

# Tower Rescue Technician

(NFPA 1006: Tower 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

# Tower Rescue

## Curriculum Training Standards Guide (2021)

**Publication Date:** February 2024

This CTS guide utilizes the following NFPA standards to provide the qualifications for State Fire Training's Watercraft Rescue (2021) curriculum:

- 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).

Cover photo courtesy of Matt O'Donnell, Battalion Chief, Ebbetts Pass Fire District.

Published by State Fire Training.

## Table of Contents

Acknowledgements.....	1
How to Read a CTS Guide .....	2
Tower Rescue.....	4
Section 1: Awareness.....	4
1-1: Performing a Rescue from Elevated Devices.....	4
1-2: Sizing Up an Incident .....	5
1-3: Recognizing Incident Hazards and Initiating Isolating Procedures.....	6
1-4: Recognizing the Need for Technical Rescue Resources .....	8
1-5: Supporting an Operations- or Technician-level Incident.....	9
Section 2: Operations.....	10
2-1: Participating in a Pre-rescue Survey.....	10
2-2: Isolating and Managing Exposure to Potentially Harmful Energy Sources .....	11
2-3: Assessing the Integrity of a Tower Structure .....	12
2-4: Utilizing Fall Protection and Positioning Equipment .....	13
2-5: Ascending a Tower.....	14
2-6: Transferring Between the Ladder or Climbing Peg Safety System.....	15
2-7: Assessing a Victim.....	16
2-8: Removing a Victim from a Preplanned Tower Environment.....	17
2-9: Directing a Team to Remove a Victim from a Preplanned Tower Environment.....	18
2-10: Developing and Adhering to Contingency Plans .....	19
2-11: Terminating an Incident .....	20
2-12: Selecting and Using PPE, Tools, and Equipment .....	22
Section 3: Technician .....	23
3-1: Directing a Tower Rescue Team .....	23
3-2: Developing an Incident Action Plan for a Tower Incident on a Structure that Accommodates Only One Rescuer .....	24
3-3: Ascending a Tower to Conduct a Rescue .....	26
3-4: Rescuing a Victim Suspended from an Elevated Position from the Ground .....	27
3-5: Rescuing a Victim Suspended from a Height Beyond the Scope of a Ground-based Rope Rescue System .....	29
3-6: Rescuing a Victim Using Multiple Sets of Sequential Rope Systems.....	31

## Acknowledgements

State Fire Training appreciates the hard work and accomplishments of those who built the solid foundation on which this program continues to grow.

State Fire Training gratefully acknowledges the following individuals and organizations for their diligent efforts and contributions that made the development and publication of this document possible.

### **CAL FIRE**

- Joe Tyler, Director
- Daniel Berlant, State Fire Marshal
- Chris Fowler, Chief of State Fire Training
- Mike Richwine, Chair, Statewide Training and Education Advisory Committee (STEAC); State Fire Marshal (retired), CAL FIRE

### **Cadre – 2023 Curriculum Development**

#### **Leadership**

- Joe Bunn, Cadre Lead, Fire Service Training Specialist III, (Retired) CAL FIRE
- Chris Fowler, Cadre Lead, Deputy State Fire Marshal III, Supervisor, CAL FIRE
- Allison L. Shaw, Editor, Sacramento State

#### **Members (Development and Validation)**

- Aide Barbat, Battalion Chief, San Diego Fire-Rescue Department
- Greg Belk, Staff Chief Statewide Training, CAL FIRE
- Ian Crossley, Captain, Mountain View Fire Department
- John Haley, Captain, Modesto City Fire Department
- Fergus Johnson, Fire Fighter, Sacramento Fire Department
- Gabriel Larios, Fire Fighter, Los Angeles County Fire Department
- Brook Mancinelli, Captain, San Francisco Fire Department
- Justin Moore, Captain, Fresno City Fire Department
- Matt O'Donnell, Battalion Chief, Ebbetts Pass Fire District
- John Smith, Captain, Los Angeles City Fire Department
- Robert Stine, Fire Fighter/USAR Training Manager, San Bernardino County Fire

## 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 certified in a specific job function.

It also documents and justifies the OSFM-approved revisions to the curriculum's 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 shaded gray.

