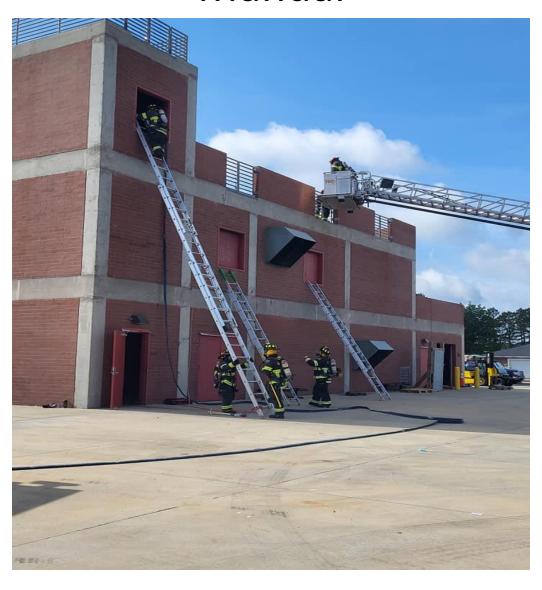
# Leland Fire/Rescue

# Truck Company Operations Manual



2023 Edition

#### Introduction

The assignment of these basic operations represents a standard ladder company plan for tactical operations designed to improve the effectiveness and safety of all firefighters working together. *This plan should in no way limit the initiative of any officer* and should enhance the decision-making process of all officers by establishing a standard operational framework.

The Truck company in the fire service dates back to the mid 1860's and the special tactics employed by these companies offer an operational advantage to any fire ground. These apparatuses provide elevated access for a multitude of uses, additional tools and equipment, specialized crews, and an elevated master stream device for large fires and or defensive operations.

In regard to its large caliber stream capability, it must be emphasized that this apparatus does not change LFR fireground operations, which is based primarily on a calculated, aggressive interior attack. The need for effective exterior streams in certain cases, must be recognized whenever conditions, as evaluated by the officer in command of operations, indicate their use.

This Truck Company Operations manual was developed to establish standards and guidelines for the use of truck companies at fires and emergencies. It will support the LFR Fireground Operations Manual and together, they will provide a complete operating manual for fireground operations.

#### TRUCK COMPANY

Definition:

A Leland Fire / Rescue Truck company shall consist of a hydraulic aerial apparatus equipped with various ground ladders, tools, technical rescue equipment, and staffed with a minimum of 3 but ideally 4 certified firefighters to perform the various task listed below on the fire and rescue scene. Truck companies should not be used to perform engine company tasks on the fire ground except for extraordinary circumstances where no engine company is available.

#### **Fire Ground Functions:**

Leland Fire / Rescue Truck Companies shall be responsible for performing the following task on the fireground:

Search, Rescue and VES Operations

Recon for Alarm and or Fire locations

Forcible Entry

Laddering the Building

Ventilation

Utilities

Opening up for Extension

Overhaul and Smoke Removal

**Salvage Operations** 

**Elevated Master Streams** 

Scene Lighting

#### **Special Operations and Rescue Scenes:**

Size up the Incident

Develop Rescue Plan to access Patient

Direct and Oversee Additional Manpower Eng Companies provide

(This section will be covered further under the Special Operations manual)

#### **Staffing and Riding Assignments:**

An assignment to a Truck Company should be considered an honor and a privilege. Because the Truck company does not typically run EMS type calls does not mean this is an assignment to be taken lightly. As a member of the Truck Company at Leland Fire / Rescue you have shown the skill and the desire to go above and beyond that of a basic firefighter. Our function is to support the engine companies and to provide the advanced and technical skill set needed when called upon.

The Truck company will split/divide into 2 teams to maximize the effectiveness of the apparatus. The inside team will consist of the Company Officer (CO) and the firefighter riding behind the CO (the Irons FF). The outside team will consist of the Driver and the Tillerman or the OV FF (depending on apparatus). The Truck company shall have priority over all other companies to have the 2<sup>nd</sup> firefighter to make up a total of 4 crew members. The TDA shall have priority of 4 over the Tower Ladder.

In the cases in which a 4<sup>th</sup> person is not assigned to the Truck for that shift due to staffing issues the OV position will be vacant. The Tillerman with a 3-man company will assume the role of the Irons FF.

