Success on the advancement and operation of a charged attack line on the fireground is a team effort. Each position on the team is important and requires a great deal of training and execution for success. The nozzle team consists of the nozzleman, back-up firefighter, door firefighter (or roving linebacker) and the officer. Often times removing a part of the team will slow or stop an advance, especially those deeply rooted in a fire building.

Unfortunately in today’s fire service with staffing and manpower constraints, we often aren’t afforded with 3-4 people to stretch and advance an attack line towards a fire area. Firefighters are often forced to perform multiple jobs; the officer usually cannot solely focus on the role of supervision; he must get involved in the movement of the line and in most situations serves as the back-up firefighter. The officer however should never operate as the nozzleman, unless he is the only one on the attack line.

The nozzle man is one of the best and most important roles on the nozzle team as they advance towards the seat of the fire. The nozzle firefighter is responsible for sizing up the stretch, taking the appropriate attack line from the apparatus, taking the appropriate amount of hose and getting a lead length to the point of entry / attack.

This session will review all important aspects of the nozzle firefighter and give students the ability to develop proficiency in the operation and movement of an attack line as the nozzle firefighter.

**Goals & Objectives**

1. Review key positions on an attack line.
2. Review the duties of the nozzle firefighter position when executing a hose stretch.
3. Review the duties of the nozzle firefighter when advancing a charged attack line as part of the nozzle team.
4. Review skills needed to communicate and operate in an effective nozzle firefighter role in ideal and realistic manpower situations.
5. Provide realistic, hands-on, training to develop confidence and proficiency as the nozzle firefighter in fireground evolutions.
Training Resources

■ Training room/Apparatus floor
  • Review the training plan with department members.
  • Review any department procedures dealing with initial attack line selection, positions and assignments, estimating the length, and advancing and operating.

■ Department tools & equipment
  • Apparatus and equipment

■ Training site(s)
  • The training can initiate in the firehouse apparatus floor. Identify the hose loads used by your department and any specific position assignments you utilize.
  • A few actual fireground advancement scenarios where you can flow water and operate as part of the nozzle team will be needed for this training.
  • A water supply will be needed.
  • You can utilize: fire station apparatus bay, training facility, open parking lot, vacant or abandoned buildings, parking garages or any other creative location you have access and ability to operate within. It doesn’t have to be anything fancy, but a furnished living area would present the most realistic challenges and provide the greatest benefit.

■ Training Props
  • No training props are needed for this session. This session involves stretching, flaking, advancing and operating the fire line and then repacking for the next evolution.

Test Answers

References
1. Department SOP’s involving deployment of attack line and position assignments
2. Stretching and Operating the First Line, FDTN FireNotes
3. The Engine Company, PennWell Publishing
4. Fire Officers Handbook of Tactics, PennWell Publishing
5. Engine Company Handbook, Sacramento Fire Department
Trainer Challenge

There’s no easy way to get guys to practice stretching and operating hose lines – accept that and try to make this one interesting. The ultimate motivator will probably be the stopwatch; however spend appropriate time to discuss and review the importance of each position on the attack line and the discipline needed to maintain positions on the line. Work on honing skills and have some fun!

I. The Nozzle Team
   A. Engine Company Operator / Engineer
   B. Engine Company Officer
   C. Nozzle Firefighter
   D. Back-Up Firefighter
   E. Door Man (Roving Linebacker)

II. The Importance of the First Line
   A. Put the fire out and all the other problems go away
   B. Protects all other functions being performed on the fireground
   C. Excuses most often used for delaying the first line…
      1. Obvious rescue
      2. Short staffed
   D. Other companies are relying on the first attack line
      1. Communicate fire location
      2. Communicate any problems encountered
      3. Communicate water on the fire and knock down
      4. DON’T lose focus

III. ALWAYS estimate the stretch (even with preconnects)
   A. Distance
      1. Apparatus to entrance
      2. Entrance to fire area
      3. Coverage of the fire area
   B. Obstacles
   C. Stairs
   D. Elevation

IV. How Well Do You Know Your Attack Lines
   A. Location
      1. Side
      2. Rear
      3. Any obstacles (equipment, other hose, ladders, bed covers)
   B. Number of Stacks
      1. Single
      2. Double
      3. Other?
   C. Loads
      1. Flat
      2. Minute-man
      3. Triple-layer
      4. Other / combination
D. Length
1. 150 feet
2. 200 feet
3. 250 feet
4. What is the maximum length you would use for the various sizes of hose you carry

E. Nozzle
1. Smooth bore – size tip, operating pressure, flow rates
2. Combination – automatic or fixed gallonage
   a. Flow rate, operating pressures
   b. special considerations
3. Do they break apart?

V. The Nozzle Firefighter
A. Deployment
1. Know how much hose you need by sizing up the stretch
2. Take lead section and whatever other hose you need
3. Ensure remainder of hose load is deployed and flaked from the hose bed – if working by yourself.
   a. May work in conjunction with back-up firefighter on a long stretch
   b. Ensure spacing and amount of hose taken are appropriate for the building/fire.
4. Flake and stage lead section appropriately – nozzle and coupling to entrance point — *always control nozzle & PPE*
5. Ensure there are no kinks
6. Chock the first door if needed

B. Preparation for Attack
1. When at entrance & flaked call for water or notify officer you are ready
2. Ensure nozzle & coupling are flaked and don PPE
3. Ensure nozzle shut off
4. Test nozzle flow, reaction, reach and ensure proper fire stream (straight)
5. Stay to one side of entrance, low and away from escaping smoke / fire gases
6. Look under smoke prior to beginning advance

C. Advance
1. Stay oriented
2. Know which direction you are going or where fire is located
3. Look under smoke for signs of fire, obstacles, people, holes
4. Size-up smoke to determine direction of air intake
5. When operating in smoke, if it’s too hot, cool the environment as you advance. If you have to cool the environment, prepare to leave nozzle open during entire advance
6. Communication with officer and back-up firefighter is essential
7. Keep hose in operational position – nozzle out in front at arms length ready to discharge water
   a. Look up and around during advance
   b. Use other senses than sight (hearing and feeling)
   c. Don’t drag nozzle on the ground
   d. Advance with caution, feeling your way with your foot or knee to ensure you don’t fall in hole, opening or stairwell
8. Call for more or less hose if necessary — *ask for specific amounts*

9. Keep head on swivel to look all directions (especially up, sides and rear)

**D. Attack**

1. Keep nozzle out in front, open fully and hand off bail

2. Work in a pattern, cooling ceiling, middle layers and putting water towards seat of fire
   a. Avoid unnecessary contact with walls
   b. Sweep floor as entering main fire areas
   c. Maintain control of nozzle at all times

3. Be prepared to have to operate nozzle alone if back-up firefighter is moving hose

4. Help move hose if needed to stage for advance up or down stairs or into another space while maintaining control of nozzle

5. Know what poor flow feels like so you can notify officer of issues developed behind nozzle team

6. Keep head on swivel to look all directions (especially up, sides and rear)

**E. Alternate Methods**

1. Sometimes in limited manpower the nozzle firefighter can pin the hoseline to the ground with a knee or hand to help absorb nozzle reaction, especially on larger fire lines (2½-inch)

**F. Equipment — PPE, Radio**

**VI. NO REALLY – How Well Do You Really Know How To Operate Your Hose System…..**

**A. Number of Folds**

1. To pull lead length and nozzle

2. Between lead length and apparatus connection

3. Between loops placed in the hose (if there are loops or multiple loops)

**B. How to Deploy**

1. How many steps does it take for you get lead length off apparatus and have slack hit the ground behind you?

2. When / how does the backup firefighter get hose off the apparatus

3. How much distance is between nozzle and back-up firefighter

4. How do you empty the hose bed

5. How far from the entrance do you need to start flaking the lead length

6. Who flakes out the hose and eliminates kinks

**C. How Long Will It Flow Off Booster Water**

**D. Operating**

1. What is it pumped at – does everyone else on the engine know

2. How does it feel when pumped at correct pressure

3. How does it look when pumped at correct pressure

4. Can you tell if there is a kink or if its under-pumped
1. **Attack Line Deployment & Flaking**

Deploying an attack line effectively is one of the most important aspects of the fire attack. Proficiency in line selection, deployment, advance and operation ensures the nozzle team can attack, control and extinguish a fire in a timely manner; thus helping to save lives and reduce property damage. Every member of the engine company should be proficient in each job that needs performed (Driver / Operator, Officer, Nozzle & Back-up).

**OBJECTIVES:**

Given an actual building, perform dry hose stretches to various locations operating as part of a nozzle team. Stretches should be performed for the type of occupancies you encounter in your running area (single family, multiple family, etc). Get the line to the point of service, properly deployed, flaked and ready for water in following circumstances:

1. Front door / Entrance
2. Rear door / Entrance
3. Interior stairs to upper floor
4. Apartment / Multi-family garden apartment from stair landing
5. Apartment / Multi-family hallway entrance

---

2. **The Interior Advance 1½-inch (Nozzle & Officer)**

The most difficult stretch and advance for the nozzle team will be with limited manpower. On a 3-man engine it most likely will be necessary to have the officer to operate as the back-up man and door man, controlling the movement of the hoseline, staging hose, supervising the operation and serving as the physical and mental support in a difficult flowing advance.

