

Chapter-4 Fire fighter-1

General. For qualification at Level I, the fire fighter candidate shall meet the general knowledge requirements in 4.1.1, the general skill requirements in 4.1.2, the JPRs defined in Sections 4.2 through 4.5 of this standard, knowledge of the incident management system, and the requirements defined in Chapter 5 as well as mission-specific competencies in Section 6.2, Personal Protective Equipment, and Section 6.6, Product Control, of NFPA 1072.

General Knowledge Requirements. The organization of the fire department, the role of the Fire Fighter-1 in the organization, the mission of fire service, the fire department's standard operating procedures (SOPs) and rules and regulations as they apply to the Fire Fighter-1 the value of fire and life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities; the role of other agencies as they relate to the fire department; the signs and symptoms of behavioral and emotional distress; aspects of the fire department's member assistance program; the importance of physical fitness and a healthy lifestyle to the performance of the duties of a fire fighter; the critical aspects of NFPA 1500.

General Skill Requirements. The ability to don personal protective clothing, doff personal protective clothing, perform field reduction of contaminants and prepare for reuse, hoist tools and equipment using ropes and the correct knot, and locate information in departmental documents and standard or code materials.

Fire Department Communications. This duty shall involve initiating responses, receiving telephone calls, and using fire department communications equipment to correctly relay verbal or written information, according to the JPRs in 4.2.1 through 4.2.4.

Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.

1.(A) Requisite Knowledge. Procedures for reporting an emergency; departmental SOPs for taking and receiving alarms, radio codes, or procedures; and information needs of dispatch center.

1.(B) Requisite Skills. The ability to operate fire department communications equipment, relay information, and record information. Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed.

2.(A) Requisite Knowledge. Fire department procedures for answering non-emergency telephone calls.

2.(B) Requisite Skills. The ability to operate fire station telephone and intercom equipment. Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

3.(A) Requisite Knowledge. Departmental radio procedures and etiquette for routine traffic, emergency traffic, and emergency evacuation signals.

3.(B) Requisite Skills. The ability to operate radio equipment and discriminate between routine and emergency traffic. Activate an emergency call for assistance, given vision-obscured conditions, PPE, and department SOPs, so that the fire fighter can be located and rescued.

4.(A) Requisite Knowledge. Personnel accountability systems, emergency communication procedures, and emergency evacuation methods.

4.(B) Requisite Skills. The ability to initiate an emergency call for assistance in accordance with the AHJ's procedures, the ability to use other methods of emergency calls for assistance.

Fire ground Operations. This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 4.3.1 through 4.3.21.

Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other PPE, so that the SCBA is correctly donned, the SCBA is correctly worn, control- led breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

5.(A) Requisite Knowledge. Conditions that require respiratory protection, uses and limitations of SCBA, components of SCBA, donning procedures, breathing techniques, indications for and emergency procedures used with SCBA, and physical requirements of the SCBA wearer.

5.(B) Requisite Skills. The ability to control breathing, replace SCBA air cylinders, use SCBA to exit through restricted passages, initiate and complete emergency procedures in the event of SCBA failure or air depletion, and complete donning procedures. Respond on apparatus to an emergency scene, given personal protective clothing and other necessary PPE, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.

6.(A) Requisite Knowledge. Mounting and dismounting procedures for riding fire apparatus, hazards and ways to avoid hazards associated with riding apparatus, prohibited practices, and types of department PPE and the means for usage.

6.(B) Requisite Skills. The ability to use each piece of provided safety equipment. Establish and operate in work areas at emergency scenes, given protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards and downed electrical wires, photovoltaic power systems, battery storage systems, an assignment, and SOPs, so that procedures are followed, protective equipment is worn, protected work areas are established as directed using traffic and scene control devices, and the fire fighter performs assigned tasks only in established, protected work areas.

7.(A) Requisite Knowledge. Potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions; proper procedures for dismounting apparatus in traffic; procedures for safe operation at emergency scenes; and the protective equipment available for members' safety on emergency scenes and work zone designations.

7.(B) Requisite Skills. The ability to use personal protective clothing, deploy traffic and scene control devices, dismount apparatus, and operate in the protected work areas as directed.

Force entry into a structure, given PPE, tools, and an assignment, so that the tools are used as designed, the barrier is removed, and the opening is in a safe condition and ready for entry.