#### 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).

# Tower Rescue

## Section 1: Awareness

### 1-1: Performing a Rescue from Elevated Devices

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.1.1

#### Job Performance Requirement

Perform the rescue of a person from a tower while working from group ladders, aerial ladders, or other elevated devices employed by the AHJ, given an incident not requiring the rescuer to be solely supported by the tower, so that the patient is transferred from the tower to the elevated device, the agency's protocol for the use of the device is followed, and the risks to the victim and rescuer are minimized.

#### Requisite Knowledge

1. Describe how to use ladders or elevated devices for tower rescue
2. Describe specific procedures for using ladders or elevated devices in victim transfer from a tower

#### Requisite Skills

1. Work from or operate ladders or elevated devices capable of accessing and rescuing the tower victim and providing positive transfer from the tower to the aerial while providing fall protection for the victim and rescue personnel

#### Content Modification

Block	Modification	Justification
RK1	Changed "familiarization with the use of" to "Describe how to use"	Adjusted for grammar.
RK1	Added "for tower rescue".	Added to narrow scope.

#### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-1</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 23</li><li>• Skill 24</li><li>• Skill 25</li><li>• Skill 26</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 14</li><li>• JPR 22</li></ul>

## 1-2: Sizing Up an Incident

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.1.2

### Job Performance Requirement

Size up a tower rescue incident, given background information and applicable reference materials, so that the scope of the rescue is determined, the number of victims are identified, the last reported location of all 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. Describe types of reference materials and their uses
2. Describe availability and capability of resources
3. Describe elements of an incident action plan and related information
4. Describe relationship of the size-up to the incident management system
5. Describe information gathering techniques and how that information is used in the size-up process
6. Describe basic search criteria for tower 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

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-1</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 1</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 3</li><li>• JPR 22</li></ul>



### 1-3: Recognizing Incident Hazards and Initiating Isolating Procedures

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.1.3

#### Job Performance Requirement

Recognize incident hazards and initiate isolation procedures, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, so that all hazards are identified; 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 types and nature of incident hazards
3. Describe equipment types and their use
4. Describe isolation terminology, methods, equipment, and implementation
5. Describe operational requirement concerns
6. Describe common types of rescuer and victim risks
7. Describe risk/benefit analysis methods and practices
8. Describe methods for controlling access to the scene
9. Describe types of technical references

#### Requisite Skills

1. Identify resource capabilities and limitations
2. Identify incident hazards
3. Assess potential hazards to rescuers and bystanders
4. Place scene control barriers
5. Operate control and mitigation equipment

#### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-3 (RK1, RK2, RK3, RK4, RK5, RK8, RK9)</li><li>• Topic 3-1 (RK6, RK7)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 4</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 5</li><li>• JPR 22</li></ul>

## 1-4: Recognizing the Need for Technical Rescue Resources

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.1.4

### Job Performance Requirement

Recognize the need for technical rescue resources at an operations- or technical-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. Describe hazards
5. Describe incident support operations and resources
6. Describe safety measures

### Requisite Skills

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

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-2</li></ul>	Tower Rescue Technicians (2021) <ul style="list-style-type: none"><li>• Skill 3</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 4</li><li>• JPR 22</li></ul>

## 1-5: Supporting an Operations- or Technician-level Incident

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.1.5

### 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 "cache".	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-6</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 8</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 8</li><li>• JPR 22</li></ul>

## Section 2: Operations

### 2-1: Participating in a Pre-rescue Survey

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.1

#### Job Performance Requirement

Participate in a pre-rescue survey, given a tower rescue preplan, the specific tower targeted in the preplan, an operations-level tower rescue tool cache, and a tower rescue team, so that the targeted elevation in the tower is attained using the tools and techniques designated for use during a rescue operation, all elements of the rescue plan are implemented, and the full scope of the plan is exercised.

