standby Team can also be assigned as an interim step while waiting for a RIC to arrive and/or assemble. A Standby Team consists of at least two firefighters held outside the hazard area, available for immediate assistance or rescue of an entry team. Once relieved by a RIC, the Standby Team may be assigned to become a Backup Team.
- A RIC is assigned for complex or high risk incidents involving sustained operations to replace the Standby Team.

*Note: the “hot zone” is defined as the control zone surrounding the hazard area, which extends far enough to prevent adverse effects to personnel outside the zone. The hot zone is the area presenting the greatest risk to members and is defined, in the case of single family home, as the structure unless otherwise identified by the IC.*

As soon as practical, the Driver Operator on the initial attack pumper shall provide a decon hose line for the removal of large particulate matter from personnel engaged in interior operations. The members being decontaminated will decon each other (“Dirty cleans Dirty”). PPE will remain in place until decon is complete.

Units arriving shall report to the IC with their intended task unless otherwise directed. For example, “Command E131”, “Command”, “E131 on location establishing RIC on the side Alpha”.

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

The first arriving Engine Company shall be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply.

- Give an initial radio report.
- A 360° to determine the location and extent of the fire and determine the best and quickest access.
- Water should be applied to the fire as soon as possible from a safe location to reduce the heat release rates from burning materials. This also is referred to as a “Quick Hit”. Any limited-duration water stream applied from the exterior should be immediately followed by an aggressive interior attack.
- Per WAC 296-305-05002(5), 2017 Edition, firefighters must not engage in interior structural firefighting in the absence of at least two standby firefighters (2-in/2-out) except as provided below:
  - On arrival at the emergency scene responders find a known rescue situation where immediate action could prevent the loss of life or serious injury, such action shall only be permitted when no less than three personnel (2-in/1-out) are present and equipped to provide emergency assistance or rescue of the team entering the hot zone.
- Utilization of a 2-in and 1-out is accepted in the initial stages when a “Rescue Mode” is declared by the first in unit. The driver operator must meet all of the WAC requirements including full PPE and SCBA.
  - No exception shall be allowed when there is no possibility to save lives or no “known” viable victim. (WAC 296-305-05002(4))

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 Aid, Medic, or Rescue unit attached 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 should support the efforts of the first arriving Engine in order of priority:

- Confirm water supply to the attack engine. Benchmark.
- Establish a Standby Team and maintain 2-in/2-out. Standby Team Members shall comply with the following per WAC 296-305-05002 (6), 2017 Edition:
  - Members shall remain aware of the status of firefighters in the hot zone.
  - Members shall remain in positive communication via radio, visual, or voice with the entry team, in full protective gear with SCBA donned and in standby mode.
  - Only one Standby Team member may be permitted to perform other duties outside the hot zone, provided constant communication is maintained with the team in the hot zone, and provided that those duties will not interfere with his or her ability to initiate rescue as appropriate.
  - No Standby Team Member shall be permitted to serve as a Standby Member of the firefighting crew when the other activities in which the firefighter is engaged inhibit the firefighter's ability to assist in or perform rescue or are of such importance that they cannot be abandoned without placing other firefighters in danger.
  - Note: once a second crew arrives at the hot zone – i.e. is assigned into the hot zone – the incident shall no longer be considered to be in the “initial stage,” and at least one Standby Team or Rapid Intervention Crew (RIC) shall be assigned.
- Additional support activities that a Standby Team may perform include:
  - Assisting with initial fire attack and hoseline advancement.
  - In the case of a ventilation limited fire, maintain door control by closing the door as much as possible to limit the flow path and by opening the door to relieve heat, smoke, and steam as water is applied.
- A Standby Team may be reassigned as a Backup Team once additional resources arrive on-scene and the RIC team has been established
- If a RIC has been established by an earlier arriving resource, ensure the deployment of a backup line to protect egress.

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

The third arriving Engine Company should be responsible for exposure protection in adjoining occupancies or floor above.

- Lay an exposure line.
- When asked for a Progress Report, the Company Officer shall advise the IC of Location Conditions, Actions, Air and Needs (LCAAN).
- Do not open windows or ventilate interior exposure areas until water has been applied and the fire is under control unless directed by the IC.
- Establish Standby Team or RIC if not already completed, unless otherwise directed by the IC.

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

The fourth arriving Engine Company should be responsible for RIC, unless otherwise directed by the IC.

## Duties of Ladder Companies

---

The first priorities and duties of Ladder Companies are comprised of the following tactical objectives: Rescue, Coordinated Ventilation and/or Primary Search. Since Ladder Company staffing differ, these task assignments may vary. For example, L161 with staffing of 5 may be able to handle both assignments, whereas an IC, when considering the capabilities of a Ladder Company staffed with 3, may have to consider prioritizing the most important or single critical task.

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no known life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures. Ventilation is to be coordinated with fire attack. Prior to ventilating a structure, the Company performing the ventilation shall communicate with the unit(s) operating below and announce over the radio that they are ready to open the structure. If needed, the IC or any interior Company then can stop the ventilation process, if interior conditions do not favor ventilation, i.e., no water on the fire, seat of fire not reached.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties and communicate their Task, Location, and Objective, whichever the first arriving Ladder Company could not do, or assist the first arriving Ladder Company in their operations.

### **Other Ladder Companies**

Additional support fireground operations will include:

- Laddering
- Forcible entry
- Overhaul
- Utilities
- Salvage
- Roof Reports
- Wall Reports

## Ladder Company Definitions

**Complete Horizontal Ventilation:** More comprehensive coordinated 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). This shall be coordinated with interior crews.

**Interior Ladder Operations:** The tasks of searching, accessing voids [pulling ceilings and checking for extension], 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, preferably early in the incident, either before or during fire suppression operations, for victims who have not exited the building. Primary search completion shall be benchmarked by command upon completion of each floor of the home/building and when a primary search of the structure is complete.

