CHAPTER 1: BECOMING A ROPE RESCUER

Chapter Overview

Rope operators and technicians are trained and experienced in the skills needed for rope rescue. The use of specialized equipment and techniques afford them the ability to access many areas. These skills and this equipment are designed to carefully move subjects away from hazardous areas into safer zones to exact treatment and transport, if needed. Rope rescues may occur in environments such as confined spaces, towers, wilderness, caves, and mines, among other locations. All of the aforementioned locations require their own specialized set of equipment and training each jurisdiction needs to be aware of.

The focus of this text is on three rescuer classes: awareness level, operations level, and technician level. The skills for each level cannot be learned solely from a book—there needs to be hands-on, skill-based training in order to show competency and proficiency at each level. This text should be used as a training guide in conjunction with a competent instructor experienced in the field of rope rescue.

Instruction in rope rescue is only the first step in the process of maintaining technician-level competency. Continuous skill-based training will keep technicians’ skills from deteriorating. It is important that a rescuer not only understand the skills needed, but is able to use them intuitively on a rescue call.

Objectives and Resources

**Knowledge Objectives**

After studying this chapter, you should be able to:

 Define the term authority having jurisdiction. (NFPA 1006: 5.1.5, p. 4)

 Identify the National Association of Fire Protection (NFPA) standards that apply to rope rescue. (p. 5)

 Identify the three levels of rope rescuer: awareness, operations, and technician. (NFPA 1006: 5.1.2, p. 6)

 Explain how the job performance requirements in NFPA 1006, Standard for Technical Rescue, support training and skills maintenance. (NFPA 1006: 5.1, p. 7–8)

 Describe the common types of rope rescue incidents. (pp. 9 – 13)

 Identify the mindset characteristics of an effective rope rescuer. (pp. 13 – 17)

 Explain how to alert others to a falling object. (p. 17)

**Skills Objectives**

There are no skills in this chapter.

Support Materials

 Dry-erase board and markers or chalkboard and chalk

 LCD projector, slide projector, overhead projector, and projection screen

 PowerPoint presentation or slides

 **Navigate for Students**

 **Advantage**

 Each printed textbook comes with an access code that unlocks several valuable teaching and learning assets including:

 **Navigate eBook**.

 Online and offline accessibility ensures that the eBook is always available. Offline interactions are captured, cached, and uploaded the next time they are connected to the Internet.

 **Navigate for Instructors**

 **ACCESS LEVELS**—Differing levels of access meet the needs of traditional, hybrid, and distance learning courses.

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Reading and Preparation

Review all instructional materials, including *Rope Rescue,* Fifth Edition, Chapter 1, and all related presentation support materials.

Chapter Presentation Overview

Pre-lecture

I. You Are the Rescuer

Small-Group Activity/Discussion

Purpose

The purpose of this activity is to introduce students to concepts surrounding the understanding and management of water rescue incidents.

Instructor Directions

1. Direct students to read the “You Are the Rescuer” scenario found at the beginning of Chapter 1 (p. 4).

2. You may assign students to a partner or a group. Direct them to review the discussion questions at the end of the scenario and prepare a response to each question. Facilitate a class dialogue centered on the discussion questions.

3. You may also assign this as an activity and ask students to turn in their comments on a separate sheet of paper.

Lecture

I. Introduction

A. Review the learning objectives.

B. Understand what the minimum required level of competency is for the organization and individuals.

C. Technical rescue is the application of special knowledge, skills, and equipment to resolve rescue situations.

D. The authority having jurisdiction (AHJ) determines the acceptability of installations, procedures, equipment, or materials based on the appropriate standards.

II. The Authority Having Jurisdiction (AHJ)

**A. An organization or individual responsible for approving and/or enforcing guidelines of a response agency**

1. May be federal, state, local, or other regional agency

2. May be a board of directors, operating committee, fire chief, commanding officer, or other entity that has statutory authority

3. The responding agency determines who and how the responsible party answers to

**B. The AHJ has authority over the actions of the response agency**

1. Holds some responsibility for the agency

2. The National Fire Protection Association (NFPA) requires the AHJ to provide needed personal protective equipment (PPE) and other equipment.

