



**DEPARTMENT OF FORESTRY AND FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
STATE FIRE TRAINING**

P.O. Box 944246
SACRAMENTO, CA 94244-2460
(916) 902-9738
Website: www.fire.ca.gov



Date: March 5, 2023

To: Statewide Training and Education Advisory Committee
State Board of Fire Services

From: Chris Fowler, Deputy State Fire Marshal III, Supervisor, CAL FIRE
Joe Bunn, Fire Service Training Specialist III, (Retired), CAL FIRE

SUBJECT/AGENDA ACTION ITEM:
Animal Technical Rescue (2021)

Recommended Actions:

First read of the updated Animal Technical Rescue curriculum.

Background Information:

SFT developed the Animal Technical Rescue curriculum in alignment with National Fire Protection Association (NFPA) 1006: Standard for Technical Rescue Personnel Professional Qualifications, 2021 edition.

This curriculum was developed to ensure an effective and coordinated response to rescuing trapped, stranded, and entangled animals.

Analysis/Summary of Issue:

Retirement of Animal Technical Rescue (2017) Curriculum

Effective December 31, 2023, SFT will retire FSTEP Animal Technical Rescue Awareness (2017) and Animal Technical Rescue Technician (2017). On January 1, 2024, SFT will remove the curriculum from the SFT course catalog, and it will no longer be available.

CTS Guide

SFT developed a CTS guide for Animal Technical Rescue to document how training standards align with NFPA 1006 (2021).

Course Plans

- SFT developed two course plans
 - Animal Technical Rescue Awareness (2021) – designed for any emergency personnel who assist with Animal Technical Rescue incidents.
 - Animal Technical Rescue Technician (2021) – designed for fire fighters with three years' full-time or six years' part-time/volunteer experience and any emergency personnel who perform Animal Technical Rescue Technician rescue.
- Animal Technical Rescue Awareness (2021)
 - This course incorporates cognitive and psychomotor training for awareness based on NFPA 1006 (2021).
 - Prerequisites:
 - IS-100, IS-200, IS-700, and IS-800 (FEMA)
 - Course length is 4 hours (3.5 lecture / 0.5 application).
 - Maximum class size set at 30.
 - Instructor-to-student ratio set at
 - 1:30 (SFT Registered Animal Technical Rescue Awareness Instructor)
 - All instructors counted toward student ratios, including application components, must be SFT Registered Animal Technical Rescue Awareness Instructors.
 - This course is not a prerequisite for Animal Technical Rescue Technician. All of the awareness content from NFPA 1006 is also included in the Animal Technical Rescue Technician (2021).
- Animal Technical Rescue Technician (2021)
 - This course incorporates cognitive and psychomotor training for awareness, operations, and technician based on NFPA 1006 (2021). The cadre added two OSFM standards related to helicopter and trailer rescue based on common California incidents.
 - Prerequisites:
 - Rope Rescue Technician (SFT)
 - IS-100, IS-200, IS-700, and IS-800 (FEMA)
 - **Note:** Animal Rescue Technician Awareness is not a prerequisite for Animal Technical Rescue Technician. All of the awareness content from NFPA 1006 is also included in the Animal Technical Rescue Technician (2021).
 - Course length is 24 hours (8 lecture / 16 application).
 - Maximum class size set at 24.
 - Instructor-to-student ratio set at
 - 1:24 for lecture (SFT Registered Animal Technical Rescue Technician Instructor)
 - 1:8 for application
 - All instructors counted toward student ratios, including application components, must be SFT Registered Animal Technical Rescue Technician Instructors.

Instructor Task Book

- SFT developed an Instructor Task Book for Animal Technical Rescue Technician to promote instructor quality and consistency.
- There is no Instructor Task Book requirement for Animal Technical Rescue Awareness.

Training Record

- SFT developed a Training Record for Animal Technical Rescue Technician for students to use as verification of skills practiced and completed during the course.
- There is no Training Record for Animal Technical Rescue Awareness.

Existing Registered Instructors – Awareness & Technician

SFT will authorize existing Animal Technical Rescue Awareness (2017) Registered Instructors to teach the Animal Technical Rescue Awareness (2021) course. SFT will authorize existing Animal Technical Rescue Technician (2017) Registered Instructors to teach the Animal Technical Rescue Technician (2021) course. SFT will update Acadis.

New Instructor Registration

To become a Registered Instructor for this curriculum, a candidate must:

Awareness	Technician
Be an OSFM Registered Instructor	Be an OSFM Registered Instructor
Complete the following coursework: <ul style="list-style-type: none"> • Animal Technical Rescue Awareness (2017 or 2021) 	Complete the following coursework: <ul style="list-style-type: none"> • Animal Technical Rescue Technician (2017 or 2021) • Rope Rescue Technician (SFT)
N/A	Complete the Animal Technical Rescue Technician (2021) Instructor Task Book
Have a minimum of three (3) years' full-time or six (6) years' part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California	Have a minimum of three (3) years' full-time or six (6) years' part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California
Provide a letter signed by their Fire Chief or authorized designee that verifies qualification to deliver Animal Technical Rescue Awareness training	Provide a letter signed by their Fire Chief or authorized designee that verifies qualification to deliver Animal Technical Rescue Technician training
Submit an SFT Instructor Registration Application and pay the registration fee	Submit an SFT Instructor Registration Application and pay the registration fee

Cadre Members

To become a Registered Instructor for this curriculum after serving on the curriculum development cadre, a candidate must:

- Be an OSFM Registered Instructor
- Complete the following coursework:
 - Rope Rescue Technician (SFT) (only required for Animal Technical Rescue Technician)
- Have a minimum of three (3) years' full-time or six (6) years' part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California
- Provide a letter signed by their Fire Chief or authorized designee that verifies qualification to deliver Animal Technical Rescue Awareness or Technician training
- Submit an SFT Instructor Registration Application

Cadre members are not required to complete the instructor task book or pay the application fee.



Animal Technical Rescue (2021) Implementation Plan

Issued: **Month** 2023

OVERVIEW

This document is intended to provide information for all State Fire Training (SFT) stakeholders on the new Animal Technical Rescue (2021) curriculum requirements. Stakeholders are encouraged to study this information carefully and seek clarification from SFT if questions arise.

The Animal Technical Rescue (2021) curriculum is presented as a Fire Service Training and Education Program (FSTEP) series. SFT developed a new curriculum training standard (CTS) guide, two course plans (awareness and technician), an instructor task book, and a student training record based on the current National Fire Protection Association (NFPA) Standard, NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021).

IMPLEMENTATION

Candidates entering the SFT system should enroll in the new Animal Technical Rescue (2021) courses and comply with the new Animal Technical Rescue requirements.

New Curriculum	Hours
Animal Technical Rescue Awareness (2021)	4 hours
Animal Technical Rescue Technician (2021)	24 hours

Animal Technical Rescue (2021) Curriculum..... September 1, 2023

Retirement of Animal Technical Rescue (2017) Curriculum December 31, 2023

Effective December 31, 2023, SFT will retire FSTEP Animal Technical Rescue Awareness (2017) and Animal Technical Rescue Technician (2017). On January 1, 2024, SFT will remove the curriculum from the SFT course catalog, and it will no longer be available.

