

LESSON ONE

FIREFIGHTER I

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

Handouts from respective fire department manuals; NC Fire Service Reference manual; S.O.P.s, Rules and Regulations; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; 1001 NFPA standard; overhead projector or laptop computer and multimedia projector; projection screen.

NFPA 1001 JPR, 2008 edition

5.1.1 General Knowledge 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 I candidate shall correctly describe in writing the mission of the fire service, and the mission of the fire department in relation to the local jurisdiction and its member firefighters.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly define in writing the mission of the fire service.
2. The Firefighter I candidate shall correctly define in writing the mission of the fire department.
3. The Firefighter I candidate shall correctly describe in writing the components of the fire department member assistance program.
4. The Firefighter I candidate shall correctly describe in writing the importance of physical fitness and a healthy lifestyle to the performance of the duties of a firefighter.

LESSON ONE

FIREFIGHTER I

Orientation and Safety

MOTIVATION

If firefighters are to develop the drive, desire, and skills required to perform their job correctly, firefighters must have the proper attitude about the fire service and their department. This attitude is rooted within the mission of the fire service and the mission of the fire department. The mission of the fire service is to accomplish the long-range goal of eliminating fire deaths, fire injuries, and the destruction of property by fire.

NOTE: The instructor is advised to completely review the organizational structure of the respective fire department in which this program is to be delivered. Due to the fact that each fire department is somewhat unique in the areas of “rules and regulations,” “standard operating procedures or guidelines,” and their “charter,” it is important for the instructor to deliver pertinent material to the firefighter candidates. The only plausible method of achieving this is for the instructor to review the departmental organizational structure in advance of the class.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly define in writing the mission of the fire service.

1. Provide a definition of the term “mission.” Mission refers to a broad, long-range goal that is the result of a conviction or aim. A range of ideas that all focus toward a single concept can inspire this conviction or aim. A mission can belong to a single person, a group of people, an organization, or an entire profession.

2. Discuss the Fire Service Mission. The mission of the fire service is to reduce and eventually eliminate deaths, injuries, and property damage due to fire.
3. Discuss with the class how the challenges to the mission of the fire service have dramatically increased with advances in technology. Technology has proven to be a double edge sword. Vast strides in the detection of fire and automatic extinguishing systems have greatly aided the fire service. On the other hand, the preponderance of petrochemical products has greatly intensified the overall fire problem. The single most difficult problem is the human element; a lack of education about fire throughout the general public ranks as the most prevalent cause of uncontrolled fire. Also, discuss the importance of a progressive attitude as a trait of the Firefighter I candidate. The fire service is steeped in tradition, and tradition can at times compromise innovation and progress.

Reference:

Delmar Handbook 3rd edition, pages 2-3

J&B Fundamentals 2nd edition, page 1, 12-14

IFSTA Essentials 5th edition, pages 14-15

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly define in writing the mission of the fire department.

1. Illustrate how the mission of the local fire department, at least in part, is the same as that of the fire service. However, the local fire department may approach the mission of the fire service in several ways. Its overall purpose is to point out how the fire department will protect its citizens.
2. Point out the fact that the local fire department mission will focus on its particular jurisdiction rather than on a state or national level.
3. Discuss why additions to the mission statement may include the well-being of the firefighters and enhanced levels of fire education for local citizens.

Reference:

Delmar Handbook 3rd edition, pages 2, 16-17

J&B fundamentals 2nd edition, pages 12-14

PRESENTATION

ENABLING OBJECTIVE #3

The Firefighter I candidate shall correctly describe in writing the components of the fire department member assistance program.

1. Pension Fund: The Firemen's and Rescue Squad Workers' Pension Fund is a voluntary, supplemental retirement program. At present membership is \$10.00 per month, up to a total payment of \$2,400.00. Members become eligible to receive payments upon 20 years service and upon reaching age 55.
2. The Firemen's Relief Fund: The "relief fund" was implemented to provide financial aid to fire department members. Money for the fund is collected from a tax levy of ½ of 1% on fire insurance premiums within the rated fire district. This fund provides financial aid to the firefighter and/or his/her family in the event of serious injury, sickness, or death as a result of fire department operations.
3. Workers' Compensation: This is a compulsory insurance that covers illness, injuries, or death caused by traumatic injuries that occur while performing the duties of a firefighter.
4. Firefighter's Death Benefit (State): This is a death benefit paid to the surviving family members by the State of North Carolina for a line of duty death in the Fire Service of North Carolina. At present this death benefit totals \$50,000.00. This death benefit will only pay if the firefighter is listed with the State of North Carolina on a certified annual roster.
5. Firemen's Death Benefit (Federal): This is a death benefit paid to the surviving immediate family members or the estate of the deceased firefighter by the Federal Government for a line of duty death in the Fire Service

of North Carolina. At present this benefit total is \$100,000.00 plus any applicable cost of living allowance. This death benefit will only pay if the firefighter is listed with the State of North Carolina on a certified annual roster.

6. Wellness Programs: medical research has proven that firefighters participating in a structured exercise program (usually found in paid fire departments) are less likely to suffer stress related illnesses. Wellness programs provide structured exercise programs along with counseling on stress, diet, and social interaction.
7. Member assistance programs can come in many forms and varieties, all types of counseling can be offered, e.g. legal, financial, marriage, psychiatric, etc. Review the member assistance programs in existence within the fire department including CISD (Critical Incident Stress Management) teams.

Reference: NC Fire Service Reference Manual.

PRESENTATION

ENABLING OBJECTIVE #4

The Firefighter I candidate shall correctly describe in writing the importance of physical fitness and a healthy lifestyle to the performance of the duties of a firefighter.

1. Discuss the different types of physical fitness programs available to fire departments.
2. Provide information on the need for a healthy lifestyle for firefighters.

Reference:

Delmar Handbook 3rd edition, pages 827-828

J&B Fundamentals 2nd edition, pages 28

IFSTA Essentials 5th edition, pages 59-61

SUMMARY

Review the mission statement of the fire service and how it affects the goals of the fire department.

Restate the mission of the respective fire department and discuss those amendments that go beyond the mission of the fire service.

Briefly list and discuss all of the pertinent member assistance programs and open the class for any questions.

Reinforce the need for a physical fitness policy.

LESSON TWO

FIREFIGHTER I

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

Handouts from respective fire department manuals; S.O.P.s or S.O.G.s, Rules and Regulations; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; 1001 NFPA Standard; overhead projector or laptop computer and multimedia projector; projection screen.

NFPA 1001 JPR, 2008 edition

5.1.1 General Knowledge 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 I candidate shall correctly describe in writing the organization of their respective fire department, and their position within the organization.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly describe in writing the organization of the fire department.
2. The Firefighter I candidate, when given a blank form and list of all positions, shall correctly identify each of the positions located on the fire department organizational chart.

LESSON TWO

FIREFIGHTER I

Orientation and Safety

MOTIVATION

If a firefighter is to function effectively and safely within the fire department, there must first exist a thorough understanding of fire department organization and an understanding of exactly where the firefighter is located in this framework. When a firefighter fails to function as a part of the organization, not only has the firefighter been placed in jeopardy, but so has the rest of the organization.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly describe in writing the organization of their fire department.

1. Illustrate and discuss how the fire department is a collective group of people that function within a prescribed framework. This framework allows for a logical sequence in the dissemination of authority and provides for a means of control.
2. Discuss in detail Unity of Command and Division of Labor as they apply to a fire service organization.

Reference:

Delmar Handbook 3rd edition, pages 25, 39

J&B Fundamentals 2nd edition, page 9

IFSTA Essentials 5th edition, pages 18-21

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate, when given a blank form and a list of all positions, shall correctly identify each of the positions located on the fire department organization chart.

1. Hand out copies of the fire departments organizational chart to all of the Firefighter I candidates and carefully explain the roles and corresponding duties of each position. Point out that different companies have different functions.
2. Point out the fact that when working with predominantly volunteer fire departments, the Board of Directors will have a position on the chart with the Chairman and President in sub-positions.
3. Point out the fact that when working with a municipal fire department, the city manager will have a position on the chart along with the city council and mayor. Where a municipal government does exist, the personnel ordinances will dictate the actual positions of administrative personnel.
4. Fire Chief: the Chief of the department is an administrator of affairs of the fire department, both on a business level and at the combat level. Depending on the size and complexity of the department, the Fire Chief's actual involvement in the combat role may vary. However, the Fire Chief is ultimately responsible for everything that the fire department does. The Fire Chief answers directly to the City Manager in a municipality or to the board of directors in a volunteer organization. They, in turn, would answer to citizens of the respective jurisdiction.
5. Deputy Chief: The Deputy Chief is an administrator of both business and combat operations within the fire department and acts directly on behalf of the Fire Chief. In the Fire Chief's absence the Deputy Chief is in overall control of the department. Depending on the size and complexity of the fire department, the Deputy Chief's role is active combat operations may vary. However, the Deputy Chief is responsible for all actions taken by personnel under their command.
6. Assistant Chief: Existence of this position usually indicates a fairly large fire department. The major responsibility of this position is usually that of shift or division command. This entails the administration of an entire shift or division of personnel as well as an active combat command role. When a Deputy Chief is not

part of the organizational structure of the fire department, then the assistant chief will assume the role of Deputy Chief.

7. **Battalion Chief:** Battalion Chiefs are most likely to be found in large fire departments and are responsible for the administration of a given zone or section of the jurisdiction (units and / or stations within a jurisdiction). Battalion Chiefs usually maintain an active combat command role.
8. **Captain:** Captains are generally responsible for the administration of a single station or where the position of Battalion Chief is not utilized, they may fill that position. Captains may also regularly administer functions in the fire department e.g., Fire Prevention Officer, Arson Investigator, or Public Fire Educator. Captains are usually the initial Incident Commander on combat operations.
9. **Lieutenants:** Lieutenants are generally responsible for a single company or crew of personnel, e.g., an engine company, truck company or ladder company. They act as managers for a small group or unit of fire department personnel, both in fire department business and combat operations. The company is the basic unit of the fire department.
10. **Fire Prevention Officer:** Depending upon the size of a department and the size of the jurisdiction, a fire department will have a fire prevention officer and can have a fire prevention bureau. This position usually entails providing fire inspections by a fire inspector the assimilation of pre-incident surveys, and public fire education. This position is usually a staff position, but in some cases requires a combat role as in public information and determining origin and cause of a fire. Also this position usually plays an active role in arson investigation. This position is sometimes referred to as Fire Marshal.
11. **Training Officer:** The Training Officer is responsible for the training of all fire department personnel. The Training Officer maintains all training records and oversees all testing within the fire department. The development of specific programs and classes,

entrance exams and certifications fall under this position. In large fire departments, a chief of training may exist with a complete staff of subordinate officers. In small fire departments, this is usually ranked as a Captains position. During training evolutions, the training officer is in complete control and all personnel (except the Fire Chief) answer to this position. The main reason for this is safety. The Training Officer must reinforce that training must be continuous.

12. Driver / Operator: The Driver / Operator is primarily responsible to drive the fire apparatus to the incident and correctly spot the apparatus for the given function required. Since there are several different types of apparatus, and the function of an apparatus may be specific, the Driver / Operator may need to be certified in several areas, e.g., pump operator, aerial apparatus operator, or tanker operator. In all cases the Driver / Operator should be certified under the North Carolina Driver / Operator Standard.
13. Firefighter: The firefighter is responsible to carry out the ordered actions of his or her superiors, both in fire department business and in combat. There may be multiple levels of the Firefighter position, Fire I and Firefighter II; depending on the level of certified training and in some cases minimum years of service. The firefighter must be skilled in combating, extinguishing, and preventing fires. Firefighters must be able to answer emergency calls property, perform suppression and/or rescue operations; also they need to know how to operate the various types of equipment and apparatus utilized by the fire department. Firefighters should have a working knowledge of basic fire prevention methods and procedures. Firefighters are subject to be called into service at any time, twenty - four hours a day, seven days a week, and 365 days a year.

Reference: 1001 Firefighter Standard.

Reference: Fire Department Charter, Fire Department Organizational Structure and Chart, Fire Department S.O.P.s and Rules and Regulations.

Reference:

Delmar Handbook 3rd edition, pages 26, 28

J&B Fundamentals 2nd edition, pages 4-5, 10

IFSTA Essentials 5th edition, pages 18-33

NOTE: It should be noted that the above positions can be utilized to fulfill multiple roles in the fire service. What is presented here is a general study of each position's individual parameters.

SUMMARY

Provide a brief review of the entire organizational structure of the fire department and the responsibilities of each position within that organizational structure, this will reinforce the concept and answer any additional questions.

Summarize the Firefighter I candidate's role and their respective responsibilities within the fire department organization.

LESSON THREE

FIREFIGHTER I

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

Handouts of respective fire department manuals; S.O.P.s, Rules and Regulations; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; NFPA 1001 Standard; overhead projector or laptop computer and multimedia projector; projection screen.

NFPA 1001 JPRs, 2008 edition

5.1.1 General Knowledge Requirements

5.2.1 Initiate the response to a reported emergency

5.3.11 Perform horizontal ventilation on a structure operating as part of a team

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 I candidate shall correctly define and describe in writing the fire department guidelines under which fire department personnel operate at all times.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly explain in writing the function of the S.O.P.s or S.O.G.s.
2. The Firefighter I candidate shall correctly explain in writing the rules and regulations of the fire department as they pertain to the firefighter.
3. The Firefighter I candidate shall correctly explain in writing the basic components of the Incident Command System and the role of the firefighter within that system.
4. The Firefighter I candidate shall correctly explain in writing the role of other agencies that may respond to emergencies.

LESSON THREE

FIREFIGHTER I

Orientation and Safety

MOTIVATION

If a firefighter is to perform safely and effectively during any fire department operation they must possess a thorough knowledge of the basic guidelines set forth in the fire department. The fire department uses Standard Operation Procedures or Guidelines and Rules and Regulations to assure safety and efficient operations.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly explain in writing the function of the S.O.P.s or S.O.G.s.

1. Discuss how the Standard Operating Procedures are the basic guidelines (policy oriented) that dictate set methods to accomplish the goals of the fire department. That goal or task may be how to roll a hose or communicate by radio.
2. Point out that S.O.P.s allow for expediency and common knowledge between the issue of an order and the completion of that order by fire department personnel.
3. Define the word "standard." It means that an accepted and approved method exists by which an action or function may be performed. The word "procedure" means a method, step by step, by which to accomplish a task. The key word "operating" means to actively do or perform, take action, or initiate. When all three definitions are applied together it becomes simple to define an S.O.P.
4. Illustrate how the function of the fire department's S.O.P.s is to insure that all fire department personnel know how to perform in any given situation and that all

superior officers know what to expect from their subordinates for any given situation.

