

Supply hose loads and deployment procedures

COURSE NUMBER 55-0506-14

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3 HOURS

SUPPLY HOSE LOADS & DEPLOYMENT

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Time required: 3 hours

Materials:

- Two fully equipped pumpers
- Pressurized water source

References:

- Fire Hose Practices, Eighth Edition, IFSTA, chapter 6

Objectives:

- Be able to deploy supply hose in forward, reverse, or split lay methods
- Identify the 4 methods of dual lay procedures
- Make hose loads in the 3 basic hose-load choices (accordian, horseshoe, and flat)
- Understand the 7 general hose-loading guidelines
- Recognize and address limitations when selecting and connecting to a hydrant

Overview:

- Deploying supply fire hose
 - Selecting/making hose loads
 - Selecting/connecting to a hydrant
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Session 1.

Hose Lays

- A. Forward lay**
 - Supply line is laid from water source to fire
 - If threaded couplings are used, a female connection is needed if the hose is to be connected to a hydrant
 - Discuss advantages and disadvantages of the forward lay
- B. Reverse lay**
 - Supply line is laid from the fire to the water source
 - If threaded couplings are used, a double male connection is needed at the engine
 - Discuss advantages and disadvantages of the reverse lay
- C. Split hose lay**
 - Combination of a forward lay and reverse lay
 - Utilizes two pumpers to complete
 - May require a double male or a double female to connect, dependent on how the supply line is loaded on the engines
- D. Dual hose lay**
 - Two or more same size lines deployed as supply lines by a single pumping apparatus
 - Four types of dual lays
 - Dual forward
 - Dual reverse
 - Forward-reverse
 - Reverse-forward

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- F. Combination
 - 1. When 2 different size hose lines are deployed from a single apparatus and are layed parrallel to each other
 - F. Demonstrate supplying water using the various hose lays
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Session 2

Selecting and making hose loads

- A. There three basic hose load choices. All can be used in standard or partitioned hose beds
 - 1. Accordion
 - a. Advantage of this load is its ease of loading
 - b. Requires only two or three persons (although 4 people are best) to load it in a manner of minutes
 - c. Shoulder carries can be easily taken from the load
 - d. Disadvantages of this load are that the hose folds contain sharp bends, which requires that the hose be reloaded periodically if it is not used on a regular basis
 - e. The hose tends to wear along its edges
 - 2. Horseshoe
 - a. Primary advantage is that it has fewer sharp bends
 - b. Hose sometimes deploys in a wavy or snake like pattern
 - c. 10 to 15% of total length can be lost because of wavy pattern during deployment
 - d. Shoulder carries cannot be obtained easily
 - 3. Flat load
 - a. Easiest of the three methods of hose loads to load
 - b. Hose folds have sharp bends
 - c. Requires 2 people to make folds for shoulder carries
 - B. Hose-loading guidelines
 - 1. Check coupling gaskets and swivel action
 - 2. Keep flat sides of the hose on the same plane when couplings are attached
 - 3. Tighten couplings hand-tight
 - 4. Remove wrinkles when it must be bent to form a loop
 - 5. Make short folds (dutchman) so couplings do not turn around during deployment
 - 6. Load large diameter hose (3.5 or larger) so all couplings are located at the front of the hosebed. This procedure saves space
 - 7. Pack hose in a manner that allows it to deploy freely from the hose bed
 - C. Firefighter should demonstrate loading the different loads
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Session 3

Selecting/connecting a hydrant

- A. Recognize and address the following limitations:

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1. Long distance from the emergency scene requires a long supply line deployment
 2. Too close to the incident places personnel and equipment in a dangerous position
 3. Hydrant does not possess adequate residual pressure
- B. Hydrant selection**
1. Usually best to use the hydrant closest to the fire/emergency scene
 2. Stronger (high-pressure) hydrants may be required to provide higher water flow rates
 3. Be prepared to identify, locate, and operate alternative hydrants if hydrant is "dry" or fails
 4. Be aware of traffic problems at the scene. It may be better to pick a hydrant on the same side of the road rather than a closer hydrant
- C. Hydrant connection**
1. Anchor the hose for deployment. This is safer than having a person hold the end of the hose
 2. Communication is essential. The company officer and driver/operator must work in concert to decide the best method of insuring water supply
 3. Once the hydrant has been chosen, this information must be given to other responding units
 4. The plug-man does not act automatically when the apparatus stops at the plug but waits for the officer in charge to assess the situation and gives orders
- D. Demonstrate locating and connecting to the hydrant**
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Summary

Fire suppression/emergency operations depend upon the rapid and efficient deployment of supply fire hose. Do not depend on the limited quantity of water onboard the apparatus. Each fire and emergency organization must select the supply hose and loading methodology that best meets their needs. Evaluate the changing needs of the community, local conditions as well as new hose technology.