TOPIC: Medium & Large Diameter Hoselays

TIME FRAME: :20

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: The student will identify and describe the different types of medium and large diameter hoselays used to overcome fireground fire flow problems.

Standard: With a minimum of 80% accuracy

MATERIALS NEEDED:

- Writing board
- Pens
- Appropriate visual aids
- Audio visual equipment

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 5th Edition, Chapter 13, pgs. 664 thru 671
- IFSTA, Hose Practices, 7th Edition, Chapter 5

PREPARATION: Successful application of fire streams is largely dependent on the speed and efficiency of engine companies laying hoselines and obtaining a dependable water supply.

PRESENTATION	
I. HOSELAYS ARE USED WHEN:	When would you use a hoselay on a structure fire?
A. Tank water is insufficient for the size and/or type of fire	
B. A water source is readily available	
1. Hydrant	
2. Pool	
3. Pond	
4. Cistern	
5. Rivers	
6. Stream	
II. TYPES OF HOSELAYS	
A. Forward Lay	
1. Laid from water source to fire	
2. Generally performed by 1st engine	
3. Advantages	
a. All equipment at fire	
b. Additional attack or exposure lines can be deployed or extended	Give an example of an appropriate scenario for a forward hoselay

PRESENTATION

4. Disadvantages

   a. First-in engine cannot boost hydrant pressure

B. Reverse lay

1. From fire to water supply

2. Necessary if:

   a. Using non-pressurized water supply, i.e. pool

   b. High volume, low pressure hydrants

3. Can be used by second-in engine to supply first-in engine

4. Advantages

   a. First-in engine can boost pressure and volume from water sources

5. Disadvantages

   a. Firefighter to pump operator communication difficult

   b. Additional tools and equipment remote from incident

   c. Difficult to deploy additional lines until arrival of next-in engines

As the second engine at scene, when could you anticipate making a reverse lay?

C. Dual Forward Lay

PRESENTATION	
1. For medium diameter hose in high flow situations (2½1/2" or 3")	
	Give a scenario where a dual forward hoselay would be especially useful
2. Mandatory for any flow requirements over 500 GPM	
3. Mandatory for any hoselay over 500'	
4. Depletes hose bed in half the distance	
D. Dual Reverse Lay	
	What is a common reason to make a dual reverse lay?
1. Useful for supplying fire protective systems:	
a. Sprinklers	
b. Standpipes	
2. Useful for truck operations	
3. Useful when initial attack engine is already placed and fire is rapidly growing	
a. Second-in engine makes dual reverse lay	

SUMMARY:

There are several methods of laying hose on the fireground. Fire behavior and local water supply characteristics will determine which method you will use.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).