INSTRUCTOR REQUIREMENTS

Instructor Registration.....September 1, 2023

Instructors for the Animal Technical Rescue (2021) curriculum must meet the SFT requirements for Registered Instructor. Instructors must have appropriate education and practical experience relating to the specific course content.

Existing Registered Instructors

SFT will authorize existing Animal Technical Rescue Awareness (2017) Registered Instructors to teach the Animal Technical Rescue Awareness (2021) course. SFT will authorize existing Animal Technical Rescue Technician (2017) Registered Instructors to teach the Animal Technical Rescue Technician (2021) course. SFT will update Acadis.

New Instructor Registration – Awareness

To become a Registered Instructor for this curriculum, a candidate must:

- Be an OSFM Registered Instructor
- Complete the following coursework:
 - Animal Technical Rescue Awareness (2017 or 2021); or
 - Animal Technical Rescue Technician (2017 or 2021)
- Have a minimum of three (3) years' full-time or six (6) years' part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California
- Provide a letter signed by their Fire Chief or authorized designee that verifies qualification to deliver Animal Technical Rescue Awareness training
- Submit an SFT Instructor Registration Application and pay the registration fee

New Instructor Registration – Technician

To become a Registered Instructor for this curriculum, a candidate must:

- Be an OSFM Registered Instructor
- Complete the following coursework:
 - Animal Technical Rescue Technician (2017 or 2021)
 - Rope Rescue Technician (SFT)
- Complete the Animal Technical Rescue Technician (2021) Instructor Task Book
- Have a minimum of three (3) years' full-time or six (6) years' part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California
- Provide a letter signed by their Fire Chief or authorized designee that verifies qualification to deliver Animal Technical Rescue Technician training
- Submit an SFT Instructor Registration Application and pay the registration fee

POTENTIAL AGENCY IMPACTS

Fire agencies desiring to use the Animal Technical Rescue (2021) curriculum as a requirement for their recruitment/promotion activities need to review the Animal Technical Rescue (2021) curriculum requirements to be sure that all agency training needs are met. After review, fire agencies should update their job specifications and recruitment documentation to reflect these new courses and certification requirements.

Accredited Regional Training Programs (ARTP), Accredited Local Academies (ALA), community colleges, and all other local delivery venues need to review the curriculum and seek approval from their curriculum committee / program sponsor, as appropriate. ARTPs should review the new Animal Technical Rescue (2021) curriculum and discuss potential impacts with their advisory committees.

Animal Technical Rescue

(NFPA 1006 Animal Technical 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

Animal Technical Rescue

Curriculum Training Standards Guide (2021)

Publication Date: Month Year

This CTS guide utilizes the following NFPA standards to provide the qualifications for State Fire Training's Animal Technical 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 Gary Johnson, Fire Captain, Sonoma Valley Fire District.

Published by State Fire Training.

Table of Contents

Acknowledgements.....	1
How to Read a CTS Guide	2
Animal Technical Rescue.....	4
Section 1: Awareness.....	4
1-1: Sizing Up an Animal Technical Rescue Incident.....	4
1-2: Recognizing Incident Hazards and Initiating Isolation Procedures	6
1-3: Recognizing the Need for Technical Rescue Resources	8
1-4: Supporting an Operations- or Technical-Level Incident.....	10
Section 2: Operations.....	12
2-1: Recognizing Basic Animal Handling and Behavior Principles	12
2-2: Stabilizing a Representative Animal	13
2-3: Performing Triage	14
2-4: Constructing an Improvised Restraint Device	15
2-5: Moving a Representative Animal	16
2-6: Moving a Representative Animal	17
2-7: Maintaining Rescue Equipment.....	18
2-8: Moving a Representative Animal Load in a High-Angle Environment	19
2-9: Developing a Plan to Release a Representative Animal from Soil Entrapment	20
2-10: Developing a Plan for an Animal Transport Vehicle Incident.....	21
2-11: Removing a Packaged Representative Animal to a Designated Safe Area	23
2-12: Terminating an Incident	25
2-13: Interacting with a Person on the Scene Experiencing an Emotional or Psychological Crisis	27
2-14: Constructing a Simple Rope Mechanical Advantage System	28
2-15: Constructing a Compound Rope Mechanical Advantage System	30
2-16: Managing a Portable Highpoint Anchor and Multiple Compound Rope Mechanical Advantage System in a High-Angle Environment	32
Section 3: Technician	34
3-1: Moving a Representative Animal Load in an Extended Duration High-Angle Environment.....	34
3-2: Completing an Assignment While Suspended from a Rope Rescue System in a High-Angle Environment	36
3-3: Removing a Representative Animal from a Vertical Depth and Across a Horizontal Path Before Lowering It to a Designated Point	38
3-4: Conducting Helicopter Operations.....	40
3-5: Conducting Trailer Operations	42

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
- Mike Richwine, State Fire Marshal
- Andrew Henning, Assistant Deputy Director: Fire and Life Safety, State Fire Training, Code Development and Analysis
- John Binaski, Chair, Statewide Training and Education Advisory Committee (STEAC); Chief, Clovis Fire Department

Cadre – 2022 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
- Robert Edie, Captain, San Bernardino County Fire
- Bruno Gonzalez, Engineer/Special Operations, City of Fremont Fire Department
- Fergus Johnson, Fire Fighter/Rescue Team Manager, Sacramento Fire Department
- Gary Johnson, Fire Captain, Sonoma Valley Fire District
- John Maretti, Fire Fighter/Operations (retired), City of Chico Fire Department
- Billy Milligan, Fire Fighter/USAR Training Manager, Riverside City Fire Department
- Tim O'Neill, Captain, Hayward Fire Department
- Robert Stine, Fire Fighter/USAR Training Manager, San Bernardino County Fire
- Dr. Carin Zeller, Veterinarian, Ventura County Fire USAR (volunteer)

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 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).