3. NFPA 1006 calls for the AHJ to establish prerequisites for training, from age requirements to medical requirements.

III. National Fire Protection Association (NFPA) Resources

A. NFPA standards on technical rescue do not carry the weight of law.

1. Used by agencies to set a baseline for best practices

2. Standards developed by a group of volunteers representing varied viewpoints and interests

3. Represents a balanced perspective and viability of information

B. NFPA standards represented:

1. NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications (2021 Edition)*

2. NFPA 2500, *Standards for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services.* Now includes:

a. NFPA 1670, *Standard on Operations for Training for Technical Search and Rescue Incidents*

b. NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*

c. NFPA 1858, *Standard on Selection, Care and Maintenance of Life Safety Rope and Equipment for Emergency Services*

3. Effective in year 2022, the contents of NFPA 1670, 1983, and 1858 will be collected into NFPA 2500.

4. NFPA 1006 and 2500 identify 20 separate search and rescue situations, including:

a. Tower rescue

b. Rope rescue

c. Structural collapse rescue

d. Confined space

e. Common passenger vehicle rescue

f. Heavy vehicle rescue

g. Animal technical rescue

h. Wilderness search and rescue

i. Trench rescue

j. Machinery rescue

k. Cave rescue

l. Mine and tunnel rescue

m. Helicopter rescue

n. Surface water rescue

o. Swiftwater rescue

p. Dive rescue

q. Ice rescue

r. Surf rescue

s. Watercraft rescue

t. Floodwater rescue

5. Rope rescue is a separate discipline, but rarely exists by itself.

a. May occur is different environments:

i. Urban

ii. Wilderness

iii. Tower

iv. Water

v. Ice

vi. Confined space

b. Might also include either high-angle or low-angle rescues

6. Due to the nature of the different skills needed, the AHJ should establish written guidelines for each discipline and the level of operational responsibility for the organization.

C. Levels of rescue

1. NFPA 2500 provides guidelines to assist in assessing the desired needs of the rescuers for the hazards in an AHJ response area. The levels are broken down as such:

a. Awareness level

i. The minimum level of capability

ii. Expected to know just enough to prevent further injury or harm, perform size up, and activate appropriate response resources

b. Operations level

i. Moderate level expected to respond to technical rescue events

ii. May identify hazards, support technician-level rescuers, and assist in search and rescue

iii. In rope rescue, this level may perform rescues where they do not need to get on a vertical rope rescue system.

c. Technician level

i. The highest skill level employed by an organization

ii. Identifies hazards, uses equipment, and applies advanced techniques as needed to mitigate search and rescue incidents

iii. In rope rescue, this level is expected to perform as an operator as well as working within the vertical plane, either suspended from a litter, ascending/descending, or climbing a structure.

2. All organizations should maintain awareness level

a. This allows for the ability to spot hazards and dispatch the needed technicians.

b. Maintaining higher levels requires the ability to mount an operation- or technician-level response whenever it is needed.

c. The number of technician-level responders is not defined by NFPA since the number differs per incident.

d. Due to the expense of maintaining the multiple levels, it is up to the AHJ to define what is needed for their response area to meet the standard.

e. Organizations should focus on the types of incidents and levels of response needed and develop a written plan.

f. Creating a cooperation agreement with surrounding rescue organizations is encouraged by NFPA when the local agency is unable to maintain the needed level of response.

IV. Using Job Performance Requirements (JPRs)

A. Job performance requirements (JPRs) describe the personnel knowledge and skills relative to each skill level.

B. NFPA 1006 establishes tasks for each level that personnel must be able to perform for each specialty.

C. This text covers high-angle environments, and covers three critical components:

1. The task to be performed

a. A concise statement of what is expected to be done

2. Tools, equipment, and materials needed

a. The items the organization must supply to complete the task

3. Evaluation parameters and performance outcomes

a. This promotes consistency in evaluation by reducing the performance measuring variables.

