Confined Space Rescue Awareness-Operations-Technician

(NFPA 1006: Confined Space Rescue Awareness/Operations/Technician)

Curriculum Training Standards Guide (2021)





California Department of Forestry and Fire Protection
Office of the State Fire Marshal
State Fire Training

Confined Space Rescue Awareness/Operations/Technician

Curriculum Training Standards Guide (2021)

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This CTS guide utilizes the following NFPA standards to provide the training standards for State Fire Training's Confined Space Rescue Awareness/Operations/Technician (2021) program:

NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).

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How to Read a CTS Guide

Overview

A curriculum training standard (CTS) guide lists the requisite knowledge, skills, and job performance requirements an individual must complete to become proficient in a specific job function.

It also documents and justifies the OSFM-approved revisions to the NFPA standard and identifies where each curriculum training standard is taught (course plan), tested (skill sheets), and validated (task book).

Individuals aspiring to meet State Fire Training's curriculum training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own agency or jurisdiction.

Format

Each curriculum training standard is comprised of eight sections.

Section Heading

Training standards are grouped by section headings that describe a general category. For example, the Fire Fighter 1 CTS guide includes the following section headings: NFPA Requirements, Fire Department Communications, Fireground Operations, and Preparedness and Maintenance.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the individual standard.

Authority

The CTS guide references each individual standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Job Performance Requirements

This segment includes a written statement that describes a specific job-related task, the items an individual needs to complete the task, and measurable or observable outcomes.

Requisite Knowledge

This segment lists the knowledge that an individual must acquire to accomplish the job performance requirement.

Requisite Skills

This segment lists the skills that an individual must acquire to accomplish the job performance requirement.

Content Modification

This table documents and justifies any revisions to the NFPA standard that the development or validation cadres make during the development of a CTS guide.

Cross Reference

This table documents where each training standard is taught (course plan), tested (skill sheets), and validated (task book).

Confined Space Rescue

Section 1: Awareness

1-1: Initiating Isolation Procedures for a Specific Confined Space Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.1

Job Performance Requirement

Initiate isolation procedures for a specific confined space incident, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, so that all hazards are identified; unauthorized entry to the confined space and adjacent areas are controlled; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

Requisite Knowledge

- 1. Describe resource capabilities and limitations
- 2. Describe hazard recognition
- 3. Describe isolation methods and terminology
- 4. Describe methods for controlling access to the scene
- 5. Describe how to operate and control mitigation equipment
- 6. *Identify* types of technical references

Requisite Skills

- 1. Identify resource capabilities and limitations
- 2. Identify potential hazards to rescuers and bystanders
- 3. Identify potential paths for entry to the confined space and its adjacent areas
- 4. Utilize scene entry control methods
- 5. Place scene control barriers
- 6. Operate control and mitigation equipment

Content Modification

Block Modification Justification		Justification
RK 5	Added new knowledge item	Added to correspond with required skill. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)		
 Topic 3-4 (RK 2) 	N/A	N/A
Topic 3-5		

1-2: Initiating a Search in Areas Immediately Adjacent to the Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.2

Job Performance Requirement

Initiate a search in areas immediately adjacent to the confined space, given hazard-specific PPE, equipment pertinent to search mission, a confined space incident location, and victim investigative information, so that search parameters are established, the victim survival profile is established, the access and egress of all people either involved in the search or already within the search area are questioned and the information is updated and relayed to command, the personnel assignments match their expertise, all victims in the adjacent areas to the confined space are located as quickly as possible, applicable technical rescue concerns are managed, risks to searchers are minimized, and all searchers are accounted for.

Requisite Knowledge

- 1. Describe local policies and procedures
- 2. *Describe* how to operate in the environment surrounding the area of the confined space access area
- 3. Describe emergency evacuation procedures

Requisite Skills

- 1. Enter, maneuver in, and exit the adjacent areas to the confined space incident
- 2. Perform escape from the area if conditions become untenable

Content Modification

Block	Modification	Justification
RK 3	Added new knowledge item.	Added to correspond with skill requirement. (2018)

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)	N/A	N/A
Topic 3-6	•	,

1-3: Communicating with Victim(s)

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.3

Job Performance Requirement

Communicate with victim(s), given a clear environment and a confined space, so that victim communication is established when possible and information relative to patient condition is documented and conveyed to incoming confined space rescue resources.

Requisite Knowledge

- 1. Describe victim communication methods appropriate to confined spaces
- 2. Describe how to use of information acquired for initial victim assessment

Requisite Skills

- 1. Use communication methods that are effective from the outside to the inside of a confined space
- 2. Identify victim communication needs and use methods for documentation and transfer of victim information

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)	N/A	N/A
• Topic 3-7	IN/A	IN/A

1-4: Performing Nonentry Rescue

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.4

Job Performance Requirement

Perform nonentry rescue, given PPE; an anchored retrieval system attached to a victim located inside a confined space with a clear interior; safety, communication, and operational protocols; and a confined space rescue tool *cache*, so that the retrieval system is operated to extract the victim, the rescuer is protected from fall hazards when working near unprotected edges, victim communication is established and maintained, the victim is managed through the portal and patient care is initiated on extraction.