Animal Technical Rescue

Section 1: Awareness

1-1: Sizing Up an Animal Technical Rescue Incident

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.1.1

Job Performance Requirement

Size up an animal technical rescue incident, given background information and applicable reference materials, so that the scope of the rescue is determined, the number of animals is identified, the last reported location of all the animals 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 the 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 animal technical 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
Animal Technical Rescue Awareness (2021) <ul style="list-style-type: none">• Topic 3-2 Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 3-2	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 7	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 8• JPR 22

1-2: Recognizing Incident Hazards and Initiating Isolation Procedures

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.1.2

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 animals 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 animal risks
7. *Describe* risk/benefit analysis methods and practices
8. *Describe* hazard recognition, isolation methods, and terminology
9. *Describe* methods for controlling access to the scene
10. *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
<p>Animal Technical Rescue Awareness (2021)</p> <ul style="list-style-type: none"> • Topic 3-2 (RK7) • Topic 3-3 (RK1, RK2, RK3, RK4, RK5, RK6, RK8, RK9, RK10, RS1, RS2, RS3, RS4, RS5) <p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Topic 3-2 (RK7) • Topic 3-3 (RK1, RK2, RK3, RK4, RK5, RK6, RK8, RK9, RK10, RS1, RS2, RS3, RS4, RS5) 	<p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Skill 8 	<p>Animal Technical Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none"> • JPR 9 • JPR 22

1-3: Recognizing the Need for Technical Rescue Resources

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.1.3

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 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

Cross Reference

Course Plan	Training Record	Task Book
<p>Animal Technical Rescue Awareness (2021)</p> <ul style="list-style-type: none"> • Topic 2-1 (RK3, RS3) • Topic 3-2 (RK1, RK2, RK5, RK6, RS1, RS2, RS4, RS5) • Topic 3-3 (RK4) <p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Topic 2-1 (RK3, RS3) • Topic 3-2 (RK1, RK2, RK5, RK6, RS1, RS2, RS4, RS5) • Topic 3-3 (RK4) 	<p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Skill 7 (embedded in size up) 	<p>Animal Technical Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none"> • JPR 8

1-4: Supporting an Operations- or Technical-Level Incident

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.1.4

Job Performance Requirement

Support an operations- or technical-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 “tool kit” to “tool cache”.	Agencies don’t have designated animal rescue “tool kits”. They draw from their overall tool cache.

Cross Reference

Course Plan	Training Record	Task Book
<p>Animal Technical Rescue Awareness (2021)</p> <ul style="list-style-type: none"> • Topic 2-3 (RS4) • Topic 3-2 (RK1, RK3, RK5, RK6, RS1, RS2, RS3, RS4) • Topic 3-3 (RK2) <p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Topic 2-3 (RS4) • Topic 3-2 (RK1, RK3, RK5, RK6, RS1, RS2, RS4) • Topic 3-3 (RK2) • Topic 3-4 (RS3) 	<p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none"> • Skill 7 (embedded in size up) 	<p>Animal Technical Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none"> • JPR 8

Section 2: Operations

2-1: Recognizing Basic Animal Handling and Behavior Principles

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.1

Job Performance Requirement

Recognize basic animal handling and behavior principles, given a representative animal, so that the incident is managed, risks to rescuers are minimized, and risks to the animal are minimized.

Requisite Knowledge

1. *Describe* hazard-specific PPE selection and use
2. *Describe* fight/flight behavior principles
3. *Describe* species-specific containment methods and devices

Requisite Skills

1. Select and use hazard-specific PPE
2. Apply species-specific handling principles
3. Identify species-specific behavioral cues

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Awareness (2021) <ul style="list-style-type: none">• Topic 2-3 Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 2-1	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 3	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 4

2-2: Stabilizing a Representative Animal

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.2

Job Performance Requirement

Stabilize a representative animal, given a first aid kit and an actual or simulated EMS agency, so that rescuers and a representative animal are protected from hazards, the representative animal's injuries or illnesses are assessed and managed, and the representative animal is delivered to the appropriate EMS provider with information regarding the history of the rescue activity and the representative animal's condition with the assistance of local-policy-determined personnel, when available.

Requisite Knowledge

1. *Describe* animal and scene assessment methods
2. *Describe* animal treatment, methods of physical and chemical immobilization, and packaging methods
3. *Identify* resource availability
4. *Describe* medical information management and communication methods

Requisite Skills

1. Use animal immobilization, packaging, and treatment methods appropriate to the situation
2. Provide animal transfer reports, both verbally and in writing

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 6-1	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 26	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 19

2-3: Performing Triage

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.3

Job Performance Requirement

Perform basic-level triage, given triage tags and AHJ protocols, so that determination between rescue and recovery modes are made, triage decisions reflect resource capabilities, severity of injuries are determined, and animal care and rescue priorities are established in accordance with local protocol.

Requisite Knowledge

1. *Describe* types and systems of triage according to AHJ protocol
2. *Describe* resource availability
3. *Describe* methods to determine injury severity
4. *Describe* ways to manage resources
5. *Describe* prioritization requirements

Requisite Skills

1. Use triage materials, techniques, and resources

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Awareness (2021) <ul style="list-style-type: none">• Topic 3-2 Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 3-2	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 7 (embedded in size up)	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 8

2-4: Constructing an Improvised Restraint Device

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.4

Job Performance Requirement

Construct an improvised restraint device, given an available rope or accessory cord, so that the device includes a long enough standing end to ensure rescuer control and that the representative animal is able to be led to a safe area.

Requisite Knowledge

1. *Describe* hazard-specific PPE selection and use
2. *Describe* application of knots
3. *Describe* animal halter pressure principles
4. *Describe* rope or webbing material selection
5. *Describe* device positioning techniques on animals

Requisite Skills

1. Select and use hazard-specific PPE
2. Tie knots
3. Construct and rig animal halters
4. Evaluate correct placement

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 4-1	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 10	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 11• JPR 22

2-5: Moving a Representative Animal

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.5

Job Performance Requirement

Move a representative animal, in a low-angle environment, as a member of a team, given an incident action plan and basic animal transport equipment, so that hazards are identified, the representative animal is moved without further injury, risks to rescuers are managed, the representative animal securement is maintained, and the objective is attained.

Requisite Knowledge

1. *Describe* types of basic animal transport equipment
2. *Identify* hazards
3. *Describe* hazard-specific PPE
4. *Describe* methods to reduce and prevent further injuries from the environment and/or species-specific securement methods (physical and chemical)
5. *Describe* transport techniques

Requisite Skills

1. Operate transport equipment
2. Assemble and operate environment- or hazard-specific animal removal systems
3. Use transport devices

Content Modification

Block	Modification	Justification
RK2	Changed “hazard identification” to “Identify hazards”.	Grammar consistency.

Cross Reference

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

2-6: Moving a Representative Animal

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.6

Job Performance Requirement

Move a representative animal, in a low-angle environment, as a member of a team, given animal transport equipment, litters, and animal removal systems specific to the rescue environment, so that the representative animal is moved without further injuries, risks to rescuers are minimized from both the hazard and the representative animal, the integrity of a representative animal's securement within the transfer device is established and maintained, the means of attachment to the rope rescue system is maintained, and the representative animal is removed from the hazard.

Requisite Knowledge

1. *Describe* types of transport equipment and removal systems
2. *Describe* selection factors with regard to specific rescue environments
3. *Describe* methods to reduce and prevent further injuries from the hazard and from the species-specific hazard
4. *Describe* types of risks to rescuers to include the hazard as well as species-specific hazards
5. *Describe* ways to establish and maintain animal securement (both physical and chemical)
6. *Describe* transport techniques
7. *Describe* rope rigging applications and methods
8. *Describe* types of specialized equipment and their uses

Requisite Skills

1. Secure an animal to transport equipment
2. Assemble and operate environment-specific animal removal systems
3. Choose an incident-specific transport device

Content Modification

Block	Modification	Justification

Cross Reference

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

2-7: Maintaining Rescue Equipment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.7

Job Performance Requirement

Maintain rescue equipment, given maintenance logs and records, tools, resources, manufacturer's guidelines, and organizational standard operating procedures, which should include keeping the large animal technical rescue cache subjected to greater than 600 lb (272 kg) loads separate from the regular cache, so that the operational status of equipment is verified and documented, components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement protocol are correctly disposed of and changed.