D. Maintaining operations and technician level requires more than just a one-time class and test.

1. Technicians are those who know the subject matter thoroughly and can execute all skills consistently.

2. Need to be able to see problems that have never happened and mitigate those hazards

3. Must be comfortable in high-angle environments

E. Such depth requires hands-on experience and repetition

1. Levels can be maintained through ongoing study, training, skill, and frequency of disciplinary operations.

F. Standards do not specify frequency of training

1. Only state that competency must be demonstrated annually

2. Annual demonstration must be documented.

3. Demonstration of competency should be separate from training.

4. Training should be held at least quarterly for technicians to maintain skill levels and competency.

V. What Is Rope Rescue?

A. Dependent on the area and rescuers involved, may be called vertical or high-angle rescue

1. Sometimes referred to as technical rescue, although the term may cover multiple different disciplines.

2. The defining factor is when rope, or other associated equipment, is involved to mitigate the present hazards.

B. *Victim* has commonly referred to the rescue subject.

1. *Casualty* has replaced the term since the rescue subject should no longer be a *victim* upon arrival of the rescuer.

2. *Patient* may be used if the subject is badly maimed, injured, or deceased.

3. In this text, *subject* will refer to this rescue individual with the understanding that evacuation methods, not medical interventions, will be the focus of this text.

4. Mountaineering equipment was originally employed, but the recent shift has been to more specialized methods and equipment for rescue and further from recreational equipment.

C. Fire service rescue

1. Life safety rope and equipment have undergone tremendous changes over the years.

a. Due to a rope rescue tragedy of 1980 in New York City

i. *Line to Safety*, a white page report by the International Association of Fire Fighters (IAFF)

ii. Rope was severed during a rescue attempt, sending two firefighters to their death.

iii. Further stress has been placed to improve training and equipment by the International Association of Fire Fighters (IAFF), National Fire Protection Association (NFPA), and International Society of Fire Service Instructors (ISFSI).

b. Most significant move has been from natural fiber laid ropes to the use of synthetic fiber kernmantle ropes.

i. This has been a massive change throughout the fire service as well as fall protection workers worldwide.

VI. Where Do Rope Rescues Occur?

A. The need may arise when someone becomes injured at, stranded at, or falls from, a point above or below grade.

1. These may happen in either a recreational or work environment.

B. Recreational incidents

1. Rock climbing

a. May take place at indoor gyms, well-maintained outdoor climbing areas, remote mountainous locations, or at residential houses

b. There is little consistency in recreational climbing in regards to the equipment being used.

i. Generally lighter weight

ii. More prone to breaking under heavy loads

c. Climbing in remote areas creates an access issue.

i. Medical care

ii. Preventing and treating heat/cold stress

iii. Feeding and hydration

iv. Long, rugged evacuation over rough terrain

2. Rappelling

a. May occur along with rock climbing, but is its own sport

i. Occurs in backcountry, remote areas

ii. Urban locations on buildings as well as in sanctioned gyms are other locations.

b. May require extensive resources and training

3. Mountaineering

a. Although it may involve rock climbing and rappelling, it is not the same sport.

b. Typically much further into the backcountry

i. Often complicated natural terrain

ii. Uncommon and severe natural hazards not found in urban settings

c. Specialized and experienced teams should be called upon

d. May involve extremely high altitudes, multi-day expeditions, major logistical support, and specialized medical and rescue procedures beyond regular rescue scenarios

4. Caving

a. Underground environments unique in the following ways:

i. Moving through long distances in low/no light

ii. Tight passageways

iii. Vertical drops

iv. Water

v. Mud

vi. Total darkness

b. Although similar to confined space and mine rescues, rescuers should be trained to work in the local caves within the response area.

5. Ice climbing

a. May be in remote backcountry areas or at set gym locations

b. Specialized equipment is used in ice climbing that needs to be understood and used during emergency situations.

C. Workplace incidents

1. Work at height and rope access

a. Familiarity with the use of fall protection and rope access is needed for all jurisdictional areas.

b. Form and function of some equipment differs from that of recreational and rescue equipment.

c. Special knowledge of fall protection equipment may be required for rescue.

2. Fall protection refers to methods of eliminating or controlling hazards to prevent workers from an elevated fall.

a. May refer to guardrails, catch nets, harness-based systems

b. For rope rescue, focus is on harness-based systems often called fall protection.

c. Fall arrest systems, a common fall protection, utilizes ropes and lanyards to mitigate falls.

3. Rope access allows working at height without the use of scaffolding and platforms.

4. Rope access has a wide range of uses:

a. Window cleaning

b. Bridge painting\inspection

c. Building engineering inspections

d. Ocean oil platform inspection and maintenance

5. Most rope access employs the use of two lines:

a. A working, main, line

b. A backup line

c. A harness as the primary point of attachment to the body

6. Self-rescue and coworker-assisted rescue are integral to rope access scenes; rescue teams may be called to assist.

7. Familiarization with industry societies that govern work at height, their standards, and the equipment used will better equip rescue teams with the knowledge of rope access methods and equipment.

a. Society of Professional Rope Access Technicians (SPRAT) – *Safe Practices for Rope Access Work* and *Certification Requirements for Rope Access Work*

b. American Society of Safety Professionals (ASSP) – Fall Protection Code *ANSI Z459 Safety Requirements for Rope Access Work*

D. Industrial sites

1. May occur at high angles or in confined spaces

a. Refineries

b. Chemical plants

c. Open pit and underground mining sites

2. Principles are similar to those in natural settings.

3. Certain areas may have pre-rigged anchor points allowing for faster access to subjects in need.

4. Response times may be faster due to onsite rescue crews and local departments.

5. Great risk of contact with industrial hazards

a. Energized electrical equipment

b. Machinery hazards

c. Razor-sharp metal elements

d. Extremely hot surfaces

e. Pressurized hydraulic and pneumatic lines

f. Chemical, radiation, and biological hazards

6. Occupational Safety and Health Administration (OSHA) requires employees to have a rescue plan in place for accidents.

a. Rescue efforts may already be enacted upon arrival.

b. A pre-incident plan is needed to seamlessly integrate all rescue efforts.

E. Wind turbine rescue

1. Heights in excess of 200 feet with limited access

2. Inside the nacelle presents with tight quarters, moving machinery, dust, and fumes

3. Access to subjects on the exterior of the nacelle, turbine, or blades present new hazards such as:

a. Extreme heights

b. Wind

c. Extreme temperatures

d. Slick surfaces due to snow, ice, leaking hydraulic oil, or rain

F. Confined space rescue

1. Defined as space with limited access and not designed for continuous human occupancy

a. May be found in industrial or municipal sites

b. Requires special rescue methods and safety considerations

c. Often contain hazardous materials, contaminated air, and dangerous machinery

d. Use of lockout/tagout procedures (LOTO), atmospheric monitoring, and ventilation

e. Personal protective equipment such as:

i. Chemical protective clothing

ii. Positive pressure self-contained breathing apparatus (SCBA)

iii. Supplied air breathing apparatus (SABA)

iv. Explosive-resistant or intrinsically safe light sources

2. OSHA regulations for confined space rescue in 29 CFR 1910.146, *Permit-Required Confined Spaces*

3. NFPA 350, *Guide for Safe Confined Space Entry and Work*

G. Tower rescue

1. Rescue methods vary depending on the type and use of the tower.

2. Rescuers should consult and work with the experts in charge of the tower in question.

3. National Association for Tower Erectors (NATE) has training guidelines for tower rescue

H. Water rescue

1. Rescues in oceans, lakes, or slow-moving rivers are often done from boats.

2. In swiftwater, most efficient method is shore-based operations.

a. Include deploying throw bags of 50 to 75 feet of positively buoyant water-resistant rope

b. Constructing highlines, tensioned diagonal lines, or boat control rope systems over water

i. Highlines, tensioned diagonal lines, and Telfer systems should use ropes rated for high-angle rescue.

3. Proper equipment and training is required for all responding personnel prior to attempting rescues.

4. Rope for in-water rescue should float so that it is visible and less likely to snag on underwater hazards.

5. American Society of Testing and Materials [ASTM] F1739, *Standard Guide for Performance of a Water Rescue – Level 1*, and ASTM F1824, *Standard Guide for Performance of a Water Rescue – Level II* address requirements.