8.(A) Requisite Knowledge. Basic construction of typical doors, windows, and walls within the department's community or service area; operation of doors, windows, and locks; and the dangers associated with forcing entry through doors, windows, and walls.

8.(B) Requisite Skills. The ability to transport and operate hand and power tools and to force entry through doors, windows, and walls using assorted methods and tools. Exit a hazardous area as a team, given vision-obscured conditions, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.

9.(A) Requisite Knowledge. Personnel accountability systems, communication procedures, emergency evacuation methods, what constitutes a safe haven, elements that create or indicate a hazard, and emergency procedures for loss of air supply.

9.(B) Requisite Skills. The ability to operate as a team member in vision-obscured conditions, locate and follow a guideline, conserve air supply, and evaluate areas for hazards and identify a safe haven. Set up, mount, ascend, dismount, and descend ground ladders, given single and extension ladders, an assignment, and team members if needed, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the necessary height with the fly locked, the top is placed against a reliable structural component, and the assignment

is accomplished.

10. (A) Requisite Knowledge. Parts of a ladder, hazards associated with setting up ladders, what constitutes a stable foundation for ladder placement, different angles for various tasks, climbing techniques, safety limits to the degree of angulation, and what constitutes a reliable structural component for top placement.

10.(B) Requisite Skills. The ability to carry ladders, raise ladders, extend ladders and lock flies, determine that a wall and roof will support the ladder, judge extension ladder height requirements, and place the ladder to avoid obvious hazards, mount, ascend, dismount, and descend the ladder. Attack a passenger vehicle fire operating as a member of a team, given PPE, an attack line, and hand tools, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are overhauled, and the fire is extinguished.

11.(A) Requisite Knowledge. Principles of fire streams as they relate to fighting automobile fires; precautions to be followed when advancing hose lines toward an automobile; observable results that a fire stream has been properly applied; identifying alternative fuels and the hazards associated with them; dangerous conditions created during an automobile fire; common types of accidents or injuries related to fighting automobile fires and how to avoid them; how to access locked passenger, trunk, and engine compartments; and methods for overhauling an automobile.

11.(B) Requisite Skills. The ability to identify automobile fuel type; assess and control fuel leaks; open, close, and adjust the flow and pattern on nozzles; apply water for maximum effectiveness while maintaining flash fire protection; advance 1 1/2 in. (38 mm) or larger diameter attack lines; and expose hidden fires by opening all automobile compartments. * Extinguish fires in exterior Class A materials, given fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior, attack lines, hand tools and master stream devices, and an assignment, so that exposures are protected, the spread of fire is stopped, collapse hazards are avoided, water application is effective, the fire is extinguished, and signs of the origin area(s) and arson are preserved.

12.(A) Requisite Knowledge. Types of attack lines and water streams appropriate for attacking stacked, piled materials and outdoor fires; dangers such as collapse associated with stacked and piled materials; various extinguishing agents and their effect on different material configurations; tools and methods to use in breaking up various types of materials; the difficulties related to complete extinguishment of stacked and piled materials; water application methods for exposure protection and fire extinguishment; dangers such as exposure to toxic or hazardous materials associated with storage building and container fires; obvious signs of origin and cause; and techniques for the preservation of fire cause evidence.

12.(B) Requisite Skills. The ability to recognize inherent hazards related to the material's configuration, operate hand lines or master streams, break up material using hand tools and water streams, evaluate for complete extinguishment, operate hose lines and other water application devices, evaluate and modify water application for maximum penetration, search for and expose hidden fires, assess patterns for origin determination, and evaluate for complete extinguishment. Conduct a search and rescue in a structure operating as a member of a team, given an assignment, obscured vision conditions, personal protective equipment, a flashlight, forcible entry tools, hose lines, and ladders when necessary, so that ladders are correctly placed when used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety including respiratory protection is not compromised.

13.(A) Requisite Knowledge. Use of forcible entry tools during rescue operations, ladder operations for rescue, psychological effects of operating in obscured conditions and ways to manage them, methods to determine if an area is tenable, primary and secondary search techniques, team members' roles and goals, methods to use and indicators of finding victims, victim removal methods (including various carries), and considerations related to respiratory protection.