Requisite Knowledge

1. *Describe* functions and operations of rescue equipment
2. *Describe* use of record-keeping systems
3. *Describe* manufacturer and organizational care and maintenance requirements
4. *Describe* selection and use of maintenance tools
5. *Describe* replacement protocol and procedures
6. *Describe* disposal methods
7. *Describe* organizational standard operating procedures

Requisite Skills

1. Identify wear and damage indicators for rescue equipment
2. Evaluate operation readiness of equipment
3. Complete logs and records
4. Select and use maintenance tools

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 6-3	N/A	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 21

2-8: Moving a Representative Animal Load in a High-Angle Environment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.8

Job Performance Requirement

Move a representative animal load in a high-angle environment, as a member of a team, given animal transport equipment, litters, other specialized equipment, and animal removal systems specific to the rescue environment, so that the representative animal is moved without further injury, risks to rescuers are minimized from both the hazard and the representative animal, the integrity of the representative animal's securement within the transfer device is established and maintained, the means of attachment to the rescue system is maintained, and the representative animal is removed from the hazard.

Requisite Knowledge

1. *Describe* types of transport equipment and removal systems
2. *Describe* selection factors with regard to specific rescue environments
3. *Describe* methods to reduce and prevent further injuries from the hazard and from the species-specific hazards
4. *Describe* types of risks to rescuers to include the hazard as well as species-specific hazards
5. *Describe* ways to establish and maintain animal securement (species-specific)
6. *Describe* transport techniques
7. *Describe* rope rigging applications and methods
8. *Describe* types of specialized equipment and their uses

Requisite Skills

1. Secure an animal to transport equipment
2. Assemble and operate environment-specific animal removal systems
3. Choose an incident-specific transport device

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 5-3	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 16	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 16

2-9: Developing a Plan to Release a Representative Animal from Soil Entrapment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.9

Job Performance Requirement

Develop a plan to release a representative animal from soil entrapment, as a member of a team, given an incident, a representative animal load, personal protective equipment, a mud rescue tool *cache*, and specialized equipment, so that hazards to rescue personnel and a representative animal are minimized; considerations are given to animal hypothermia, dehydration, and other injuries; techniques are used to enhance animal survivability; and tasks are accomplished within projected time frames.

Requisite Knowledge

1. *Describe* identification, utilization, and required care of personal equipment
2. *Describe* general hazards associated with mud rescue to both the animal and the rescuers to include adhesive forces
3. *Describe* selection and application of rescue tools and resources
4. *Describe* risk/benefit assessment techniques for extrication methods
5. *Describe* time constraints

Requisite Skills

1. Select, use, and care for personal protective equipment
2. Operate rescue tools and stabilization systems
3. Complete risk/benefit assessments for selected methods of rescue and time restraints

Content Modification

Block	Modification	Justification
JPR	Changed “tool kit” to “tool cache”.	Agencies don’t have designated animal rescue “tool kits”. They draw from their overall tool cache.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none"> • Topic 2-2 (RK5) • Topic 2-3 (RK1, RS1) • Topic 3-1 (RK2) • Topic 3-2 (RK4, RS3) • Topic 3-4 (RK 3, RS2) 	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none"> • Skill 24 	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"> • JPR 10 • JPR 22

2-10: Developing a Plan for an Animal Transport Vehicle Incident

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.10

Job Performance Requirement

Develop a plan for an animal transport vehicle incident, given an incident, agency guidelines, and planning forms, so that size-up is conducted and continued throughout the incident; a standard approach is used during training and operational scenarios; hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; vehicle stabilization needs are evaluated; and resource needs, including veterinary personnel, are identified.

Requisite Knowledge

1. *Describe* operational protocols
2. *Describe* specific planning forms
3. *Describe* types of vehicles common to the AHJ boundaries
4. *Describe* vehicle hazards
5. *Describe* animal hazards to the rescuers
6. *Describe* incident support operations and resources
7. *Describe* vehicle anatomy
8. *Describe* fire suppression and safety measures

Requisite Skills

1. Apply operational protocols
2. Select specific planning forms based on the types of vehicles
3. Identify and evaluate various types of vehicles within the AHJ boundaries
4. Request support and resources
5. Identify vehicle anatomy
6. Determine the required fire suppression and safety measures

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 2-3 (RK5)• Topic 3-1 (RK3, RK6, RS3, RS4)• Topic 3-3 (RK4)• Topic 3-4 (RK1, RK2, RS1, RS2)• Topic 5-5 (RK7, RK8, RS5, RS6)	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 25	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 10• JPR 22

2-11: Removing a Packaged Representative Animal to a Designated Safe Area

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.11

Job Performance Requirement

Remove a packaged representative animal to a designated safe area, as a member of a team, given an animal transfer device, a designated egress route, and personal protective equipment, so that effort is coordinated, the designated egress routes are used, a representative animal is removed without compromising animal packaging, injury is prevented, and stabilization is maintained.

Requisite Knowledge

1. *Describe* animal handling techniques
2. *Describe* an incident management system
3. *Describe* types of immobilization, packaging, appropriate animal attachment points, and transfer devices
4. *Describe* types of immobilization techniques
5. *Describe* uses of immobilization devices

Requisite Skills

1. Use immobilization, packaging, and transfer devices for specific situations
2. Use immobilization techniques, including chemical with the assistance of AHJ designated personnel
3. Apply medical protocols and safety features to immobilize, package, and transfer
4. Use techniques for lifting or moving the animal

Content Modification

Block	Modification	Justification
RS2	Added "Use".	NFPA didn't provide a verb.
RS4	Added "Use".	NFPA didn't provide a verb.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 3-2 (RK2)• Topic 4-2 (RK1)• Topic 4-3 (RK3, RK4, RK5, RS1, RS2, RS3)• Topic 5-2 (RS3)	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 15	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 12• JPR 13• JPR 15• JPR 16• JPR 22

2-12: Terminating an Incident

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.12

Job Performance Requirement

Terminate an incident, given personal protective equipment specific to the incident, isolation barriers, and a 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 material 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. Use barrier protection techniques
3. *Use* data collection and record keeping/reporting protocols
4. *Conduct* post-incident analysis activities

Content Modification

Block	Modification	Justification
JPR	Changed “tool kit” to “tool cache”.	Agencies don’t have designated animal rescue “tool kits”. They draw from their overall tool cache.
RS3	Added “Use”.	NFPA didn’t provide verb.
RS4	Added “Conduct”.	NFPA didn’t provide verb.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 6-2	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 27	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 20• JPR 22

2-13: Interacting with a Person on the Scene Experiencing an Emotional or Psychological Crisis

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.13

Job Performance Requirement

Interact with a person on the scene who is in an emotional or psychological crisis, given an animal emergency situation consistent with the mission of the agency, the policies and procedures of the organization, and a person in a crisis scenario, so that the condition is recognized and communicated to the team, the rescuer is prevented from harm, and the actions of the rescuer do not escalate the incident.

