Pennsylvania State Fire Academy



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Minimum Standard for Accreditation (MSA)

July 1992

1150 Riverside Drive

<u>Course Title:</u> New Aerial Apparatus Familiarization (NAEP)

Length of Course: 8 Hours

Lecture/Lab Breakdown: 3.5/4.5

Prerequisites: AELA or AELX

<u>Referenced Texts:</u> Fire Officers Guide to Aerial Ladders/Elevating Platforms (NFPA); Operation/Service Manual for aerial device in question

<u>Course Goal</u>: Upon completion of this course, an experienced aerial apparatus operator will be able to safely and effectively operate a specific piece of new aerial apparatus assigned to his/her organization, performing all operations in compliance with the provisions contained in the manufacturer's operation/service manual.

Description of Course: This course will acquaint the student with the design features, safety requirements, and operational procedures for specific aerial devices. Service and maintenance information as well as practical experience are provided. This course is generally provided where there is a need to expose experienced operators to the characteristics of an apparatus new to their department.

Description of Methodology to be used: (Brief) Lecture and demonstration, coupled with supervised student practice.

<u>Student Equipment/Supply Needs:</u> Pen/pencil and notebook (preferably usable under field conditions), T.O.G. or sturdy work clothes, including safety shoes, hard hat, gloves, and eye protection.

Equipment/Audiovisual/Supply requirements: Example of the aerial device in question (fully equipped), copy of manufacturer's operation and service manual for same; area where spotting, stabilization and operation can occur; pumper, water supply, safe area, and other equipment needed for elevated master stream operation; classroom w/seating, chalkboard and AV equipment per instructor's need. (will depend on specific AV's selected by instructor). Audiovisuals and handouts as selected by the instructor to reinforce lessons.

Continued

COURSE OUTLINE

(General - Not Detailed)

| <u>Time</u> | <u>Content</u> |
|-------------|---|
| :30 | Registration; Review of Basic Aerial Operational Theory and Safety |
| :30 | Hydraulic System Operational Theory |
| :30 | Spotting/Stabilization Requirements and Procedures |
| :30 | Load/Angle Restrictions |
| :30 | Basic Operating Procedures |
| :30 | Elevated Master Stream Procedures |

- :30 Servicing/Maintenance Requirements
- 2:00 Operating Exercises: Spotting, Stabilizing, Operation*
- 2:00 Elevated Master Stream Exercise*
- :30 Review and Summary

*Times shown are based on a maximum of 20 students per piece of aerial equipment and per instructor.

<u>Competency Evaluation Mechanism (Brief description-attach copy)</u>: Directed questioning during lecture and demonstration; observation of student practices during exercises. Instructors are strongly encouraged to devise a 15-30 question written examination based on the specific information pertaining to the equipment used, using the manufacturer's manual as a basis.

<u>Course Objectives (specific)</u>: Upon completion of this course, the student shall, to the satisfaction of the instructor:

- 1. Correctly relate the basic operational theory of aerial fire apparatus.
- 2. Correctly demonstrate safety procedures generic to all aerial fire apparatus; correctly demonstrate safety procedures specific to the apparatus in question in accordance with manufacturer's manual recommendation.
- 3. Correctly describe the basic hydraulic system layout and function of the apparatus in question.
- 4. Given an actual or simulated spotting scenario, correctly describe and/or demonstrate the spotting and stabilization of the aerial device in accordance with manufacturer's manual recommendations.
- 5. Correctly identify load and angle safe operating parameters in accordance with manufacturer's manual recommendations; demonstrate compliance with same during operation of the device.
- 6. Correctly identify all applicable procedures pertaining to elevated master stream operation; demonstrate safe and proper operation of the device in the elevated master stream mode in accordance with manufacturer's manual recommendation.

continued

Instructor <u>Notes</u> MINIMUM STANDARDS FOR ACCREDITATION Aerial Apparatus Familiarization (NAEP) July 1992 Page 3 of

Course Objectives (specific):

7. Correctly identify and perform all applicable operator inspection, servicing, and maintenance procedures called for by the manufacturer's manual for the device in question.

Questions/Comments: Rita Wessel, Curriculum Specialist: Extension 106 rwessel@state.pa.us