13.(B) Requisite Skills. The ability to use SCBA to exit through restricted passages, set up and use different types of ladders for various types of rescue operations, rescue a fire fighter with functioning respiratory protection, rescue a fire fighter whose respiratory protection is not functioning, rescue a person who has no respiratory protection, and assess areas to determine tenability. Attack an interior structure fire operating as a member of a team, given an attack line, ladders when needed, personal protective equipment, tools, and an assignment, so that team integrity is maintained, the attack line is deployed for advancement, ladders are correctly placed when used, access is gained into the fire area, effective water application practices are used, the fire is approached correctly, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are recognized and managed, and the fire is brought under control.

14.(A) Requisite Knowledge. Principles of fire streams; types, design, operation, nozzle pressure effects, and flow capabilities of nozzles; precautions to be followed when advancing hose lines to a fire; observable results that a fire stream has been properly applied; dangerous building conditions created by fire; principles of exposure protection; potential long-term consequences of exposure to products of combustion; physical states of matter in which fuels are found; common types of accidents or injuries and their causes; and the application of each size and type of attack line, the role of the backup team in fire attack situations, attack and control techniques for grade level and above and below grade levels, and exposing hidden fires.

14.(B) Requisite Skills. The ability to prevent water hammers when shutting down nozzles; open, close, and adjust nozzle flow and patterns; apply water using direct, indirect, and combination attacks; advance charged and uncharged 1 ½ in. (38 mm) diameter or larger hose lines up ladders and up and down interior and exterior stairways; extend hose lines; replace burst hose sections; operate charged hose lines of 1 ½ in. (38 mm) diameter or larger while secured to a ground ladder; couple and uncouple various hand line connections; carry hose; attack fires at grade level and above and below grade levels; and locate and suppress interior wall and subfloor fires. Perform horizontal ventilation on a structure operating as part of a team, given an assignment, PPE, ventilation tools, equipment, and ladders, so that the ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke.

15.(A) Requisite Knowledge. The principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation; safety considerations when venting a structure; fire behavior in a structure; the products of combustion found in a structure fire; the signs, causes, effects, and prevention of back-drafts; and the relationship of oxygen concentration to life safety and fire growth.

15.(B) Requisite Skills. The ability to transport and operate ventilation tools and equipment and ladders, and to use safe procedures for breaking window and door glass and removing obstructions. Perform vertical ventilation on a structure as part of a team, given an assignment, PPE, ground and roof ladders, and tools, so that ladders are positioned for ventilation, a specified opening is created, all ventilation barriers are removed, structural integrity is not compromised, products of combustion are released from the structure, and

the team retreats from the area when ventilation is accomplished.

16. (A) Requisite Knowledge. The methods of heat transfer; the principles of thermal layering within a structure on fire; the techniques and safety precautions for venting flat roofs, pitched roofs, and basements; basic indicators of potential collapse or roof failure; the effects of construction type and elapsed time under fire conditions on structural integrity; and the advantages and disadvantages of vertical and trench/strip ventilation.

16. (B) Requisite Skills. The ability to transport and operate ventilation tools and equipment; hoist ventilation tools to a roof; cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements; sound a roof for integrity; clear an opening with hand tools; select, carry, deploy, and secure ground ladders for ventilation activities; deploy roof ladders on pitched roofs while secured to a ground ladder; and carry ventilation-related tools and equipment while ascending and descending ladders. Overhaul a fire scene, given PPE, an attack line, hand tools, a flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

17. (A) Requisite Knowledge. Types of fire attack lines and water application devices most effective for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, obvious signs of area of origin or signs of arson, and reasons for protection of fire scene.

17 (B) Requisite Skills. The ability to deploy and operate an attack line; remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity; apply water for maximum effectiveness; expose and extinguish hidden fires in walls, ceilings, and subfloor spaces; recognize and preserve obvious signs of area of origin and arson; and evaluate for complete extinguishment. Conserve property as a member of a team, given salvage tools and equipment and an assignment, so that the building and its contents are protected from further damage.

18.(A) Requisite Knowledge. The purpose of property conservation and its value to the public, methods used to protect property, types of and uses for salvage covers, operations at properties protected with automatic sprinklers, how to stop the flow of water from an automatic sprinkler head, identification of the main control valve on an automatic sprinkler system, forcible entry issues related to salvage, and procedures for protecting possible areas of origin and potential evidence.

18. (B) Requisite Skills. The ability to cluster furniture; deploy covering materials; roll and fold salvage covers for reuse; construct water chutes and catchalls; remove water; cover building openings, including doors, windows, floor openings, and roof openings; separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination; stop the flow of water from a sprinkler with sprinkler wedges or stoppers; and operate a main control valve on an automatic sprinkler system. Connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.

19.(A) Requisite Knowledge. Loading and off-loading procedures for mobile water supply apparatus; fire hydrant operation; and suitable static water supply sources, procedures, and protocol for connecting to various water sources.

19. (B) Requisite Skills. The ability to hand lay a supply hose, connect and place hard suction hose

for drafting operations, deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them, make hydrant- to-pumper hose connections for forward and reverse lays, connect supply hose to a hydrant, and fully open and close the hydrant. Extinguish incipient Class A, Class B, and Class C fires, given a selection of portable fire extinguishers, so that the correct extinguisher is chosen, the fire is completely extinguished, and correct extinguisher-handling techniques are followed.

- 20. (A) Requisite Knowledge.** The classifications of fire; the types of, rating systems for, and risks associated with each class of fire; and the operating methods of and limitations of portable extinguishers.
- 20. (B) Requisite Skills.** The ability to operate portable fire extinguishers, approach fire with portable fire extinguishers, select an appropriate extinguisher based on the size and type of fire, and safely carry portable fire extinguishers. Operate emergency scene lighting, given fire service lighting equipment, power supply, and an assignment, so that emergency scene lighting equipment is operated within the manufacturer's listed safety precautions.
- 21. (A) Requisite Knowledge.** Safety principles and practices, power supply capacity and limitations, and light deployment methods.
- 21. (B) Requisite Skills.** The ability to operate department power supply and lighting equipment, deploy cords and connectors, reset ground-fault interrupter (GFI) devices, and locate lights for best effect. Turn off building utilities, given tools and an assignment, so that the assignment is safely completed.
- 22. (A) Requisite Knowledge.** Properties, principles, and safety concerns for electricity, gas, and water systems; utility disconnect methods and associated dangers; and use of required safety equipment.
- 22. (B) Requisite Skills.** The ability to identify utility control devices, operate control valves or switches, and assess for related hazards. Combat a ground cover fire operating as a member of a team, given protective clothing, SCBA (if needed), hose lines, extinguishers or hand tools, and an assignment, so that threats to property are reported, threats to personal safety are recognized, retreat is quickly accomplished when warranted, and the assignment is completed.
- 23. (A) Requisite Knowledge.** Types of ground cover fires, parts of ground cover fires, methods to contain or suppress, and safety principles and practices.
- 23. (B) Requisite Skills.** The ability to determine exposure threats based on fire spread potential, protect exposures, construct a fire line or extinguish with hand tools, maintain integrity of established fire lines, and suppress ground cover fires using water. Tie a knot appropriate for hoisting tools, given PPE, tools, ropes, and an assignment, so that the knots used are appropriate for hoisting tools securely and as directed.
- 24. (A) Requisite Knowledge.** Knot types and usage; the difference between life safety and utility rope; reasons for placing rope out of service; the types of knots to use for given tools, ropes, or situations; hoisting methods for tools and equipment; and using rope to support response activities.
- 24. (B) Requisite Skills.** The ability to hoist tools using specific knots based on the type of tool.
- Air Monitoring.** Operate an air-monitoring instrument, given an air monitor and an assignment or task, so that the device is operated and the fire fighter recognizes the high- or low-level alarms of the air monitor and takes action to mitigate the hazard.
- 25. (A) Requisite Knowledge.** Knowledge of the various uses for an air monitor, the basic operation of an air monitor, and recognition and emergency actions to be taken upon the

activation of the high- or low-level alarms of the air monitor.

25. (B) Requisite Skills. The ability to operate the air monitor, recognize the alarms, and react to the alarms of the air monitor.

Rescue Operations. This duty shall involve no requirements for Fire Fighter I.

Preparedness and Maintenance. This duty shall involve performing activities that reduce the loss of life and property due to fire through response readiness, according to the JPRs in 4.5.1 and 4.5.2.

Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer's or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

26. (A) Requisite Knowledge. Types of cleaning methods for various tools and equipment, correct use of cleaning solvents, and manufacturer's or departmental guidelines for cleaning equipment and tools.

26. (B) Requisite Skills. The ability to select correct tools for various parts and pieces of equipment, follow guidelines, and complete recording and reporting procedures.

Clean, inspect, and return fire hose to service, given washing equipment, water, detergent, tools, and replacement gaskets, so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service.

27.(A) Requisite Knowledge. Departmental procedures for noting a defective hose and removing it from service, cleaning methods, and hose rolls and loads.

27. (B) Requisite Skills. The ability to clean different types of hose; operate hose washing and drying equipment; mark defective hose; and replace coupling gaskets, roll hose, and reload hose.

Chapter-5 Firefighter 2

General. For qualification at Level II, the Fire Fighter II shall meet the general knowledge requirements in 5.1.1, the general skill requirements in 5.1.2, the JPRs defined in Sections 5.2 through 5.5 of this standard, the requirements defined in Chapter 4, and knowledge of the Incident Management System sections of ICS 200 as described.

General Knowledge Requirements. Responsibilities of the Fire Fighter II in assuming and transferring command within an incident management system, performing assigned duties in conformance with applicable NFPA and other safety regulations and AHJ procedures, and the role of a Fire Fighter II within the organization.

General Skill Requirements. The ability to determine the need for command, organize and coordinate an incident management system until command is transferred, and function within an assigned role in an incident management system.

Fire Department Communications. This duty shall involve performing activities related to initiating and reporting responses, according to the JPRs in 5.2.1 and 5.2.2. Complete a basic incident report, given the report forms, guidelines, and information, so that all pertinent information is recorded, the information is accurate, and the report is complete.

1.(A) Requisite Knowledge. Content requirements for basic incident reports, the purpose and usefulness of accurate reports, consequences of inaccurate reports, how to obtain necessary information, and required coding procedures.

1.(B) Requisite Skills. The ability to determine necessary codes, proof reports, and operate fire department computers or other equipment necessary to complete reports. Communicate the need for team assistance, given fire department communications equipment, SOPs, and a team, so that the supervisor is consistently informed of team needs, departmental SOPs are followed, and the assignment is accomplished safely.

2.(A) Requisite Knowledge. SOPs for alarm assignments and fire department radio communication procedures.

2.(B) Requisite Skills. The ability to operate fire department communications equipment.

Fire ground Operations. This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 5.3.1 through 5.3.4. Extinguish an ignitable liquid fire, operating as a member of a team, given an assignment, an attack line, PPE, a foam proportioning device, a nozzle, foam concentrates, and a water supply, so that the correct type of foam concentrate is selected for the given fuel and conditions, a properly proportioned foam stream is applied to the surface of the fuel to create and maintain a foam blanket, fire is extinguished, reignition is prevented, team protection is maintained with a foam stream, and the hazard is faced until retreat to safe haven is reached.

(A) Requisite Knowledge. Methods by which foam prevents or controls a hazard; principles by which foam is generated; causes for poor foam generation and corrective measures; difference between hydrocarbon and polar solvent fuels and the concentrates that work on each; the characteristics, uses, and limitations of fire-fighting foams; the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application; foam stream application techniques; hazards associated with foam usage; and methods to reduce or avoid hazards.

(B) Requisite Skills. The ability to prepare a foam concentrate supply for use, assemble foam stream components, master various foam application techniques, and approach and retreat from spills as part of a coordinated team.

Coordinate an interior attack line for a team's accomplishment of an assignment in a structure fire, given attack lines, personnel, PPE, and tools, so that crew integrity is established; attack techniques are selected for the given level of the fire (e.g., attic, grade level, upper levels, or basement); attack techniques are communicated to the attack teams; constant team coordination is maintained; fire growth and development is continuously evaluated; search, rescue, and ventilation requirements are communicated or managed; hazards are reported to the attack teams; and incident command is apprised of changing conditions.