Requisite Knowledge

1. *Describe* indicators of a person in emotional crisis
2. *Describe* typical triggers that can cause individuals to become agitated or anxious
3. *Describe* methods of interacting to prevent harm to the rescuer and the subject
4. *Describe* best practices to de-escalate incidents involving persons in crisis

Requisite Skills

1. *Employ* methods of approach that minimize the risk to the rescuer from subjects whose psychological or emotional state is unknown
2. *Use* interview techniques that provide insight to the motives and state of mind of the subject
3. Communicate and interact with the subject in a manner that does not escalate the incident

Content Modification

Block	Modification	Justification
RS1	Added "Employ".	NFPA didn't provide verb.
RS2	Added "Use".	NFPA didn't provide verb.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 2-5	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 5	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 6• JPR 22

2-14: Constructing a Simple Rope Mechanical Advantage System

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.14

Job Performance Requirement

Construct a simple rope mechanical advantage system, given an incident, representative animal load, an anchor system, life safety rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, so that the system constructed accommodates the load and reduces the force required to lift the load; operational interference is factored and minimized; the system is efficient; a system safety check is completed; and the system is connected to an anchor system and the load, with recognition a suboptimal static system safety factor (SSSF) might be required to accomplish the rescue.

Requisite Knowledge

1. *Describe* determination of incident needs as related to choosing simple rope systems
2. *Describe* the elements of efficient design for *simple* rope systems
3. *Describe* knot selection
4. *Describe* methods for reducing excessive force to system components
5. *Describe* evaluation of incident operations as related to interference concerns and setup
6. *Describe* rope commands
7. *Describe* rigging principles
8. *Describe* system safety check procedures
9. *Describe* methods of evaluating system components for compromised integrity

Requisite Skills

1. Determine incident needs as related to choosing simple rope systems
2. Select effective knots
3. Calculate expected loads
4. Evaluate incident operations as related to interference concerns and setup
5. Perform a system safety check
6. Evaluate system components for compromised integrity

Content Modification

Block	Modification	Justification
RK2	Changed "compound" to "simple".	NFPA error.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 5-1	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 13	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 14• JPR 22

2-15: Constructing a Compound Rope Mechanical Advantage System

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.15

Job Performance Requirement

Construct a compound rope mechanical advantage system, given an incident, a representative animal load, an anchor system, life safety rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, so that the system constructed accommodates the load and reduces the force required to lift the load; operational interference is factored and minimized; the system is efficient; a system safety check is completed; and the system is connected to an anchor system and the load, with recognition to a sub optimal SSSF might be required to accomplish the rescue.

Requisite Knowledge

1. *Describe* determination of incident needs as related to choosing compound rope systems
2. *Describe* the elements of efficient design for compound rope systems
3. *Describe* knot selection
4. *Describe* methods for reducing excessive force to system components
5. *Describe* evaluation of incident operations as related to interference concerns and setup
6. *Describe* rope commands
7. *Describe* rigging principles
8. *Describe* system safety check procedures
9. *Describe* methods of evaluating system components for compromised integrity

Requisite Skills

1. Determine incident needs as related to choosing *compound* rope systems
2. Select effective knots
3. Calculate expected loads
4. Evaluate incident operations as related to interference concerns and setup
5. Perform a system safety check
6. Evaluate system components for compromised integrity

Content Modification

Block	Modification	Justification
RK1	Changed “simple” to “compound”.	Changed to match JPR.

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 5-1	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 14	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 14• JPR 22

2-16: Managing a Portable Highpoint Anchor and Multiple Compound Rope Mechanical Advantage System in a High-Angle Environment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.2.16

Job Performance Requirement

Manage a portable highpoint anchor and multiple compound rope mechanical advantage system in a high-angle environment, as a member of a team, given an incident, multiple rope rescue systems incorporating a compound rope mechanical advantage system, a representative animal load to be moved, and a specified minimum travel distance for the load, so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Requisite Knowledge

1. *Describe* methods to determine incident needs
2. *Describe* types of interference concerns
3. *Describe* rope commands
4. *Describe* safe operating limits of the portable highpoint anchor
5. *Describe* system safety check protocol
6. *Describe* procedures for continued evaluation of system components for compromised integrity
7. *Describe* common personnel assignments and duties
8. *Describe* common commands
9. *Describe* methods for controlling a load's movements
10. *Describe* system stress issues during operations
11. *Describe* animal stress issues during movement
12. *Describe* management methods for common problems

Requisite Skills

1. Determine incident needs
2. Evaluate incident operations as related to interference concerns
3. Complete a system safety check
4. Continually evaluate system components for compromised integrity
5. Direct personnel effectively
6. Operate multiple mechanical advantage systems in balance
7. Communicate commands
8. Analyze system efficiency
9. Manage load movement
10. Identify concerns

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 3-2 (RK1, RS1)• Topic 5-1 (RK3, RK8)• Topic 5-3 (RK2, RK4, RK5, RK6, RK7, RK9, RK10, RK11, RK12, RS2, RS3, RS4, RS5, RS6, RS7, RS8, RS9, RS10)	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 17	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 16• JPR 22

Section 3: Technician

3-1: Moving a Representative Animal Load in an Extended Duration High-Angle Environment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.3.1

Job Performance Requirement

Move a representative animal load in an extended duration high-angle environment, as a member of a team, given animal transport equipment, litters, and animal removal systems specific to the rescue environment, so that the representative animal is moved without further injuries, risks to rescuers are minimized from both the hazard and the representative animal, the integrity of the representative animal's securement within the transfer device is established and maintained, the means of attachment to the rope rescue system is maintained, and the representative animal is removed from the hazard.

Requisite Knowledge

1. *Describe* types of transport equipment and removal systems
2. *Describe* selection factors with regard to specific rescue environments
3. *Describe* methods to reduce and prevent further injuries from the hazard and from the species-specific hazards
4. *Describe* types of risks to rescuers, including the hazard as well as species-specific hazards
5. *Describe* ways to establish and maintain animal securement (both physical and chemical)
6. *Describe* transport techniques
7. *Describe* rope rigging applications and methods
8. *Describe* types of specialized equipment and their uses

Requisite Skills

1. Secure an animal to transport equipment
2. Assemble and operate environment-specific animal removal systems
3. Choose an incident-specific transport device

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 3-3 (RK3, RK4)• Topic 4-3 (RK, RK5, RS1)• Topic 5-1 (RK7)• Topic 5-3 (RK2, RK6, RK8, RS2, RS3)	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 17	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 16• JPR 22

3-2: Completing an Assignment While Suspended from a Rope Rescue System in a High-Angle Environment

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.3.2

Job Performance Requirement

Complete an assignment while suspended from a rope rescue system in a high-angle environment, given a team, a representative animal when raising or lower animals, an assignment, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to animals and rescuers are minimized, the means of attachment to the rope rescue system is secure, selected specialized equipment facilitates efficient rescuer movements, and specialized equipment does not unduly increase risks to rescuers or animals.

