



**Lt. Mike Mason, Downers Grove, IL. Fire Dept.**

## **Stretching and Operating the 1 <sup>3</sup>/<sub>4</sub> Hose Line**

### ***Session Overview***

One of the most important fire ground activities that takes place is the first arriving company's ability to stretch and operate the first line into an offensive action. Every firefighter on the department will at one time or another be responsible for this action during offensive procedures. This specific exercise will incorporate the use of discussion and hands-on training which will provide for the sizing up, stretching and operating of the 1 <sup>3</sup>/<sub>4</sub> hose line.

This hands-on activity cannot cover all types of situations that may be presented in putting the first line into operation at structure fires during offensive attacks. Frequent training on the advancement of fire attack hose lines along with good fire preplanning will help ensure and improve the techniques and maneuvers that we utilized in order for us to be successful at extinguishing fires.

### ***Goals and Objectives***

- Discussions on the purpose of the first line and the choice of 1 <sup>3</sup>/<sub>4</sub> hose lines.
- Determining line size and positioning
- Estimating the stretch
- Stretching the first line
- Techniques and maneuvers
- Crew members roles and responsibilities
- Awareness of the fire area and its dynamics.

### **Position Responsibilities during Fire Operations**

#### ***Engine Company Officer***

The first due engine officer makes important decisions on the fire ground in accordance with the conditions found on arrival. He must relate and communicate by radio all information about the fire building and the fire's condition to all incoming companies and chiefs. In addition, the following is an overview of the responsibilities of his position with the first in Engine Company that will be operating the first line.

- First and foremost is the safety of his company, to make sure that all members have proper supervision and that no free lancing is taking place.
- To adequately size up the scene and insure if possible a positive water supply. Size up should include the building description, extent and location of fire, any life hazards or rescues, occupancy types, water situation and mode of operation.
- Establish the objectives of attacking the fire, protecting the occupants or protecting exposures.

- Selector the proper line and determine its most effective position when ordering the stretch.
- 360 degree survey of the fire building and fire area from all sides if possible. In multi-dwellings this will mean checking the apartment floors and layouts in order to position and operate the first line.
- Properly supervise the line and its advancement. The attack line should always be under control of the engine company officer. Ensure that the line continues to move forward in order to extinguish the fire efficiently and to relieve a company member when necessary until his replacement.
- To control the flow of water and avoid any indiscriminate use of it during and after extinguishment.

### ***Driver/ Pump Operator***

The driver operator is an extremely important position on the engine company. This firefighter should have a good working knowledge of hydraulics as well as all the tools that are carried on the vehicle and where they are stored. The driver operator is responsible for safe operational procedures when responding to all emergencies as well as safe operations during fire ground activities. The following is a list of responsibilities with this position.

- Responsible for all safe driving while making sure company members are seat belted whenever the vehicle is moving.
- Be aware of the districts, streets and hydrants.
- Responsible for routine maintenance of the vehicle.
- During fire operations is responsible for achieving a positive water supply.
- Aware of all buildings that are equipped with stand pipes or sprinklers.
- Be able to establish drafting operations if necessary.
- For establishing a supply to the fire attack line while incorporating correct pressures for the nozzle being used and the lengths being stretched.
- Maybe responsible for accountability and command in certain situations.
- Responsibilities to the Company members on the first line are detrimental.

### ***Nozzleman***

The nozzleman is one of the most aggressive positions in the fire service and it requires an experienced individual. He will be the only firefighter that will be exposed to the experience of heat conditions more than others. The nozzleman is responsible when the engine pulls up and at the officers directions will grab the assigned 1 ¾ line at the top folds and begin to stretch the line towards the fire building. The following is a list of responsibilities, techniques and maneuvers that this experience member should be well acquainted with.

- Will grab the appropriate line when designated by company officer to do so.
- Be able to establish the shortest possible distance when stretching the line to the front of the building or fire area.
- Be able to recognize the type of stretch that may be needed for a given situation. This will include the amount of hose lengths as they relate to private dwellings, multiple dwellings and commercial buildings.
- Prepare to flake out all flat hose without kinks at the area of advancement to the fire and establish his position.

- Make sure that there is sufficient hose to advance through the structure and to the fire area.
- Will let members know when there is enough hose line present and in its proper position at the entrance and communicate to call for water.
- Making sure that he has a firm hand and a secured knee on the line in order to avoid it being pulled or kicked out especially just before and during charging.
- Making sure that the hose line is bled out. That the stream pattern is correct and that no air is in the line along with the feel of the proper pressure present within the line.
- Making sure that all members are on the proper side of the line when advancing the line while recognizing that the total control of the hose line is under the direction of the company officer.
- The nozzleman calls for more line when necessary, operates the nozzle at all times, always determines the rate of advance and protects the front and rear of the company members.
- Responsible for pushing back all heavy fire at entrances.
- To sweep the floor with the nozzle on a regular basis to create clearing and cooling ahead of the team.
- To be able to operate the nozzle and stream in various positions through direct and deflective applications when necessary.
- Know-how to hold and operate the nozzle in various techniques and maneuvers with the position of the nozzle to be approximately 1 ½ feet out ahead of the body.
- Be able to direct the nozzle in a left or right manner as well as clockwise circles, to sweep ahead and direct streams upward at the ceiling while avoiding any kinking in the area of the nozzle.
- To always make sure that company members are ready and to never move into a fire area alone.
- To continue to advance in a forward motion with the team unless conditions require the necessity for backing the line out with the line operating at all times covering their retreat.
- Not to pass major burning fire without its extinguishment.
- Responsible for never advancing blindly but to be aware watching for fire glow, rollover, smoke conditions and high heat.
- Be able to direct streams of water at angles into doorways, windows, to the front and to the rear.
- To be able to recognize emergency procedures for flashovers and nozzle protection procedures. This means the nozzle to be pointed directly at the ceiling providing either direct or large clockwise motions while retreating.
- Responsible for operating the line and directing its stream at fire and unburned gases overhead and lowering the stream angle directly to the fire.
- To be aware of danger situations regarding wrap-around configurations as commonly found in kitchens, dining rooms, living rooms in private dwellings.
- To realize the importance of sweeping the floor in order to cool it and remove debris.