5. Point out that fire department S.O.P.s will vary somewhat with each individual fire department; therefore, it is beneficial for fire departments subject to mutual aid to have a basic knowledge of their sister fire department's S.O.P.'s where interactive operations are concerned.
6. Emphasize that if a personnel ordinance is utilized in a governmental format, Standard Operating Procedures or departmental policies cannot supersede governmental policies or procedures.
7. Point out that S.O.G.'s are more flexible and useable by line officers and therefore are used more often than S.O.P's

Reference:

Delmar Handbook 3rd edition, pages 38

J&B Fundamentals 2nd edition, page 5

IFSTA Essentials 5th edition, pages 33-34

NOTE: Standard Operating Procedures and Standard Operating Guidelines are essentially the same. In some jurisdictions, the word procedure has been changed to guidelines due to legal interpretation.

APPLICATION

Divide the class into groups of five or six firefighters. Have the groups develop an S.O.P. around a simple routine task such as mowing the lawn or painting a pike pole. Allow approximately ten minutes for the exercise. Have a spokesperson from each group present their version of the S.O.P. to the class.

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly explain in writing how the rules and regulations and state laws pertain to the firefighter.

1. Illustrate how Fire Department Rules and Regulations are the policy-oriented edicts that govern day-to-day functions of fire department personnel.
2. Point out that in order to maintain an effective, safe, and efficient organization, fire departments must first establish guidelines that address possible and probable situations that occur. Within this framework personnel can, in most circumstances, function without the need for direct supervision and can make decisions without developing anxiety over making the wrong decision.
3. Discuss how rules and regulations dictate everything from dress code to rules against coming into work intoxicated, how to act during a given set of circumstances, or what time to report for duty.
4. Discuss how rules and regulations also dictate those appropriate disciplinary measures used in the event a rule or regulation is violated, thus assuring fairness to all personnel.

Reference:

Delmar Handbook 3rd edition, pages 37

J&B Fundamentals 2nd edition, page 6

IFSTA Essentials 5th edition, pages 33-34

APPLICATION

Divide class into groups of three to five. Cite four different situations where rules and regulations should apply and have the groups address each situation and research the correct action from their respective fire department rules and regulations. After 30 minutes have a spokesman from each group stand up and present the correct action to be taken in each case.

#1 Scenario:

Firefighter John Smith is stopped by a State Patrolman for speeding (70- MPH in a 45-MPH zone) while enroute to a structure fire. The State Patrolman did not issue Smith a citation. J. Smith was driving his personal vehicle and uses his red dash light.

#2 Scenario:

Firefighters Jones and Firefighter Smith wish to trade pre-assigned work shifts or duties (paid or volunteer). What should they do?

#3 Scenario:

Firefighter Smith has just shown up for a regularly scheduled training session 30 minutes late, and he is exhibiting signs of intoxication. What action or actions should be taken?

#4 Scenario:

While on duty at the fire station, Firefighter Jones is visited by a local citizen that presents the fire department with a \$100.00 cash donation. What should they do?

NOTE: The instructor may utilize scenarios of their own choosing if particular problems or circumstances exist.

PRESENTATION

ENABLING OBJECTIVE #3

The Firefighter I candidate shall correctly explain in writing the basic components of the Incident Command System and the role of the firefighter within that system.

1. Point out that the Incident Command System, hereafter referred to as ICS, defines how the chain of command forms and progresses through any given operation. ICS establishes the guidelines for an authority to be utilized to control all functions during an incident.
2. Discuss how Fire Service ICS is somewhat similar to a military command system, since fire fighting is considered combat.
3. Emphasize the fact that a key point in ICS is the manageable span of control by one person with the ratio being one to five. One person can effectively manage five subordinates.

4. Point out that fire departments are recommended by NFPA 1500 to have a written ICS, however, not all ICS's are alike and differences should be noted. Basically, the principal is the same. The National Fire Academy has developed a standardized ICS for all types of agencies.
5. Discuss each of the five major ICS functional areas.
 - a) Command.
 - b) Operations.
 - c) Planning.
 - d) Logistics.
 - e) Finance.
6. Explain that the toolbox concept is utilized here, and not all incidents will require all of the tools in the box.
7. Illustrate how ICS can provide for different kinds of operations.
 - a) Single jurisdiction / single agency involvement.
 - b) Single jurisdiction / multiple agency involvement.
 - c) Multiple jurisdiction / multiple agency involvement.
8. If the ICS is properly designed it will adapt to any type of emergency incident no matter how large or small.
9. Discuss how the system should consist of procedures for controlling facilities, personnel, equipment, and communications.
10. Point out that in order for the firefighter to function within the ICS correctly they must first understand the components of ICS.
 - a) Common Terminology.
 - b) Modular Organization.
 - c) Integrated Communications.
 - d) Unified Command Structure.
 - e) Consolidated Action Plans.
 - f) Manageable Span of Control.
 - g) Designed Incident Facilities.
 - h) Comprehensive Resource Management.
11. Illustrate how the IC (Incident Commander) has certain priorities that must be addressed in order. The first priority is always Life Safety. The second priority is Incident Stabilization. The third priority is Property

Conversation. When a firefighter knows what the IC's priorities are, then they can better understand the overall goal of the operation and their particular function within that operation.

12. Point out that once the tactical and strategic goals of an incident are determined and the action plan is implemented, the operation begins to utilize the necessary resources, and that one of those is the firefighter. Discuss the difference between tactics and strategy.
13. Illustrate how the firefighter may fit into several different units.
 - a) A "crew" is a specified number of personnel without an apparatus who are assembled for a task and who have a common leader.
 - b) A "single resource" could be an engine, squad, ladder truck, rescue crew, etc.
 - c) A "task force" is a group of any type or kind of resources, with common communications and a leader, temporarily assembled for special tactical missions.
 - d) A "strike team" is a specific number of the same kinds and type of resources with a common leader and common communications) In other words the firefighter is a part of a resource within the ICS.
14. Point out that when the resources for an incident have been identified, then the IC can set up "divisions."
 - a) A "division" is an organizational level responsible for operations within a specific geographical location at the incident, such as the interior of a building. The firefighter may become part of a division.
15. Discuss how the firefighter might become a part of a "group."
 - a) A "group" is an organizational level responsible for a specific function at an incident such as a "ventilation group" or "salvage group."
16. Illustrate how groups and divisions operate at the same command level. Divisions do not work for groups and groups do not work for divisions. A group might very

well be working in a division, but independent of that division's actual responsibility.

17. Show how by utilizing divisions and groups the IC can control tactical operations at the incident through division/group supervisors. This reduces the number of personnel the IC must deal with and provides for a better span of control with less confusion.
18. Discuss what happens when an incident becomes so large, that division and group leaders are too numerous. A "branch" is then created to maintain the span of control.
 - a) A "branch" is an organizational level between the IC and the division/group leaders, Operations, or Logistics.
 - b) A branch is responsible for implementing the portion of the incident action plan appropriate for that particular branch. They are most commonly used in Operations or Logistics Sections.
19. Emphasize the fact that "Staging" is a critical function of any type of incident. It allows for the orderly deployment of resources from a nearby location. On large operations staging will fall under the operations officer, otherwise the IC will control staging.