VII. Becoming a Rope Rescuer

A. Operations- and technician-level rope rescuers are trained in the skills needed for rope rescue environments.

1. Use of specialized equipment is needed to navigate hazards.

2. Use of specifically designed equipment to extract subjects to safe areas for treatment

3. Rescue environments may include towers, confined spaces, wilderness, caves, mines, etc.

a. Additional training and equipment are needed to overcome the unique hazards.

B. This text is not hazard specific

1. Focuses on awareness-, operations-, and technician-level training

2. This text should complement, not replace, skill-based training with a competent instructor experienced in the field.

a. Instructors may be found in established training organizations, fire training centers, or independent schools.

b. Instructors should have experience in the environment where the rescuer will be working.

C. Rope rescue instruction is only the first step.

1. Skills deteriorate when not used. Skill-based training is vital.

2. A person must not only have the skills for the job, they must understand how to use those skills instinctively.

D. Aptitude for the high-angle environment

1. Fear of heights is natural.

a. Those working without a fear of heights or a respect for heights is a danger to themselves and others on scene.

b. Those uncomfortable at height also pose a danger to others they work with.

c. Ease of working at height only comes with practice working at height.

E. Characteristics of an effective rescuer

1. Although difficult to define certain characteristics, a few stand out:

a. Concern for the subject in need

i. Understanding that it is a person and not an object being rescued

ii. The rescuer’s demeanor dictates the subject’s reactions.

b. Communication is key.

i. Hearing is the last sense to go, even when unconscious.

F. Safety

1. Primary objective is safety.

a. Obtained through mental and physical excellence and team organization

b. Achieved by a comprehensive size-up, evaluating options, and choosing the best of them

i. 1989 Georgia incident where a paramedic used non-life-safety rope to rappel 110 feet, the rope broke, causing the paramedic to fall. The paramedic was extracted by way of four-wheel drive vehicle. The four-wheel drive vehicle was a viable option to be used over rope access.

G. Personal red flags

1. Be aware of danger signs when working in rope rescue.

a. Tunnel vision

b. Physical fatigue

c. Mental or physical impairment caused by environmental factors

d. Alcohol or drug impairment

e. Failure to call out dangerous situations

f. Overconfidence, leading to a lack of attention

e. Family or personal problems clouding judgement

g. Overexcitement

h. Poor physical condition

i. Any medical condition that may inhibit energy or situational awareness

j. Failure to ask for assistance when needed

H. Physical safety concepts

1. Safety lines

a. Everyone near the edge should be tied to a safety line.

2. System redundancy

3. Wear proper PPE for the task at hand.

4. Properly check out equipment prior to and after each use.

I. Systems thinking

1. What are the necessary components of the rope rescue system?

a. What are their strengths and weaknesses?

b. What effects will they have on the outcome of the operation?

2. The rope rescue system consists of many elements – rope, hardware, anchors, and others.

3. The effective strength of the system is only as strong as the weakest part of the system.

J. Working with this text and a competent instructor, candidates should learn to evaluate the strengths and weaknesses of a system.

1. There are multiple ways to rig a system affording stronger or weaker outcomes, depending on the variation used.

K. Use of low-risk methods first

1. The optimum approach to rescue is using the most effective means while minimizing dangers to both subject and rescuers.

a. Evaluate the situation before approaching it.

b. Do not rush.

c. Choose the least dangerous route to the subject.

d. Use the simplest and most effective system to get the job done.

e. Set up operations to minimize dropped objects on the subject and effected area.

f. Ensure the team leader is well qualified and experienced in the type of rescue operation.

g. A safety officer should be appointed to oversee use of all equipment and systems.

h. Ensure all rescuers involved wear proper PPE for the tasks performed.

i. Set up safety lines and ensure they are in use any time a rescuer nears the edge.

L. Preparation for self-rescue

1. Rescuers should be ready for something to go wrong and ready to extricate themselves.

a. Preparation and training for an emergency is key.

b. Sufficient gear should be carried to exact a rescue if the need arises.

i. Carabiners, ascenders, slings (webbing or rope), Prusiks

M. Backup of other rescuers

1. All attention needs to be focused on the task at hand.

2. All members should be alert to the development of unsafe conditions and be ready to make appropriate corrections.

N. Care of equipment

1. Proper care of rope rescue equipment is important since it is life safety equipment.

2. Considerations to avoid loss and damage to equipment include:

a. Leave no unsecured equipment near the edge of a drop.

b. Secure all gear that will be used on a vertical face.

c. Lay equipment on a clean tarp or hang it up. Do not leave it in the dirt on the ground.

d. Inspect all gear after each use, in training and on a rescue. Document all findings.

e. Although new kernmantle ropes are not as vulnerable as older laid ropes, it is still not ideal to step on ropes.

f. Rope needs to be inspected for excessive wear, chemical and UV damage.

g. Remove all defective gear from use immediately.

h. Double rope systems (main and a backup line) should be used in rescue operations.

O. Attention to detail

1. To ensure effective work and prevent injury

2. Injury or death may occur when there is a lack of attention being paid.

3. The more rescuers practice their craft, the better they will be at being able to keep their attention to detail while still seeing the big picture of the full rescue.

4. Improvisation is necessary due to the uncertain nature of rope rescues. Every situation is different and needs to be handled differently.

P. Team concepts

1. Training together often to form a cohesive group diminishes the chances of accidents and near misses.

2. An assigned safety officer should make sure safety procedures are followed during all training and real rescues.

3. The safety officer should be a separate person from the incident commander.

Q. Warning call

1. Falling objects are a common hazard during rescue calls. Any time an object falls, a loud warning yell should follow.

2. Yelling “Rock, Rock, Rock” is preferred.

a. Three calls ensures that it is heard.

b. Yelling “look out” or “heads up” tends to make people look up at the falling hazard.

3. Rescuers should be trained to duck and cover should they hear “Rock, Rock, Rock.”

R. Training expectations

1. Awareness-level rescuers

a. Recognize a rope incident and activate the necessary number and level of resources.

2. Operations-level rescuers

a. Demonstrate proper use and care of rope.

b. Demonstrate proper use and care of other rope rescue equipment.

c. Demonstrate the ability to tie the knots in the “Knots” chapter of this text.

d. Rig safe and secure anchors.

e. Calculate system safety ratios on various systems with various equipment.

f. Demonstrate the ability to efficiently belay another rescuer.

3. Technician-level rescuer

a. Demonstrate the ability to rappel, as well as tie off the rappel to operate hands free, efficiently returning to rappel.

b. Demonstrate the ability to ascend, tie a friction hitch.

c. Demonstrate the use of both mechanical ascenders and friction hitches to ascend.

d. The ability to efficiently change over from ascending to rappelling and from rappelling to ascending as well as the ability to free themselves from a jammed rappel device without the use of a knife

4. All team members

a. Should be trained to, at minimum, DOT emergency medical responder

b. Show the use of litters, hauling, and lowering

c. Show proper communication skills

d. Have an understanding of the logistics, management, and operations of the level they possess

VIII. Summary

 **Training is essential to a good rope rescue program, both at an individual level and at the team level.**

 **NFPA and other standards can be used to augment knowledge and understanding, but should be considered a starting point rather than the end-all to preparation and planning.**

 **NFPA 1006 addresses individual skills for technical rescuers, and should be used in conjunction with NFPA 2500 (1670) for team capabilities and requirements.**

 **Rope rescue skills are foundational to many other specific disciplines of technical rescue, but should be augmented with specific discipline/environment training for best outcome.**

 **Because OSHA requires workplaces with fall protection programs to have provision for prompt rescue, responders may find rescue already underway when they arrive.**

 **Fire departments and rescue organizations should preplan with employers who have work-at-height programs.**

 **In addition to specific required skills and knowledge, rope rescuers must have an aptitude for work at height.**

 **Rope rescuers should be safety oriented, team players who are inclined to hone their skills for their own safety, and that of others.**

Post-lecture

I. After-Action Review

Individual/Small-Group Activity/Discussion

On Scene

This activity is designed to help the student understanding how to approach a fire investigation. This activity incorporates both critical thinking and the application of basic trench rescue knowledge.