### ***Backup Firefighter***

The backup firefighter is the strength of the nozzle team. His job is not only to help move the line but to absorb the back pressure that is received from the line when it is being operated by the nozzleman. He provides the nozzleman very close stability and support. His responsibilities are as follows.

- Responsible for grabbing and stretching the hose line off the engine.

- Carries folded sections of hose until the nozzle man states he has enough line.
- Responsible for managing and flaking out the folds and then aids the nozzle men in flaking and managing his folds.
- Positions himself behind the nozzleman on the same side of the line and secures the line with his lower extremities in order to prevent it from being kicked away before and during charging.
- To maintain his position behind the nozzleman throughout the entire advance. Accomplished by leaning into the nozzleman with his shoulder into the back of the nozzle man without pushing him.
- Responsible for looking upward and forward recognizing and being aware of different fire conditions and emergencies.
- To relieve as much of the back pressure as possible in order to allow the nozzle man to maneuver the nozzle and the stream.
- To be able to anticipate the direction of the nozzle and the stream in order to move the hose just behind the nozzle in the opposite direction to help maintain a fluid movement. If the nozzle is high the backup man should position the hose line low. If the nozzle is low the backup man should position the hose line high.
- The backup man is responsible for communicating to the officer the nozzleman's intentions as well as being alert and communicating to both the company officer and the nozzle man any serious threats or conditions.
- The backup man is to be aware of fire on their sides, overhead and behind.

### ***Door Man***

This position is extremely important for without it the hose line and its crew would probably never be able to advance to the fire and inevitably its extinguishment. This firefighter will be doing an extreme amount of work in regards to roaming up and down the hoseline guaranteeing its integrity and position as well as guaranteeing the safety of the members on the line. The following responsibilities should be addressed by the firefighter assigned to this key position.

- Is responsible for roaming the entire length of the advancing line if necessary.
- Helps aid in the advancement of the line by humping hose, removing kinks, chocking doors and stretching/ advancing the line.
- Help the driver operator if necessary in hooking up in achieving a positive water source.
- To trace the line from the pumper to the fire area guaranteeing its clearance when passing through doors and relieving kinks, obstructions and stalls at turns.
- Responsible for staying low along with the nozzle team just outside of doorways to fire areas in order to help feed the line into the nozzleman and backup firefighter.
- To insure that the line is not being forced into the team in order to avoid pushing them forward.
- To move up to the nozzleman, backup firefighter and company officer just after knocked down or water application on the main body of fire in order to help, relief or assist any team member as well as exposing hidden fire and removing debris.

## Training Activity Exercise

Resources: Acquired facility such as private dwelling or commercial space to allow stretching a hose line into the structure and flowing intermittent streams.

Department Tools and Equipment: one engine 3 members, one medical unit 2 members, 1 ¾ line/150-200ft, smooth bore nozzle, 10 traffic cones, forcible entry tools, full turnout gear, scba.

Activity: Members will pull up in front of acquired structure and prepare to pull a 1 ¾ hose line with smooth bore nozzle in a designated entryway as directed by an instructor. Making sure all members are assigned appropriate positions and responsibilities by the company officer in order to advance the line into and throughout the structure as designated by the instructor. After entering the structure with full ppe and scba/on air/off air/members will advance the 1 ¾ line following the traffic control cones set up to help direct the line to the fire area and then to operate the hoseline, nozzle and stream in certain techniques and maneuvers.

### **Objectives:**

- Proper size up
- Proper line deployment from engine
- Proper layout in flaking and kinks
- Proper line positions
- Proper line charging and bleeding
- Proper line advancement/ individual team members techniques on responsibilities assigned.
- Demonstrate nozzleman and backup mans relationship during nozzle operations.
- Demonstrate backup firefighter relationship during advance.
- Demonstrate doorman's relationship and support to line members.
- Advancing company to demonstrate proper hand positions on nozzle and hoseline.
- Nozzleman to demonstrate proper position and technique on nozzle direction and control.
- Company to demonstrate sweeping the floor.
- Demonstrate directing stream at ceiling
- Demonstrate directing stream into fire base
- Company to demonstrate advancing through the techniques of directing the stream through 3 positions during advancement/ ceiling/ floor/fire/move forward repeat.

Company to demonstrate once at fire area z pattern, circular pattern, deflection pattern and reverse fire protection position.

*Lieutenant Mike Mason is a 23 year veteran of the fire service. He is a Certified Instructor III and Fire Officer II along with being a staff instructor for the Downers Grove Fire Academy, Romeoville Fire Academy, Southwest United Fire Academy and other academies throughout the state of Illinois.*

*Lieutenant Mike Mason is the co-author of Rapid Intervention Company Operations (R.I.C.O.) on Thomson/Delmar Publications which is recognized as the largest and most comprehensive text available on Rapid Intervention.*