Reference:

Delmar Handbook 3rd edition, pages 38-47
J&B Fundamentals 2nd edition, pages 104-115
IFSTA Essentials 5th edition, pages 35-40

NOTE: The term "IMS" or Incident Management System is synonymous with the term "ICS" or Incident Command System.

APPLICATION

Divide the class into groups of three to five students. Cite two different incidents where the ICS needs to be utilized; have each group determine an IC then let each group set up the ICS and describe the correct action plan for the given incident. After 30 minutes have a spokesman from each group stand up and present the action plan implemented in each case. Do not discuss tactics. Hand out a copy of the scenarios to each group.

#1 Scenario:

Small Dwelling.

Fire Conditions:

Arrival at 0200 hours.

Heavy smoke and fire coming from main floor, front, and right side.

25% involvement on main floor.

Occupied dwelling.

No evidence of fire in basement.

TACTICAL CONSIDERATIONS:

Conduct primary search for victims.

Confine fire to first floor.

Provide ventilation.

#2 Scenario:

Small commercial.

Fire conditions:

Arrival at 140 hours.

Heavy smoke and fire coming from front and right side.

25% involvement.

TACTICAL CONSIDERATIONS:

Conduct primary search.

Confine fire to area of involvement.

Provide ventilation.

Perform salvage in sales and storage area.

PRESENTATION

ENABLING OBJECTIVE #4

The Firefighter I candidate shall correctly explain in writing the role of other agencies that may respond to emergencies.

1. Point out that when an emergency occurs and the fire department responds, there may be a need for other types of agencies to respond as well.
2. Discuss the fact that frequently, EMS (Emergency Medical Services) will respond due to the high probability of personnel and civilian injury.

3. Discuss the need for law enforcement agencies and how they will be utilized for traffic control, and in some instances, arson investigation.
4. Emphasize the fact that all agencies that respond to an emergency must function within the framework of the Incident Command System. The Incident Commander is responsible for all operational activity and therefore, is in control of or at least aware, of any operation being performed at the incident.
5. Point out that when a large incident occurs involving multiple agencies, a liaison officer will be utilized to coordinate between the IC and the agency representatives. Liaison officers must be diplomatic when dealing with agencies unfamiliar with the ICS.
6. Show how the actual role of any agency responding to an emergency is to perform a specified function at the incident while performing under the direction of the IC and maintaining direct communications with the IC. Agencies represent a resource to the ICS and will be utilized correspondingly.
7. Below is a list of agencies that could be utilized within the ICS. Discuss each.

LOCAL AGENCIES

- Mutual Aid Fire Department Response (two or more departments responding together)
- Emergency Medical Services
- Rescue Squad
- City and/or County Law Enforcement
- Local Branch of the Oil Jobbers Assoc.
- County Health Department
- Gas Company
- Electrical Company; Duke Power, CP&L
- Private Industry (Haz Mat Incidents)
- Construction Companies

STATE AGENCIES

- NC Environmental Protection Agency
- NC State Fire Marshal
- NC State Bureau of Investigation
- NC Highway Patrol
- NC OSHA
- NC Department of Transportation
- NC Forest Service
- NC Department Health

FEDERAL AGENCIES

- US Department of Alcohol, Tobacco and Firearms and Dangerous Explosives
- Federal Bureau of Investigation
- Environmental Protection Agency
- OSHA
- US Forestry Service
- US Department of Transportation
- US Coast Guard
- Federal Aviation Administration
- Nuclear Regulatory Commission

These are just a few of the agencies that might be utilized in conjunction with the incident command system.

Reference:

Delmar Handbook 3rd edition, pages 38-39

J&B Fundamentals 2nd edition, pages 4-6

IFSTA Essentials 5th edition, pages 36, 40-43

SUMMARY

Summarize the function of the fire department S.O.P.s and how they affect each individual firefighter within the organization.

Summarize the key points concerning the fire department rules and regulations, and how they govern the fire department personnel in day-to-day operations.

Review and list the basic components of the ICS and reiterate the role of the Firefighter I within the ICS

Summarize the roles of outside agencies and their responsibilities within the ICS.

HANDOUT FOR RULES AND REGULATIONS CLASS EXERCISE

RESEARCH THE CORRECT ACTION IN EACH CASE

#1 Scenario

Firefighter John Smith is stopped by a State Patrolman for speeding (70 MPH in a 45-MPH zone) while enroute to a structure fire. The State Patrolman did not issue Smith a citation. J. Smith was driving his personal vehicle and using his red dash light.

#2 Scenario

Firefighter Jones and Firefighter Smith wish to trade pre-assigned work shifts or duties (paid or volunteer). What should they do?

#3 Scenario

Firefighter Smith has just shown up for a regularly scheduled training session 30 minutes late and exhibiting signs of intoxication. What action(s) should be taken?

#4 Scenario

While on duty at the fire station, Firefighter Jones is visited by a local citizen that presents the fire department with a \$100.00 cash donation. What should he/she do?

LESSON FOUR

FIREFIGHTER I

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; overhead projector or laptop computer and multimedia projector; slide projector and screen; VCR/DVD; monitor; Video: "Firefighter Safety and Survival - Company Officer's Responsibility;" NFPA 1500 Standard on Fire Department Occupational Safety and Health Program.

NFPA 1001 JPRs, 2008 edition

5.1.1 General Knowledge Requirements

5.3.5 Exit a hazardous area as a team

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 I candidate shall correctly identify and define in writing their responsibilities in a fire department safety program and the elements of an incident personnel accountability system.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly identify in writing the firefighters' responsibilities in a fire department safety program.
2. The Firefighter I candidate shall correctly identify in writing the elements of an incident personnel accountability system.

LESSON FOUR

FIREFIGHTER I

Orientation and Safety

MOTIVATION

Every year we have firefighters injured or killed in the performance of their duties. Almost all of these firefighter injuries and deaths were preventable. The fire service can ill afford to lose any personnel to death or injury. The prevention of firefighter injury or death is not an impossible goal. There are measures that we can take to protect ourselves in the performance of our duty. We must develop an understanding of safety standards and methods and apply them while performing our duties. These safety standards and methods have, in large part, been developed because of a firefighter death or injury. Please do not allow our predecessor's sacrifice to be in vain, especially where you are concerned.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly identify in writing firefighters' responsibilities in a fire department safety program.

1. Discuss the purpose and intent of the NFPA 1500 standard.
2. Discuss the NFPA 1500 Standard, Chapter 4, Section 4-4, concerning the individual's roles and responsibilities toward safety.
3. Point out that each individual member of the fire department shall:
 - a) Cooperate.
 - b) Participate.

