

August Drill of the Month
Instructor Guide

Course: Pumps Refresher Course

Session Reference: 3

Topic: Pump Operations Practical

Level of Instruction:

Time Required: 6 hours

Materials: Four Fully Equipped Pumpers
Master Stream Devices
Pitot Gauges

Reference: Pump Operator Student Manual,
Maryland Fire and Rescue Institute

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Preparation:

Motivation:

Objective (SPO): 3-1

The student will demonstrate an understanding of the operation of a centrifugal fire pump to supply and apply water from various sources, in various capacities, and in various operations, through practical activities, to the satisfaction of the instructor, and satisfactory completion of required skills.

Overview:

Practical Pump Operations

- * Operation from a hydrant as a supply pumper
- * Operation from draft as a supply pumper
- * Operation as an attack pumper

Session 3 Practical Pump Operations

- SPO 3-1 The student will demonstrate an understanding of the operation of a centrifugal fire pump to supply and apply water from various sources, in various capacities, and in various operations, through practical activities, to the satisfaction of the instructor, and satisfactory completion of required skills.
- 3-1 Demonstrate an understanding of pump operations for supplying water from pressurized water sources.
- 3-2 Demonstrate an understanding of pump operations for supplying water from static water sources.
- 3-3 Demonstrate an understanding of pump operations by operating as an attack pumper and supplying various attack lines.

Practical Evolutions (devices would be used to simulate distance)

I. Operation from hydrant as supply pumper (3-1)

- A. Engage pump
- B. Charge supply lines from tank (3" line(s))
- C. Establish water supply from hydrant
- D. Change from tank operations to hydrant operations

II. Operation from draft as supply pumper (3-2)

- A. Engage pump
- B. Charge supply lines from tank (4" or 5" line)
- C. Establish water supply from static source
- D. Charge from tank operations to drafting operations

III. Operation as attack pumper (3-3)

- A. Engage pump
- B. Charge attack lines from tank (master stream)
- C. Change from tank operations to supply line

- D. Operate relief valve

All four units would be operating simultaneously with each student operating each unit

IV. Students should be monitored to observe the following (use checklist to record successful completion of skills):

- A. Smooth engaging of pump
- B. Initial operation of pump from tank
- C. Establishment of water supply
- D. Smooth change from tank to other source
- E. Operation of relief valve/pressure governor
- F. Proper gauge pressures
- G. Overall safety of operation

Review:

Practical Pump Operations

- * Operation from a hydrant as a supply pumper
- * Operation from draft as a supply pumper
- * Operation as an attack pumper

Remotivation:

Assignment:

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Evaluation: