

# LESSON ONE

## FIREFIGHTER II

### Orientation and Safety

**DOMAIN:** COGNITIVE

**LEVEL OF LEARNING:** KNOWLEDGE /  
COMPREHENSION

#### **MATERIALS**

NFPA 1001 standard; copy of Fire Department charter; copy of Fire Department Standard Operational Procedures; copy of the Fire Department Rules and Regulations; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2<sup>nd</sup> Edition or Delmar Firefighter's Handbook 3<sup>rd</sup> Edition; overhead projector or laptop computer and multimedia projector; projection screen.

#### **NFPA 1001 JPRs, 2008 edition**

- 6.1.1 General Knowledge Requirements.
- 6.1.2 General Skill Requirements.

#### **Junior Member Statement:**

Junior Member training activities should be supervised by qualified instructors to assure that the cognitive and psychomotor skills are completed in a safe and non-evasive manner. While it is critical that instructors be constantly aware of the capabilities of all students both mentally and physically to complete certain tasks safely and successfully, the instructor should take every opportunity to discuss with departmental leaders and students the maturity and job awareness each participant has for the hazards associated with fire and rescue training.

## **TERMINAL OBJECTIVE**

The Firefighter II candidate shall correctly describe their role within the organization as it relates to their job in emergency and non-emergency situations.

## **ENABLING OBJECTIVES**

1. The Firefighter II candidate shall correctly define in writing their role within the fire department.
2. The Firefighter II candidate shall correctly define in writing the responsibilities of assuming and transferring command within the Incident Command System.

# LESSON ONE

## FIREFIGHTER II

### Orientation and Safety

#### MOTIVATION

When firefighters attain the Level II Certification, their degree of responsibility to the organization becomes more consequential. Decisions on the part of the Firefighter II will have a more significant impact, especially during combat operations. Actions taken by Firefighter II personnel will directly affect the overall operation and the safety of on scene personnel, as well as, the eventual outcome of an operation.

#### PRESENTATION

#### ENABLING OBJECTIVE #1

The Firefighter II candidate shall correctly define in writing their role within the fire department.

1. Discuss the definition of the term “role”; it refers to an expected behavior in all types of pertinent situations with the associated expected results.
2. Discuss the role of the Firefighter II in non-combative situations, in that they are to exhibit professional levels of service in any and all functions carried out for the department. In all respects the Firefighter II must exhibit the proper attitude towards any required action. A high degree of initiative is expected of the Firefighter II, and they must be aware that they are, in fact, teachers. They set the example for Firefighter I personnel.
  - a) Exhibit leadership in the performance of any duty assignment.
  - b) Exhibit a thorough knowledge of S.O.P's, Rules and Regulations.
  - c) Maintenance of equipment.
  - d) Maintenance of quarters (station).
  - e) Maintenance of physical abilities.

- f) Awareness of safety in performance of all duties
  - g) Take on additional responsibility of higher rank when required.
  - h) Perform fire inspections within the jurisdiction.
  - i) Train in accordance with required standards to a high degree of proficiency.
  - j) Strive to maintain the professional image of the fire service when dealing with citizens.
3. Discuss the role of the Firefighter II in combative situations.
- a) They must execute all orders in a timely and precise fashion. Explanation of procedures and methods should be unnecessary. When required, a Firefighter II must be capable of assuming command of an operation until higher-ranking personnel are available.
  - b) Discuss the expected performance capabilities of a Firefighter II at an incident:
  - c) Respond to alarms in accordance with S.O.P.s, Rules and Regulations.
  - d) Perform required fire ground function efficiently and safely.
  - e) Assume and transfer command when necessary
  - f) Relay any necessary information, and give location of alarms received from dispatch.
  - g) Protect life and property to the highest degree possible.
  - h) Perform to the highest levels of professionalism.

Reference: Standard Operational Procedures.

Reference:

Delmar Handbook 3rd edition, pages 27,125-128, 756-774

J&B Fundamentals 2<sup>nd</sup> edition, pages 3-4, 118-121

IFSTA Essentials 5th edition, pages 24-25

## **ENABLING OBJECTIVE #2**

The Firefighter II candidate shall correctly explain the responsibilities of assuming and transferring command within the Incident Command System.

1. Discuss the assumption of command. The Firefighter II, in order to assume command of an incident, must first understand the responsibilities of a command.
  - a) Assesses the incident priorities.