- c) Comply with the provisions of the occupational safety and health program.
4. Describe the advantages of establishing a cooperative, working relationship between firefighters and staff concerning safety related problems.
 5. Discuss the interrelationship of a safety program and the fire department.
 - a) Effectiveness of a safety program depends upon it becoming an integral part of the total organization.
 - b) A cooperative working relationship must be established between the safety officer and line / staff functions. On the fireground, the safety officer reports to the incident commander.
 - c) Attitude of all personnel is critical for the success or failure of any safety program.
 6. Discuss the responsibilities of a safety officer.
 - a) Establish appropriate specifications for equipment.
 - b) Secure required maintenance to keep facilities and equipment in safe order.
 - c) Obtain budget appropriations to implement the safety program.
 - d) Initiate medical programs.
 - e) Have a solid working relationship with the training officers so that safety standards and procedures become an integral part of all training exercises.
 7. Discuss the impact of firefighter injuries.
 - a) Loss of firefighter service.
 - b) Re-assignment of personnel to accomplish duties.
 - c) Increased workload stress of on scene personnel.
 - d) Reduction in operating resources.
 - e) Emotional factors.
 - f) Disability retirement.
 - g) Workers' compensation.
 - h) Insurance (medical, life.)
 - i) Low morale (frequent injuries.)

Reference:

Delmar Handbook 3rd edition, pages 120-121, 130-132, 166, 823-840
J&B Fundamentals 2nd edition, pages 26-27

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly identify in writing the elements of an incident personnel accountability system.

1. Point out that every fire department should develop a personnel accountability system to encompass the following:
 - a) Standardization.
 - b) Used at every incident.
 - c) All personnel should be familiar with the system.
 - d) Importance in the event of a serious accident or structural collapse.

2. Discuss the different accountability systems.
 - a) Tag system.
 - b) SCBA tag system.

Reference:

Delmar Handbook 3rd edition, pages 189, 824-825

J&B Fundamentals 2nd edition, pages 32-33

IFSTA Essentials 5th edition, pages 74-76

APPLICATION

Divide class into small groups. Use the NFPA 1500 Standard's worksheets, if available, to allow the candidates to evaluate their fire department against the things discussed in this lesson. If the 1500 Standard is unavailable allow each group to identify and record obstacles that may be present in their own organization(s) that would impede a safety program.

SUMMARY

Review the responsibilities of the firefighter as denoted by the NFPA 1500 standard and how these responsibilities are addressed within their respective fire departments.

Re-emphasize the importance of utilizing a personnel accountability system and review the various systems in use.

LESSON FIVE

FIREFIGHTER

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: APPLICATION

MATERIALS

Overhead projector or laptop computer and multimedia projector; slide projector and screen; VCR/DVD and monitor; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; slides from the NFA's, "Firefighter Safety and Survival Program;" Video from Fire Engineering Series, "Collapse of Burning Buildings."

NFPA 1001 JPRs, 2002 edition

- 5.3.1 Use SCBA during emergency, operations
- 5.3.5 Exit a hazardous area as a team
- 5.3.10 Attack an interior structure fire

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 I candidate, when given a written exam, shall correctly identify and describe in writing dangerous building conditions created by fire and list techniques used in maintaining orientation.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly identify in writing safety hazards encountered in buildings.
2. The Firefighter I candidate shall correctly identify in writing the reasons a firefighter can become trapped or disoriented within a building, and describe the steps to follow should this happen.

LESSON FIVE

FIREFIGHTER I

Orientation and Safety

MOTIVATION

All too often, a firefighter must enter an involved structure to extinguish the fire or perform a search. Since entry into the structure may be necessary, the firefighter must be aware of dangerous building conditions created by the fire. The firefighter must be able to demonstrate techniques for the correct action should they become trapped or disoriented. The firefighter's life, as well as that of additional personnel, will literally depend upon their capability to function correctly within these hostile environments.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly identify in writing hazards encountered in buildings.

1. Discuss the five (5) dangerous building conditions.
 - a) Heavy content fire loading.
 - b) Combustible furnishings and finishes.
 - c) Wood-shake shingles.
 - d) Wooden floors and ceilings.
 - e) Large, open spaces.

2. Point out local examples of each of the dangerous building conditions listed above and discuss the clues a firefighter should be looking for on arrival to an incident at one of these structures.

Reference:

Delmar Handbook 3rd edition, pages 385-388, 402-409

J&B Fundamentals 2nd edition, pages 162-173

IFSTA Essentials 5th edition, pages 152-156

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly identify in writing the reasons a firefighter can become trapped or disoriented within a building and describe the steps to follow should this happen.

1. Discuss the reasons firefighters become trapped or disoriented within a building.
 - a) Unexpected structural collapse.
 - b) Doors closing behind crews.
 - c) Firefighters straying from hose or lifeline.

2. Discuss the actions that should be taken by firefighters in the event they become trapped or disoriented.
 - a) Remain calm and find cover from the fire.
 - b) Activate PASS device.
 - c) Remain with hose line or safety line.
 - d) If available, make radio contact as quickly as possible with others on the scene.

3. Show video from Fire Engineering Series, entitled "Collapse of Burning Buildings."

Reference:

Delmar Handbook 3rd edition, pages 837-838

J&B Fundamentals 2nd edition, pages 377-378, 536-542

IFSTA Essentials 5th edition, pages 318-322

APPLICATION

Divide class into small groups. Show slides or pictures of various building conditions that may represent a potential for trapping firefighters and allow them to identify these conditions. An alternative to this could include a tour of occupancies in the area to allow the class to identify situations that could cause firefighters to become trapped.

SUMMARY

Briefly review the types of dangerous building conditions that can jeopardize the safety of firefighters.

Reiterate that most buildings provide a potential for firefighters to become trapped or disoriented.

Re-emphasize those procedures that firefighters can follow if and when they become disoriented or trapped in a building.

LESSON SIX

FIREFIGHTER I

Orientation and Safety

DOMAIN: PSYCHOMOTOR

LEVEL OF LEARNING: APPLICATION

MATERIALS

Overhead projector or laptop computer and multimedia projector; slide projector and screen; VCR/DVD and monitor; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition.

NFPA 1001 JPRs, 2008 edition

5.3.17 Illuminate the emergency scene

5.3.18 Turn off building utilities

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 I candidate shall correctly identify and describe in writing the steps and hazards involving shutting off various utilities, as well as identify safety procedures when using fire service lighting equipment.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly demonstrate the procedures for shutting off various utility services to a building, and the hazards associated with each.
2. The Firefighter I candidate shall correctly identify and describe in writing safety procedures when using fire service lighting equipment.

LESSON SIX

FIREFIGHTER I

Orientation and Safety

MOTIVATION

Safety procedures should be established and utilized for shutting off any of the various types of utilities. At almost every fire, firefighters are called upon to handle various situations that involve shutting off utilities to a building. Shutting off utilities can pose a serious threat to firefighters, particularly those involving electricity. Firefighters have been seriously injured or killed attempting to shut off the electricity to a building. For this reason, guidelines should be established to determine if the utilities should be shut off. However, if utilities need to be shut off, this must be done safely and correctly.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly demonstrate the procedures for shutting off various utility services to a building, and the hazards associated with each.

1. Discuss the safest methods firefighters can use to disconnect the electrical service from a building.
 - a) If possible, shut off the main breakers at the electrical service box or panel.
 - b) Do not cut outside wires or pull electrical meters.
2. Discuss reasons firefighters should not cut outside wires or pull electrical meters.
 - a) Extreme electrical hazards exist if improper equipment is used when cutting drop wires to a building.