Requisite Knowledge

1. *Describe* task-specific selection criteria for life safety harnesses
2. *Describe* personal protective equipment selection criteria
3. *Describe* variations in litter design and intended purpose
4. *Describe* rigging principles
5. *Describe* techniques and practices for high-angle environments
6. *Describe* common hazards posed by improper maneuvering and harnessing

Requisite Skills

1. Select and use rescuer harness and personal protective equipment for common environments
2. Attach the life safety harness to the rope rescue system
3. Maneuver around existing environment and system-specific obstacles
4. Perform work while suspended from the rope rescue system
5. Evaluate surroundings for potential hazards

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
<p>Animal Technical Rescue Technician (2021)</p> <ul style="list-style-type: none">• Topic 5-3 (all RK)• All RS – Students will not work suspended from rope in this course. These skills are part of the Rope Rescue course which is a prerequisite for Animal Technical Rescue Technician	<p>N/A</p>	<p>Animal Technical Rescue Technician (2021) Instructor Task Book</p> <ul style="list-style-type: none">• JPR 16

3-3: Removing a Representative Animal from a Vertical Depth and Across a Horizontal Path Before Lowering It to a Designated Point

Authority

1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 10.3.3

Job Performance Requirement

As a member of a team, remove a representative animal from a vertical depth, then across a horizontal path before lowering it to a designated point, given rescue personnel, an established system, a target for the load, a load to be moved, and personal protective equipment, so that the movement is controlled; the load is held in place when needed; operating methods do not stress the system to the point of failure; personnel assignments are made; tasks are communicated; and potential problems are identified, communicated, and managed.

Requisite Knowledge

1. *Describe* determination of incident needs as related to the operation of a system
2. *Describe* capabilities and limitations of various systems
3. *Describe* incident site evaluation as related to interference concerns and obstacle negotiation
4. *Describe* system safety check protocol
5. *Describe* procedures to evaluate system components for compromised integrity
6. *Describe* common personnel assignments and duties
7. *Describe* common commands
8. *Describe* common problems and ways to minimize or manage those problems
9. *Describe* ways to increase the efficiency of load movement

Requisite Skills

1. Determine incident needs
2. Complete a system safety check
3. Evaluate system components for compromised integrity
4. Communicate with personnel effectively
5. Management movement of the load
6. Evaluate for any potential problems

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 5-3	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 18	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 16• JPR 22

3-4: Conducting Helicopter Operations

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Use a helicopter to move an animal in need of technical rescue, as a member of a team, given an incident, a representative animal load to be moved, appropriate tools and equipment, and a helicopter, so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Requisite Knowledge

1. Describe when to consider a helicopter operation
2. Describe how to apply a helicopter operation for animal technical rescue
3. Identify the benefits of a helicopter operation
4. Identify the hazards, risks, or limitations of a helicopter operation
5. Describe system safety check protocol
6. Describe procedures to evaluate system components for compromised integrity
7. Describe personnel assignments and duties

Requisite Skills

1. Determine incident needs
2. Complete a system safety check
3. Evaluate system components for compromised integrity
4. Communicate with personnel effectively
5. Management movement of the load
6. Evaluate for any potential problems

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Topic 5-3 (RS1, RS2, RS3, RS4, RS5, RS6)• Topic 5-4 (RK1, RK2, RK3, RK4, RK5, RK6, RK7)	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none">• Skill 19	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none">• JPR 17• JPR 22

3-5: Conducting Trailer Operations

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Extricate an animal in need of technical rescue from a trailer, as a member of a team, given an incident, webbing, rescue straps, a flex guide, ropes, slip sheets, a rescue glide, a representative animal, and a trailer, so that hazards to rescuers and the animal are minimized operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Requisite Knowledge

1. Describe vehicle anatomy
2. Describe fire suppression and safety measures
3. Describe the dynamics of a trailer incident
4. Identify the best access points for equipment application
5. Describe how to release the dividers from the exterior of the trailer
6. Describe how to handle an animal tethered in a transport vehicle
7. Describe how to attach a long lead line
8. Describe when removal of the animal is and is not appropriate
9. Describe how to apply a rescue strap without entering the trailer

Requisite Skills

1. Determine incident needs
2. Communicate with personnel effectively
3. Management movement of the load
4. Evaluate for any potential problems

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Training Record	Task Book
Animal Technical Rescue Technician (2021) <ul style="list-style-type: none"> • Topic 5-3 (RS1, RS2, RS3, RS4) • Topic 5-5 (RK1, RK2, RK3, RK4, RK5, RK6, RK7, RK8, RK9) 	Animal Technical Rescue Technician (2021) <ul style="list-style-type: none"> • Skill 20 	Animal Technical Rescue Technician (2021) Instructor Task Book <ul style="list-style-type: none"> • JPR 18 • JPR 22



Animal Technical Rescue Awareness (2021)

Course Plan

Course Details

Description: This course provides the knowledge and skills to prepare an emergency responder to support an animal technical rescue incident at an awareness level in a safe and effective manner in accordance with AHJ policies and procedures. Topics include animal anatomy and physiology, handling and behavior principles, rescuer safety and approach, incident size up, and recognizing and isolating hazards to rescuers and animals. This course incorporates awareness training based on NFPA 1006 (2021).

Designed For: Any emergency personnel who support animal technical rescue incidents.

Prerequisites: IS-100, IS-200, IS-700, and IS-800 (FEMA)

Standard: Attend and participate in all course sections
Successful completion of all skills identified on the Training Record

Hours: 4 hours
(3.5 lecture / 0.5 application)

Max Class Size: 30

Instructor Level: SFT Registered Animal Technical Rescue Awareness Instructor

Instructor/Student Ratio: 1:30

Restrictions: All instructors counted toward student ratios, including application components, must be SFT Registered Animal Technical Rescue Awareness Instructors.