(A) Requisite Knowledge. Selection of the nozzle and hose for fire attack, given different fire situations; selection of adapters and appliances to be used for specific fire ground situations; dangerous building conditions created by fire and fire suppression activities; indicators of building collapse; the effects of fire and fire suppression activities on wood, masonry (brick, block, stone), cast iron, steel, reinforced concrete, gypsum wallboard, glass, and plaster on lath; search and rescue and ventilation procedures; indicators of structural instability; suppression approaches and practices for various types of structural fires; and the association between specific tools and special forcible entry needs.

(B) Requisite Skills. The ability to assemble a team, choose attack techniques for various levels of a fire (e.g., attic, grade level, upper levels, or basement), evaluate and forecast a fire's growth and development, select tools for forcible entry, incorporate search and rescue procedures and ventilation procedures in the completion of the attack team efforts, and determine developing hazardous building or fire conditions.

Control a flammable gas cylinder fire, operating as a member of a team, given an assignment, a cylinder outside of a structure, an attack line, PPE, and tools, so that crew integrity is maintained, contents are identified, safe havens are identified prior to advancing, open valves are closed, flames are not extinguished unless the leaking gas is eliminated, the cylinder is cooled, cylinder integrity is evaluated, hazardous conditions are recognized and acted upon, and the cylinder is faced during approach and retreat.

(A) Requisite Knowledge. Characteristics of pressurized flammable gases, elements of a gas cylinder, effects of heat and pressure on closed cylinders, boiling liquid expanding vapor explosion (BLEVE) signs and effects, methods for identifying contents, how to identify safe havens before approaching flammable gas cylinder fires, water stream usage and demands for pressurized cylinder fires, what to do if the fire is prematurely extinguished, valve types and their operation, alternative actions related to various hazards, and when to retreat.

(B) Requisite Skills. The ability to execute effective advances and retreats, apply various techniques for water application, assess cylinder integrity and changing cylinder conditions, operate control valves, and choose effective procedures when conditions change.

Protect evidence of fire cause and origin, given a flash-light and overhaul tools, so that the evidence is noted and protected from further disturbance until investigators can arrive on the scene.

(A) Requisite Knowledge. Methods to assess origin and cause; types of evidence; means to protect various types of evidence; the role and relationship of Fire Fighter IIs, criminal investigators, and insurance investigators in fire investigations; and the effects and problems associated with removing property or evidence from the scene.

(B) Requisite Skills. The ability to locate the fire's origin area, recognize possible causes, and protect the evidence.

Rescue Operations. This duty shall involve performing activities related to accessing and disentangling victims from motor vehicle accidents and helping special rescue teams, according to the JPRs in 5.4.1 and 5.4.2. Extricate a victim entrapped in a motor vehicle as part of a team, given stabilization and extrication tools, so that the vehicle is stabilized, the victim is disentangled without further injury, and hazards are managed.

(A) Requisite Knowledge. The fire department's role at a vehicle accident, points of strength and weakness in auto body construction, dangers associated with vehicle components and systems, the uses and limitations of hand and power extrication equipment, and safety procedures when using various types of extrication equipment.

(B) Requisite Skills. The ability to operate hand and power tools used for forcible entry and rescue as designed; use cribbing and shoring material; and choose and apply appropriate techniques for moving or removing vehicle roofs, doors, wind-shields, windows, steering wheels or columns, and the dash-board. Assist rescue operation teams, given standard operating procedures, necessary rescue equipment, and an assignment, so that procedures are followed, rescue items are recognized and retrieved in the time as prescribed by the AHJ, and the assignment is completed.

(A) Requisite Knowledge. The fire fighter's role at a technical rescue operation, the hazards associated with technical rescue operations, types and uses for rescue tools, and rescue practices and goals.

(B) Requisite Skills. The ability to identify and retrieve various types of rescue tools, establish public barriers, and assist rescue teams as a member of the team when assigned. **Fire and Life Safety Initiatives, Preparedness, and Maintenance.** This duty shall involve performing activities related to reducing the loss of life and property due to fire through hazard identification, inspection, and response readiness, according to the JPRs in 5.5.1 through 5.5.5. Perform a fire safety survey in an occupied structure, given survey forms and procedures, so that fire and life safety hazards are identified, recommendations for their correction are made to the occupant, and unresolved issues are referred to the proper authority.

(A) Requisite Knowledge. Organizational policy and procedures, common causes of fire and their prevention, the importance of a fire safety survey and public fire education programs to fire department public relations and the community, and referral procedures.