Requisite Knowledge

- 1. Describe principles of operation for nonentry rescue (retrieval) systems and equipment
- 2. Identify risks associated with nonentry rescue
- 3. Describe methods for fall prevention
- 4. Describe safety, communication, medical, and operational protocols

Requisite Skills

- 1. Use and apply PPE and fall prevention methods
- 2. Operate nonentry rescue (retrieval) systems and equipment
- 3. Implement safety, communication, *medical*, and operational protocols
- 4. Assure victim passage through the portal without obstruction

Content Modification

Block	Modification	Justification
JPR	A kit is a subset of a larger cache,	Changed "kit" to "cache".
	which is more appropriate for this JPR.	
	(2021)	
RK 1	Added "nonentry rescue" and	Added to clarify that awareness-level
	"systems and".	personnel cannot enter a confined space for
		rescue. (2021)
RK 2	Added new knowledge item.	Not addressed by NFPS. (2021)
RS3	Added "medical".	Added for consistency with other protocol
		lists. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)	N/A	N/A
• Topic 3-8	IN/A	IN/A

1-5: Sizing Up a Confined Space Rescue Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.5

Job Performance Requirement

Size up a confined space rescue incident, given background information and applicable reference materials, so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

Requisite Knowledge

- 1. Identify types of reference materials and their uses
- 2. *Identify* availability and capability of the resources
- 3. *Identify* elements of an incident action plan and related information
- 4. Describe the relationship of the size-up to the incident management system
- 5. *Identify* information gathering techniques and how that information is used in the size-up process
- 6. Identify basic search criteria for confined space rescue incidents

Requisite Skills

- 1. Read technical rescue reference materials
- 2. Gather information
- 3. Use interview techniques
- 4. Relay information
- 5. Use information-gathering sources

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)	N/A	N/A
Topic 3-2		

1-6: Recognizing the Need for Technical Rescue Resources

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.6

Job Performance Requirement

Recognize the need for technical rescue resources at an operations- or technician-level incident, given AHJ guidelines, so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

Requisite Knowledge

- 1. Describe operational protocols
- 2. *Identify* specific planning forms
- 3. Describe types of incidents common to the AHJ
- 4. *Identify* hazards
- 5. *Identify* types of resources
- 6. *Identify* needed resources
- 7. Describe incident support operations and resources
- 8. Describe safety measures

Requisite Skills

- 1. Apply operational protocols
- 2. Select specific planning forms based on the types of incidents
- 3. Identify and evaluate various types of hazards within the AHJ
- 4. Request support and resources
- 5. Determine the required safety measures

Content Modification

Block	Modification	Justification
RK 5	Added new knowledge item.	Not addressed by NFPA. (2021)
RK 6	Added new knowledge item.	Not addressed by NFPA. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021)	N/A	N/A
• Topic 3-3	IN/A	IN/A

1-7: Supporting an Operations- or Technician-level Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.1.7

Job Performance Requirement

Support an operations- or technician-level incident, given an incident, an assignment, an incident action plan, and resources from the tool *cache*, so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

Requisite Knowledge

- 1. Describe AHJ operational protocols
- 2. Describe hazard recognition
- 3. Describe incident management
- 4. Describe PPE selection
- 5. Describe resource selection and use
- 6. *Describe* scene support requirements

Requisite Skills

- 1. Apply operational protocols
- 2. Function within an incident management system
- 3. Follow and implement an incident action plan
- 4. Report the task progress status to a supervisor or incident command

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue: Awareness (2021) • Topic 3-1	N/A	N/A

Section 2: Operations

2-1: Initiating a Search Inside a Confined Space in Those Areas Immediately Visible from the Confined Space Entry Portal

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.1

Job Performance Requirement

Initiate a search inside a confined space in those areas immediately visible from the confined space entry portal, given hazard-specific PPE, equipment pertinent to search mission, a confined space, and victim investigative information, so that search parameters are established; the victim profile is established; the people in or around the search area are questioned and the information is updated and relayed to command; the personnel assignments match their expertise; all victims inside the space that are immediately visible from outside the portal are located and identified quickly; applicable technical rescue concerns are managed; risks to searchers are minimized; and all searchers are accounted for.

Requisite Knowledge

- 1. *Identify* local policies and procedures
- 2. *Describe* how to operate in the environment surrounding the area of the confined space access area

Requisite Skills

- 1. Work in the immediate area of the confined space entry portal
- 2. Perform immediate escape from the area if conditions become untenable

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 9-3 	(2021)	Instructor (2021)
	• 1	• JPR 1

2-2: Performing Size-up of a Confined Space Rescue Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.2

Job Performance Requirement

Perform size-up of a confined space rescue incident, given background information and applicable reference materials, so that the type of rescue is determined, the number of victims is identified, the last reported location of all victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.

Requisite Knowledge

- 1. Describe types of reference materials and their uses
- 2. *Identify* availability and capability of the resources
- 3. Describe elements of an action plan and related information
- 4. Describe relationship of size-up to the incident management system
- 5. *Describe* information gathering techniques and how that information is used in the size-up process

Requisite Skills

- 1. Read technical rescue reference materials
- 2. Gather information
- 3. Relay information
- 4. Use information gathering sources

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 3-5 (RK 2)	(2021)	Instructor (2021)
• Topic 3-7 (RK 1, 3, 4, 5)	• 2	• JPR 2
• Topic 8-2 (RS 1-4)		

2-3: Conducting Environmental Monitoring

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.3

Job Performance Requirement

Conduct monitoring of the environment, given monitoring equipment reference material, PPE, accurately calibrated detection and monitoring equipment, and size-up information, so that a representative sample of the space is obtained, accurate readings are made, readings are documented, and effects of ventilation in determining atmospheric conditions and the conditions of the space have been determined for exposures to existing or potential environmental hazards.