**Rescue:** A known victim in known location.

**Search & Rescue:** A known victim in an unknown location.

**Secondary Search:** A thorough and systematic search of the fire building, conducted after the primary search, for any victims still in the building. It is preferred to have a different unit conduct the secondary search than having the same unit that conducted the primary search.

## Duties of Chief Officers

---

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

The first arriving Chief Officer will assume command from the initial IC either via radio or face-to-face communication. The transfer of command should include units assigned, status of water supply, supplemental needs/alarms. Transfer to another Battalion Chief should only be done after the incident is de-escalating to avoid missed transmissions and loss of situational awareness.

If practical and if the BC's vehicle is equipped, in-cab command is preferred to limit distractions, increase communication effectiveness, and functional command presence.

Ultimately, the incident will likely be managed by the Battalion Chief 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, thus avoiding missed transmissions or loss of situational awareness.

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

The second arriving Chief Officer will report to the IC, check in and conduct a Chief Officer 360° if the initial BC has not completed one. Upon completion of the 360° and based on the needs of the incident, the second Chief Officer may be assigned to Safety (ISO), assist the IC as a Staff Assistant (Command Post Aide) or manage a Division or Group. The IC is responsible for and retains Safety until it has been assigned (delegated).

### **Additional Staff**

Consideration of additional staff may include:

- Staff Assistant (Command Post Aide)
- Group/Division Supervisor(s)
- Safety Officer
- Rapid Intervention Group (RIG) Supervisor
- Planning
- Senior staff (Overhead) Deputy Chiefs

### **Assigning a Staff Assistant (Command Post Aide)**

Staff assistants shall be assigned to the IC and Division/Group Supervisors as soon as possible. This is required to effectively manage multiple channels or talk groups.

Developing an Incident Action Plan and utilization of a Tactical Work Sheet shall be completed and utilized by the IC (BC) during the event. The ability to effectively track and manage resources is one of the most important jobs of the IC behind firefighter safety.



## Designating Hoselines

---

On the fireground, there are four (4) basic functions or assignments for a hoseline:

1. Attack
2. Backup
3. Exposure
4. Standby or RIC

Utilizing these specific terms when assigning a hoseline will assist the Company being assigned in understanding the mission of the line. In addition, making assignments that address the Task, Location, and Objective will provide more clarity on the fireground. For example:

*“E142, Main St Command”*

*“E142”*

*“Hoseline to floor 2, backup”*

*“E142 copy, hoseline to floor 2, backup”*

### Hoseline Functions

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

A **Backup Line** protects the egress of the Attack Line. This is a line that may be inside the IDLH and not utilized as a Standby Team or RIC.

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

A **Standby or RIC Line** is intended to be used during Mayday scenarios.

## Risk Management

---

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 and after initial development of the Incident Action Plan (IAP).

At an emergency incident, the IC shall have the responsibility to:

- Assume and confirm command and take an effective fixed physical command position, along with stating the mode/strategy.
- If Command had already been established conduct a transfer of command. Radio transfer is preferred then face-to-face. Avoid taking your initial IC out of the fight to conduct a face-to-face transfer of command.
- Ensure a 360° size-up is performed on the structure, including assessment on the presence of a basement.
- Develop an overall strategy and incident action plan.
- Request additional resources as required.
- Perform situation evaluation that include risk assessment and operational safety, including the assignment of RIC commensurate with the needs of the incident.
- Initiate, maintain, and control incident communications.
- Develop an overall strategy and attack plan and assign units to operationally address the same.
- Develop an effective ICS organization by managing resources, maintaining an effective span of control, and maintaining direct supervision over the entire incident by creating geographical and/or functional area supervisors as appropriate for the scope and size of the incident. Assure personnel accountability is maintained.
- 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.
- Release resources from the incident.

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

Company Officers and IC shall take necessary steps to determine whether human life may be endangered.

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

- Given a specific 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 human lives. ***Risk a lot to save a lot in a highly calculated fashion***
- Given a specific situation, activities that are routinely employed to protect property and/or environment, 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 and/or environment alone. ***Risk a little to save a little in a highly calculated fashion***
- 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.***

In addition:

- Employees are to use appropriate safety practices, sound judgment, and initiative in emergency situations.
- Officers shall be mindful of their responsibilities for the safety of their subordinates.
- As soon as practical, at significant incidents, the IC shall assign a qualified Incident Safety Officer with the specific authority and responsibility to evaluate hazards and provide direction with respect to the safety of operations.
- A Standby Team or Rapid Intervention Crew (RIC) will be established when one or more crews are assigned to the hot zone.
- In the absence of additional staff, the Incident Safety Officer or Command Post Aide may transition to the position of Rapid Intervention Group (RIG) Supervisor in the event of a “Mayday” or other fireground emergency where RIG is activated. The responsibility of the Incident Safety Officer will revert to the IC until reassigned.
  - Do not change the talk group in which the Mayday was declared. The RIG Supervisor will communicate with the Mayday firefighter or crew.

## Communications

---

### Communications “ORDER Model”

A communications model shall be used to ensure the receipt and acknowledgment of critical communications. The NATO phonetic alphabet will be utilized to identify sides of buildings (i.e. Alpha, Bravo, Charlie, Delta). An example of a Company being assigned would be:

*“E151, 148 Command”*

*“E151”*

*“Exposure line Side - Charlie”*

*“E151, exposure line Side – Charlie”*

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.

In addition, avoid “good news reporting” This is giving information to the IC that is not priority or pertinent. The following is an example of good news reporting:

*“Command from E151”*

*“Command”*

*“E151 is continuing on a right wall search and will advise when complete”*

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.

### Initial Radio Reports (IRR)

When providing an initial radio 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 *Tactical Guidelines*. Critical components include:

- Occupancy Type/Number of Stories: house, multi-family building/complex, garden style, center hall apartment, etc.
- Announce working fire (if applicable)
- Fire Location (Floor 1, 2, etc.)
- Actions
- Supply: NEED OR HAVE
- Establish/Name/Locate Command
- Complete a 360° if possible, if you are unable to complete the 360°, advise what you have seen.

