



Pennsylvania State Fire Academy

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Minimum Standard for Accreditation (MSA)

July 1992

Course Title: Rural Fire Ground Water Movement (RFWM)

Length of Course: 16 Hours

Lecture/Lab Breakdown: 6/10

Prerequisites: IST

Referenced Texts:

Course Goal: Students attending this program will become familiar with basic concepts and techniques utilizing large diameter hose and tank trucks to move water to the rural fire ground. They will demonstrate safe, efficient methods for moving water for fire extinguishment purposes.

Description of Course: This course introduces the student to basic methods of water movement in the rural area for fire fighting. Tank trucks and large diameter hose are utilized. Safe, efficient and recommended methods are discussed, demonstrated, and practiced.

Description of Methodology to be used: (Brief) Combination of lecture, demonstration, audiovisual presentation and practical exercises.

Student Equipment/Supply Needs: Pen/Pencil, Notebook, Turn Out Gear

Equipment/Audiovisual/Supply requirements: Classroom, Chalkboard, Handouts and Audiovisuals per Instructor Discretion; two locations for outside evolutions, one for drafting water for filling tankers and for L.D.H. Operations and one to dump water from tankers; three engines, six tankers minimum, 1000 ft. of 2-1/2" or 3" or 4" hose; 2000 ft. of 5" hose with adaptors and fittings; minimum three portable folding tanks, master stream device with stacked tips, pitot gauge, friction loss chart, nozzle pressure chart, minimum three portable pumps with suction hose and strainers; various strainers, siphon devices and other locally available equipment used in tanker shuttle operations; if possible a four port manifold for 5" hose.

Continued

MINIMUM STANDARDS FOR ACCREDITATION

COURSE OUTLINE
(General - Not Detailed)

<u>Time</u>	<u>Content</u>	<u>Instructor Notes</u>
:30	Registration, Introduction and Course Description	
1:00	Water for Fire Extinguishment	
1:30	Understanding Friction Loss	
1:00	L.D.H. Equipment and Techniques	
3:00	L.D.H. Operations from Draft	
2:00	Tanker Construction and Theory	
1:00	Site Set Up and The Shuttle System	
1:30	Site Set Up Exercise	
3:30	Tanker Shuttle Evolution	
1:00	Test Conclusion	

Competency Evaluation Mechanism (Brief description-attach copy): Evaluation by instructor during practical exercises.

Course Objectives (specific): The participant will:

1. be able to explain why water is used for fire extinguishment.
2. be able to determine the amount of water required for extinguishing a structure fire utilizing several methods.
3. be able to demonstrate an understanding of friction loss.
4. be able to explain construction, care, loading, unloading, and other techniques for using L.D.H. in rural operations.
5. participate in practical exercises utilizing L.D.H. with the supply engine working from a static water source (drafting).
6. be able to identify various types of tanker construction and necessary specifications to build a safe tanker.
7. participate in setting up various fill sites and a dump site for a tanker shuttle.
8. be able to explain proper methods and procedures for operating a safe, efficient tanker shuttle.

Questions/Comments: Rita Wessel, Curriculum Specialist: Extension 106
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