

	City of Fitchburg Fire Department			(Insert Picture)	
	Tab 3 – Standard Operating Guidelines Section 3200 – Engine Company Operations				
	Forward Hose Lay			Policy Number	3204
			Version	2.0	
Version:	Prepared By:	Reviewed By:	Approved By:	Approval Date	Effective Date
1.0	Larry Huber	NA	Larry Huber	11-14-1983	11-14-1983
1.1 Reformatted	Jason Ladwig	NA	NA		2003
2.0	Officer Review	NA	Randall Pickering	June, 2005	June, 2005

Subject: Forward Hose Lay

Scope: All department personnel

Objective: To provide a department guideline for forward hose lay evolutions which can be applied to various fireground situations.

Goals: Provide evolutions that will achieve the following:

- Permit a four-person engine company to efficiently complete the evolution with a minimum of physical output.
- Produce the maximum fire flow allowed by the equipment and appliances carried on the apparatus.
- Provide evolutions that are adaptable to the specific needs of emergencies in both rural and water district locations.

Definitions:

Forward hose lay: The laying of a supply line (4 or 2 ½ inch) from a water source (hydrant or tanker dump site) to the scene of the emergency.

Preconnected hoseline: Hose of a pre-determined length with a nozzle attached that is carried connected to a pump discharge.

1-¾" preconnect: a preconnected hoseline, two hundred feet (200') in length, with a combination nozzle set at 150 GMP with a 15/16 slug tip attached. The nozzle shall be normally set at 150 gallons-per-minute. Such hand lines are carried in the crosslay troughs above the pump panel.

Bumper line: Engine 99 is equipped with one hundred feet (100') of 1-¾ inch in length with a combination nozzle set at 150 GMP with a 15/16 slug tip attached.

2-½" preconnect: a preconnected hoseline, two hundred (200') in length with a automatic fog nozzle attached. Such hoseline are carried in the far right trough in the main hose bed of the engine.

Apartment line: Hoseline of one hundred fifty feet (150') of 3-inch hose with a 2 ½ x 1 ½ inch gated wye attached. On engines 85 & 90 this hoseline will be carried in the trough located immediately to the left of the 2-½ inch pre-connect in the main hose bed. On Engine 99, this hoseline is carried in the cross-lay trough.

Flat load with loop: All pre-connected hoseline and the apartment lines will be loaded using this load. This loading method permits one member to advance any of the lines. This load is loaded like the regular flat load except loops are made at each end on the 6th & 10th fold.

Positions of Crew Members:

1. Officer (OFR) - a member riding in the right front cab position. This member (a department officer or a firefighter who has successfully completed acting officer training) is the supervisor of this unit and is responsible for the crew's operation and safety.
2. Driver/Operator (DO) - a member riding in the operator's position whom is responsible for driving the vehicle and operating the pump.
3. Firefighter #1 (FF1) - a member riding in the jump seat directly behind the Officer. This member is responsible for advancing the initial attack line in carrying out these evolutions.
4. Firefighter #2 (FF2) - a member riding in the jump seat directly behind the Driver/Operator. This member is responsible for establishing the water source (hydrant or rural water source).

Evolution Descriptions

A. One 1 ¾ preconnected hoseline (fire within 200' of engine)

1. Engine Company selects hydrant or other water source. FF2 exits vehicle, secures the appropriate 4" supply line and hydrant bag. FF2 will remain in this position to make the necessary connections after hose is laid out.
2. FF2 motions to the DO when he/she has secured one end of the selected supply hose, and it is safe for the engine to begin the forward lay.
3. The engine will drive forward at a speed of 5-10 mph, taking care to avoid blocking the entire road with the supply line. The Engine shall be positioned "just short" or "just past" the fire building.
4. FF1 will advance a preconnected 1-¾" attack line to a point directed by the OFR. The OFR, carrying all assigned tools, will assist in advancing the hoseline.
5. The DO will supply the attack line with tank water upon the officer's request.
6. [Hydrant Operations Only] FF2 confirms with the DO that he/she is ready for FF2 to open the hydrant and charge the supply line. Confirmation may be visual, face-to-face, or by radio. Once confirmation is received, FF2 opens hydrant.
7. FF2 will walk along the supply line, removing any kinks or sharp bends. FF2 will then join OFR and FF1 and assist in the attack.
8. The DO will change from tank supply to the supply line as soon as possible.

NOTE 1: In the event the attack line is being supplied by tank water and the tank level reaches ¼ remaining, the DO will advise Command.

B. Two 1-3/4" preconnected hoselines (fire within 200' of engine)

1. The steps taken to advance two 1-¾" hoselines are the same as those described for the single line attack evolution. FF2 will advance the second hoseline after the supply line is secured.

NOTE: Although it is possible to operate 1-¾" hoseline with one firefighter, it is more efficient and safer when two firefighters work as a team. OFR must consider these factors when selecting this evolution.