**Follow-Up Report (FUR)** will follow a 360° view and contain:

- Updates on potential hazards (basement, overhead wires, etc.)
- Confirm fire location and announce Operational Mode
- Requests for additional resources, as needed

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: *“E135 on scene of a two-story house, Working Fire, Floor 1. Pulling hoseline to alpha, we are on a supply, doing a 360°. Establishing NE 175 command, update to follow”*

With this transmission, the following companies should assume:

- **2<sup>nd</sup> Arriving Engine Company:** Confirm the supply is established.
  - Establish a Standby Team for two-out and pull hoseline.
  - Assist with advancing the attack line.
  - Door control.
- **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 Floor 2 and checking for extension.
- **4<sup>th</sup> Arriving Engine Company:** RIC, unless otherwise directed by the IC
- **1<sup>st</sup> Arriving Ladder:** Primary search
- **2<sup>nd</sup> Arriving Ladder:** Coordinated ventilation/primary search Floor 2.

Companies will not deploy until directed by the IC. Once directed, all companies will confirm their assignment.

### **Progress Reports**

As units operate on the fireground, periodic PROGRESS reports requested by the IC to help paint a picture for determining resource needs and assignments. A format for reporting is the **LCAAN** format:

- **L**ocation
- **C**onditions
- **A**ctions
- **A**ir (reported based on team member with lowest percentage)
- **N**eeds

An example is:

*“E142, Main Street Command”*

*“E142”*

*“Progress report”*

*“E142 is on floor 3, heavy smoke in the hallway, stretching hoseline off the standpipe, need one additional engine company and ventilation. Air is 75% plus”*

*“Command received, I will be sending you E144, and L142 is opening the roof now”.*

*“E142 received, sending me E144 and L142 opening roof.”*

Command may request a progress report (**LCAAN**) periodically, or they should be provided by companies as they operate make sure this is not good news reporting.

### **Tactical 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 Command.

Second (2<sup>nd</sup>) Alarm units will typically be dispatched and respond on Dispatch 2, leaving the initial TAC free for fireground operations.

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 Dispatch 2, especially if requested by units (Chief Officers) not yet on-scene.

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

---

Washington State Law requires that when members are operating in a hazard area, two 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 2-Out should match the incident's degree of potential risk and can evolve as resources become available. As most fire units are staffed with three (3) members, this guideline is written from that context.

Additional information can be found in Appendix D of WAC 296-305.

**Exemption:** In the initial stages of an incident, when only one unit is operating on-scene, *the 2-Out standard may be reduced to 1-Out when the rescue of a KNOWN occupant is required. At this point, the One-Out member (most often the Engineer) must have full PPE, with SCBA donned in the Standby condition, and have contact with the Two-In members.*

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

- Establish, name, and locate command along with stating the mode/strategy.
- 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 Standby line to use as needed to protect interior crews.

## Fires in Structures with Multiple Floors

---

Fires in structures with more than one story have a predictable pattern of fire spread. The fire will typically travel to upper floors if not controlled quickly and, as such, the floors above need evacuation, primary search, 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 the IC.

Companies operating on a floor above the fire should maintain door control to prevent fire spread by means of creating a flow path. This should only be done with clear understanding of fire conditions below and with ongoing fire attack.

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

When stairwells are present, the stairwell being used for fire attack should be identified early in the incident. Additionally, the stairwell(s) for evacuation should also be identified. In uncontrolled fire conditions, door control to these stairwells must be maintained.

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

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

The IC should regularly request a progress report and determine conditions, progress, or a lack of progress. Likewise, the IC must communicate with interior crews if there are any discrepancies between what interior crews report and what the IC sees from the exterior.

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

RIC 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.



### **Assignments 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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply.

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

The second arriving Engine Company should ensure a water supply and assist with the first hoseline advancement, control the door, and deploy a second hoseline. First and second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

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

If the initial fire attack is making good progress, the third arriving Engine Company should continue to the floor above to check for extension, primary search and evacuation of occupants, and provide exposure protection. If assistance is needed on the fire floor, they should advise the IC and assist as needed.

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

The fourth arriving Engine Company shall be responsible for RIC, unless otherwise directed by the IC.

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still a priority. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do or assist the first arriving Ladder Company in their operations.

# NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

---

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul

## Front Door Tactics

---

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

- 1) If an occupant 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.
- 3) The rule of always attacking a fire from the uninvolved to involved portion might delay water application and create unwanted flow paths and making conditions worse. It has been demonstrated that hose streams set to a straight stream pattern do not push the fire to uninvolved areas.

While “front door tactics” provide quick access to most areas of the structure, water applied directly to the fire from the safest positions – interior or exterior – will result in the fastest way to improve interior conditions for both occupants and fire control. The front door, however, remains good access for locating occupants and completing fire extinguishment.

Items 1 through 3 above are all valid reasons to use front door tactics as a starting point on most fire attacks where its use will provide the quickest route to the fire. A complete size-up and 360° of the fire building must be completed to determine the fire location and evaluate the effectiveness of using the front door.

### **Completing an initial Size-Up**

It is important for the first-in Company Officer/IC 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. If a 360° cannot be completed by the first-in company, the Company Officer will announce this over the radio.

## NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

---

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 locate the fire and determine if the front door will be the quickest way to apply water to the fire.

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

- 1) There is a rescue situation that requires an immediate demand for resources.
- 2) Water can best be applied to first reduce the energy output of the fire through another opening or access point.
- 3) The fire attack mode is defensive.
- 4) The seat of the fire is on the exterior.
- 5) There is an **advanced** basement fire that was not seen from the street, and the need to attack from the “Charlie” side is evident.
- 6) Fire attack will be initiated from the exterior prior to entering. For example, a garage fire with a “quick hit” may be an effective way to slow the growth of the fire.

## Standpipe Operations

---

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 high-rise buildings.

### Supplying the System

When supplying the standpipe, several circumstances 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 the pressure specific to that system.
- The Driver Operator shall ensure they are utilizing multiple hoselines 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 landing below the fire floor. 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. Be aware that if a flow path is suddenly created by an open door or failed window, conditions could change rapidly.