#### The Inside Team

The objective of the inside team of the truck company is to force entry into the structure, assist engine companies in locating the seat of the fire and controlling the fire room if, search for and rescue trapped victims, and to expose and control fire extension. The officer is responsible to ensure that a primary search of the fire floor is conducted quickly and report the status of the search to command. Once this is completed the crew should report back to the fire area to assist the engine company in controlling extension and overhaul operations.

#### The Outside Team

The objective of the outside team of the truck company is to assist with the rescue of victims, ventilate the structure, provide for egress, soften the structure, and to control utilities. The outside team leader (Diver) must assess the situation and be prepared to prioritize tasks based on the situation. When obvious rescues are present this is the priority. Often the outside team will need to begin VES operations while the inside team simultaneously conducts searches from the inside. Remember to let command know that you will be conducting VES and where.

Regarding the types of construction mentioned below, do not overlook the possible need for early ventilation. The proper ventilation in the proper place at the proper time in coordination with fire attack will improve tenability and survivability for any trapped victims and will increase the speed of searches and other operations on the inside. Remember "Water on the fire" from the engine company is the go ahead to open up the vent hole or windows for ventilation.

## **Residential and Commercial Fire Assignments**

Position/Radio Designation	Tools	Primary Functions	Secondary Functions
Truck (Unit #)	-TIC	-360	-Salvage
Officer (Inside	-Hook	-Forcible Entry	-Overhaul
Team)	-Halligan	-Primary Search	Overnaui
Teamy	-Flashlight	-Locate/confine fire	
	-Search Rope -Commercial	-Report Interior	
		conditions	
Truck (Unit #) Irons	-Irons	-Forcible Entry	-Salvage
(Inside Team)	-Water Can	-Primary Search	-Overhaul
	-Flashlight	-Locate/Confine fire,	
	-Consider K-Tool or hydra	control fire with	
	ram for commercial and	door and can	
	apartment/hotels		
Truck (Unit #) Driver	-TIC	-Position apparatus	-Secondary Search
(Outside Team)	-6'-8' NY Hook	for aerial ops	-Salvage
	-Halligan	-VES	-Overhaul
	-Ground Ladders	-Force Rear Doors	
	-Saws	-Ground Ladder	
	-Flashlight	Placement	
		-Roof Ops	
		Aerial Ops	
Truck (Unit #)	-TIC	-VES	-Secondary Search
OV (Outside	-6'-8' NY Hook	-Report Rear	-Salvage
vent)	-Halligan	conditions	-Overhaul
	-Ground Ladders	-Utilities	
Will Be T53 Tiller	-Saws	-Ground Ladder Ops	Also consider:
	-Flashlight	-Roof Ops	-PPV Fans
			-Gas Monitors
			-Salvage covers

## **Automatic Fire Alarms (Investigation Mode)**

Position/Radio Designation	Tools	Primary Function
Truck (Unit #)	-TIC	-Gain Entry if not made
Officer (Inside	-Halligan	already
Team)	-Flashlight	-Report Interior
	. 13.018	Conditions
		-Find and Report Alarm
		Panel Indication
		-Determine Cause
		-Assist with Reset
Truck (Unit #) Irons	-Irons	-Gain Entry if not made
(Inside Team)	-Water Can	already
	-Flashlight	-Reset Pull Stations
	-Knox Box Key	-Assist Truck Officer
Truck (Unit #) Driver	-TIC	-Position apparatus for
(Outside Team)	-6'-8' NY Hook	aerial ops
	-Halligan	-360 Report
	-Flashlight	-Report Exterior
		Conditions
		- Report Upper Floor
		Conditions
		-Roof Report for
		Commercial Buildings
Truck (Unit #)	-TIC	-Assist T53 Driver with
OV (Outside	-6'-8' NY Hook	Primary Functions
vent)	-Halligan	
	-Flashlight	
Will Be T53 Tiller		