**OBJECTIVES:**

Given an actual location or building, the nozzle team will deploy, flake and make entry to a location where they can begin attack on a simulated fire area from an outside entrance. The nozzle team will operate in fake smoke or restrict vision by covering the SCBA and advance through a building or space to a designated target area. The goals will be: speed, communication, proper staging and completion of task.

---

3. **The Interior Attack 1½-inch (Nozzle & Officer)**

The most difficult stretch and advance for the nozzle team will be with limited manpower. On a 3-man engine it most likely will be necessary to have the officer to operate as the back-up man and door man, controlling the movement of the hoseline, staging hose, supervising the operation and serving as the physical and mental support in a difficult flowing advance.

**OBJECTIVES:**

Given an actual location or building, the nozzle team will deploy, flake and make entry to a location where they can begin attack on a simulated fire area from an outside entrance. The nozzle team will operate the hose line into the entrance way, simulating knocking down any fire and then advance and operate the nozzle appropriately from room to room. Focusing on proper water application, movement of the nozzle and hose, pushing into fire area while flowing water and sweeping the floor in the fire area. The nozzle team will shut down at each room and move room-to-room – opening appropriately, flowing during advance and putting water in the entire space until the entire fire area is covered.
The NOZZLE FIREFIGHTER

Success on the advancement and operation of a charged attack line on the fireground is a team effort. Each position on the team is important and requires a great deal of training and execution for success. The nozzle team consists of the nozzleman, back-up firefighter, door firefighter (or roving linebacker) and the officer. Often times removing a part of the team will slow or stop an advance, especially those deeply rooted in a fire building.

Unfortunately in today’s fire service with staffing and manpower constraints, we often aren’t afforded with 3-4 people to stretch and advance an attack line towards a fire area. Firefighters are often forced to perform multiple jobs; the officer usually cannot solely focus on the role of supervision; he must get involved in the movement of the line and in most situations serves as the back-up firefighter. The officer however should never operate as the nozzleman, unless he is the only one on the attack line.

The nozzle man is one of the best and most important roles on the nozzle team as they advance towards the seat of the fire. The nozzle firefighter is responsible for sizing up the stretch, taking the appropriate attack line from the apparatus, taking the appropriate amount of hose and getting a lead length to the point of entry / attack.

This session will review all important aspects of the nozzle firefighter and give students the ability to develop proficiency in the operation and movement of an attack line as the nozzle firefighter.

Date: _____________________
Time: _____________________
Trainer: ____________________________________
Location: ____________________________________
1. While firefighters can disagree on many things, one thing that most agree on is:
   A. Always initiate interior attack
   B. Always initiate exterior attack
   C. Put the fire out and most of the other problems go away
   D. All of the above

2. When it comes to attack line positions and assignments who should NOT be operating the nozzle unless it is the absolute last option?
   A. Back-up firefighter
   B. Nozzle firefighter
   C. Officer
   D. All of the above

3. When considering the amount of hose required for the attack line stretch, the distance should account for:
   A. Apparatus to entrance
   B. Entrance to fire area
   C. Coverage of the fire area
   D. All of the above

4. One key piece of information regarding the nozzle used on the attack line is?
   A. Weight
   B. Color
   C. Flow rate
   D. All of the above

5. Checking the nozzle prior to entry should include:
   A. Nozzle flow
   B. Stream reach
   C. Proper stream
   D. All of the above

6. During the advance the nozzle firefighter should:
   A. Never sweep the floor
   B. Maintain contact with the nozzle
   C. Leave the nozzle to move hose
   D. All of the above

7. Knowing what a properly pumped attack line feels like allows the nozzle firefighter to:
   A. Avoid any communication
   B. Identify possible flow restrictions due to kinks
   C. Advance without assistance from the back-up firefighter
   D. None of the above

8. When operating the nozzle during an advance the nozzle firefighter should take his hand off of the bale?
   A. True
   B. False
I. The Nozzle Team
   A. Engine Company Operator / Engineer
   B. Engine Company Officer
   C. Nozzle Firefighter
   D. Back-Up Firefighter
   E. Door Man (Roving Linebacker)

II. The Importance of the First Line
   A. Put the fire out and all the other problems go away
   B. Protects all other functions being performed on the fireground
   C. Excuses most often used for delaying the first line…
      1. Obvious rescue
      2. Short staffed
   D. Other companies are relying on the first attack line
      1. Communicate fire location
      2. Communicate any problems encountered
      3. Communicate water on the fire and knock down
      4. DON’T lose focus