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 IC 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.

## Basement Fires

---

Basement fires present a special challenge and therefore 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. 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 the Charlie side 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.

Enclosed basements are more difficult to control due to limited access and egress and limited ventilation points. The most effective method for developed or ventilation-limited basement fires is to apply a hose stream through an exterior window. If attack lines must descend 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 Positive Pressure Ventilation (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 hoseline 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 (flow path).

### **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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply. Attempt to determine if the basement is finished or unfinished.

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

The second arriving Engine Company should ensure a water supply and assist with the first hoseline advancement, control the door, and deploy a second hoseline. First and second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

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

The third arriving Engine Company should lay a third line to be used as an exposure line to the floor above the fire with coordination of IC and Company in basement prior to working above the fire.

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

The fourth arriving Engine Company should be responsible for RIC, unless otherwise directed by the IC

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do, or assist the first arriving Ladder Company in their operations.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul



## Attic Fires

---

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 IC and other companies to ensure that they are aware of the conditions.

### **Hoseline Placement**

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

### **Ventilation**

If used, vertical ventilation will be coordinated with fire attack. Positive Pressure Ventilation (PPV) should not be used until the fire is confirmed under control and flow path is 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 will *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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply. Be prepared to pull ceilings for quick access to the fire. Consideration to keeping the fire in the attic and use of gable end attacks should also be considered.

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

The second arriving Engine Company should ensure a water supply (benchmarked) and assist with the first hoseline advancement, control the door, and deploy a second hoseline. First and second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

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

The third arriving Engine Company should lay a third line to be used as an exposure line.

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

The fourth arriving Engine Company should be responsible for RIC, unless otherwise directed by the IC.

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

The first arriving Ladder Company shall assess roof stability and will only ventilate when directed to by IC and in coordination with interior crews.

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

The second arriving Ladder Company shall be assigned primary search or assist the first arriving Ladder Company with vertical ventilation, if necessary. Otherwise, provide interior Ladder Company operations.

## Residential Attached Garage Fires

---

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. 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 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 door 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 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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply. Lay first hoseline 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 should ensure a water supply and assist with the first hoseline advancement and deploy a second hoseline. First and second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

- If the initial attack is to the garage, the second hoseline should be deployed into the living area to prevent fire spread and perform search and rescue of the living area.
- If the initial hoseline deployment is interior, second hoseline will establish standby.

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

The third arriving Engine Company should deploy a third hoseline for exposures, conduct primary search of exposure areas, and check for extension.

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

The fourth arriving Engine Company should be responsible for RIC, unless otherwise directed by the IC.

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do, or assist the first arriving Ladder Company in their operations.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul

## Fires in Single-Family Dwellings

---

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 probabilities 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. Hoseline 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:

**Rambler:** 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:** 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 “Alpha” 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 rambler or two-story residence, a daylight basement is enclosed on two or three sides and open on one or two sides (usually the “Charlie”) 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. Reference [Basement Fires](#) section of this document.

## Tactics for Single-Family Residences

### Hoseline Placement

First line placement for fires involving single-family dwellings are generally focused on the safest and quickest location to apply water to the seat of the fire, most often 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

Coordinated ventilation of residential structures will involve a combination of horizontal ventilation for immediate relief of conditions as water is applied and vertical ventilation to address attic extension and to provide relief to interior crews. Horizontal/hydraulic will be the primary tactic utilized for lower floor fires in multi-story structures absent attic extension.

Reference [Attic Fires](#) section of this document.

### 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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply.

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

The second arriving Engine Company should ensure a water supply and assist with the first hoseline advancement, control the door, and deploy a second hoseline. First and Second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

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

The third arriving Engine Company should 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 should be responsible for RIC, unless otherwise directed by the IC

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do, or assist the first arriving Ladder Company in their operations.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul

## Fires in Multi-Family Dwellings

---

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 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. **Interior or Center Hallway 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 interior 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 IC make the proper judgment regarding these occupants, being mindful that any resources assigned to rescue/removal will be unavailable for suppression activities.

**Rescue:** Occupants who 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 be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply.

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

The second arriving Engine Company should ensure a water supply and assist with the first hoseline advancement, control the door, and deploy a second hoseline. First and second Engine Companies establish fire attack and Standby Teams and benchmark on the radio.

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

The third arriving Engine Company should lay an exposure line, conduct primary search of exposure areas, and check for extension. For multi-story townhomes and interior hallway apartments, control any flow paths.

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

The fourth arriving Engine Company should be responsible for RIC, unless otherwise directed by the IC

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do or assist the first arriving Ladder Company in their operations.

# NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

---

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul

## Fires in Commercial Buildings

---

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 standalone, 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 high-rise. 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 hoseline, 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” hoselines to knock down a large volume of fire while cooling the area is essential. Advancing and maneuvering a 2½” hoseline in a large commercial structure will require *at least* two companies.

Both horizontal and vertical ventilation are key and must be coordinated to assist advancing hoselines. This can often be accomplished by the use of 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. Typically, both Ladder Companies will be assigned to ventilation at commercial structures.

**Movement inside a structure in excess of 175’ should be avoided. This is based on a 200’ hose lay. If there is a need to move past that distance a secondary access point should be considered. This takes into consideration of the importance of air management and ease of movement. Additionally, there is the potential of high piled stock that could hinder egress.**

## Assignments by Arrival

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

The first arriving Engine Company shall be responsible for establishing Command (unless established prior to arrival). Priorities include possible rescue, fire attack and water supply.

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

The second arriving Engine Company should ensure a water supply and assist with initial hoseline advancement. Establish a standby to maintain 2-in/2-out role.

The IC will assign additional resources to accomplish the needs of the incident. For example:

- Standby Team
- Back-up line
- RIC/RIG
- Safety
- Exposure line(s)
- FDC
- Secondary Supply

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

Life safety is the primary objective. The first arriving Ladder Company should consider rescue its first priority. If immediate coordinated ventilation is needed for the fire attack or search to take place and cannot be performed simultaneously by splitting the crew, the search may be passed to the second arriving Ladder Company or assigned to another Company by the IC. Considerations include no life hazard (unoccupied structure), heavy smoke or high heat conditions, top floor fire, attic fires, and commercial structures.