#### Requisite Knowledge

1. Evaluate a tower preplan
2. Describe contents and use of the operations-level tower rescue tool cache
3. Describe organizations' policies and procedures for tower rescue operations

#### Requisite Skills

1. Climb tower to the designated height
2. Select and transport designated tools

#### Content Modification

Block	Modification	Justification
JPR	Changed "kit" to "cache".	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RK2	Changed "kit" to "cache".	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.

#### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-2</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 27</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 15</li><li>• JPR 22</li></ul>

## 2-2: Isolating and Managing Exposure to Potentially Harmful Energy Sources

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.2

### Job Performance Requirement

Isolate and manage exposure to potentially harmful energy sources found in erected structures, including power systems such as mechanical radio frequency (RF), and electrical hazards, given lock-out tag-out (LOTO) equipment and construction materials and PPE, so that all hazards are identified, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.

### Requisite Knowledge

1. Describe types and uses of PPE
2. Describe hazardous energy monitoring and testing equipment
3. Describe types of energy sources
4. Describe system isolation methods
5. Describe specialized system features
6. Describe tools for disabling hazards
7. Describe policies and procedures of the AHJ

### Requisite Skills

1. Select and use hazard-specific PPE
2. Use monitor and test equipment
3. Identify hazards
4. Operate beneficial systems in support of tactical objectives
5. Operate tools and devices for securing and disabling hazards
6. Engage in practices that minimize exposure to known or suspected hazards

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-4</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 5</li><li>• Skill 6</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 6</li><li>• JPR 22</li></ul>

## 2-3: Assessing the Integrity of a Tower Structure

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.3

### Job Performance Requirement

Assess the integrity of the tower structure and related components, given an incident, a pre-climb checklist, and an unobstructed climb path, so that safe access to the victim is assured, and ensure any integrated safety systems, such as vertical lifelines (e.g., cable or rail-type structure), are accessible.

### Requisite Knowledge

1. Describe types of structures within area of response, including self-supported, lattice-type, guyed, monopole, or nonstandard-type towers
2. Describe potential structural compromise that would create additional hazards to rescuers

### Requisite Skills

1. Perform physical inspection of accessible tower components in accordance with a pre-climb checklist

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-5</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 7</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 7</li><li>• JPR 22</li></ul>

## 2-4: Utilizing Fall Protection and Positioning Equipment

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.4

### Job Performance Requirement

Recognize, identify, and utilize typical fall protection and work positioning equipment used by climbers, given a specific tower structure, so that the victim can be transferred to the rescue system.

### Requisite Knowledge

1. Describe how to review tower rescue preplan to gain familiarity with tower climber safety and work positioning equipment

### Requisite Skills

1. Operate tower climber safety and work positioning equipment

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-8</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 11</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 10</li><li>• JPR 22</li></ul>



## 2-5: Ascending a Tower

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.5

### Job Performance Requirement

Perform an ascent using proper PPE and safe climbing technique equipment, given an incident, so that access to the level of the victim is achieved.

### Requisite Knowledge

1. Describe how to determine proper PPE, given the type of tower structure and integrated temporary or permanent safety systems, to perform safe climbing techniques

### Requisite Skills

1. Don appropriate PPE, including but not limited to fall protection, helmet, and gloves as appropriate
2. Use 100 percent tie off or vertical lifeline equipment systems to ascend the tower structure

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-3</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 28</li><li>• Skill 29</li><li>• Skill 32</li><li>• Skill 33</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 16</li><li>• JPR 22</li></ul>

## 2-6: Transferring Between the Ladder or Climbing Peg Safety System

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.6

### Job Performance Requirement

Perform transfer between the ladder or climbing peg safety system, given an incident, so that tie off is maintained, equipment is utilized, and procedures are followed as part of identified rescue plan.

### Requisite Knowledge

1. Describe engagement and disengagement procedures from vertical lifeline cable or rope grabs
2. Describe how to use Y-lanyard and work positioning lanyards

### Requisite Skills

1. Perform safe transfer between integrated vertical lifeline systems
2. Climb and maneuver on the tower structure while maintaining tie off

### Content Modification

Block	Modification	Justification
RK1	Removed “familiarity with the”.	Adjusted for grammar.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-3</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 30</li><li>• Skill 31</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 16</li><li>• JPR 22</li></ul>

## 2-7: Assessing a Victim

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.7

### Job Performance Requirement

Assess a victim in a tower environment according to the rescue preplan, given an incident, so that the risks from a fall are minimized or eliminated, the patient is accessed, and the objective is achieved.

### Requisite Knowledge

1. Describe tactics identified in the rescue preplan
2. Describe fall factors and methods for reducing them for a rescuer performing tower climbing operations

### Requisite Skills

1. Implement the tactics and employ the tools identified in the preplan to achieve the objective

### Content Modification

Block	Modification	Justification
RK2	Removed "an understanding of".	Adjusted for grammar.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 4-1 (JPR, RS1)</li><li>• Topic 3-1 (RK1)</li><li>• Topic 3-8 (RK2)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 13</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 12</li><li>• JPR 22</li></ul>

## 2-8: Removing a Victim from a Preplanned Tower Environment

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.8

### Job Performance Requirement

Perform the removal of a victim from a preplanned tower environment, given an incident, a rescue preplan, and a prescribed means of removal of the victim to the objective, so that risks to victims and rescuers are minimized, all the elements of the preplan are complied with, and the objective is achieved.

### Requisite Knowledge

1. Describe tactics identified in the rescue preplan for the removal of a victim on a tower

### Requisite Skills

1. Employ tactics identified in the rescue preplan for the removal of a victim on a tower

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 4-2 (JPR, RK1)</li><li>• Topic 3-1 (RS1)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 14</li><li>• Skill 15</li><li>• Skill 16</li><li>• Skill 17</li><li>• Skill 18</li><li>• Skill 19</li><li>• Skill 20</li><li>• Skill 21</li><li>• Skill 22</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 13</li><li>• JPR 22</li></ul>

## 2-9: Directing a Team to Remove a Victim from a Preplanned Tower Environment

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.9

### Job Performance Requirement

Direct a team in removal of a victim from a preplanned tower environment, given an incident, a rescue preplan, and a prescribed means of removal of the victim to the objective, so that risks to victims and rescuers are minimized, all the elements of the preplan are complied with, and the objective is achieved.

### Requisite Knowledge

1. Describe tactics identified in the rescue preplan for the removal of a victim on a tower

### Requisite Skills

1. Direct the employment of tactics identified in the rescue preplan for the removal of a victim on a tower

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-7</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 43</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 20</li><li>• JPR 22</li></ul>

## 2-10: Developing and Adhering to Contingency Plans

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.10

### Job Performance Requirement

Develop and adhere to contingency plans for when inclement weather or other factors make operations-level response ineffective or dangerous to rescuers, given an incident, so that a risk/benefit decision can be made.

### Requisite Knowledge

1. Describe AHJ policies and procedures
2. Describe risk versus benefit analysis application
3. Describe site safety and hazard control techniques
4. Describe pre-incident rescue action planning

### Requisite Skills

1. Apply policies and protocols, risk versus benefit analysis information, pre-incident planning data, risk management, and site safety control techniques

### Content Modification

Block	Modification	Justification

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-1 (RK1, RK2, RK4, RS1)</li><li>• Topic 3-3 (RK3, RS1)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 2</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 3</li><li>• JPR 22</li></ul>

## 2-11: Terminating an Incident

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.2.11

### Job Performance Requirement

Terminate an incident, given PPE specific to the incident, isolation barriers, and tool cache, so that rescuers and bystanders are protected and accounted for during termination operations, the party responsible is notified of any modification or damage created during the operational period, documentation of loss or materials use is accounted for, scene documentation is performed, scene control is transferred to a responsible party, potential or existing hazards are communicated to that responsible party, debriefing and post-incident analysis and critique are considered, and command is terminated.