III. ALWAYS estimate the stretch (even with preconnects)
   A. Distance
      1. Apparatus to entrance
      2. Entrance to fire area
      3. Coverage of the fire area
   B. Obstacles
   C. Stairs
   D. Elevation

IV. How Well Do You Know Your Attack Lines
   A. Location
      1. Side
      2. Rear
      3. Any obstacles (equipment, other hose, ladders, bed covers)
   B. Number of Stacks
      1. Single
      2. Double
      3. Other?
   C. Loads
      1. Flat
      2. Minute-man
      3. Triple-layer
      4. Other / combination
   D. Length
      1. 150 feet
      2. 200 feet
      3. 250 feet
      4. What is the maximum length you would use for the various sizes of hose you carry
   E. Nozzle
      1. Smooth bore – size tip, operating pressure, flow rates
      2. Combination – automatic or fixed gallonage
         a. Flow rate, operating pressures
         b. special considerations
      3. Do they break apart?

V. The Nozzle Firefighter
   A. Deployment
      1. Know how much hose you need by sizing up the stretch
      2. Take lead section and whatever other hose you need
      3. Ensure remainder of hose load is deployed and flaked from the hose bed – if working by yourself.
         a. May work in conjunction with back-up firefighter on a long stretch
      4. Flake and stage lead section appropriately – nozzle and coupling to entrance point — always control nozzle & PPE
      5. Ensure there are no kinks
      6. Chock the first door if needed
   B. Preparation for Attack
      1. When at entrance & flaked call for water or notify officer you are ready
      2. Ensure nozzle & coupling are flaked and don PPE
      3. Ensure nozzle shut off
      4. Test nozzle flow, reaction, reach and ensure proper fire stream (straight)
      5. Stay to one side of entrance, low and away from escaping smoke / fire gases
      6. Look under smoke prior to beginning advance
C. Advance
1. Stay oriented
2. Know which direction you are going or where fire is located
3. Look under smoke for signs of fire, obstacles, people, holes
4. Size-up smoke to determine direction of air intake
5. When operating in smoke, if it’s too hot, cool the environment as you advance. If you have to cool the environment, prepare to leave nozzle open during entire advance
6. Communication with officer and back-up firefighter is essential
7. Keep hose in operational position – nozzle out in front at arms length ready to discharge water
   a. Look up and around during advance
   b. Use other senses than sight (hearing and feeling)
   c. Don’t drag nozzle on the ground
   d. Advance with caution, feeling your way with your foot or knee to ensure you don’t fall in hole, opening or stairwell
8. Call for more or less hose if necessary — ask for specific amounts
9. Keep head on swivel to look all directions (especially up, sides and rear)

D. Attack
1. Keep nozzle out in front, open fully and hand off bail
2. Work in a pattern, cooling ceiling, middle layers and putting water towards seat of fire
   a. Avoid unnecessary contact with walls
   b. Sweep floor as entering main fire areas
   c. Maintain control of nozzle at all times
3. Be prepared to have to operate nozzle alone if back-up firefighter is moving hose
4. Help move hose if needed to stage for advance up or down stairs or into another space while maintaining control of nozzle
5. Know what poor flow feels like so you can notify officer of issues developed behind nozzle team
6. Keep head on swivel to look all directions (especially up, sides and rear)

E. Alternate Methods
1. Sometimes in limited manpower the nozzle firefighter can pin the hoseline to the ground with a knee or hand to help absorb nozzle reaction, especially on larger fire lines (2½-inch)

F. Equipment — PPE, Radio

VI. NO REALLY – How Well Do You Really Know How To Operate Your Hose System…..
A. Number of Folds
1. To pull lead length and nozzle
2. Between lead length and apparatus connection
3. Between loops placed in the hose (if there are loops or multiple loops)

B. How to Deploy
1. How many steps does it take for you get lead length off apparatus and have slack hit the ground behind you?
2. When / how does the backup firefighter get hose off the apparatus
3. How much distance is between nozzle and back-up firefighter
4. How do you empty the hose bed
5. How far from the entrance do you need to start flaking the lead length
6. Who flakes out the hose and eliminates kinks

C. How Long Will It Flow Off Booster Water

D. Operating
1. What is it pumped at – does everyone else on the engine know
2. How does it feel when pumped at correct pressure
3. How does it look when pumped at correct pressure
4. Can you tell if there is a kink or if its under-pumped
<table>
<thead>
<tr>
<th>STUDENT NAME</th>
<th>DEPT/STA #</th>
<th>ACTIVITY 1</th>
<th>ACTIVITY 2</th>
<th>ACTIVITY 3</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rate student performance/participation for each Activity – value of 1 thru 5

TRAINER: ____________________ SIGNATURE: ____________________ DATE: ________