SFT Designation: FSTEP

Table of Contents

Course Details	1
Table of Contents	2
Required Resources	3
Instructor Resources	3
Online Instructor Resources	3
Student Resources	3
Facilities, Equipment, and Personnel.....	3
Time Table.....	4
Time Table Key.....	4
Unit 1: Introduction	6
Topic 1-1: Orientation and Administration.....	6
Unit 2: Working with Animals.....	7
Topic 2-1: Introduction to Animal Technical Rescue	7
Topic 2-2: Animal Anatomy and Physiology	8
Topic 2-3: Animal Handling and Behavior Principles.....	9
Topic 2-4: Rescuer Safety and Approach.....	10
Unit 3: Scene Management	11
Topic 3-1: Common Animal Technical Rescue Incidents	11
Topic 3-2: Sizing Up an Animal Technical Rescue Incident.....	14
Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures.....	16
How to Read a Course Plan.....	18

Required Resources

Instructor Resources

To teach this course, instructors need:

- NFPA 1006: Standard for Technical Rescue Personnel (2021) (physical or digital access to current edition)

Recommended resources:

- *Technical Large Animal Emergency Rescue* (Gimenez, Gimenez, and May, 2008, 1st edition, Wiley-Blackwell, ISBN: 978-0813819983)
- British Animal Rescue and Trauma Care Association ([BARTA](#))
- [The Horse Portal](#) (University of Guelph)
- Large Animal Sedation & Anesthesia Field Guide ([Loops Rescue](#))

Online Instructor Resources

The following instructor resources are available online at

<https://osfm.fire.ca.gov/divisions/state-fire-training/fstep-curriculum/>

- None

Student Resources

To participate in this course, students need:

- No requirements

Facilities, Equipment, and Personnel

Facilities

The following facilities are required to deliver this course:

- Standard learning environment or facility, which may include:
 - Writing board or paper easel chart
 - Markers, erasers
 - Amplification devices
 - Projector and screen
 - Laptop or tablet with presentation or other viewing software
 - Internet access with appropriate broadband capabilities

Personnel

The following personnel are required to deliver this course:

- Any instructor counted toward student ratios must be an SFT Registered Animal Technical Rescue Awareness (2021) Instructor.

Time Table

Segment	Lecture	Application	Unit Total
Unit 1: Introduction			
Topic 1-1: Orientation and Administration	0.5	0.0	
Unit 1 Totals	0.5	0.0	0.5
Unit 2: Working with Animals			
Topic 2-1: Introduction to Animal Technical Rescue	0.5	0.0	
Topic 2-2: Animal Anatomy and Physiology	0.5	0.0	
Topic 2-3: Animal Handling and Behavior Principles	0.5	0.0	
Topic 2-4: Rescuer Safety and Approach	0.25	0.0	
Unit 2 Totals	1.75	0.0	1.75
Unit 3: Scene Management			
Topic 3-1: Common Animal Technical Rescue Incidents	0.25	0.0	
Topic 3-2: Sizing Up an Animal Technical Rescue Incident	0.5	0.25	
Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures	0.5	0.25	
Unit 3 Totals	1.25	0.5	1.75
Formative Assessments			
Determined by AHJ or educational institution	0.0	0.0	0.0
Summative Assessment			
Determined by AHJ or educational institution	0.0	0.0	0.0
Course Totals	3.5	0.5	4.0

Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.

5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Draft

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, skills exercises, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Smoking locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus
 - Course objectives
 - Calendar of events
 - Course requirements
 - Student evaluation process
 - Assignments
 - Activities
 - Required student resources
 - Class participation requirements

Discussion Questions

1. Determined by instructor

Application

1. Have students complete all required registration forms.

Unit 2: Working with Animals

Topic 2-1: Introduction to Animal Technical Rescue

Terminal Learning Objective

At the end of this topic a student, given definitions and AHJ data, will be able to describe animal technical rescue.

Enabling Learning Objectives

1. Define animal technical rescue
 - Rescuing of an animal requiring technical skills, not to be confused with “animal rescue” which typically refers to abuse or neglect (NFPA 2500)
 - To extricate or manipulate an animal from a location that is dangerous to a place of safety by the most humane method with regard to the safety of all involved
2. Describe the purpose of animal technical rescue
3. Identify transferable technical rescue skills and how they can complement animal technical rescue efforts
4. Identify types of animal technical rescue incidents common to the AHJ

Discussion Question

1. What types of animals are common in, or unique to, your AHJ?
2. What types of animal technical rescue incidents are common in your AHJ?
3. What technical rescue skills do you already have that could be applied to animal technical rescue?

Application

1. Determined by instructor

Instructor Notes

1. None

CTS Guide Reference: None

Topic 2-2: Animal Anatomy and Physiology

Terminal Learning Objective

At the end of this topic a student, given animal anatomy and physiology information, will be able to identify vulnerable areas and systems of the animal skeletal structure so that anatomical features and purchase points can be used for equipment placement, extrication, and lifting to assist with moving an animal in need of technical rescue.

Enabling Learning Objectives

1. Identify animals common to the AHJ
 - Small (generally less than 300 lbs.)
 - Large (generally over 300 lbs.)
2. Identify the skeletal structure of an animal
 - Front leg system
 - Hind leg system
 - Equipment access and locations
3. Describe physiological systems of an animal
 - Circulatory system and vascular areas
 - Respiratory system
 - Nervous system
4. Describe how to monitor animal condition throughout a rescue
 - Physical, auditory, visible signs, vital signs, position of patient
 - Identify rescue timeframe (“golden hour”)
 - Determine viability and potential need to euthanize
 - Heartbeat
 - Brain stem response (corneal reflex test)

Discussion Question

1. How would you determine normal or baseline vital signs for an animal in need of technical rescue?
2. What is anatomically unique about a horse’s hind leg that will impact rescue efforts?
3. What are some other members of the equine family impacted by the “golden hour”?

Application

1. Determined by instructor

Instructor Notes

1. While animal technical rescue applies to many types of animals, this course predominantly focuses on horses.

CTS Guide Reference: None

Topic 2-3: Animal Handling and Behavior Principles

Terminal Learning Objective

At the end of this topic a student, given a representative animal, will be able to recognize basic animal handling and behavior principles so that the incident is managed, risks to rescuers are minimized, and risks to the animal are minimized.

Enabling Learning Objectives

1. Describe, select, and use hazard-specific PPE
 - Determined by AHJ
2. Describe the fight/flight animal behavior principle
3. Identify an animal's natural defensive behaviors
 - Biting
 - Kicking
 - Scratching
 - Trampling
 - Goring
 - Spitting
4. Identify species-specific behavioral cues
5. Describe species-specific containment methods and devices
 - Animal handling skills
 - Physical restraints
 - Chemical restraints
 - Sedation vs. anesthesia
6. Describe how to apply species-specific handling principles

Discussion Question

1. What are some non-invasive ways to calm an animal in need of technical rescue?
2. What PPE does your agency use during animal technical rescue?
3. How could you contain an animal in need of technical rescue?
4. What are some behavioral indicators that an animal is in distress and may become a hazard to the rescuer?

Application

1. Determined by instructor

Instructor Notes

1. For any objective that includes "Determined by AHJ", teach the content specific to the AHJ hosting the course but note that other jurisdictions may have different requirements.

CTS Guide Reference: CTS 2-1

Topic 2-4: Rescuer Safety and Approach

Terminal Learning Objective

At the end of this topic a student, given a representative animal, will be able to safely approach an animal in need of technical rescue so that the incident is managed, risks to rescuers are minimized, and risks to the animal are minimized.