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

Life safety is still the objective. The second arriving Ladder Company should assume either ventilation or search duties whichever the first arriving Ladder Company could not do or assist the first arriving Ladder Company in their operations.

Other Ladder Company functions to support fireground operations will include:

- Laddering
- Forcible entry
- Utilities
- Salvage
- Overhaul

## Fires in High-Rise Buildings

---

A high-rise is defined as any building with occupied floors above 75 feet from the lowest fire department vehicle access. There are many high-rise buildings on the Eastside, with more planned and or under construction. High-rise buildings are typically divided into two types of occupancies: Office or Residential (apartment, condo, or hotel). Historically, the incidence of fires in high-rises is relatively low, but when they do burn, a large contingent of firefighters is required to bring the incident under control. In addition, the life safety and fire problem are likely to be complex and challenging.

### Assignments by Arrival

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

The first arriving Engine Company shall be responsible to:

- Size-up.
- Take control of the alarm room/panel.
- Capture all elevators.
- Indicate the status of the elevators.
- Indicate to the IC, or Fire Dispatch if the first arriving Officer is the IC, 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 move to the floor above and conduct Primary Search/Rescue 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 the IC

#### 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 IC
- Bring two 1¾" bundles to Lobby.
- Initiate action as directed by the IC

**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 Company shall be responsible to support the investigation/fire attack Company.

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

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

## General MVA Practices

---

Our member agencies respond to motor vehicle accidents with person(s) injured or trapped on a regular basis. It is the goal of “tactical guidelines” for General MVA’s to assist all of us in delivering that service in a manner which is as seamless and efficient as possible.

Goals include:

- Clear Command communications (utilizing the “Order Model”)
- Management of the initial resources
- Situational awareness by all responders
- High priority on safety

This document contains general guidelines on mitigation of motor vehicle accidents. These are:

- Basic assignments for Aid Units, Medic Units, Engine Companies, Ladder or Heavy Rescue Companies, Medical Services Officers (MSOs), and Chief Officers
- Risk management and parking strategies

### General Guidelines

As neighboring departments, we rely on each other to assist with emergency incidents and solve problems daily. 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, IMS, tactics, and tasks.

Given the large areas of limited access roadways (I405, I5, I90, etc.) Zone 1 agencies cover, ICs should not name their command for the limited access roadway they are located on, e.g. “I90 Command”. The reason for this is Zone 1 units respond to large areas of limited access roadways (I405, I5, I90, etc.). As an example, they cover over 60 miles of I90 roadway, and the likelihood of multiple I90 incidents is high. Consider the use of Exit Numbers as Command names, e.g. Exit 9 Command.

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 IC who will direct these companies in their work.

### Incident Priorities

- Life Safety
- Firefighter Health and Safety
- Incident Stabilization
- Property Conservation
- Environmental Conservation

### **Strategic Objectives**

- Create a Temporary Traffic Control Zone (TTCZ) upstream blocking, downstream containment. Use engine and ladder apparatus to block, not command vehicles or aid cars.
- Establish a “Transport Corridor” to protect the life safety of responders and victims.
- TRIAGE patients.
- Provide the patient(s) with BLS and ALS care.
- Mitigate and apply appropriate fire/hazard control measures.
- Provide vehicle stabilization and extrication.

King County EMS requires ALS on scene time of no more than 15 minutes. Our goal is to have those patient(s) who need significant surgical therapy on the road to a trauma center within 15 minutes of fire department arrival.

### **Deployment Model**

In most cases, our response plans accommodate units arriving simultaneously. If responding apparatus are delayed, they usually arrive not too far behind one another. Units must work together to accomplish strategic objectives and tactical operations based on the incident and order of unit arrival. The first arriving unit should establish command. This deployment model reflects, in general, the best practice for each unit.

Response plans will vary depending on the agency responding, the type of MVA, resources available, and department policy. On high speed roadways, Limited Access Roadways (LAR), or when scene safety warrants it, a second large apparatus should be deployed to protect the scene and create a Temporary Traffic Control Zone (TTCZ). The second blocking apparatus should **not** be used as a working platform whenever possible but should be used as a blocking unit for scene safety and traffic control.

### **1<sup>st</sup> Arriving Aid/Medic/EMS**

- Park in the “Transport Corridor” of the (TTCZ).
- Perform triage, if not already completed.
- Patient care.

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

- Block in the direction of travel/initiate TTCZ (deploy cones).
- Scene/basic stabilization and hazard mitigation.
- Assist with patient care.
- Initiate extrication and rescue duties if needed.



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

- Block to complete upstream TTCZ (deploy cones).
- If appropriate, assist with patient care and hazard mitigation.
- Assist with extrication and rescue duties, if needed.

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

- Park apparatus in strategic location to facilitate rescue and to make buffer in TTCZ.
- CO Assume Rescue/Extrication Group Supervisor.
- Advanced stabilization and extrication and rescue duties.

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

- Ensure TTCZ has been established.
- Park in TTCZ whenever possible.
- Assume/establish command.
- Establish/maintain Transport Corridor.
- Safety.
- For ALS calls start a 10-minute clock.
- Ensure WSP and WSDOT are advised if on a state road.

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

- Park in TTCZ when possible.
- Establish Medical Group Supervisor or other assignment based on IC direction.

### **Tactical Operations**

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

#### **Aid Unit Tactical Objectives include, but are not limited to:**

- Park apparatus in a strategic position to protect the scene and allow quick access to the transport corridor.
- Size-up the situation and perform TRIAGE.
- Identify the number of patients, vehicles, and severity of injuries. This should be accomplished within first 2 minutes of arrival.
- Initiate BLS care.