- b) Sometimes pulling a meter may not even stop the flow of electricity to the building.
- 3. Discuss positioning of the petcock on natural gas meters.
 - a) Petcock is perpendicular to the pipe.
 - b) A spanner wrench may be used to close most natural gas petcocks.
- 4. Point out that utilities, shut off because of fire operations, should not be restored by the firefighters due to liability.
- 5. Discuss the need for a departmental policy governing the handling of electrical emergencies.
 - a) Notify power company personnel as soon as there is an electrical hazard.
 - b) Let power company personnel handle energized electrical equipment if possible. The exception to this policy is when a life is in immediate danger, a rescue must be performed and the rescuer has the proper knowledge and equipment. This equipment must be certified to be dielectric by an approved testing agency, and the firefighter must be thoroughly trained in its use.
 - c) Do not use solid or straight hose streams when a possible electrical hazard exists.
 - d) Let pole top or cross arm fires burn until utility personnel shut down the power unless part of the pole or cross arm is in danger of falling. In this case, a fire extinguisher rated for Class C fires may be used to extinguish the fire. A firefighter will most likely have to use a fire department aerial device to reach the fire.
 - e) Exercise extreme caution when using all ladders around electrical hazards.
 - f) When possible, avoid parking apparatus under overhead wires.
 - g) OSHA 29 CFR 1926.550 states that aerial devices or ground ladders shall be kept a minimum of 10 feet from lines rated 50 KV or lower. For lines over 50 KV, the minimum clearance shall be 10 feet plus 0.4 inches for each 1 KV over 50KV, or use twice the length of line insulator but never less than 10 feet.
 - h) Let only power company personnel cut electrical wire.

- i) Treat all wires as “live” high-voltage wires.
 - j) Establish a danger zone of at least one span in either direction from downed power wires.
6. Wear full protective clothing when electrical hazards exist.

Reference:

Delmar Handbook 3rd edition, pages 708, 769

J&B Fundamentals 2nd edition, pages 279-280, 636-637

IFSTA Essentials 5th edition, pages 780-787, 779-780

APPLICATION

Divide the class into groups and have them identify occupancies in their communities that may present a special problem in controlling the utilities. Allow each group to identify possible solutions and discuss these with the class. An alternative to this exercise could involve taking the class on a tour of the community to identify and discuss how various utilities can be controlled at various occupancies.

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly identify and describe in writing safety procedures when using fire service lighting equipment.

1. Discuss the points concerning the procedures for operating 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. List and discuss why the following items should be 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.
3. Explain the purpose of a ground-fault interrupter when a tool's insulation fails. The ground-fault interrupter will shut off the electricity very quickly to reduce the severity of shock to the user.

Reference:

Delmar Handbook 3rd edition, pages 708-709, 716-717
J&B Fundamentals 2nd edition, page 231
IFSTA Essentials 5th edition, pages 65-67,332-334

APPLICATION

If a light plant is available, allow each student an opportunity to check its operating status. Also, using available equipment, allow each student an opportunity to set up a display of portable lighting.

SUMMARY

Review the aspects of controlling building utilities effectively and safely.

Summarize the procedures for setting up and maintaining lighting equipment with regard to firefighter safety.

LESSON SEVEN

FIREFIGHTER I

Safety and Orientation

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

Overhead projector or laptop computer and multimedia projector; slide projector and screen; VCR/DVD and monitor; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; NFA Video: "Firefighter Safety and Survival - Company Officer's Responsibility;" NFA Video: "Firefighter Safety and Survival - Potential Infectious Waste."

NFPA 1006 JPR, 2008 edition

5.3.10 Attack an interior structure fire

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 I candidate, when given a written examination, shall correctly identify the potential long-term health consequences of exposure to the products of combustion and describe methods that will reduce the risk to the firefighter's health.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly identify in writing the potential long-term health consequences of exposure to the products of combustion.
2. The Firefighter I candidate shall correctly identify in writing the methods to reduce the long-term health effects of exposure to the products of combustion.

LESSON SEVEN

FIREFIGHTER I

Orientation and Safety

MOTIVATION

One of the dangers facing firefighters is exposure to the products of combustion. These products can cause Cancer and other diseases in firefighters. Firefighters need to be aware that this problem is one in disguise. Even if there are no immediate effects, the products of combustion can cause long term effects. For example, in 1950 cancer was responsible for 18% of all firefighter deaths. Cancer deaths for firefighters have increased at twice the rate than that of the general public. Another serious long-term effect of the products of combustion is carboxy-hemoglobin. The firefighter cannot overcome this condition readily, therefore, it can cause serious and unexpected problems with a succeeding exposure to carbon monoxide. All firefighters should realize that fire can be an immediate threat to life, and that its products of combustion, although not so immediate, can be just as deadly.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly identify in writing potential long-term consequences of exposure to products of combustion.

1. Lead the class in a discussion on the four common hazardous atmospheres associated with fires or other emergencies.
 - a) Oxygen deficiency.
 - b) Elevated temperatures.
 - c) Smoke.
 - d) Toxic atmospheres (with and without fire.)
2. Discuss the common toxic gases associated with combustion.
 - a) Carbon Dioxide.

- b) Carbon Monoxide.
 - c) Hydrogen Chloride.
 - d) Hydrogen Cyanide.
 - e) Nitrogen Dioxide.
 - f) Phosgene.
3. Discuss the various diseases found in firefighters. Point out that cancer is becoming the "firefighter disease."
- a) Heart disease.
 - b) Cancer.
 - c) Emphysema.
 - d) Lung disease.
4. Provide a discussion on the short term and long term effects of carboxy-hemoglobin.
5. Discuss the following cancer-related facts.
- a) Cancer deaths for firefighters have doubled the past 30 years.
 - b) Cancer in firefighters particularly strikes the lung, brain, intestine, rectum, colon lymphatic system, throat, mouth, and pancreas.
 - c) Cancer deaths for firefighters are double that of the general public's cancer death rate.
 - d) Lung disease strikes firefighters more often than black lung strikes miners.
6. Point out that heart disease disables firefighters 55% more often than the people they serve and is the leading cause of death for firefighters.
7. Point out that since 1950, the average age of death for firefighters from cancer or heart disease has dropped from 49 to 44 years.
8. Lead the class in a discussion involving some of the reasons why the threat of cancer has increased in firefighters.
- a) Increased exposure to cancer-causing agents. The products of synthetic chemicals have increased 350 fold since the end of World War II.
 - b) Increased chemical hazards in the average home or office. Poisonous fumes given off from fire involving: furniture, toys, carpeting, appliances, clothing and insulation.

- c) Other common home items that can release cancer-causing substances include: Pesticides, herbicides, gasoline, and household cleaners.

Reference:

Delmar Handbook 3rd edition, pages 105, 122, 162-164, 827-828, 960-961

J&B Fundamentals 2nd edition, pages 47-49

IFSTA Essentials 5th edition, pages 180, 182-185

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate will correctly identify in writing the methods to reduce the long- term health effects of exposure to the products of combustion.

1. Discuss using S.C.B.A. along with all other Personal Protective Equipment when entering any area where there is the potential to encounter the products of combustion.
2. Lead the class in a discussion on how firefighters can reduce their risk of cancer.
 - a) Stay healthy by eating well, getting the proper rest, obtaining medical checkups, and weight control.
 - b) Exercise on a regular basis.
 - c) Avoid chemical habits by not smoking, abusing alcohol or taking non-prescribed drugs.
 - d) Take advantage of education and training relating to health and safety on the fire ground.