(B) Requisite Skills. The ability to complete forms, recognize hazards, match findings to preapproved recommendations, and effectively communicate findings to occupants or referrals.

5.2.1* Present fire safety information to station visitors or small groups, given prepared materials, so that all information is presented, the information is accurate, and questions are answered or referred.

(A) Requisite Knowledge. Parts of informational materials and how to use them, basic presentation skills, and departmental standard operating procedures for giving fire station tours.

(B) Requisite Skills. The ability to document presentations and to use prepared materials.

5.2.2* Prepare a pre-incident survey, given forms, necessary tools, and an assignment, so that all required occupancy information is recorded, items of concern are noted, and accurate sketches or diagrams are prepared.

(A) Requisite Knowledge. The sources of water supply for fire protection; the fundamentals of fire suppression and detection systems; common symbols used in diagramming construction features, utilities, hazards, and fire protection systems; departmental requirements for a preincident survey and form completion; and the importance of accurate diagrams.

(B) Requisite Skills. The ability to identify the components of fire suppression and detection systems; sketch the site, buildings, and special features; detect hazards and special considerations to include in the preincident sketch; and complete all related departmental forms. Maintain power plants, power tools, and lighting equipment, given tools and manufacturers' instructions, so that equipment is clean and maintained according to manufacturer and departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

(A) Requisite Knowledge. Types of cleaning methods, correct use of cleaning solvents, manufacturer and departmental guidelines for maintaining equipment and its documentation, and problem-reporting practices.

(B) Requisite Skills. The ability to select correct tools; follow guidelines; complete recording and reporting procedures; and operate power plants, power tools, and lighting equipment. Perform an annual service test on fire hose, given a pump, a marking device, pressure gauges, a timer, record sheets, and related equipment, so that procedures are followed, the condition of the hose is evaluated, any damaged hose is removed from service, and the results are recorded.

(A) Requisite Knowledge. Procedures for safely conducting hose service testing, indicators that dictate any hose be removed from service, and recording procedures for hose test results.

(B) Requisite Skills. The ability to operate hose testing equipment and nozzles and to record results.

Chapter 6 Emergency Medical Services

General EMS Requirements.

The AHJ shall determine the level of emergency medical services to be provided. The level of training and service for emergency medical services shall be in accordance with Section 6.2.

Levels of Training and Service. Emergency medical services shall include at least one of the following:

- (1) First aid provider
- (2) Emergency medical responder (also known as medical first responder)
- (3) Emergency medical technician
- (4) Advanced emergency medical technician
- (5) Paramedic

First Aid Provider. Performs minimum emergency medical care performance capabilities for entry-level personnel that are developed and validated by the AHJ to include infection control, CPR/AED, bleeding control, and shock management. **Emergency Medical Responder (also known as Medical First Responder).** With a limited amount of equipment, answers emergency calls to provide efficient and immediate care to ill and injured patients focused on lifesaving interventions. Requisite knowledge and

skills shall be determined by the designated governing body under which the AHJ operates. The possession of a certificate or license from the governing body shall indicate compliance with the appropriate requisite knowledge and skills.

Emergency Medical Technician. Performs scene size up, evaluates scene safety, and recognizes the need for higher levels of medical care as it relates to patient assessment, airway management, breathing and circulation, bleeding, shock management, and immobilizing potential spinal or other bone fractures as approved by AHJ. Requisite knowledge and skills shall be determined by the designated governing body under which the AHJ operates. The possession of a certificate or license from the governing body shall indicate compliance with the appropriate requisite knowledge and skills.

Advanced Emergency Medical Technician. Performs scene size up, evaluates scene safety, and recognizes the need for higher levels of medical care while providing a scope of practice focused on the acute management and transportation of critical and emergent patients. Requisite knowledge and skills are determined by the designated governing body under which the AHJ operates. The possession of a certificate or license from the governing body indicates compliance with the appropriate requisite knowledge and skills.

Paramedic. Emergency medical treatment beyond basic life support that provides advanced life saving techniques to the critically ill or injured.

Requisite knowledge and skills are determined by the designated governing body under which the AHJ operates. The possession of a certificate or license from the governing body indicates compliance with the appropriate requisite knowledge and skills.