C. One 1 ¾" preconnect hoseline (fire between 200' and 350' of engine)

1. Engine company selects hydrant or other water source. FF2 exits vehicle, secures the appropriate 4" supply line and hydrant bag. FF2 will remain in this position to make the necessary connections after the hose is laid out.
2. FF2 motions to the DO when he/she has secured one end of the selected supply hose and it is safe for the engine to begin the forward lay.
3. The Engine will drive forward at a speed of 5-10 mph, taking care to avoid blocking the entire roadway with the supply line. The engine shall be positioned "just short" or "just past" the fire building.
4. The OFR will advance the apartment line toward the building or objective.
5. FF1 will deliver 200' of 1 3/4" to the gated wye at the end of the apartment line. This will be achieved using one of the following methods:
 - FF1 will remove a 200', 1-3/4" preconnect hoseline from the crosslay trough and the DO will disconnect the hoseline from the jumper line.
 - FF1 will carry 200' of 1-3/4" in the form of two, 100' 1-3/4" hi-rise hose bundles.
6. The DO will supply the attack line with tank water upon the officer's request.
7. [Hydrant Operations Only] FF2 confirms with the DO that he/she is ready for FF2 to open the hydrant and charge the supply line. Confirmation may be visual, face-to-face, or by radio. Once confirmation is received, FF2 opens the hydrant.
8. FF2 will walk along the supply line, removing any kinks or sharp bends. FF2 will join the OFR and FF1 to assist in the attack.
9. The DO will change from tank supply to the supply line as soon as possible.

NOTE 1: In the event the attack line is being supplied by tank water and the tank level reaches 1/4 remaining, the DO will advise command.

D. One 2-1/2" hoseline (fire within 200' of engine)

1. Engine company selects hydrant or other water source. FF2 exits vehicle, secures the appropriate 4" supply line and hydrant bag. FF2 will remain in this position to make the necessary connections after the hose is laid out.
2. FF2 motions to the DO when he/she has secured one end of the selected supply hose, and it is safe for the engine to begin the forward lay.
3. The engine will drive forward at a speed of 5-10 mph, taking care to avoid blocking the entire roadway with the supply line. The Engine shall be positioned "just short" or "just past" the fire building.
4. FF1 will go to the rear of the vehicle and advance the 2-1/2" preconnect to a point directed by the OFR. The OFR, carrying assigned tools, will assist in the advancement of the hoseline.
5. The DO will supply the attack line with tank water upon the OFR's request. The OFR will back up the FF1 until the arrival of FF2.
6. [Hydrant Operations Only] FF2 confirms with the DO that he/she is ready for FF2 to open the hydrant and charge the supply line. Confirmation may be visual, face-to-face, or by radio. Once confirmation is received, FF2 opens the hydrant.

7. FF2 will walk along the supply line, removing any kinks or sharp bends. FF2 will join the officer and FF1 to assist in the attack.
8. The DO will change from tank supply to the supply line as soon as possible.

NOTE 1: In the event the attack line is being supplied by tank water and the tank level reaches $\frac{1}{4}$ remaining, the DO will advise command.

E. One-2 $\frac{1}{2}$ " hoseline (fire between 200' and 450' from engine)

1. Engine company selects hydrant or other water source. FF2 exits vehicle, secures the appropriate 4" supply line and hydrant bag. FF2 will remain in this position to make the necessary connections after the hose is laid out.
2. FF2 motions to the DO when he/she has secured one end of the selected supply hose, and it is safe for the engine to begin the forward lay.
3. The Engine will drive forward at a speed of 5-10 mph, taking care to avoid blocking the entire roadway with the supply line. The Engine shall be positioned "just short" or "just past" the fire building.
4. The OFR will advance the Apartment Line toward the building or objective. The OFR then disconnects the gated wye from the apartment line.
5. FF1 will disconnect the 2- $\frac{1}{2}$ " preconnect from the pump discharge. The hoseline will be advanced to the end of the apartment line (where the OFR has disconnected the gated wye). FF1 will connect the 2- $\frac{1}{2}$ " preconnect to the apartment line.
6. The DO will supply the attack line with tank water upon the OFR request. The OFR will back up the FF1 until the arrival of FF2.
7. [Hydrant Operations Only] FF2 confirms with the DO that he/she is ready for FF2 to open the hydrant and charge the supply line. Confirmation may be visual, face-to-face, or by radio. Once confirmation is received, FF2 opens the hydrant.
8. FF2 will walk along the supply line, removing any kinks or sharp bends. FF2 will then join the OFR and FF1 to assist in the attack.
9. The DO will change from tank supply to the supply line as soon as possible

NOTE: In the event the attack line is being supplied by tank water and the tank level reaches $\frac{1}{4}$ remaining, the DO will advise command.

F. Master Stream from Forward Layout

1. Engine company selects hydrant or other water source. FF2 exits vehicle secures the appropriate 4" supply line and hydrant bag. FF2 will remain in this position to make the necessary connections after the hose is laid out.
2. FF2 motions to the DO when he/she has secured one end of the selected supply hose, and it is safe for the engine to begin the forward lay.
3. The engine will drive forward at a speed of 5-10 mph, taking care to avoid blocking the entire roadway with the supply line. The engine shall be positioned "just short" or "just past" the fire building.

4. The OFR will remove the master stream device from the engine and proceed to the point of operation. FF1 will advance 4" hose to the master stream device. The hose is connected to the 4" discharge on the engine.
5. The DO will supply the master stream with tank water upon the OFR request.
6. [Hydrant Operations Only] FF2 confirms with the DO that he/she is ready for FF2 to open the hydrant and charge the supply line. Confirmation may be visual, face-to-face, or by radio. Once confirmation is received, FF2 opens the hydrant.
7. FF2 will walk along the supply line, removing any kinks or sharp bends.
8. The DO will change from tank supply to the supply line as soon as possible.

NOTE: In the event the attack line is being supplied by tank water and the tank level reaches $\frac{1}{4}$ remaining, the DO will advise command.