### Requisite Knowledge

1. Describe PPE characteristics
2. Describe hazard and risk identification
3. Describe isolation techniques
4. Describe statutory requirements identifying responsible parties
5. Describe accountability system use
6. Describe reporting methods
7. Describe post-incident analysis techniques

### Requisite Skills

1. Select and use hazard-specific PPE
2. Decontaminate PPE
3. Use barrier protection techniques
4. Collect data
5. Follow record-keeping/reporting protocols
6. Conduct post-incident analysis activities

### Content Modification

Block	Modification	Justification
JPR	Changed “kit” to “cache”.	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS2	Changed “decontamination” to “Decontaminate PPE”.	Adjusted to match other NFPA 1006 paragraphs.
RS3	Added “use”.	NFPA did not provide a verb.
RS4	Changed “data collection” to “Collect data”.	Adjusted to match other NFPA 1006 paragraphs.

Tower Rescue  
Section 2: Operations

RS5	Added "follow".	NFPA did not provide a verb.
RS6	Added "conduct".	NFPA did not provide a verb.

**Cross Reference**

<b>Course Plan</b>	<b>Training Record</b>	<b>Task Book</b>
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 6-1</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 44</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 21</li><li>• JPR 22</li></ul>



## 2-12: Selecting and Using PPE, Tools, and Equipment

### Authority

1. Office of the State Fire Marshal

### Job Performance Requirement

Select, operate, and use personal protective equipment (PPE), tools, and equipment, given a tower rescue incident and AHJ policies and procedures, so that PPE, tools, and equipment are appropriate to incident response needs, donned and worn correctly, and used in accordance with manufacturer specifications and all applicable policies and procedures.

### Requisite Knowledge

1. Identify PPE used during tower rescue incidents
2. Identify protections provided by PPE during tower rescue incidents
3. Identify limitations of PPE during tower rescue incidents
4. Identify when and how to don and doff PPE
5. Describe how to use tower rescue tools and equipment
6. Identify guidelines for cleaning, inspecting, and maintaining tools and equipment
7. Describe methods for cleaning tools and equipment
8. Identify when and how to remove tools and equipment from service

### Requisite Skills

1. Don and doff PPE
2. Select, use, and maintain tools and equipment

### Content Modification

Block	Modification	Justification
CTS	Created a new standard.	The risk of injury to rescuer and victim is high and the PPE, tools, and equipment are very specific for tower rescue. This information needs to be part of the standard.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-7</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 9</li><li>• Skill 10</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 10</li><li>• JPR 22</li></ul>

## Section 3: Technician

### 3-1: Directing a Tower Rescue Team

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.1

#### Job Performance Requirement

Direct a tower rescue team, given a tower rescue scenario, incident action plan, pre-incident plan data, and resources from the tower rescue tool cache, so that resources are deployed to best advantage, the incident action plan is supported, and objectives are attained.

#### Requisite Knowledge

1. Describe AHJ policies and procedures
2. Describe incident management
3. Describe site safety and hazard control techniques
4. Describe preplan usage

#### Requisite Skills

1. Interpret and apply policies and protocols
2. Initiate and operate within the IMS
3. Demonstrate situational awareness
4. Interpret and apply pre-incident planning data
5. Employ risk management
6. Use site safety control techniques

#### Content Modification

Block	Modification	Justification
JPR	Changed “kit” to “cache”.	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS3	Added “demonstrate”.	NFPA did not provide a verb.
RS5	Added “employ”.	NFPA did not provide a verb.
RS6	Added “use”.	NFPA did not provide a verb.

#### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-7</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 43</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 20</li><li>• JPR 22</li></ul>

## 3-2: Developing an Incident Action Plan for a Tower Incident on a Structure that Accommodates Only One Rescuer

### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.2

### Job Performance Requirement

Develop an incident action plan for a tower rescue incident on a structure whose size, shape, or configuration would accommodate only one rescuer, given a tower rescue scenario, so that sources are identified and managed, fall protection is maintained throughout the event, anchor points are identified and utilized to best advantage, and the incident action plan objectives are met.