Requisite Knowledge

- 1. Describe capabilities and limitations of detection and monitoring equipment
- 2. *Describe* ways to confirm calibration
- 3. *Describe* defining confined space configuration as it applies to obtaining a representative sample of space
- 4. Describe basic physical properties of contaminants
- 5. Describe how to determine contents of a confined space

Requisite Skills

- 1. Use and confirm calibration of detection and monitoring equipment
- 2. Acquire representative samples of space

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 3-1 (RK 4) 	(2021)	Instructor (2021)
• Topic 3-2 (RK 1, 2, 3, 5)	• 3	• JPR 3
• Topic 8-3 (RS 1, 2)		

2-4: Assessing the Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.4

Job Performance Requirement

Assess the incident, given size-up information, information from technical resources, monitoring equipment, and PPE required to perform the assessment, so that general area and space-specific hazards are identified, bystanders and victims are interviewed, immediate and ongoing monitoring of the space is performed, the victims' conditions and location are determined, a risk/benefit analysis is performed, methods of ingress and egress for rescuer and victims are identified, rescue systems for victim removal are determined, and an emergency means of retrieval for rescue entrants is established.

Requisite Knowledge

- 1. Describe use of size-up information and interview techniques
- 2. Describe types of PPE
- 3. Describe monitoring equipment protocols
- 4. Describe rescue and retrieval systems
- 5. Describe permit programs
- 6. Identify types of and uses for available resources
- 7. Describe risk/benefit analysis methods
- 8. Describe common hazards and their influence on the assessment
- 9. Describe methods to identify egress from and ingress into the space
- 10. *Describe* processes to identify size, type, and configuration of the opening(s) and internal configuration of the space

Requisite Skills

- 1. Select and interpret size-up information
- 2. Conduct interviews
- 3. Choose and utilize PPE
- 4. Operate monitoring equipment
- 5. Identify hazard mitigation options
- 6. Identify probable victim location
- 7. Perform risk/benefit analysis
- 8. Recognize characteristics and hazards of confined spaces
- 9. Evaluate specific rescue systems for confined space entry and retrieval of rescuers and victims during confined space incidents

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space	Confined Space Rescue
Operations/Technician	Rescue	Operations/Technician
 Topic 2-6 (RK 2) 	Operations/Technician	Instructor (2021)
 Topic 3-1 (RK 8) 	(2021)	• JPR 4
 Topic 3-4 (RK 7) 	• 4	
 Topic 3-5 (RK 6) 		
• Topic 3-6 (RK 1, 3, 4, 5, 9, 10)		
 Topic 8-1 (RS 1-9) 		

2-5: Controlling Hazards

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.5

Job Performance Requirement

Control hazards, given PPE and a confined space tool *cache*, so that the rescue area is established; access to the incident scene is controlled; rescuers are protected from exposure to hazardous materials and atmospheres, all forms of harmful energy releases, and physical hazards; and victims are protected from further harm.

Requisite Knowledge

- 1. Describe PPE
- 2. Describe safety protocols
- 3. Describe monitoring equipment and procedures
- 4. Describe ventilation equipment and procedures
- 5. Describe incident hazards
- 6. Describe types of hazardous materials exposure risks
- 7. *Describe* forms, sources, and control of harmful energy and physical hazards in the confined space

Requisite Skills

- 1. Utilize PPE
- 2. Place scene control barriers
- 3. Operate atmospheric monitoring equipment
- 4. Ventilate a confined space
- 5. Identify dangerous forms of energy
- 6. Mitigate physical and atmospheric hazards

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space
Operations/Technician	Operations/Technician	Rescue
 Topic 2-6 (RK 1) 	(2021)	Operations/Technician
• Topic 3-1 (RK 5, 6)	• 5	Instructor (2021)
 Topic 3-3 (RK 2 		• JPR 5
• Topic 8-4 (RK 3, 4, 7, RS 1-6)		

2-6: Applying and Using Self-contained Breathing Apparatus (SCBA) as a Rescue Entrant

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.6

Job Performance Requirement

Apply and use self-contained breathing apparatus (SCBA) as a rescue entrant, given a confined space incident requiring respiratory protection, a rescue assignment, a means of entry into and exit from the space, a rescue attendant outside the space, SCBA, breathing apparatus cylinders, and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be seen easily from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection, the rescue entrant passes through the portal without removal of the SCBA, the assigned rescue duty is performed, the rescue entrant frequently assesses the level of air remaining in the cylinder and communicates this level to rescuers outside of the space, and the rescue entrant exits the space prior to activation of the low-pressure alarm on the SCBA.