## Traffic Accidents with Entrapment/Pin In

Position/Radio Designation	Tools	Primary Function
Truck (Unit #) Officer (Serve as the Rescue Officer)	-Cribbing and/or Struts -Patient Blanket -Necessary Tools	-360 and Size Up -Determine and Announce Extrication Plan -Assist with Stabilization -Secure Battery if Possible -Safety
Truck (Unit #) Irons	-Cribbing and/or Struts -Rhino Tool/Glass Master -Hydraulic Tools	-Stabilize the Vehicle -Secure Battery if Possible -Remove Glass -Remove Interior Plastics/Trim -Assist with Hydraulic Tools
Truck (Unit #) Driver	-Cutters -Saw Zaw -Portable Lights -Other Necessary Tools	-Position Apparatus- Blocking the scene with Rescue Comps. facing extrication area -Scene Lighting -Hydraulic Operator/Set up portable pump as well with Rams -Tie Back Rigger
Truck (Unit #) OV Will Be T53 Tiller	-Spreaders -Rams -Other Necessary Tools	-Hydraulic Operations

#### **Elevator Rescue**

Position/Radio Designation	Tools	Primary Function
Truck (Unit #) Officer (Serve as the Rescue Officer)	-Flashlight -Halligan -K Tool Kit- For Small picks	-Determine Location of car -Make Verbal Contact with Occupant -Confirm that Power is Secure -Safety
Truck (Unit #) Irons	-Flashlight -Irons -Elevator Keys	-Secure Pit and/or elevator car power -Gain Access to car -Remove Occupants
Truck (Unit #) Driver	-Flashlight -6'-8' NY Hook	-Locate and Gain Access to Elevator Equip. Rm. -Secure Main Power to Elevator -Remove Occupants
Truck (Unit #)OV Will Be T53 Tiller	-Flashlight -Hydra-Ram -Fresno Ladder	-Locate and Gain Access to Elevator Equip. RmSecure Main Power to Elevator -Remove Occupants

## **OPERATIONS**



## **Tactics and Objectives:**

The role of the Truck Company on the fire ground is very diverse and its needs can be impacted by construction, fire location and load, and life safety. Truck Company operations are a very vital part of any fireground operation, and their functions should not be limited by the operational capabilities of the crews assigned to them.

The following pages will break down the tactical objectives that should be considered and followed at various types of construction we face in our district.

It is important to remember that the placement of the Truck Company is vital on the fire ground. The Truck should have priority placement on all fire ground incidents so that the maximum capabilities of the apparatus can be utilized. When responding into an incident the Truck Co officer should be communicating with the first due engine to determine the best route of travel and to relay any information that could affect placement.

Engine Companies should exercise care when laying supply lines to allow access into the fire ground. Supply lines should be laid to the hydrant side of the street leaving a travel lane open and should cut hose over to supply the working engine that is parked past the incident.

If the supply line is laid across the roadway and it is blocking access, then as long as it is uncharged the Truck should run over the supply line and make sure to not park on top of it. DO NOT RUN OVER ANY CHARGED SUPPLY LINES OR ANY ATTACK LINES.

The first due Truck company should position the apparatus on the working side of the structure in a way that best utilizes full length of the aerial device (ex. Scrub 2 sides, scrub the entire long side, and to make the roof)

Proper placement also assists the crew in having the apparatus close by to have the needed equipment close to the working area. The outside team should not have to travel long distances to get what they need as the incident evolves.

The role of the 2<sup>nd</sup> due Truck company should be to position on the opposite side of the structure (especially commercial) and fill in any roll that the first due Truck has not completed or to work in conjunction with the Truck company already on scene to complete certain task.

## **Single Family Residentials**



## 1<sup>st</sup> Due Truck Company

#### **Inside Team (Officer and Irons FF)**

- 360 size up for best entry point and rescue opportunities
- Forcible Entry
- Locate Contain/Confine Fire
- Rescue/Primary Search starting from nearest to fire room
- Open up for Engine Company
- Secure Interior Utilities

## Outside Team (Driver and Tillerman/OV FF)

- 360 walk around, consider taking ladders and saws on lap and ladder all sides for egress
- VES operations (Search priority should be the floor above fire on multi story)

-On Larger residentials the outside team should VES and work towards the location of the inside team, coordinating the search on the fire floor, especially on upper floors

- Be prepared to coordinate vertical or horizontal vent once "water on the fire" is given
- Secure outside utilities

## Multi Family Residentials (Apartment complexes)



## 1<sup>st</sup> Due Truck Company

#### Inside Team (Officer and Irons FF) Report to Fire Floor

- 360 size up, Report to Fire Floor
- Forcible Entry
- Locate Contain/Confine Fire
- Rescue/Primary Search starting from nearest to fire room
- Open up for Engine Company, quickly check for extension in common breeze ways and attic spaces
- Secure Interior Utilities

#### Outside Team (Driver and Tillerman/OV FF)

- 360 taking ladders and ladder multiple area for egress, be prepared for trapped victims on balconies and in windows
- VES operations (Search priority should be the floor above fire on multi story)
- Aerial Operations
- If fire is on top floor, vertical ventilation should be an early priority
- Be prepared to coordinate vertical or horizontal vent once "water on the fire" is given
- Secure outside utilities

For fires on the top floor the outside team should be set up and be ready to go to the roof quickly.