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

- Park apparatus in a strategic position to protect the scene.
- Establish Command.
- Size-up the situation and perform initial triage
- Conduct Inner and outer circle assessment.
- Mitigation of hazards (fire, electrical, chemical, etc.).
- Establish a charged exposure line and provide a dry chemical extinguisher.

- Initial stabilization of vehicles.
- Scene lighting.
- Assisting with patient packaging and extrication.
- Initiate extrication and rescue duties, if needed.

**Ladder Company and Heavy Rescue Company Tactical Objectives include, but are not limited to:**

- Park apparatus in a strategic position to protect the scene.
- Company Officer may fill Rescue Group Supervisor role.
- Provide advanced stabilization and extrication functions (spreaders, rams, cutters, etc.).
- Scene lighting.
- Assist with patient packaging.

**Battalion Chief Tactical Objectives include, but are not limited to:**

- Park apparatus in a strategic position to protect the scene.
- Establish/Assume, Name and Locate COMMAND.
- Define/confirm the Transport Corridor has been established.
- Manage the Strategy & Resources.
- Address needs of cooperating agencies (WSP, DOT, Local PD, DOE, Public Works)
- Provide SAFETY.
- Implement de-mobilization plan to include transfer of responsibility for incident when necessary.

**Medic Unit Tactical Objectives include, but are not limited to:**

- Park apparatus in a strategic position to protect the scene and allow quick access to the transport corridor.
- Provide ALS care.
- Transport patient(s) needing surgical therapy to trauma center.
- Minimize time on-scene.

**MSO Tactical Objectives include, but are not limited to:**

- Park apparatus in a strategic position to protect the scene.
- Medical Group Supervisor when applicable.
- Provide EMS quality assurance (QA).
- Provide EMS supervision and communications.
- Provide scene SAFETY for responders.
- Act as EMS scene time clock.

**Safety & Risk Management**

*"We will risk a lot to save a lot. But, if there is nothing to save at a MVA on a busy divided highway, perhaps we should get off the freeway and out of harm's way."*

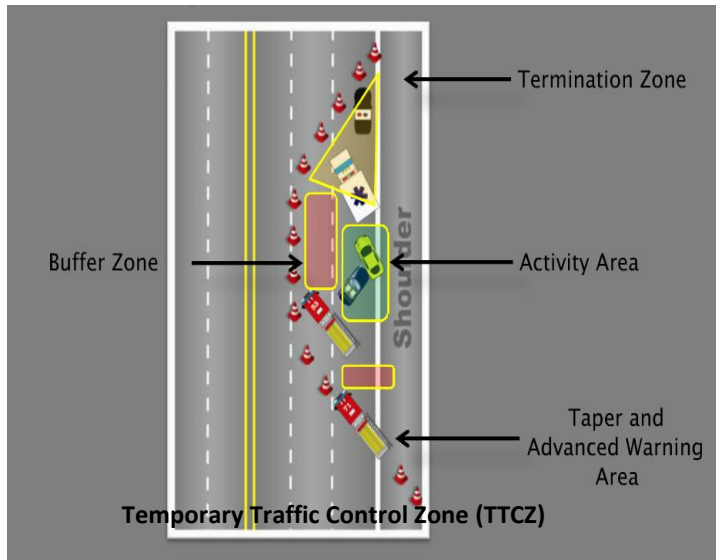
Visibility without blinding the oncoming vehicles helps us to stay safe on roadways. Turn off headlights when they are not needed. Traffic vests, turnouts with reflective striping, emergency vehicles with striping and flashing lights, traffic cones, and sometimes road flares assist us in staying safe. Officers and Firefighters should keep their eyes on traffic when operating on the perimeter of the TTCZ. During high-volume or dangerous traffic conditions, including but not limited to high-speed highways, an additional fire engine should respond to protect the work area.

### **Strategic Parking**

Many of our MVA/ rescue events occur on busy roadways. Our ideal event will allow us to "shut down" the road to prevent any traffic from approaching our work area. Unfortunately, we do not have that ability to do this on our multi-lane freeways, nor is it always necessary. Many times, we do not have the initial resources to effectively accomplish the blockade until well into the event. We can build a "Temporary Traffic Control Zone" (TTCZ) quite well with our apparatus.

Always turn wheels away from the accident scene whenever possible. Drivers should position apparatus at a 45-degree angle away from the accident scene. Pump panels, equipment access points, and patient load areas should also be protected from traffic. When possible, block an additional lane to provide an adequate buffer zone ("lane plus one" concept). In all MVA incidents, our goal should be to provide a "protective shell" in the activity work area. Traffic cones should be deployed in a safe manner as illustrated whenever possible. DOT and Police units that are on-scene can further enhance scene safety and protection of the activity work area. Safety vests that are DOT compliant should be used by all responders in addition to bunker gear.

## Lane and Traffic Control Terminology & Illustrations



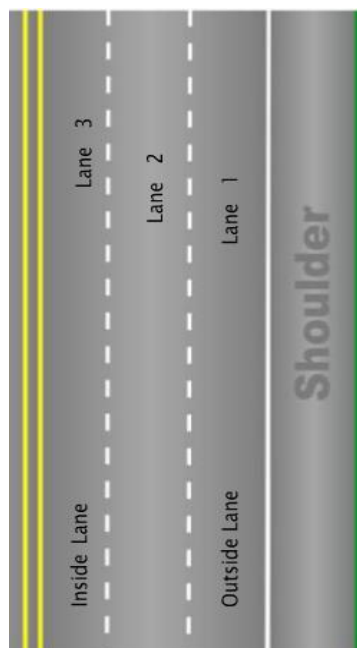
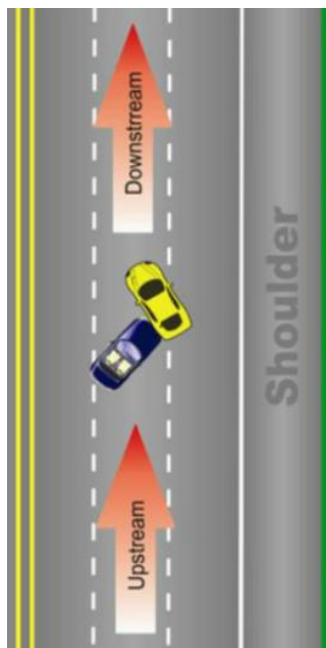
**Temporary Traffic Control Zone** – The physical area of a roadway within which emergency personnel perform their fire, EMS, and rescue tasks at a vehicle-related incident.

**Transport Corridor** – A designated area to accommodate a flow path for vehicles to safely navigate in and out of TTCZ.

**Taper and Advanced Warning Area** – The taper is the action of merging several lanes of moving traffic into fewer moving lanes. This area is the beginning of the advanced warning for upstream traffic.

**Buffer Zone** – The distance or space between personnel and vehicles in the protected work zone and nearby moving traffic.

**Termination Zone** – Area downstream of the incident that returns traffic to normal flow. This area must be large enough to safely accommodate Rescue, Aid, Medic, or AMB.



**Blocking** – Positioning a fire department apparatus on an angle to the lanes of traffic creating a physical barrier between upstream traffic and the work area. Includes 'block to the right' or 'block to the left'.

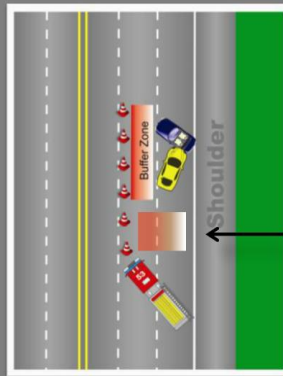
**Downstream** – The direction that traffic is moving as it travels away from the incident scene.

**Upstream** – The direction that traffic is traveling from as the vehicles approach the incident scene.

**Note:** In most cases, the HOV lane is on the inside lane. On sections of some highways – 520 for example – the HOV lane is located as Lane 1 or outside lane.

# NKCTC TACTICAL GUIDELINES FOR OFFENSIVE FIRE ATTACK & COMPANY OPERATIONS

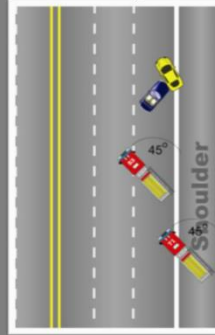
Use a "Lane Plus One" concept for blocking traffic. The **Plus One** is your buffer zone.



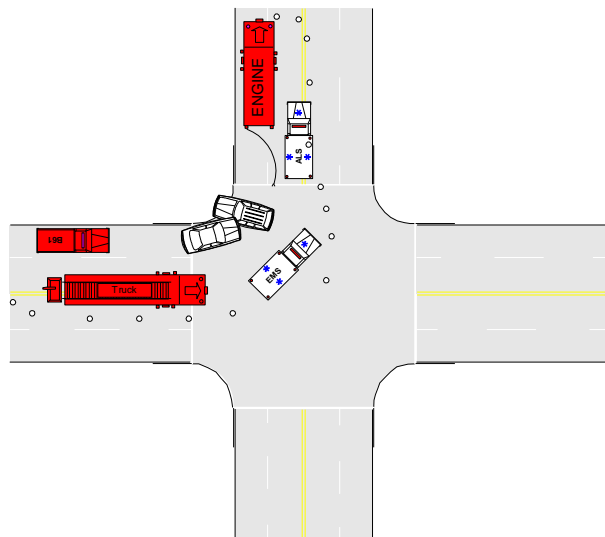
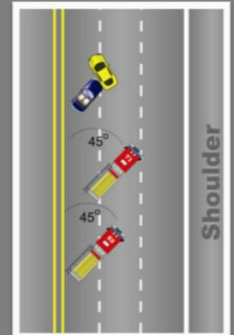
It is also important to create a buffer area in front of the apparatus

If possible park at a 45° angle away from the accident scene with your wheels turned away from the accident.

Blocking Left



Blocking Right



Above is an example of an intersection TTCZ.

## Definitions/Glossary

---

**Decontamination** – Gross decontamination is performed by using water from designated hoselines to remove large particulate matter from personnel working at the scene of a fire. This can be accomplished with a designated decontamination hose with nozzle, i.e., garden-type hose. *All personnel who have been exposed to products of combustion must be field decontaminated (gross decon) prior to removing respiratory equipment. Remember: Dirty Cleans Dirty.*

**Default Hazard Control Zones** – Hazard control zones will be understood to be established as described below unless otherwise declared or modified by the IC or Safety Officer.

**Cold Zone** – The control zone of an incident that contains the command post and such other support functions as are deemed necessary to control the incident.

**Warm Zone** – The control zone outside the hot zone where personnel and equipment decontamination and the hot zone support takes place.

**Hot Zone** – The floor or floors within a building or surrounding exterior area which may contain an IDLH atmosphere. In the case of a single-family home, the structure itself is defined as the hot zone unless otherwise defined by the IC.

**Exclusion Zone** – The control zone designated to exclude all unauthorized personnel, responders, and equipment.

**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.

**Hose Lines – there are 4 types of (hose) lines:**

**Attack Line** – A line deployed for the application of water to the fire from an interior or exterior position.

**Backup Line** – A line used to protect the egress of crews operating on the interior of a structure. Crews staffing backup lines should operate from an area of relative safety where they can rapidly come to the aid of the personnel they are protecting.

**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.

**Hose Lines – there are 4 types of (hose) lines (cont.):**

A **Standby** or **RIC Line** is intended to be used during Mayday scenarios.

**The IC**

1. Is responsible for overall personnel accountability.
2. Shall initiate accountability procedures at the beginning of the incident and maintain the system throughout the operation.
3. Shall maintain an awareness of the location and function of all companies assigned to an incident.
4. Shall implement Branch Directors or Division/Group Supervisors when needed to maintain a safe and manageable span of control.

**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.

**LCAAN** – An acronym used as a reminder when providing progress reports.

L = Location  
C = Conditions  
A = Actions  
A = Air  
N = Need

**Operational Modes – there are 3 operational modes:**

**Defensive Mode** – An operational mode which is defensive or protective in nature involving mainly exterior extinguishment efforts.