3. Discuss the types of fire ground situations where there is a potential for firefighters to contract Carboxy-hemoglobin.
 - a) Fire attack.
 - b) Building search.
 - c) Overhaul operations.
 - d) Fire Investigation (determining origin and cause.)
4. Discuss possible locations in the candidate's district that could possibly emit cancer-causing materials.
5. Show the video entitled "Potential Infectious Waste."

Reference:

Delmar Handbook 3rd edition, pages 960-961

J&B Fundamentals 2nd edition, pages 35-40

IFSTA Essentials 5th edition, pages 165-166

SUMMARY

Review the identified health-related illnesses that today's firefighter faces.

Re-emphasize each of the preventative measures firefighters should take to reduce their risk of exposure to the causes of long-term health problems.

LESSON EIGHT

FIREFIGHTER I

Orientation and Safety

DOMAIN: COGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

Overhead projector and/or laptop computer and multimedia projector; slide projector and screen; VCR/DVD and monitor; IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; NFPA 1901; National Fire Academy's "Firefighter Safety and Survival - Company Officer's Responsibility;" Videos: "The Sandy Lee Story" and "Code 3 Response" and "Training Safety: Lessons for the Future."

NFPA 1001 JPRs, 2008 edition

5.3.2 Respond on apparatus to an emergency scene

5.3.10 Attack an interior structure fire

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 I candidate shall correctly identify in writing the reasons for firefighter injuries and deaths in fire related and non-fire related activities.

ENABLING OBJECTIVES

1. The firefighter I candidate shall correctly identify in writing the safety procedures for personnel on the fire ground.
2. The Firefighter I candidate shall correctly identify in writing the safety procedures while responding on the apparatus.
3. The Firefighter I candidate shall correctly identify in writing the procedures for safe training operations.
4. The Firefighter I candidate shall correctly identify in writing the procedures for ensuring a safe station / facility.

LESSON EIGHT

FIREFIGHTER I

Orientation and Safety

MOTIVATION

The firefighter will often be confronted with dangerous situations on the fire ground that may contribute to injury or death. Firefighters are also frequently injured and killed in non-fire ground related incidents. This can be attributed partially to the many skills that they must develop and the complex equipment they must learn to operate. Fire department safety programs should be developed and implemented in every fire department to ensure that safety is maximized whether on the fire ground, training grounds, or performing station duties. Also, every firefighter must be taught to be accountable for their safety and for the safety of others.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly identify in writing the safety procedures for personnel on the fire ground.

1. Point out that exposure to fire products is one of the most frequent causes of injury and death on the fire ground. Examples include smoke, burns, back draft and flashover.
2. Point out that falls are a common cause of injury and death on the fire ground. Examples include improper use of equipment or physical condition of the structure.
3. Point out that sprains, strains, wounds and cuts are other types of injuries that generally occur due to misuse of equipment, improper lifting, and failure to wear protective clothing.

4. Explain that under certain conditions, firefighters can be disoriented and trapped. Discuss the proper action to take in the event this happens.
5. Discuss some common causes of deaths and injuries resulting from lack of pre-fire planning.
 - a) Lack of understanding of the overall fire scene .
 - b) Type of construction.
 - c) Age and contents of the building.
 - d) Structural obstacles.
6. Discuss some fire-related problems that can arise such as back draft, flashover, rollover, and structural collapse.
7. Discuss hazards that might exist with apparatus placement, misuse of equipment and improper overhaul procedures.
 - a) Unused ladders that are removed from the apparatus to get to other ladders should be removed to a safe location.
8. Point out that the officer's role in fire ground safety is vital. They should be well trained to handle any situation and to ensure safety for all personnel.
9. Point out that personnel accountability is a critical factor on the fire ground.
 - a) Tag system.
 - b) SCBA tag system.
 - c) The Incident Command System (ICS.)

Reference:

Delmar Handbook 3rd edition, pages 40-44, 103-111, 189, 823-833

J&B Fundamentals 2nd edition, pages 32, 109, 137-141, 538-542

IFSTA Essentials 5th edition, pages 35-40, 50-51, 60-61, 74-76, 118-120, 122-125, 153-156, 180-187, 319-322

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly identify in writing the safety procedures while responding on apparatus.

1. Lead the class in a discussion on situations where deaths or injuries have occurred to firefighters when proper safety procedures were not followed when getting on or off apparatus and while riding the apparatus.
2. Point out the following aspects of safety while responding.
 - a) Firefighters should not dress while apparatus is in motion.
 - b) All personnel riding apparatus should be in the fully enclosed portion of the cab.
 - c) If sirens and noise level exceeds 90 decibels, hearing protection should be worn.
3. Lead the class in a discussion on why all firefighters, when riding apparatus, should be seated with seat belts fastened.
4. Lead the class in a discussion on safe ways of mounting and dismounting fire apparatus.
5. Discuss with class the importance of having S.O.P.s that apply to responding and returning from calls on fire apparatus and private vehicles.
6. Point out that when new apparatus is purchased, it should meet the standards set forth in NFPA 1901.

Reference:

Delmar Handbook 3rd edition, pages 132, 28-29
J&B Fundamentals 2nd edition, pages 29, 275-277
IFSTA Essentials 5th edition, pages 63-64

APPLICATION

Show one or both tapes entitled, "The Sandy Lee Story" and "Code 3 Response." Have the students identify personal safety hazards while mounting, responding and dismounting the apparatus. An alternative to this exercise is to practice mounting and dismounting the apparatus and properly seatbelts.

PRESENTATION

ENABLING OBJECTIVE #3

The Firefighter I candidate shall correctly identify in writing the procedures for safe training operations.

1. Point out that firefighters, generally, are well trained and have excellent equipment; yet, deaths and injuries during training operations still occur. Identify the leading types of injuries.
 - a) Sprains and strains often caused by improper lifting techniques, anxiety, improper use of equipment and others. Improper lifting techniques and slips and falls are the two most common activities that result in injury.
 - b) Wounds and cuts often caused by failure to wear gloves and other protective clothing, as well as improper use of equipment.
 - c) Burns caused by exposure to fire products are common.
2. Point out that before training sessions begin, the structure, equipment to be used, and other aspects of the operation should be examined. Necessary repairs should be made to all of these before the training exercise begins.
3. Discuss the dangers involved when of firefighters participate in pranks and horseplay on the training ground.

Reference:

Delmar Handbook 3rd edition, pages 126-127

J&B Fundamentals 2nd edition, pages 26-27, 35-40

IFSTA Essentials 5th edition, pages 67-69

PRESENTATION

ENABLING OBJECTIVE #4

The Firefighter I candidate shall correctly identify in writing the procedures for ensuring a safe station / facility.

1. Point out that fire station safety is often overlooked by firefighters and officers.

2. Discuss the following aspects of accidents in the station / facility.
 - a) Safety hazards in the fire station can result in accidents to firefighters and visitors. The Safety Officer should make sure all hazards are corrected.
 - b) Accidents most associated with performing station duties include back strains, bruises, sprains and fractures. Back strain represents the most expensive in terms of cost and time out of work.
 - c) Proper training in lifting and carrying can prevent many accidents listed above.