#### **Town Homes**



## 1<sup>st</sup> Due Truck Company

## **Inside Team (Officer and Irons FF)**

- 360 size up for best entry point and rescue opportunities
- Forcible Entry
- Locate Contain/Confine Fire
- Rescue/Primary Search starting from nearest to fire room
- Open up for Engine Company and check for extension into neighboring units
- Secure Interior Utilities

## Outside Team (Driver and Tillerman/OV FF)

- 360 taking ladders and ladder multiple area for egress, be prepared for trapped victims on overhangs and in windows
- VES operations (Search priority should be the floor above fire on multi story) Be cautious of no floors on 2<sup>nd</sup> floor windows
- Aerial Operations
- If fire is on top floor, vertical ventilation should be an early priority
- Be prepared to coordinate vertical or horizontal vent once "water on the fire" is given
- Secure outside utilities

For fires on the top floor the outside team should be set up and be ready to go to the roof quickly.

## **Big Box Construction**



## 1<sup>st</sup> Due Truck Company

#### **Inside Team (Officer and Irons FF)**

- 360 size up if possible for best entry point, fire location and rescue opportunities
- Forcible Entry
- Operating with the First due Engine to Locate Contain/Confine Fire
- Rescue/Primary Search starting from nearest to fire area- Search Ropes should be deployed on any building where the size or configuration of the structure enhances the probability of a member becoming disoriented, lost, or with limited egress options
- Secure Interior Utilities, be mindful of multiple locations and the presence of 3 phase

## Outside Team (Driver and Tillerman/OV FF)

- Driver should set the aerial as soon as possible to get a roof report
- If fire is on top floor, vertical ventilation should be an early priority
- Be prepared to coordinate vertical or horizontal vent once "water on the fire" is announced
- Tillerman/OV FF should work around the building opening up multiple points of egress
- Secure outside utilities- Be mindful of 3 phase

On big box construction it may be necessary to not split the crew depending on conditions. In this case the driver should remain with the apparatus and continue his functions and the OV go with the inside crew. The next due Truck or engine company should be assigned to assist the driver with their functions.

## **Big Box Continued...**

The Drivers roof report should include the following information:

- -Construction type (flat or pitched, and parapet walls)
- -Roof covering (rubber membrane, tar, asphalt, gravel, etc.)
- -Any dead loads (HVAC units, radio towers, storage units, etc.)

The inside team once the fire has been located may need to assist the engine company with getting hose to the fire.

If proper personnel are assigned to hose advancement the inside crew should begin a primary search. It may also be necessary for the crew to establish a tag line on initial entry if prior to the hose line. This will serve as a quick way for the engine to find you and for the apparatus to serve as an anchor point for large area searches.

## **Strip Mall Construction**

The functions of the Truck company should closely mirror those of the Big Box. It will be less likely that the crew would need to split, and the functions of each position would be their traditional roles. Just as in townhomes and apartment complexes, a focus should be made on early vertical ventilation to limit fire spread into neighboring units. The outside team needs to pay attention to utility connections and make sure that all power is secured and not just to the affected units.

## **Reporting Elements of the Truck Company**

Truck Company officers assigned to interior operations are responsible for reporting the following benchmarks to Command either directly or through their division or group supervisor if assigned:

- Primary Search
- Secondary Search
- Status of Extension

Truck Company Drivers are responsible for an early roof report on structures with a flat roof. This report should include:

- Any visible conditions (smoke, fire, etc)
- Stability of the roof, including any area of concern such as sag
- Location of heavy roof loads if present
- Location of any firewalls and parapet walls

Truck Company Tillerman or OV Firefighter is responsible for a rear side conditions report. While making his lap he should carry assigned tools and an appropriate ground ladder. This should include:

