Course Title: Engine Company Operations (ECOP)

Length of Course: 16 Hours

Lecture/Lab Breakdown: 4.5/11.5

Prerequisites: ELIF or EBM or FF I certification


Course Goal: Participants in this course will be given the knowledge and skills necessary to operate on a fireground as a member of an engine company.

Description of Course: A discussion of fire behavior and spread in structures, methods of calculating needed fire flow and organizing and equipping engine company is followed by a series of "hands on" drills involving various engine company evolutions.

Description of Methodology to be used: (Brief) A combination of lecture/discussion is followed by field demonstrations and drills.


Equipment/Audiovisual/Supply requirements: Chalkboard, Overhead Transparency Projector, Slide Projector with Screen, Two (four) well equipped engines, water supply (hydrant preferred), place to work where traffic disruption and water discharge will not be a problem.

COURSE OUTLINE (General - Not Detailed)

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<th>Time</th>
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<tbody>
<tr>
<td>:25</td>
<td>Introduction</td>
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<td>Fire Behavior in Structures</td>
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(continued)
1:00  Fire Flow Determination and Flow Development Considerations
1:00  Engine Layout and Equipment
1:00  Engine Company Organization and Riding Position Assignments
1:50  Basic Engine Company Operation Drill - Introduction and Walk Through
1:50  Single Piece Engine Company Drills
1:00  Clean Up and Reservice
1:00  Two Piece and Multiple Piece Company Principles of Operation
2:00  Two Piece Engine Company Drills
2:00  Multiple Piece Engine Company Drills
1:00  Clean Up and Reservice
:50  Critique and Examination

**Competency Evaluation Mechanism (Brief description-attach copy):** (1) Periodic direct questioning; (2) 25 question written examination; and (3) Return demonstration during field operations.

**Course Objectives (specific):** Upon successful completion of this course, the student will:

1. Define an incipient fire; rollover; flashover; a fuel limited fire; an oxygen limited fire; backdrafts and other terms relating to fire behavior and tell how each impacts on fire spread in a structure.
2. Identify at least two means of estimating fire flow requirements.
3. Explain the relationship existing between pump sizes, hoseline sizes, and nozzle sizes and their impact on ultimate fire flow.
4. Define the considerations necessary for laying out and equipping a multi-function engine company.
5. Identify the manning requirements for operating an engine company and establish riding position assignments.
6. Demonstrate proficiency by operating as a member of a wagon company and an engine company in various single/two/multiple piece company operations.

Questions/Comments: Contact the Curriculum Specialist