Requisite Knowledge

- 1. Describe capabilities and limitations of SCBA in confined space rescue
- 2. Describe breathing air conservation
- 3. *Describe* communication methods appropriate to breathing apparatus use in confined spaces

Requisite Skills

- 1. Use SCBA in a confined space entry for rescue
- 2. Use breathing techniques that will conserve the air supply
- 3. Use communication methods that effectively convey information between rescuers inside and outside of the space

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 9-1 	(2021)	Instructor (2021)
	• 6	• JPR 6

2-7: Applying an Atmosphere-supplying Respirator to a Victim

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.7

Job Performance Requirement

Apply an atmosphere-supplying respirator to a victim, given a confined space incident requiring respiratory protection, a live victim, an atmosphere-supplying respirator and associated equipment, and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement; the victim can be easily seen from the outside of the space's primary access opening; rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer; the space can accommodate two or more rescuers in addition to the victim; all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection; the apparatus face piece is applied rapidly, positioned properly on the face and without air leakage; application of the face piece can be performed simultaneously with spinal precautions; the breathing apparatus unit is securely placed during victim movement so the face piece will not be pulled from the victim's face during movement; the level of air remaining in the victim's breathing apparatus is frequently accessed and communicated; and the victim is removed from the space without interruption of the air supply.

Requisite Knowledge

- 1. *Describe* capabilities and limitations of atmosphere supplying respirators (SCBA or SAR) for victims in confined space rescue
- 2. *Describe* expected victim air usage
- 3. *Describe* methods for application of face pieces to victims wearing helmets and for those with spinal injuries
- 4. *Describe* methods for securement of a victim's breathing apparatus unit when packaged in litters, attached to rope rescue systems, or being dragged along a horizontal plane
- 5. Describe communication methods in confined spaces

Requisite Skills

- 1. Apply a patent air supply to a victim in a confined space rescue
- 2. Move the victim wearing breathing apparatus without interruption or compromise of their air supply or face piece seal
- 3. Continuous monitoring of the victim's air supply during operations
- 4. Use communication methods that effectively convey information between rescuers inside and outside of the space

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-1	(2021)	Instructor (2021)
	• 7	• JPR 7

2-8: Performing Full Spinal Immobilization of a Victim Inside a Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.8

Job Performance Requirement

Perform full spinal immobilization of a victim inside a confined space, given a confined space incident requiring spinal precautions, a victim, full spinal immobilization equipment, a second rescuer to assist, and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim's cervical spine is manually maintained in a neutral position immediately on contact and maintained until the body and head are completely immobilized and secure, victim movement onto the spinal immobilization device creates minimal manipulation of the spine, void spaces between the victim and immobilization device are padded as appropriate, victim securement to the immobilization device will prevent spinal manipulation during movement, and applicable local treatment protocols are followed.

Requisite Knowledge

- 1. *Describe* capabilities and limitations of long spine immobilization equipment for victims in confined space rescue
- 2. *Describe* methods for movement of a victim onto a long spine immobilizer with minimum spinal manipulation
- 3. Describe methods for securement of a victim's body on a long spine immobilizer
- 4. Describe methods for securement of a victim's head on a long spine immobilizer
- 5. Describe other long spinal immobilization treatment modalities and procedures

Requisite Skills

- 1. Maintain manual immobilization of a victim's head during the immobilization process
- 2. Assist in moving the victim to a long spine immobilizer with only two persons with minimal spinal manipulation
- 3. Apply void space padding as needed based on the immobilization device
- 4. Apply and secure the victim's body and head to a long spinal immobilization device

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-2	(2021)	Instructor (2021)
	• 8	• JPR 8

2-9: Preparing for Entry into Horizontally Oriented Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.9

Job Performance Requirement

Prepare for entry into horizontally oriented confined space, given a confined space rescue tool *cache* and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to confined space entry operations are reassigned and replaced, route and methods of entry are determined, and rescuer evacuation is planned.

Requisite Knowledge

- 1. Describe effects of hazardous atmospheres on victims and rescuers
- 2. Describe types and operation of required hazard-specific monitoring equipment
- 3. *Describe* organization protocol for medical and psychological evaluation related to confined space entry
- 4. Describe methods of entry into confined spaces in accordance with operational protocols
- 5. Describe rescuer evaluation methods

Requisite Skills

- 1. Operate monitoring equipment
- 2. Perform rescuer pre-entry medical exam
- 3. Evaluate rescuer capabilities and limitations
- 4. Identify victim communication needs
- 5. Evaluate for point and route of confined space entry
- 6. Select evacuation methods

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 3-1 (RK 1) 	(2021)	Instructor (2021)
• Topic 4-2 (RK 3, 4, 5)	• 9	• JPR 9
• Topic 9-5 (RK 2, RS 1-6)		

2-10: Entering a Horizontally Oriented Confined Space for Rescue

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.10

Job Performance Requirement

Enter a horizontally oriented confined space for rescue, given PPE; safety, communication, and operational protocols; portable lighting; and a confined space rescue tool *cache*; a retrieval system; and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim is contacted, controlled confined space entry is established and maintained, atmosphere is monitored continuously, the victim's mental and physical conditions are assessed further, the rescue entrant is aided by portable lighting, rescue entrants are attached to retrieval lines at all times, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.