3. Discuss the following actions that can help prevent in-station accidents.
 - a) Inspect the station on a regular basis to ensure good housekeeping.
 - b) Appoint a station safety officer who can develop and implement safety procedures.
 - c) Develop physical fitness safety guidelines for all personnel.

Reference:

Delmar Handbook 3rd edition, pages 129-132

J&B Fundamentals 2nd edition, pages 33-34

IFSTA Essentials 5th edition, pages 65-67

APPLICATION

Divide the class in to groups of two or three and have each group identify the various safety hazards found in a fire station, and develop procedures for correcting them.

SUMMARY

Review in detail the safety procedures that the Firefighter I candidate should utilize on the fire ground.

Re-examine each of the safety procedures for responding on fire department apparatus.

Review all of the safety concerns that the Firefighter I candidate needs to be aware of when involved in a training exercise.

Summarize the requirements for maintaining a safe fire station or facility.

LESSON NINE

FIREFIGHTER I

Orientation and Safety

DOMAIN: CONGNITIVE

LEVEL OF LEARNING: COMPREHENSION

MATERIALS

IFSTA Essentials 5th edition or Jones and Bartlett Fundamentals of Fire Fighter Skills 2nd Edition or Delmar Firefighter's Handbook 3rd Edition; IFSTA Fire Department Occupational Safety, 2nd edition; NFPA Standards 1001 and 1500; overhead projector and/or laptop computer and multimedia projector; projection screen.

NFPA 1001 JPR, 2008 edition

5.3.3 Establish and operate in work areas at emergency scenes

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 I candidate shall correctly describe in writing the different work areas that must be established at any emergency incident and the level of training that personnel will need in order to function in each of these areas. This must be established by the AHJ for their equipment and personnel training levels.

ENABLING OBJECTIVES

1. The Firefighter I candidate shall correctly describe in writing the procedures for establishing work areas at any emergency scene.
2. The Firefighter I candidate shall correctly describe in writing the training requirements for emergency personnel to function in these work areas.

LESSON NINE

FIREFIGHTER I

Orientation and Safety

MOTIVATION

The fire service is inherently dangerous, and as most injuries occur to firefighters during operations at emergency scenes, it is paramount that all personnel involved at these scenes operate as safely as possible. Becoming aware of the many types of hazards that are present at an emergency scene is the first step in preventing possible injury or death. Once personnel understand what dangers are present, it then becomes a matter of following established guidelines.

Note: The instructor is advised to completely review the organizational structure of the respective fire department in which this program is to be delivered. Due to the fact that each fire department is somewhat unique, especially concerning rules and regulations, SOP's, and charters, it is important for the instructor to deliver pertinent material to the firefighter candidates. The only plausible method of achieving this is for the instructor to review the departmental organizational structure in advance of the class.

PRESENTATION

ENABLING OBJECTIVE #1

The Firefighter I candidate shall correctly describe in writing the procedures for establishing work or control zones at an emergency scene.

1. Define a work area at an emergency scene.
2. Discuss the benefits of preplanning and establishing S.O.P.s for response to emergency scenes and how they plan for tactical operations.
3. Discuss the following types of emergency scenes and the hazards they present to emergency personnel:

- a) Traffic.
 - b) Utilities.
 - c) Environmental.
 - d) Structural.
 - e) Haz Mat.
4. Discuss the proper techniques for establishing work areas at any scene.
- a) Establish IMS.
 - b) Scene Size-Up.
 - c) Communication.
 - d) Work Area Designations.
 - e) Crowd Control.

Reference:

Delmar Handbook 3rd edition, pages 39, 41, 129-132, 242-243, 520-521, 551-553, 693-719, 828-833
J&B Fundamentals 2nd edition, pages 33, 108-110, 277-280
IFSTA Essentials 5th edition, pages 70-74

PRESENTATION

ENABLING OBJECTIVE #2

The Firefighter I candidate shall correctly describe in writing the training requirements for emergency personnel to function in designated work or control zones.

1. List and Discuss the importance of pre-planning and training as they relate to establishing a work area for a response to an emergency scene involving traffic hazards.
 - a) Establish IMS.
 - b) Positioning of apparatus to establish safety barricade.
 - c) Dismounting apparatus in traffic conditions.
 - d) Establishing traffic control corridors for existing road conditions.
 - e) Proper establishment of control zones for operations.
 - f) Dealing with inclement weather.
2. Discuss pre-planning and training as they relate to establishing work areas for a response to an emergency scene involving an electrical hazard.
 - a) Establish IMS.

- b) Safety zone for downed power transmission lines.
 - c) Proper placement of apparatus with regards to power transmission lines.
 - d) Proper establishment of control zones for operations.
 - e) Dealing with inclement weather conditions.
3. Discuss pre-planning and training as they relate to establishing work areas for a response to an emergency scene involving environmental hazards that may be found a water related incidents.
- a) Establish IMS.
 - b) Proper PPC for response to a water related incident.
 - c) Proper use of water-related equipment on scene.
 - d) Proper use of apparatus for a water related incident.
 - e) Proper establishment of control zones for operations.
 - f) Dealing with inclement weather conditions.
4. Discuss pre-planning and training as they relate to establishing work areas for a response to an emergency scene involving structural hazards.
- a) Establish IMS.
 - b) Proper placement of apparatus.
 - c) Designation of areas of responsibility.
 - d) Designation of escape routes.
 - e) Proper establishment of control zones for operations.
 - f) Dealing with inclement weather conditions.
5. Discuss pre-planning and training as they relate to establishing work areas for response to an emergency scene involving hazardous materials.
- a) Establish IMS.
 - b) Proper approach routes for personnel and apparatus.
 - c) Traffic control procedures for incident.
 - d) Proper establishment of control zones for operations.

Reference:

Delmar Handbook 3rd edition, pages 35-36, 126-127
J&B Fundamentals 2nd edition, pages 33, 282, 726-727, 755-759, 765-766

APPLICATIONS

The Firefighter I candidate when given the appropriate equipment, and working as a member of a team, shall correctly demonstrate the preventive measures necessary to protect emergency personnel for each of the following scenarios.

1. Help establish a work area for dealing with traffic control at a motor vehicle accident using the following elements:
 - a) Roadway design.
 - b) Location of incident.
 - c) Speed Limit.
 - d) Time of day.
 - e) Size of incident.
 - f) Weather Conditions.

2. Help establish a work area for dealing with a downed electrical transmission line at an emergency scene. Consider the following:
 - a) Notification of utilities.
 - b) Proper placement of apparatus.
 - c) Proper deployment of personnel.
 - d) Weather conditions.

3. Help establish a work area for dealing with a water-related incident given the following circumstances:
 - a) Still water.
 - b) Swift water.
 - c) Flood.
 - d) Ice.
 - e) Surf and Tidal.
 - f) Adverse weather conditions.

4. Help establish a work area for dealing with a structural related incident involving the following circumstances:
 - a) Fire.
 - b) Explosion.
 - c) Earthquake.

5. Help establish a work area for dealing with a hazardous materials related incident at the following locations:
 - a) Roadway.

- b) Industrial Site.
- c) Private.

Reference:

Delmar Handbook 3rd edition, pages 533-580

SUMMARY

Review with the Firefighter I candidates the correct procedures for establishing work areas at any emergency scene.

Review with the Firefighter I candidate the training requirements for emergency personnel to function in these work areas.