Purpose

To allow students an opportunity to develop responses to critical thinking questions.

Instructor Directions

1. Direct students to read the “On Scene” questions located in the After-Action Review section at the end of Chapter 1 (p. 19).

2. Direct students to read and individually answer the discussion questions. Allow approximately 10 minutes for this part of the activity. Facilitate a class review and discussion of the answers, allowing students to correct responses as needed.

3. You may also assign these as individual activities and ask students to turn in their comments on a separate piece of paper.

Answers

1. What’s the difference between being trained in a given skill versus being competent in that skill?

Training means simply that a person has received instruction. Competency requires frequent training and practice so that the rescuer understands the skills, is able to perform the skills accurately and instinctively, and demonstrates the ability problem-solve relative to rope rescue use of the skills.

2. What rope rescue disciplines are covered by NFPA 1006 and 2500 (1670)?

 Tower rescue

 Rope rescue

 Structural collapse rescue

 Confined space rescue

 Common passenger vehicle rescue

 Heavy vehicle rescue

 Animal technical rescue

 Wilderness search and rescue

 Trench rescue

 Machinery rescue

 Cave rescue

 Mine and tunnel rescue

 Helicopter rescue

 Surface water rescue

 Swiftwater rescue

 Dive rescue

 Ice rescue

 Surf rescue

 Watercraft rescue

 Floodwater rescue

3. Which of these technical rescue disciplines exist(s) in your response area?

This answer will depend upon the needs of your locality.

4. Which of these technical rescue disciplines might involve rope rescue?

Nearly any discipline has the potential to also involve rope rescue. Most notably, the follow disciplines might involve rope rescue:

 Tower rescue

 Structural collapse rescue

 Confined space rescue

 Common passenger vehicle rescue

 Heavy vehicle rescue

 Animal technical rescue

 Wilderness search and rescue

 Trench rescue

 Machinery rescue

 Cave rescue

 Mine and tunnel rescue

 Helicopter rescue

 Surface water rescue

 Swiftwater rescue

 Dive rescue

 Ice rescue

 Surf rescue

 Watercraft rescue

 Floodwater rescue

5. You respond to a car-over-the-edge incident, where a rope is draped down the slope as a handline for rescuers to hold onto while scrambling down the bank. Does this constitute rope rescue?

No. A rope rescue is defined as a rescue incident in which a rope and other associated gear are necessary to move the subject from the hazard, provide safety, and/or protect the rescuer(s) and subject(s) from falling.

6. What are some red flags in a person’s behavior or attitude that might suggest to you that they may not be an ideal candidate to become a rope rescuer?

A person who exhibits excessive bravado, unwillingness to ask questions, and/or an unhealthy response to adrenaline may not be an ideal candidate to become a rope rescuer. Other conditions that can be red flags include a failure to speak out when seeing a dangerous situation; overconfidence, thoughts impaired by personal problems or substance use, tunnel vision; physical fatigue, poor physical condition, or medical conditions.

II. Lesson Review

Discussion

Note: Facilitate the review of this lesson’s major topics using the review questions as direct questions or slides. Answers are found throughout this lesson plan.

1. What does AHJ stand for and what is its purpose? (Lecture II A, B)

2. Who is the NFPA and what is its purpose? (Lecture III A)

3. What NFPA standards do rope rescues follow? (Lecture III B)

4. What are the three levels of rescuers? (Lecture III C)

5. What is the importance of job performance requirements (JPRs)? (Lecture IV D, E, F)

6. What is rope rescue? (Lecture V A)

7. What are some hazards involved with workplace rope rescues? (Lecture VI C)

8. What are some personal red flags to look out for during a rescue operation? (Lecture VII G)

9. Why is it important to use low-risk methods of rescue first? (Lecture VII K)

10. What are some ways to care for your rope rescue equipment? (Lecture VII N)

III. Assignments

Lecture

A. Advise students to review materials for a quiz (determine the date/time).

B. Direct students to read the next chapter in *Rope Rescue, Fifth Edition*, as listed in your syllabus (or reading assignment sheet) to prepare for the next class session.