Requisite Knowledge

- 1. Describe principles of operation for atmospheric monitoring equipment
- 2. *Describe* methods for patient care in confined spaces
- 3. Describe portable lighting methods
- 4. Describe safety, communication, medical, and operational protocols
- 5. Describe controlled confined space entry and egress procedures for confined spaces

Requisite Skills

- 1. Use and apply PPE and rescue-related systems and equipment
- 2. Use portable lighting in a darkened environment
- 3. Implement safety, communication, and operational protocols
- 4. Use medical protocols to determine treatment priorities
- 5. Use medical equipment specific to confined space victim needs
- 6. Reassess and confirm mode of operation

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 5-1 (RK 1, 2, 4, 5)	(2021)	Instructor (2021)
 Topic 10-2 (all) 	• 10	• JPR 10

2-11: Package the Victim in a Litter for Removal from a Horizontally Oriented Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.11

Job Performance Requirement

Package the victim in a litter for removal from a horizontally oriented confined space, given a confined space rescue tool *cache*, a litter and associated rigging equipment, a space that provides enough internal and external clearance to maneuver a litter in and around the space, so that the victim is secured to the litter, the litter is secured to the rescue system if needed, the litter will pass through the portal, the victim is protected during the extraction, and further harm to the victim is minimized.

Requisite Knowledge

- 1. Describe spinal management techniques
- 2. Describe victim packaging techniques
- 3. Describe how to use low-profile packaging devices and equipment
- 4. Describe methods to reduce or avoid damage to equipment
- 5. *Describe* similarities and differences between packaging for confined spaces and for other types of rescue

Requisite Skills

- 1. Immobilize a victim's spine
- 2. Package victims in litters, low-profile devices, and litters
- 3. Recognize and perform basic management of various traumatic injuries and medical conditions
- 4. Support respiratory efforts
- 5. Perform local treatment modalities as required based on the environment

Content Modification

Block	Modification	Justification	
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate	
	"cache".	for this JPR. (2021)	

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-4	(2021)	Instructor (2021)
	• 11	• JPR 11

Confined Space Rescue Operations/Technician (2021) Section 2: Operations					

2-12: Assembling an Artificial High Directional (AHD) and Applicable Raising and Lowering Systems

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.12

Job Performance Requirement

Assemble an *artificial high directional (AHD)* for application of a high point of attachment to a confined space rescue system given *an AHD*, additional rescuers to assist in the assembly, and a vertically oriented space with a portal above which to set the *AHD*, so that the *AHD* is assembled in accordance with the manufacturer's recommendations, rescue systems are attached and secured to the *AHD* and the *AHD* provides enough clearance above the portal to fully extract a victim packaged in a vertically oriented litter.

Requisite Knowledge

- 1. Describe capabilities and limitations of AHDs in confined space rescue
- 2. Describe assembly procedures for the AHD utilized
- 3. Describe methods for stabilization of AHDs to prevent unnecessary movement
- 4. *Describe* force application to *AHDs* and proper direction of that force to prevent movement or collapse

Requisite Skills

- 1. Assemble the AHD with assistance of other rescuers
- 2. Attach the rescue system to the AHD
- 3. Position the device high enough to provide adequate clearance area above the portal to allow removal of a vertically oriented litter
- 4. Operate the system in a way that will keep the AHD stable while lifting a load

Content Modification

Block	Modification	Justification
Topic	Changed to "Assembling an Artificial High	The intent/action is the same, but this
Title	Directional (AHD) and Applicable Raising	is the terminology used in the field in
	and Lowering Systems".	California. (2021)
CTS	Changed all references to "anchor device"	The intent/action is the same, but this
	and "portable anchor device" to "AHD".	is the terminology used in the field in
		California. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 9-7 	(2021)	Instructor (2021)
	• 12	• JPR 12

2-13: Preparing for Entry into Vertically Oriented Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.13

Job Performance Requirement

Prepare for entry into vertically oriented confined space, given a confined space rescue tool *cache* and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to entry operations are reassigned and replaced, route and methods of confined space entry are determined, and rescuer evacuation is planned.

Requisite Knowledge

- 1. Describe effects of hazardous atmospheres on victims and rescuers
- 2. Describe types and operation of required hazard-specific monitoring equipment
- 3. Describe organization protocol for medical and psychological evaluation related to entry
- 4. Describe methods of entry into confined spaces in accordance with operational protocols
- 5. Describe rescuer evaluation methods

Requisite Skills

- 1. Operate monitoring equipment
- 2. Perform rescuer pre-entry medical exam
- 3. Evaluate rescuer capabilities and limitations
- 4. Identify victim communication needs
- 5. Evaluate for point and route of confined space entry
- 6. Select evacuation methods

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 3-1 (RK 1) 	(2021)	Instructor (2021)
 Topic 4-2 (RK 3, 4, 5) 	• 13	• JPR 13
• Topic 9-6 (RK 2, 4, RS 1-6)		

2-14: Entering a Vertically Oriented Confined Space for Rescue

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.14

Job Performance Requirement

Enter a vertically oriented confined space for rescue, given PPE; safety, communication, operational protocols; a confined space rescue tool *cache*; and a confined space, so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim is contacted, controlled confined space entry is established and maintained, atmosphere is continuously monitored, the victim's mental and physical conditions are further assessed, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.