### Requisite Knowledge

1. Describe AHJ policies and procedures
2. Describe data gathering and collection methods
3. Describe climbing plan elements
4. Describe anchor point identification and construction methods
5. Describe hazardous energy source recognition
6. Describe identification and control methods
7. Describe free climb ascent and descent techniques
8. Describe fall protection methods

### Requisite Skills

1. Conduct size up and assessment
2. Identify and control hazards
3. Identify and control hazardous energy sources
4. Use monitoring equipment to detect hazardous energy sources
5. Construct anchor and belay systems
6. Select PPE and other resources from the tower rescue tool cache

### Content Modification

Block	Modification	Justification
JPR	Changed "kit" to "cache".	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS1	Added "conduct".	NFPA did not provide a verb.
RS6	Changed "kit" to "cache".	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 3-9 (RK1, RK2, RK3, RK4, RK5, RK6, RK7, RK8)</li><li>• Topic 3-1 (RS1)</li><li>• Topic 3-4 (RS2, RS3, RS4)</li><li>• Topic 3-7 (RS5, RS6)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 12</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 11</li><li>• JPR 22</li></ul>

### 3-3: Ascending a Tower to Conduct a Rescue

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.3

#### Job Performance Requirement

Ascend a simulated or actual tower to conduct a rescue, given an incident action plan and a pre-climb checklist, so that the pre-climb checklist and hazard control measures are implemented; fall protection systems are utilized; and the rescuer moves both horizontally and vertically between structural elements of the tower, with or without the benefit of climbing pegs, ladders, or vertical lifelines, to achieve the objectives of the incident action plan.

#### Requisite Knowledge

1. Describe an incident action plan
2. Describe a pre-climb checklist
3. Describe identification of site-specific tower features and components
4. Describe type- and hazard-specific PPE selection
5. Describe climbing plan

#### Requisite Skills

1. Use incident action plans
2. Develop and use pre-climbing checklists and site safety plans, types of fall protection, and lifeline systems
3. Identify tower anatomy and features
4. Perform climbing techniques and methods

#### Content Modification

Block	Modification	Justification
RS3	Added "identify".	NFPA did not provide a verb.
RS4	Added "perform".	NFPA did not provide a verb.

#### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 2-1 (RK3, RS3)</li><li>• Topic 3-7 (RK4)</li><li>• Topic 3-9 (RK1, RS1)</li><li>• Topic 5-3 (RK2, RK5, RS2, RS4)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 28</li><li>• Skill 29</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 16</li><li>• JPR 22</li></ul>

### 3-4: Rescuing a Victim Suspended from an Elevated Position from the Ground

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.4

#### Job Performance Requirement

Perform a ground-based tower rescue requiring the rescue of a suspended victim from an elevated position, given an incident action plan, climbing plan, hazard-specific PPE, and resources from the tower rescue tool cache, so that the victim is released/transferred from an existing fall arrest system to one created by the rescuer, and the victim is moved both horizontally and vertically a distance representative of the rescue environment.

#### Requisite Knowledge

1. Describe an incident action plan
2. Describe hazard and risk assessment
3. Describe climbing plan elements
4. Describe PPE selection and use
5. Describe types of fall protection systems
6. Describe fall protection system transfer procedures
7. Describe horizontal and vertical movement methods

#### Requisite Skills

1. Assess a scene
2. Use hazard control techniques
3. Use and apply PPE
4. Operate fall protection systems
5. Use horizontal and vertical climbing and movement techniques

#### Content Modification

Block	Modification	Justification
JPR	Changed “kit” to “cache”.	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS2	Added “use”.	NFPA did not provide a verb.
RS5	Added “use”.	NFPA did not provide a verb.

### Cross Reference

Course Plan	Training Record	Task Book
Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Topic 5-4 (JPR, RK7, RS5)</li><li>• Topic 3-9 (RK1, RK3)</li><li>• Topic 3-1 (RK2, RS1)</li><li>• Topic 3-7 (RK4, RS3)</li><li>• Topic 3-8 (RK5, RK6, RS4)</li><li>• Topic 3-3 (RS2)</li></ul>	Tower Rescue Technician (2021) <ul style="list-style-type: none"><li>• Skill 34</li><li>• Skill 35</li><li>• Skill 36</li></ul>	Tower Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"><li>• JPR 17</li><li>• JPR 22</li></ul>

### 3-5: Rescuing a Victim Suspended from a Height Beyond the Scope of a Ground-based Rope Rescue System

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.5

#### Job Performance Requirement

Perform a rescue requiring the rescue of a victim suspended from a tower at a height beyond the scope of a ground-based rope rescue system, given an incident action plan, climbing plan, hazard-specific PPE, and resources from the tower rescue tool cache, so that the victim is transferred to the rescue system and is moved both horizontally and vertically a distance representative of the rescue environment.