- b) Determines the incident's strategic goals and tactical objectives.
  - c) Develops or approves and implements the incident action plan.
  - d) Develops an incident command structure appropriate for the incident.
  - e) Assesses resource needs and orders, deploys, and releases needed resources.
  - f) Coordinates overall emergency activities.
  - g) Serves as the ultimate safety officer responsible for preventing fire fighter injuries and/or death.
  - h) Coordinates activities of outside agencies.
  - i) Authorizes information release to the media.
2. Discuss the transfer of command. The Firefighter II must be able to correctly transfer command to a higher-ranking officer. Transfer of command is a critical function that must be accomplished efficiently and accurately. The general steps are listed below.
- a) Upon arrival of the higher-ranking officer the transfer of command will begin.
  - b) Describe what has happened.
  - c) Whether anyone was / is injured or trapped.
  - d) Whether the problem is stabilized or getting worse.
  - e) What resources are on scene or en-route.
  - f) Whether current resources are adequate for the situation or that more resources need to be called.
  - g) The Firefighter II will then listen to the new IC repeat the status report to identify any miscommunication.

Reference:  
Delmar Handbook 3rd edition, pages 39-40  
Standard Operational Procedures.

## **APPLICATION**

Divide class into groups of three to five students. Have each group address the following scenario as if they are the first engine company on arrival and must assume command of the operation. Each group will structure the initial operation, develop strategic goals and a plan of attack. Ten minutes into the operation a captain arrives to assume command. A spokesperson from each group will present the details of the

operation to the class and demonstrate the transfer of command.

**SCENARIO:**

MARYLAND CHEMICAL COMPANY FIRE CONDITIONS:

Arrival at 0635, Tuesday

Explosion in main warehouse tears hole in roof to rear office area

Number of injured employees

Toxic vapor/product cloud is being carried against the Harbor City Inn and 12 nauseated people are in front of the hotel

HVAC system on the hotel is spreading fumes into fully occupied rooms.

Fire is burning out of control and spreading through the warehouse, feeding on the chemically impregnated wooden structural members.

**TACTICAL CONSIDERATIONS:**

Primary search for occupants

Provide evacuation for potentially exposed persons

Provide control and containment of hazardous materials

Control fire in the structure now involved

Provide emergency medical care for injured persons

**SUMMARY**

Review the fact that the Firefighter II should be able to explain their role as a member of the fire department organization upon completion of this unit.

Review and discuss each of the Firefighter II's responsibilities in the assumption of Command.

Reiterate each of the points that the Firefighter II must cover in the transfer of command.



# LESSON TWO

## FIREFIGHTER II

### Orientation and Safety

**DOMAIN:** COGNITIVE

**LEVEL OF LEARNING:** COMPREHENSION

#### **MATERIALS**

NFPA 1500; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2<sup>nd</sup> Edition or Delmar Firefighter's Handbook 3<sup>rd</sup> Edition; local fire department standard operating procedures; pre-fire surveys; access to the communications center; set of dummy telephones; set of portable radios; copies of blank dispatch report sheets; overhead or laptop computer and multimedia projector; slide projector, screen, and extension cord.

#### **NFPA 1001 JPRs, 2008 edition**

6.1.1 General Knowledge Requirements.

6.1.2 General Skill Requirements.

6.5.4 Maintain power plants, power tools, and lighting equipment

#### **Junior Member Statement:**

Junior Member training activities should be supervised by qualified instructors to assure that the cognitive and psychomotor skills are completed in a safe and non-evasive manner. While it is critical that instructors be constantly aware of the capabilities of all students both mentally and physically to complete certain tasks safely and successfully, the instructor should take every opportunity to discuss with departmental leaders and students the maturity and job awareness each participant has for the hazards associated with fire and rescue training.

## **TERMINAL OBJECTIVE**

The Firefighter II candidate shall correctly describe the benefits provided to fire department personnel by the utilization of fire department safety standards and list those safety hazards common to operation of fire department tools and electrical equipment.