Requisite Knowledge

- 1. Describe principles of operation for atmospheric monitoring equipment
- 2. Describe methods for patient care in confined spaces
- 3. Describe safety, communication, medical, and operational protocols
- 4. Describe controlled confined space entry and egress procedures for confined spaces

Requisite Skills

- 1. Use and apply PPE and rescue-related systems and equipment
- 2. Implement safety, communication, and operational protocols
- 3. Use medical protocols to determine treatment priorities
- 4. Use medical equipment specific to confined space victim needs
- 5. Reassess and confirm mode of operation

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 5-1 (RK 1-4) 	(2021)	Instructor (2021)
• Topic 10-3 (RK 1-3, RS 1-5)	• 14	• JPR 14

2-15: Packaging the Victim in a Litter for Removal from a Vertically Oriented Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.15

Job Performance Requirement

Package the victim in a litter for removal from a vertically oriented confined space, given a confined space rescue tool *cache*, a vertically oriented litter and associated rigging equipment, a work area that provides enough vertical clearance to extract a vertically oriented litter and a victim, so that the victim is secured to the litter, the litter is secured to the rescue system in a vertically configuration, the litter will pass through the portal, the litter can be raised high enough to clear the portal, the victim is protected during the extraction, and further harm to the victim is minimized.

Requisite Knowledge

- 1. Describe spinal management techniques
- 2. Describe victim packaging techniques
- 3. Describe how to use low-profile packaging devices and equipment
- 4. Describe methods to reduce or avoid damage to equipment
- 5. *Describe* similarities and differences between packaging for confined spaces and for other types of rescue

Requisite Skills

- 1. Immobilize a victim's spine
- 2. Package victims in litters, low-profile devices, and litters
- 3. Recognize and perform basic management of various traumatic injuries and medical conditions
- 4. Support respiratory efforts
- 5. Perform local treatment modalities as required based on the environment

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-5	(2021)	Instructor (2021)
	• 15	• JPR 15

2-16: Removing a Victim Requiring Immediate Extraction to Prevent Imminent Death

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.16

Job Performance Requirement

Remove a victim from a confined space, given a confined space rescue tool *cache*, victim harnesses and rigging, a victim who has been discovered to be in respiratory arrest, and conditions inside the space requiring immediate extraction to prevent imminent death of the victim, so that the victim is rapidly secured in an extraction harness, the harness is secured to the rescue system, and the victim is removed from the space.

Requisite Knowledge

- 1. Describe rapid victim harness application techniques
- 2. Describe methods to reduce or avoid damage to equipment
- 3. *Describe* similarities and differences between packaging for conditions of imminent danger as compared to those that are stable

Requisite Skills

- 1. Recognize the immediate threat and need for rapid extraction,
- 2. Rapid application of victim harnesses and rigging to rescue systems

Block	Modification	Justification
Topic	Changed to "Removing a Victim	The core of this issue is imminent death, not the
Title	Requiring Immediate	vertical orientation. Rescuers would carry out
	Extraction to Prevent Imminent	these actions in either horizontal or vertical
	Death".	scenarios. It should apply to both. (2021)
JPR	Removed "vertically oriented".	The core of this issue is imminent death, not the
		vertical orientation. Rescuers would carry out
		these actions in either horizontal or vertical
		scenarios. It should apply to both. (2021)
JPR	Changed "kit" to "cache".	A kit is a subset of a larger cache, which is more
		appropriate for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 11-6 	(2021)	Instructor (2021)
	• 16	• JPR 16

2-17: Removing a Victim from a Horizontally Oriented Confined Space

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Remove a victim from a horizontally oriented confined space, given a confined space rescue tool cache, rigging, and a packaged victim, so that the victim is secured to the rescue system, the litter passes through the portal, the victim is protected during the extraction, and further harm to the victim is minimized.

Requisite Knowledge

- 1. Describe rigging application techniques
- 2. Describe methods to reduce or avoid damage to equipment

Requisite Skills

1. Apply rigging to assist horizontal movement

Content Modification

Block	Modification	Justification
CTS	Added new	Removal under non-imminent death circumstances is not
	certification training	covered by NFPA but the packaging standards stop short or
	standard.	actual removal. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-7	(2021)	Instructor (2021)
	• 17	• JPR 17

2-18: Removing a Victim from a Vertically Oriented Confined Space

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Remove a victim from a vertically oriented confined space, given a confined space rescue tool cache, rigging, and a packaged victim, so that the victim is secured to the rescue system, the litter passes through the portal, the victim is protected during the extraction, and further harm to the victim is minimized.

Requisite Knowledge

- 1. Describe rigging application techniques
- 2. Describe methods to reduce or avoid damage to equipment

Requisite Skills

1. Apply rigging to assist horizontal movement

Content Modification

Block	Modification	Justification
CTS	Added new	Removal under non-imminent death circumstances is not
	certification training	covered by NFPA but the packaging standards stop short or
	standard.	actual removal. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 11-8 	(2021)	Instructor (2021)
	• 18	• JPR 18

2-19: Removing All Entrants from a Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.17

Job Performance Requirement

Remove all entrants from a confined space, given PPE, rope and related rescue and retrieval systems, personnel to operate rescue and retrieval systems, and a confined space rescue tool *cache*, so that internal obstacles and hazards are negotiated, all persons are extricated from a space in the selected transfer device, the victim and rescuers are decontaminated as necessary, and the victim is delivered to the EMS provider.