#### Requisite Knowledge

1. Describe incident action plan
2. Describe hazard and risk assessment
3. Describe climbing plan elements
4. Describe PPE selection and use
5. Describe types of fall protection systems
6. Describe fall protection system transfer procedures
7. Describe horizontal and vertical movement methods

#### Requisite Skills

1. Assess a scene
2. Use hazard control techniques
3. Use and apply PPE
4. Operate fall protection systems
5. Use horizontal and vertical climbing and movement techniques
6. Use tower-based rescue techniques

#### Content Modification

Block	Modification	Justification
JPR	Changed “kit” to “cache”.	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS2	Added “use”.	NFPA did not provide a verb.
RS5	Added “use”.	NFPA did not provide a verb.
RS6	Added “use”.	NFPA did not provide a verb.



### Cross Reference

Course Plan	Training Record	Task Book
<p>Tower Rescue Technician (2021)</p> <ul style="list-style-type: none"><li>• Topic 5-5 (JPR, RK7, RS5, RS6)</li><li>• Topic 3-9 (RK1, RK3)</li><li>• Topic 3-1 (RK2, RS1)</li><li>• Topic 3-7 (RK4, RS3)</li><li>• Topic 3-8 (RK5, RK6, RS4)</li><li>• Topic 3-3 (RS2)</li></ul>	<p>Tower Rescue Technician (2021)</p> <ul style="list-style-type: none"><li>• Skill 37</li><li>• Skill 38</li><li>• Skill 39</li></ul>	<p>Tower Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none"><li>• JPR 18</li><li>• JPR 22</li></ul>

### 3-6: Rescuing a Victim Using Multiple Sets of Sequential Rope Systems

#### Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
  - Paragraph 4.3.6

#### Job Performance Requirement

Perform a lowering operation of a victim from a tower or elevated structure where the travel path or height of the objective requires establishment of multiple sets of sequential rope systems, given a tower rescue scenario and a tower rescue tool cache, so that the victim is protected from a fall, rope movement is managed without entanglement, and the objective is achieved.

#### Requisite Knowledge

1. Describe incident action plan
2. Describe hazard and risk assessment
3. Describe climbing plan elements
4. Describe PPE selection and use
5. Describe types of fall protection systems
6. Describe fall protection system transfer procedures
7. Describe horizontal and vertical movement methods

#### Requisite Skills

1. Assess a scene
2. Use hazard control techniques
3. Use and apply PPE
4. Operate fall protection systems
5. Use horizontal and vertical climbing and movement techniques
6. Use tower-based rescue techniques

#### Content Modification

Block	Modification	Justification
JPR	Changed “kit” to “cache”.	Agencies do not have specific tower rescue tool kits; they assemble tools as needed from their general tool cache.
RS1	Added “use”.	NFPA did not provide a verb.
RS5	Added “use”.	NFPA did not provide a verb.
RS6	Added “use”.	NFPA did not provide a verb.

### Cross Reference

Course Plan	Training Record	Task Book
<p>Tower Rescue Technician (2021)</p> <ul style="list-style-type: none"><li>• Topic 5-6 (JPR, RK7, RS5, RS6)</li><li>• Topic 3-9 (RK1, RK3)</li><li>• Topic 3-1 (RK2, RS1)</li><li>• Topic 3-7 (RK4, RS3)</li><li>• Topic 3-8 (RK5, RK6, RS4)</li><li>• Topic 3-3 (RS2)</li></ul>	<p>Tower Rescue Technician (2021)</p> <ul style="list-style-type: none"><li>• Skill 40</li><li>• Skill 41</li><li>• Skill 42</li></ul>	<p>Tower Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none"><li>• JPR 19</li><li>• JPR 22</li></ul>