## **ENABLING OBJECTIVES**

1. The Firefighter II candidate shall correctly define in writing the terms 'laws and standards.'
2. The Firefighter II candidate shall correctly define in writing the goals and objectives as they pertain to safety policies.
3. The Firefighter II candidate shall correctly identify in writing how laws and standards impact a fire department's safety program.
4. The Firefighter II candidate shall correctly describe in writing the safety procedures to be used for fire service lighting equipment.
5. The Firefighter II candidate, when given various hand or power tools, shall correctly describe in writing the respective safety hazards presented by each.
6. The Firefighter II candidate, when given various power tools, shall correctly describe in writing the safety procedures for ensuring various power tools are in a "ready state".

# **LESSON TWO**

## **FIREFIGHTER II**

### **Orientation and Safety**

#### **MOTIVATION**

Fire fighting is one of the world's most dangerous occupations. Accidents in this profession can result in costly losses, with the greatest loss being the death of a firefighter. Fire fighting is inherently dangerous as a result of the many adverse conditions and situations encountered at most fire ground operations. Therefore, firefighter safety should always be paramount in the firefighter's mind. Every effort should be taken to reduce the hazards associated with fighting fires. Often the firefighter thinks of rules, regulations, and laws related toward occupational health and safety as obstacles designed to inhibit or restrict their activity while conducting fire service training or performing fire fighting duties, when in fact, most are designed to make fire fighting as safe as possible. The firefighter has the responsibility to not only become familiar with the various rules, regulations, and laws, but also adhere to them. Firefighter deaths and injuries are preventable, but only if the firefighter recognizes the hazards and knows how to safely negotiate them.

#### **PRESENTATION**

##### **ENABLING OBJECTIVE #1**

The Firefighter II candidate, when given a written exam, shall correctly define the terms 'laws and standards.'

1. Discuss the fact that all fire departments will have to implement a safety program to meet their special or individual needs.
2. Explain the differences between laws and standards relating to safety standards for the fire service.
  - a) Laws: rules of conduct that are adopted and enforced by an authority having jurisdiction.

- b) Standards: criterion documents that are developed to serve as models or examples of desired performance behaviors.

Reference:

Delmar Handbook 3rd edition, page 848

J&B Fundamentals 2<sup>nd</sup> edition, pages 25-26

IFSTA Essentials 5th edition, pages 51-57, 59

## **PRESENTATION**

### **ENABLING OBJECTIVE # 2**

The Firefighter II candidate, when given a written exam, shall correctly define goals and objectives as they pertain to safety policies.

1. Lead the class in a discussion concerning the differences between safety goals and objectives.
2. Define the term “goal”: a broad, general, non-measurable statement of desired achievement.
  - a) Prevent human suffering, deaths, injuries, illnesses, and exposures to hazardous atmospheres and contagious diseases.
  - b) Prevent damage / loss of equipment
  - c) Reduce the incidence and severity of accidents and hazardous exposures.
3. Define the term “objective”: a specific, measurable, achievable statement of intended accomplishment. Objectives should always include a certain time frame.

Reference:

Delmar Handbook 3rd edition, pages 24, 694

IFSTA Essentials 5th edition, page 59

## **PRESENTATION**

### **ENABLING OBJECTIVE # 3**

The Firefighter II candidate, when given a written exam, shall correctly identify how laws and standards impact a fire department's safety program.

1. Identify and discuss the purpose the N.F.P.A. 1500, Standard has concerning fire department operations.

2. Point out how the N.F.P.A. 1500 Standard on Fire Department Occupational Safety and Health Programs can serve as a guide in establishing objectives for making the fire service a safer place.
3. Illustrate the fact that the N.F.P.A. 1500 is a minimum standard, none of the objectives are intended to restrict a department or jurisdiction from exceeding the requirements specified by the standard.
4. Discuss the positive impact the N.F.P.A. 1500 Standard could have toward firefighter safety if used in a fire department's safety program.
5. Identify and discuss what O.S.H.A.'s Title 29 of the C.F.R. 1910.120 document involves, as it pertains to a fire departments safety and health program. Ref.: Title 29 of the Code of Federal Regulations (CFR) 1910.120, sub-part L.

Reference: Delmar Handbook 3rd edition, 119-121, 130, 139, 140, 166, 696, 793, 850-851, 855, 941, 966, 1037  
J&B Fundamentals 2<sup>nd</sup> edition, pages 26  
IFSTA Essentials 5th edition, pages 52-54, 56-57

## **PRESENTATION**

### **ENABLING OBJECTIVE #4**

The Firefighter II candidate, when given a written examination, shall correctly describe the safety procedures to be used for fire service lighting equipment.

