

MODULE 10a

APPARATUS

Instructor Guide

APPARATUS FAMILIARIZATION

Learning Objectives. By the end of this lesson the fire recruit will:

1. Be able to identify different types of fire apparatus
 2. Be able to explain the different functions and capabilities of fire apparatus.
-

Requirements Facility: Classroom with tables and chairs.

Materials:

Student Manual

Instructor Manual

Equipment:

Computer

Video Projector

Dry Erase Board and Markers

Methodology This module is taught through use of lecture, conference and discussion

Module Length 60 Minutes

Audio-Visual PowerPoint Presentation: Apparatus, Module 10,

APPARATUS FAMILIARIZATION

I. INTRODUCTION

1. Welcome and Course Introduction. Welcome to module 10 Apparatus & Equipment. I'm your instructor (Name). During previous periods of instruction, we have given you an orientation of the fire service; we have discussed personal safety, self-contained breathing apparatus, search and rescue, hose loads, fire streams, ladders, forcible entry, and ventilation. Today, we'll be looking at the apparatus used to extinguish the fires, and rescue people.



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2. Administrative announcements.

NOTE: The Instructor Should Make Any Administrative announcements necessary prior to the start of the lesson.

3. Purpose of this module. The purpose of this module is to provide you, the recruit firefighter, a basic understanding of the history of apparatus, the various types of apparatus in use today, their functions, and some equipment carried on them.
4. Scope of this module. For the next 30 Minutes we will discuss and look at various types of apparatus used by the fire service
5. Objectives. By the end of this module, you will:
 - a. Identify apparatus commonly used in the fire service.
 - b. Understand the uses of various apparatus
 - c. Understand the evolution of apparatus.
 - d. Describe Different Types Of Fire Apparatus Used In Various Jurisdictions



Slide: 10a-2

6. Conditions. The instruction you receive in this module is intended for firefighting recruits, meaning, it is our assumption that you know little or nothing about firefighting. Instruction will take place here in a classroom environment. We will use lecture, conference, and discussion methods to deliver your instruction.
7. Transition. Your fire department has a variety of apparatus that are large, complicated and potentially dangerous.

APPARATUS FAMILIARIZATION

II. BODY.

A. Hand Drawn.

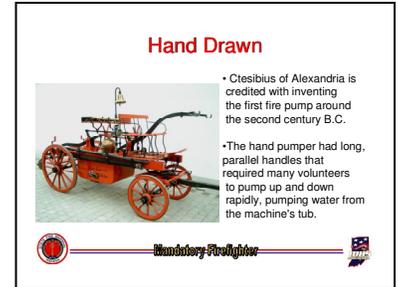
- a. Ctesibius of Alexandria is credited with inventing the first fire pump around the second century B.C.
- b. The hand pumper had long, parallel handles that required many volunteers to pump up and down rapidly, pumping water from the machine's tub.

B. Horse Drawn.

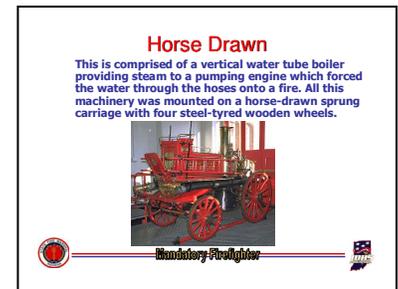
- a. This is comprised of a vertical water tube boiler providing steam to a pumping engine, which forced the water through the hoses onto a fire. All of this machinery was mounted on a horse-drawn sprung carriage with four steel-tyred wooden wheels.

C. Steam-Powered Fire Engine.

D. Early Motorized Apparatus.



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Slide: 10a-4

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Slide: 10a-5

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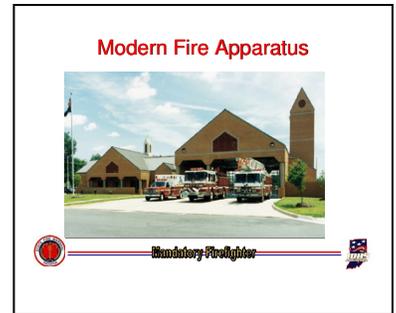
Slide: 10a-6

APPARATUS FAMILIARIZATION

E. Modern Fire Apparatus.

a. Engine Companies

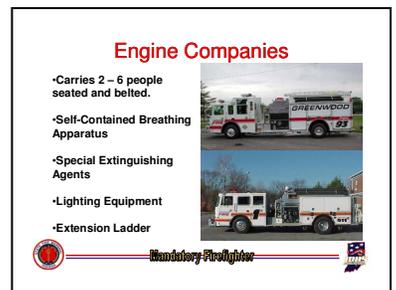
- i. Deliver water at fire scene
- ii. Stretch hose lines.
- iii. Attack and extinguish fires.
- iv. Carries pump, hose, water, tools, and appliances.
- v. Carries 2-6 personnel seated and belted.
- vi. Self-Contained Breathing Apparatus
- vii. Special Extinguishing Agents.
- viii. Lighting Equipment.
- ix. Extension Ladder



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Slide: 10a-8



Slide: 10a-9

F. Truck Companies

- i. Forcible entry.
- ii. Search and rescue.
- iii. Ventilation.
- iv. Ladders.
- v. Securing utilities.
- vi. Overhaul.
- vii. Carries ladders, aerial device and tools.



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G. Aerial Ladder.

- a. Apparatus-mounted ladder reaching 75'-110'.
 - i. Ladder designed so various sections slide out from one another.
 - ii. Ladder bed is attached to a turntable that allows for 360-degree rotation.



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H. Mobile Water Supply Apparatus

- a. "Tankers or Water Tenders"
 - i. Most engines today have at least a 500 gallons water tank.
 - ii. Tenders have tanks from 1,000 to 8,000 gallons.
 - iii. Some tenders may have a pump.
 - iv. According to NIMS this apparatus is designated as a water tender.



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I. Heavy Rescues.

- i. Forcible Entry.
- ii. Search and rescue.
- iii. Scene Lighting.
- iv. Specialized rescue.
- v. Vehicle extrication.
- vi. Confined space.
- vii. Rope rescue.



Slide: 10a-11

J. Special Rescue.

- i. Hazardous Materials.
- ii. Dive Rescue.
- iii. Rope Rescue.
- iv. Confined Space.
- v. Trench/Collapse.



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K. Brush Rig.

- a. Used to extinguish fires in hard to access areas.
- b. Usually 4X4.
- c. Carries shovels, axes, and Rakes.
- d. Have smaller diameter hose
- e. Some are equipped with a foam system.



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L. EMS/Squads

- a. Basic life support.
 - i. Carries patient care equipment including.
 - ii. Oxygen, AED, Suction, Bag Valve Mask, Splints, and Bandaging Equipment.
 - iii. Advanced life support.
 1. Carries all basic life support equipment plus medical drugs.



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M. Incident Command Vehicles.



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N. Mobile Communication & Command Post.

- a. Used for long term incidents.
- b. Large fires.
- c. Mass casualty incidents.
- d. Special rescues.
- e. Hazardous materials incidents.



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- O. Airport Crash Truck.
- Carries foam, dry chemical, and water.
 - Able to traverse all terrain.
 - Some have special nozzles to penetrate aircraft skin.
 - Equipment carried on apparatus.
- P. Closing.
- Questions. What are your questions pertaining to anything we have discussed during this module?
 - Closing Statement. A firefighter must be able to enter the scene safely and effectively. This was an introduction to what you will learn in future training. Review equipment displayed on slide. Students should be familiar with all tools carried on their individual pieces of apparatus..



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Slide: 10a-18

There are no skill sessions required for this module.



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