- Obvious conditions
- Placement of ground ladders
- Utility Control
- Any victims
- VES needs

Roof Division (Driver and Tillerman/OV) ventilation report should include:

- Location of the hole
- Conditions emanating from the hole
- Conditions in the attic/cockloft spaces (fire load)
- Further actions being taken (additional holes, bigger hole, additional locations)

#### Search and Rescue of Victims

The number one priority of all fire department personnel is the protection of all savable life. Achieving this goal requires several considerations. Actions to remove victims from the fire must be considered, but controlling the fire must also be addressed, often simultaneously. For this purpose, this is why Leland Fire/Rescue has a dedicated, staffed Truck company whose primary focus is the rescue of victims on the fire ground.

While responding to or arriving at a fire, members may receive some or no reports of victims trapped or still inside the structure. There may be information that everyone is out, or no one is home or that someone is trapped. This information may be accurate, inaccurate or lost in communication. Members should consider this information however no structure is considered clear until we, the fire department, have cleared it.

#### Searching for Victims

During operations (particularly in residential structures) all members will maintain a high suspicion of trapped victims and conduct primary searches aggressively and quickly. Only after the completion of a thorough primary search should the all clear be reported to command.

On structures that have been deemed defensive, consideration should be given for survivable spaces. It is imperative that the Truck company members perform a proper 360 and notify command of conditions and possible victim locations and their intentions.

On the fire ground, members should consider there are 2 possible scenarios:

- A known, highly likely location of a victim- In this scenario rapid attempts should be made to access and search these targeted areas.
- An unknown location or unclear if victims are present- In this scenario members should use their size up and their knowledge of victim and fire behavior to identify the most likely occupied and survivable spaces, targeting search efforts here first. Search areas should be prioritized based on areas most threatened by fire but are also survivable spaces.

-With the above scenarios, members should choose the fastest appropriate way to the location of possible victims. VES tactics provide a quick means to target these areas.

#### **Vent Enter Search**

VES tactics are a valuable operation on the fire ground to rapidly gain access to areas that need to be searched quickly that are high life hazard, or most threatened.

VES can be carried out in various ways:

- Each with a different starting point from the exterior, finding the doorway, searching the immediate area and closing the door to that room to finish the search.
- Entering a point for VES and determining that the hallway/rooms adjacent to the entry point has easy access and carrying out a search of multiple rooms from the door way of initial room (in this scenario, care must be taken to control the door to the room we entered to better control the areas we are searching to allow us to get back to our initial starting location).

The biggest item that crews need to relay to command is that they are performing a VES operation and their location.

On multi story structures such as larger houses or multifamily residentials when the inside team is working to get to the seat of the fire and start a search, the outside team should be working to make access to the fire floor as well or the floor directly above if present and began their search. Ideally the 2 search teams will meet up if on the same floor, or if on separate floors will be able to work together in not only searching but then also moving into checking for extension early.

-Reference the above building construction types for functions of the Outside team, remember that when dealing with fires on the top floor of town homes, apartment complexes, and strip malls it may be necessary to go directly to the roof for vertical ventilation.

#### **Victim Located**

When crews locate a victim/victims in a fire the first action shall be to transmit and URGENT message to command. The message should include your ID, victim location, and intended exit pathway.

Example: URGENT traffic, Truck 53 driver to command, we have located a victim on division two on the alpha side. We are coming out the alpha/bravo window, will need a ladder and assistance.

Remember the exit pathway should be the fastest but also the safest path for the victim. Areas of high heat or gases should be avoided.

#### Secondary Searches

Secondary searches should be completed by a different crew than those that performed the primary search. This can be the 2<sup>nd due</sup> truck company, an engine company that is in staging or any other unit that has not previously searched the area in the primary. Secondary searches are not intended for viable victims and should be conducted after the fire is extinguished and conditions have cleared. To ensure the most thorough secondary search possible is to wait unit the atmosphere has been cleared enough to allow for SCBA to be removed.

#### Search Ropes

Search Ropes should be deployed on any building where the size or configuration of the structure enhances the probability of a member becoming disoriented, lost, or with limited egress options. This can occur in buildings of any use, including commercial and large residential.

When the search rope is deployed, the end of the rope shall be secured in a visible and secure location. Crews must ensure that there is no chance that conditions will deteriorate in the location at which the ropes end is secured. Command should be notified of when a search rope is deployed and the location at which it is tied off at.