1. Discuss the safety considerations for each of the procedures listed, concerning power plants and lighting equipment.
  - a) Run power plants at least once a week for at least 20 minutes, while powering an electrical device.
  - b) Check fluid levels weekly. Check gas and oil levels after every use. Drain the power plant of all fluids if it is not to be in service for an extended period.
  - c) Wear gloves when changing quartz bulbs. Normal hand oil can cause a bulb to explode when it is energized.

- d) Inspect electrical cords at weekly intervals to ensure that the insulation is not damaged.
  - e) Inspect the spark plug, spark plug wire, and carburetor at weekly intervals. A spare spark plug should also be readily accessible.
  - f) Test electrical devices for operating status while the power plant is running.
  - g) Change extra gasoline approximately every three weeks to ensure freshness.
2. Explain the safety hazards that each point listed below should mitigate when utilized in auxiliary electrical equipment such as cords and connectors.
- a) 12-gauge 3-wire type (most common).
  - b) Adequately insulated.
  - c) Waterproof.
  - d) Advantages of twist lock connectors
  - e) Emphasize the importance of utilizing a ground-fault interrupter on any circuit being used at an incident.
  - f) Explosion proof.

Reference:

Delmar Handbook 3rd edition, 708-709, 716-717  
J&B Fundamentals 2<sup>nd</sup> edition, page 231  
IFSTA Essentials 5th edition, pages 65-67, 330-334

## **APPLICATION**

If a lighting system or power plant is available, allow each student an opportunity to check its operating status and identify any safety procedures required for its proper operation.

## **PRESENTATION**

### **ENABLING OBJECTIVE #5**

The Firefighter II candidate, when given various hand or power tools, shall correctly describe the respective safety hazards presented by each

1. Emphasize the fact that safety is paramount in the use of any hand or power tool.

2. Discuss the safety hazards that the operator should be cognizant of when carrying or operating any of the tools.
  - a) Axes and hatchets.
  - b) Handsaws.
  - c) Bolt Cutters.
  - d) Cutting torches.
  - e) Circular saws.
  - f) Reciprocating saws.
  - g) Chain saws.
  - h) Halligan tool.
  - i) Small pry bar / nail puller.
  - j) Crow bar.
  - k) Spanner wrench.
  - l) Kelly tool.
  - m) Rabbit tool.
  - n) Power Hydraulic spreader.
  - o) Pike poles.
  - p) Plaster hooks.
  - q) Powered hydraulic extension rams.
  - r) Battering rams.
  - s) Ram bars.
  - t) Mallets.
  - u) Hammers.
  - v) Sledgehammers or mauls.
  - w) Chisels.
  - x) Punches.
  - y) Automatic center punches.
  - z) Picks.

Reference:

Delmar Handbook 3rd edition, pages 458, 588-598

J&B Fundamentals 2<sup>nd</sup> edition, pages 214-231

IFSTA Essentials 5th edition, pages 397-407

### **ENABLING OBJECTIVE # 6**

The Firefighter II candidate, when given various power tools, shall correctly describe in writing the safety procedures for ensuring various power tools are in a “ready state”.

1. Discuss the fact that all power tools should be kept in a “ready state” to ensure emergency readiness.
  - a) All power equipment should be full of fresh fuel.

- b) Damaged or dull blades should be replaced or repaired.
  - c) Belts should be checked for correct operating tension and damaged.
  - d) All hose fittings should be clean and clear of obstructions.
  - e) All equipment should be clean and dry.
2. Discuss the fact that all power and lighting equipment should be cleaned in accordance with manufacturer recommendations.
  3. Discuss the fact that damaged or deficient equipment should be documented and reported in accordance with department Standard Operating Guidelines.

Reference:

Delmar Handbook 3rd edition, pages 588-598  
Jones & Bartlett, Fundamentals 2<sup>nd</sup> edition, pages 230-231.  
IFSTA, Essentials 5<sup>th</sup> edition, pages 412-413.

**SUMMARY**

Re-emphasize the fact that the firefighter should be familiar with the laws and standards that impact firefighter safety; especially NFPA 1500.

Review the safety considerations for the operation of power plants and lighting systems.

Briefly review the safety hazards associated with the various hand and power tools utilized by the firefighter.