**Offensive Mode** – An operational mode which is offensive in nature generally involving interior extinguishment efforts. Depending on fire conditions, offensive mode may be initiated from the exterior prior to immediate entry.

**Rescue Mode** – An operational mode which is focused on immediate actions meant to protect or rescue occupants to prevent serious injury or death. The initial Company on-scene may utilize 2-in/1-out while performing imminent rescue. Rescue mode ends when the second company arrives on-scene or when the rescue situation is resolved, whichever occurs first.

**Outside Ventilation** – 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.

**Personnel Accountability** – All members operating at an emergency are responsible to actively participate in the King County Passport Accountability System.

**“Quick Hit”** – An initial fire ground tactic while in the offensive mode characterized by:

- A rapid short duration application of water on visible fire or super-heated spaces from a remote or exterior area
- Using a straight or solid stream
- Directed toward the upper portions of the area of involvement (where the most heat is)
- Keeping nozzle movement to a minimum
- Still allowing heat, smoke and steam to escape through the opening
- Used to temporarily reduce heat energy production and limit fire growth prior to entry and direct suppression techniques being employed.

The “Quick Hit” is a tactical tool that like any other tactical tool has an appropriate time and place for application, as well as situations where it would not be the most appropriate tactical tool.

**RIC or Standby Line** – A line used to facilitate the rescue of responders during Mayday situations.

**Roof Report** – Type of roof, conditions stable/unstable, fire/smoke conditions, locations firewalls, heavy roof loads if present, conditions of attic if known, blueprint of building and actions being taken

## Searches

**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 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 IC 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. A 360° size-up should be completed prior to making entry, unless in Rescue Mode.



**Tasks, Location, Objective or TLO** – A method to effectively describe a tactical objective while being clear and simple in directions. Example: “E142 hoseline to alpha, floor one, fire attack.

**Vent-Enter-Isolate-Search (VEIS)** – A search technique involved in a known imminent rescue situation, where normal means of accessing and searching a room have been compromised by fire, heat, and smoke conditions. It involves creating an opening or taking the window of the room to be searched – usually at a location remote from the initial fire attack – that allows localized smoke and heat to temporarily vent. Firefighters enter the room from the exterior and immediately seal the room by closing the door to prevent the movement of heat, smoke, and fire into the room from the creation of a flow path. Firefighters search the room quickly and exit back out the window they entered. This operation is performed without a hoseline.

**Ventilation Limited Fire** – A fuel rich fire

**Water on Fire (Agent Applied)** – Benchmark announced by IC upon the communication from Fire attack crew

**Working Fire** – Indicates a situation that will at least require the commitment of all responding companies. This report advises dispatch that the companies will be engaged in tactical activities and will be held at the scene for an extended period. Dispatch will monitor radio traffic to anticipate the needs of the IC. The dispatchers will also utilize the Order Model of communication.

**Wall Report** - A tactical objective the may coincide with the Roof Report when evaluating concrete tilt up walls. The roof is held up by the wall structures, if the walls begin to separate or pull away a collapse is likely to occur. Crews may be placed on corners to provide real-time updates to command.

## Blue Card Mutual Aid Terminology

---

**Accountability Location** - This generally refers to the Alpha side of the structure and where the passport accountability will be tracked until the IC #2 arrives (BC) and assumes command.

**In Cab Command** - IC#2 (BC) will be located in a designated area determined by the IC. The IC#2 will most likely be located in the command unit but may be required to move to an Engine company cab closer to the scene if there are access issues. Example: "Dispatch from B131, Go ahead B131, B131 has assumed command, command is located on the Alpha side across the street in the cab of my apparatus, and we are still in the offensive mode." When you approach the Incident command post and an aide is present, report to the aide side first to drop off your passport.

**Level 1 Staging** - Announce to "Command" E131 is Level 1". Maintain apparatus in a position to re-deploy based on the needs of command. Don't over commit. Crews remain with apparatus until assigned.

**Level 2 Staging** - Is a formal staging area that will be run by a Staging Area Manager. This specific location will be designated by command. Usually the first arriving engine officer on the 2<sup>nd</sup> alarm will establish the Staging area manager duties.

**On Deck** - Crews will report to the assigned geographic location in full PPE and equipment (Irons, TIC, required hose) Command will likely use the on deck crew for his/her next assignment. Command will advise E122 to go "On deck side Alpha" for example.

**Order Model** - Remember to Hail who you are calling first "160<sup>th</sup> command from E122". "E122 from command go ahead". Wait for the response prior to providing your critical information.

**Recycle** - This term will be used to advise the IC/Company officer that his/her crew will exit the structure/assignment and obtain a new SCBA bottle and a quick drink. This is not rehab. The assumption is that the crew is ready to conduct another work cycle after receiving a new bottle. The crew will return to the previous assignment and report completion of recycle to the IC or Division or Group Supervisor.

**Roof Report** - A tactical objective assigned to a company(s) to access the roof and provide a report to the IC. Example- Command from L161, Command go ahead, L161 has made the roof, and we have a slight pitched roof with normal construction, normal dead loads and multiple skylights. We have smoke coming from the gable end on the Delta side.

**Snohomish County On Deck** - Snohomish County Fire utilizes the on deck crew as a stand by team. They will routinely re-assign the on deck crew to interior duties and back fill the next up crew to perform the “On deck” or Stand By duties.

**Wall Report** - A tactical objective that may coincide with the Roof Report when evaluating concrete tilt up walls. The roof is held up by the wall structures, if the walls begin to separate or pull away a collapse is likely to occur. Crews may be placed on corners to provide real-time updates to command.

**Zone 3 Level 2 Staging** - Zone 3 will only use Level 2 when the IC has a command post aide. Units will be instructed to respond on the travel channel, “VC Fire 7” and given the location of Level 2 staging. If you are dispatched on a 2<sup>nd</sup> alarm and not directed to the travel channel, utilize the Level 1 criteria.