Requisite Knowledge

- 1. Identify personnel and equipment resource lists
- 2. Describe specific PPE
- 3. Identify types of confined spaces and their internal obstacles and hazards
- 4. Describe rescue and retrieval systems and equipment
- 5. Describe operational protocols
- 6. Describe medical protocols
- 7. Identify EMS providers
- 8. Describe decontamination procedures

Requisite Skills

- 1. Select and use PPE
- 2. Select and operate rescue and retrieval systems used for victim removal
- 3. Utilize medical equipment
- 4. Use equipment and procedures for decontamination

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space	Confined Space Rescue
Operations/Technician	Rescue	Operations/Technician
 Topic 2-3 (RK 3) 	Operations/Technician	Instructor (2021)
• Topic 2-6 (RK 2)	(2021)	• JPR 19
• Topic 3-5 (RK 1, 7)	• 19	
• Topic 12-1 (RK 4, 6, 8, RS 2-4)		

2-20: Terminating a Technical Rescue Operation

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.2.18

Job Performance Requirement

Terminate a technical rescue operation, given an incident scenario, assigned resources, and site safety data so that rescuer risk and site safety are managed, scene security is maintained and custody transferred to a responsible party, personnel and resources are returned to a state of readiness, record-keeping and documentation occur, and post-event analysis is conducted.

Requisite Knowledge

- 1. Describe Incident Command functions and resources
- 2. Describe hazard identification and risk management strategies
- 3. Describe logistics and resource management
- 4. *Describe* personnel accountability systems
- 5. Describe AHJ-specific procedures or protocols related to personnel rehab
- 6. Describe record-keeping and documentation requirements (federal, state, AHJ)

Requisite Skills

- 1. Hazard recognition
- 2. Risk analysis
- 3. Use site control equipment and methods
- 4. Use data collection and management systems
- 5. Use asset and personnel tracking systems

Content Modification

Block	Modification	Justification
RK 6	Added new knowledge item.	NFPA does not address record-keeping. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 6-1 (RK 1-6) 	(2021)	Instructor (2021)
• Topic 12-2 (RS 1-5)	• 20	• JPR 20

Section 3: Technician

3-1: Initiating a Search Inside a Confined Space in Those Areas Not Immediately Visible from the Confined Space Entry Portal

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.1

Job Performance Requirement

Initiate a search inside a confined space in those areas not immediately visible from the confined space entry portal, given hazard-specific PPE, confined space rescue entrant(s) to perform the search, equipment pertinent to search mission, a confined space, and victim investigative information, so that search parameters are established; the victim profile is established; search result information is acquired and relayed to command; the personnel assignments match their expertise; all victims inside the space are located and identified quickly; applicable technical rescue concerns are managed; risks to searchers are minimized; and all searchers are accounted for.

Requisite Knowledge

- 1. *Identify* local policies and procedures
- 2. Describe how to operate inside the confined space

Requisite Skills

- 1. Work inside the confined space
- 2. Communicate with rescuers outside the confined space portal
- 3. Perform self-rescue if conditions become untenable (when possible)

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 10-4 	(2021)	Instructor (2021)
	• 21	• JPR 21

3-2: Preplanning a Confined Space Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.2

Job Performance Requirement

Preplan a confined space incident, given applicable guidelines and regulations and a preplan form, so that a standard approach is used during a confined space rescue emergency, hazards are recognized and documented, isolation methods are identified and documented, all accesses to the location of the confined space entry opening are identified and documented, all types of confined space entry openings are identified and documented, and internal configurations and special resource needs are documented for future rescuer use.

Requisite Knowledge

- 1. Identify operational protocols
- 2. Identify specific preplan forms
- 3. *Identify* types of hazards common to jurisdictional boundaries
- 4. Identify hazards that should and must be identified on preplans
- 5. Identify isolation methods and issues related to preplanning
- 6. Identify issues and constraints relating to the types of confined space openings
- 7. *Identify* internal configuration special resource needs of a confined space
- 8. Identify applicable legal issues

Requisite Skills

- 1. Select a specific preplan form
- 2. Draft or draw a sketch of confined spaces
- 3. Complete supplied forms
- 4. Identify and evaluate various configurations of confined spaces, access points, confined space entry openings, isolation procedures, and energy control locations
- 5. Recognize general and site-specific hazards
- 6. Document all data
- 7. Apply all regulatory compliance references

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 7-1	(2021)	Instructor (2021)
	• 22	• JPR 22

3-3: Applying and Using Supplied-air Respirators (SARs) as a Rescue Entrant

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.3

Job Performance Requirement

Apply and use supplied-air respirators (SARs) as a rescue entrant, given a confined space incident requiring respiratory protection, a rescue assignment, a means of entry into and exit from the space, a rescue attendant outside the space, personnel to manage air lines outside of the space, a SAR, a breathing air supply system with air lines to supply the SAR, breathing apparatus cylinders, personnel to monitor and maintain the air supply system, and a confined space, so that the internal configuration of the space will not create entanglement hazards when using air lines, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and might be mitigated by using respiratory protection so that the rescue entrant passes through the portal without removal of the SAR and the assigned rescue duty is performed.