#### Large Area Search

In structures where the possibility of large areas will need to be searched, a search rope should be deployed, however this will typically be done in a different fashion. As mentioned in the commercial/big box when the OV FF enters with the inside them, the officer will direct the search, develop a starting point as an anchor location, put tag lines on each of the searching firefighters and have them search a designated area. While the firefighters are searching, the officer can monitor the operation with his TIC and monitor conditions around them. Once the designated areas are searched, the process can be moved and then repeated until all areas have been cleared.





## **Ventilation**



The 2 main types of Ventilation that the Truck company should be set up for and be prepared to carry out early on arrival of a structure fire are:

- Vertical
- Horizontal

For vertical ventilation purposes, the Driver of the first due truck company is the supervisor of this operation. He may be assigned an additional truck company's members or an engine that is on scene to assist. He will assume the roof division supervisor and all those working under him will report to him so there is not confusion on the radio as to who is where. The roof supervisor will represent all those assigned to him.

As a vent team performing vertical vent, your Q to open up or punch the ceiling will be when the engine calls that they have water on the fire.

#### Residential:

-For residential style roofs, a minimum of a 4'x4' hole is needed. IF ONCE IT IS OPENED AND TURBULANT CONDITIONS ARE PRESENT, MAKE IT LARGER.

#### Commercial:

For Commercial roof ops, a minimum of 2 companies should be assigned to the roof.

For commercial roof ops, once the crew initially makes the roof an inspection cut should be made. This cut should be just large enough to establish how thick the roofing material is, the direction of the support system and the type of supports.

Following the inspection cut, small heat holes should be cut every 10' to ensure the crew is not going past the fire.

The Minimum size hole should be an 8'x8'. IF ONCE IT IS OPENED AND TURBULANT CONDITIONS ARE PRESENT, MAKE IT LARGER.

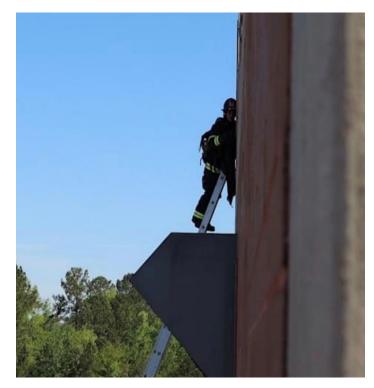
#### **Horizontal Ventilation:**

For quick relief or to quickly control the flow of gases and steam of water flow, the outside team should be prepared to take out the fire room window early if not done so by the fire itself. Once the fire has been controlled, members can begin opening up multiple windows to alleviate the smoke conditions inside the rest of the structure.

Once the fire is under control and the interior crews are ready for it, positive pressure ventilation should be set up. On larger structures be prepared with multiple PPV fans and have a power supply readily available for when the battery fans begin to die.

#### **Ground Ladders**





Ground ladders should be placed on all sides of a multi-level structure during interior operations. These ladders should be placed in the rescue mode so to allow rapid egress for interior crews or rapid access should a victim be located. Once ground ladders are placed, their location should be announced over the fire ground channel so that all crews working will know their location should they need them.

The standard complement of ground ladders varies between truck companies however members should use their best judgement for placement on structures. 16' or greater roof ladders can be used for balcony access or to the 2nd floor if needed. Once the appropriate ground ladders are exhausted from the truck companies, the outside team should utilize the ground ladders of nearby engine companies.

As the outside team of the first due truck has many functions, utilize other members on the fire ground to achieve full coverage of ground ladders. The first due engineer once he has his lines established, or a member of the 2<sup>nd</sup> due engine are good resources as long as this does not hinder the advancement of the attack line.

All members, especially those members assigned to the truck company should be proficient in the single firefighter methods for all ground ladders on the apparatus except for the 35' ladder. Crew members should be proficient in the 2-person method for the 35' ladder. Weight of the ground ladders compared to size of the member is not an excuse! Ground ladders are one of the main tools we have for quick, effective rescues and failure is not an option in deploying them. Get them off the truck and train with them often.

#### **Roof Ladders**

For roof ladder use in vertical ventilation, that decision is left up to the crew going to the roof. If the roof is a walkable pitch, and the crew is comfortable then it is not needed. If the decision to not use a roof ladder is chosen, then the crew should make access in the valley of the roof if possible and get to the peak to make their cut over the fire room. Once the sufficient cut is made then exit the roof.