Requisite Knowledge

- 1. Describe capabilities and limitations of SAR in confined space rescue
- 2. Describe breathing air conservation
- 3. *Describe* air-line management
- 4. *Describe* communication methods appropriate to breathing apparatus use in confined spaces

Requisite Skill

- 1. Use SAR in a confined space entry for rescue
- 2. Use breathing techniques that will conserve the air supply
- 3. Manage air lines while working within the space
- 4. Use communication methods that effectively convey information between rescuers inside and outside of the space

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 4-1 (RK 1-4)	(2021)	Instructor (2021)
• Topic 9-2 (all)	• 23	• JPR 23

3-4: Performing Short Spinal Immobilization of a Victim Inside a Confined Space

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.4

Job Performance Requirement

Perform short spinal immobilization of a victim inside a confined space, given a confined space incident requiring spinal precautions, a stable victim, a short spinal immobilization device, a second rescuer to assist, and a confined space, so that the portal size or internal configuration will not allow the application of a full spine immobilization device, all hazards in and around the confined space have been identified and might be mitigated by using respiratory protection so that the victim's cervical spine is manually maintained in a neutral position immediately on contact and maintained until the short immobilization device is completely applied and secure, victim movement onto the spinal immobilization device creates minimal manipulation of the spine, void spaces between the victim and immobilization device are padded as appropriate, victim securement to the immobilization device will reduce spinal manipulation during movement, and applicable local treatment protocols are followed.

Requisite Knowledge

- 1. *Describe* capabilities and limitations of short spine immobilization equipment for victims in confined space rescue
- 2. *Describe* methods for movement of a victim onto a long spine immobilizer with minimum spinal manipulation
- 3. Describe methods for securement of a victim onto a short spine immobilizer
- 4. Describe methods for securement of a victim's head on a short spine immobilizer
- 5. Describe other short spinal immobilization treatment modalities and procedures

Requisite Skills

- 1. Maintain manual immobilization of a victim's head during the immobilization process
- 2. Assist in moving the victim to a short spine immobilizer with only two persons with minimal spinal manipulation
- 3. Apply void space padding as needed based on the immobilization device
- 4. Apply and secure the victim's upper body and head to a short spinal immobilization device

Block	Modification	Justification

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
• Topic 11-3	(2021)	Instructor (2021)
	• 24	• JPR 24

3-5: Preparing for Entry into the Confined Space with a Hazardous Atmosphere

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.5

Job Performance Requirement

Prepare for entry into the confined space with a hazardous atmosphere, given a confined space with a hazardous atmosphere, atmosphere-supplied respirators, and a confined space tool *cache*, so that entry can be made into a confined space that contains one or more of the following characteristics: the internal configuration of the space could create entanglement hazards and retrieval might not be effective, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that continuous atmospheric monitoring is initiated, the atmosphere is assessed to be manageable with atmosphere-supplying respirators, victim communication is established when possible, atmosphere-supplying respirators are used by rescue entrants while within the space, atmosphere-supplying respirators are rapidly applied to the victim, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to entry operations are reassigned and replaced, route and methods of confined space entry are determined, and rescuer evacuation is planned.

Requisite Knowledge

- 1. Describe effects of hazardous atmospheres on victims and rescuers
- 2. Describe types and operation of required hazard-specific monitoring equipment
- 3. Describe types and operation of required atmosphere supplying respirators
- 4. *Describe* organization protocol for medical and psychological evaluation related to confined space entry
- 5. *Describe* methods of entry into confined spaces with hazardous atmospheres in accordance with operational protocols
- 6. Describe rescuer evaluation methods

Requisite Skills

- 1. Operate monitoring equipment
- 2. Perform rescuer pre-entry medical exam
- 3. Evaluate rescuer capabilities and limitations
- 4. Identify victim communication needs
- 5. Evaluate for point and route of confined space entry
- 6. Select evacuation methods

Content Modification

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Operations/Technician	Operations/Technician	Operations/Technician
 Topic 3-1 (RK 1) 	(2021)	Instructor (2021)
• Topic 4-2 (RK 4, 5, 6	• 25	• JPR 25
• Topic 9-4 (RK 2, 3, 5, RS 1-6)		

3-6: Entering a Confined Space with Atmospheric Hazards

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 7.3.6

Job Performance Requirement

Enter a confined space with atmospheric hazards, given hazard-specific PPE; safety, communication, and operational protocols; a confined space with a hazardous atmosphere; a confined space rescue tool *cache* so that the victim is contacted; and a confined space, so that the internal configuration of the space could create entanglement hazards and retrieval might not be effective, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that a controlled confined space entry is established and maintained, the atmosphere is continuously monitored, the rescuers and patient(s) are protected from the hazards, the victim's mental and physical conditions are further assessed, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.

Requisite Knowledge

- 1. Describe principles of operation for atmospheric monitoring equipment
- 2. *Describe* methods for patient care in confined spaces
- 3. Describe application of hazard-specific PPE
- 4. Describe safety, communication, medical, and operational protocols
- 5. Describe controlled confined space entry and egress procedures for confined spaces

Requisite Skills

- 1. Use and apply hazard-specific PPE and rescue-related systems and equipment
- 2. Implement safety, communication, and operational protocols
- 3. Use medical protocols to determine treatment priorities
- 4. Use medical equipment specific to confined space victim needs
- 5. Reassess and confirm mode of operation

Block	Modification	Justification
JPR	Changed "kit" to	A kit is a subset of a larger cache, which is more appropriate
	"cache".	for this JPR. (2021)

Course Plan	Training Record	Task Book
Confined Space Rescue:	Confined Space Rescue	Confined Space Rescue
Opeerations/Technician	Operations/Technician	Operations/Technician
• Topic 2-6 (RK 3)	(2021)	Instructor (2021)
• Topic 5-1 (RK 1, 2, 4, 5)	• 26	 JPR 26
• Topic 10-1 (RK 1, 2, 4, RS 1-5)		