In this photo, you can see the pitch of this roof is very walkable. The outside team placed a ground ladder directly below where the hole was needed. This allowed for easy and quick access without being slowed down by placing an unnecessary roof ladder which would have delayed the operation.

#### **Extension and Overhaul**

Along with locating the seat of the fire and conducting searches for victims, the other primary function of the Truck Company officer is to ensure a thorough overhaul of the structure has been completed. Overhaul of the structure must be balanced with fire investigation, as improper overhaul can disrupt the scene and disturb evidence and patterns that investigators use to determine the cause.

Checking for extension can be related to performing a primary search. This is the first stage of overhaul and is focused on ensuring that there is no active fire in void spaces or other areas. Checking for extension needs to be done as early as possible once water is on the fire to ensure there is no fire spread into areas that are not easily seen. This is especially true on top floor fires and fires that have extended into common areas such as corridors in apartment complexes. All findings should be reported to command so that they are aware that crews are actively searching for hidden fire. It may be necessary to leave a crew in position to keep an eye on areas of concern that are left in place until after the investigation is completed.

Once the fire investigation has been completed then a thorough overhaul can be conducted. At this stage a more thorough action of opening up and removing burned items and pulling open more walls and ceilings can be completed to ensure that any potential for a rekindle is eliminated. Areas to focus on should include but not limited to are:

- Trimming all doors and windows affected back to clean wood
- Removing dense materials that can retain heat such as furniture, mattresses, piles of clothes, etc.
- Opening up burned walls and ceiling to clean wood
- Removing insulation out of walls and ceiling near exposed areas

All areas affected by fire should be opened up to the point of clean material to be certain there is no hidden fire or smoldering heat. Be sure that material that retains heat is removed from the structure.

In instances where the building cannot be properly overhauled, such as having to wait on an investigation, command should arrange for a fire watch rotation to monitor the building for rekindles.





## **Aerial Operations and Defensive Fires**

At all fire and rescue related incident scenes the aerial apparatus should have priority placement on the fireground. Engine companies should be mindful of their placement to allow room for the truck. On structure responses the first due truck company should position on the working side of the incident if possible, in a manner that allows the most possible use of the aerial device. Even on scenes that the aerial is not used, the truck company should be close so that members do not have a far distance to go when additional tools are needed.



This photo is a good example of an engine company being cognizant of the truck company needing placement and addressing their supply line. The aerial has access to the entire A side and the roof. There is a dedicated engine and truck to this side of the structure.

The TDA should be kept in a ready state with the water way unpinned, in rescue mode. This allows for the stick to have better access to the roof or the side of the structure without the waterway being in the way. On large residential structures (such as apartment complexes) the turn table of both aerial devices should be centered near the main fire room. For example, if the fire is on the A/B side then the aerial should have scrub access to both sides as well as the roof. If the fire is in the middle of the complex, then the scrub of the aerial should be able to reach both sides of the fire compartment and the roof.



In this photo, the truck company is placed on the corner of a large multi family dwelling with aerial access to two sides. This is a good example for when the fire is on one end of a complex and maximum effectiveness of the aerial is utilized.

#### **Defensive Operations**

For defensive fire operations, it should be the standard practice for an Engine company to pump the aerial device, even the platform that has a pump. This frees up the personnel of the truck to perform their other fireground functions. With defensive ops however does not mean that the truck company can only operate in a "surround and drown" mode. If there is access and the fire dictates, the aerial device operated in a below grade position is an excellent option. This allows for a large GPM to be accurately placed into a structure to try to get ahead of rapid-fire growth. With this tactic the goal is to be able to control the bulk of the fire and be able to transition back to an offensive mode.

When the aerial goes up for large defensive fires through the roof, the primary goal should be to control the fire from spreading further. It may be necessary to utilize the aerial to protect exposures, but exposures should typically be handled by an engine company with large handlines or ground monitors. For larger structures, there should be a truck company dedicated to all sides with an engine assigned to them.

On the defensive fire ground, the crews of the truck companies should be utilized to open up the structure to allow access for water to reach the fire. There could also be opportunities that although it is a defensive fire, there is survivable space that needs to be searched. In this case, relay the need to command and go no further than needed.