Enabling Learning Objectives

1. Describe general considerations for approach
 - Scene arrival (minimize stress to animal)
 - Mechanism of incident
 - Hazards to rescuer and animal
 - Animal position (standing vs. recumbent)
 - Animal disposition
2. Describe how to approach an animal in need of technical rescue
 - Approach a standing animal from its left side shoulder (when possible)
 - Approach a recumbent animal from the side opposite its legs
 - Avoid kick zones
 - Maintain visual, verbal, or physical contact with animal
 - Approach slowly and quietly
 - When kneeling, stay on one foot and one knee (avoid two knees)

Discussion Question

1. How can you minimize stress to the animal while arriving and operating at an incident?
2. How can animal defense systems put rescuers at risk?
3. How do you prioritize rescuer safety around a distressed animal?

Application

1. Determined by instructor

Instructor Notes: None

CTS Guide Reference: None

Unit 3: Scene Management

Topic 3-1: Common Animal Technical Rescue Incidents

Terminal Learning Objective

At the end of this topic a student, given historical and AHJ incident data, will be able to describe common types of animal technical rescue incidents so that incidents are managed and risks to rescuers and the animal are minimized.

Enabling Learning Objectives

1. Describe common types of animal technical rescue incidents
 - Stranded animal able to self-extricate
 - Stranded or entangled animal
 - Anesthetized or recumbent animal
 - Animal trapped in soil, mud, water, or ice
 - Animal involved in a transport incident
2. Describe what it means to self-extricate a stranded animal
 - Criteria for self-extrication
 - Physical and mental condition of animal
 - Animal history and capacity (if known)
 - Ability to stabilize footing
 - Ability to eliminate and/or control hazards and obstacles
 - Ability to contain animal after extrication
3. Describe what it means to assist with movement/extrication for a stranded or entangled animal
 - Removing an object from an animal
 - Best progression for removal
 - Appropriate equipment and tools for spreading, cutting, or dismantling
 - Potential barriers for animal and rescuers
 - Removing an animal from an object
 - Appropriate equipment for extrication
 - Scenario will transition to self-extrication or rescuing a recumbent or anesthetized animal
4. Describe what it means to extricate a recumbent or anesthetized animal
 - Animals can still move and create risk
 - Animal considerations escalate (circulation, breathing, muscle damage, etc.)
 - Resource needs increase
 - Larger workspace needed for animal recovery
5. Describe what it means to extricate an animal trapped in soil, mud, water, or ice
 - Types of conditions
 - Mud
 - Standing water
 - Moving water
 - Pools

- Ice/cold
- Rescuer safety and approach carry more risk
- Environmental impact on rescuer and animals
 - Temperature
 - Wind
 - Contaminates in water
- Resource needs increase
 - Need to break suction on animal's legs
 - Specialty water rescue resources
 - Personnel
 - Equipment (flotation, breaking suction, etc.)
- May be more difficult to position and apply equipment
- May increase decontamination needs
- 6. Describe what it means to extricate an animal from a transport accident
 - Types of transport vehicles common to the AHJ
 - Animal hauler vehicle anatomy
 - Vehicle hazards to animal and rescuers
 - Multiple animals may be involved
 - Animal entrapment
 - Restricted space considerations
 - Animal containment needs
 - Scene safety (traffic, hazardous materials, etc.)
 - Resource needs increase
 - Specialty vehicle extrication resources
 - Personnel
 - Equipment
- 7. Describe how rescuers can support animal technical rescue incidents
 - Staffing placement
 - Operational zones
 - Safe sheltering
 - Safe routes for animal and rescuers
 - Equipment and staffing resources

Discussion Question

1. How will your rescue efforts change if a person is trapped by an animal in need of technical rescue?
2. What resources are available in your AHJ to deal with righting a transport vehicle to assist with an animal technical rescue?
3. What other types of rescue incidents have you encountered and how were they resolved?

Application

1. Students will practice these rescue scenarios on the drill ground and perform each scenario once for evaluation.

Instructor Notes: None

CTS Guide Reference: None

Draft

Topic 3-2: Sizing Up an Animal Technical Rescue Incident

Terminal Learning Objective

At the end of this topic, a student given background information and applicable reference materials, will be able to size up an animal technical rescue incident so that the scope of the rescue is determined, the number of animals is identified, the last reported location of all animals 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.

Enabling Learning Objectives

1. Identify size-up considerations
 - Potential human victims
 - Type of animal(s)
 - Number of animals
 - Specific problem to address
 - Agencies having jurisdiction
 - Environment
 - Access and egress
 - Weather
 - Terrain
 - Time of day
 - Threat/hazard assessment
 - Triage
 - Determine rescue vs. recovery
 - Body recovery
 - Determined by AHJ
 - Drug residue in bodies
 - Assess injury severity
 - Determine animal care and rescue priorities
 - Align with resource capabilities
 - Use AHJ protocols and triage tags/markers
 - Resource needs
 - Personnel
 - Equipment (including mechanized)
 - Workspaces
 - Chance for secondary disaster
 - Transfer of care
2. Describe risk/benefit analysis methods and practices
3. Describe types of reference materials and their uses
 - AHJ standard operating procedures
4. Describe availability and capability of the resources
 - Types of resources
 - Personnel
 - Animal handler

- Animal control
- Public Information Officer
- Veterinarian (could have associated costs)
- Law enforcement
- Equipment
 - Containment
 - Transport
 - Technical rescue
 - Specialized equipment (could have associated costs)
- Process
 - Identify need
 - Request resources
 - Secure scene and render safe until additional resources arrive
 - Incorporate awareness-level personnel into operational plan
 - Traffic/perimeter control
 - Tool cache
 - Runners
 - Haul team
 - Communications (with animal owner, others)
 - Radio/operations relay
 - General scene support
- Operational protocols
- Planning forms
- 5. Describe elements of an incident action plan and related information
- 6. Describe relationship of size up to the incident management system
- 7. Describe information gathering techniques and how that information is used in the size-up process
- 8. Describe basic search criteria for animal technical rescue incidents
- 9. Read technical rescue reference material
- 10. Gather information
- 11. Use interview techniques
- 12. Relay information
- 13. Use information-gathering sources

Discussion Question

1. What additional factors should be considered as part of size up?
2. What additional resources would you need if you were dealing with a herd of animals?
3. If an animal owner is not present,
 - Who is responsible for animal welfare and associated costs on scene?
 - Who has the authority to euthanize the animal?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 1-1, CTS 1-3, CTS 1-4, CTS 2-3

Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures

Terminal Learning Objective

At the end of this topic a student, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, will be able to recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and animals are minimized; and rescue time constraints are considered.

Enabling Learning Objectives

1. Describe types and nature of incident hazards
 - Traffic
 - Terrain
 - Utilities
 - Weather
 - Hazardous materials
 - Zoonotic diseases
 - Transport vehicle hazards
 - Others
2. Describe how to mitigate on-scene hazards by:
 - Recognizing hazards
 - Identifying rescuer, animal, and bystander risks
 - Identifying necessary resources
 - Availability
 - Capabilities
 - Limitations
 - Cost
 - Consulting appropriate technical references
 - Selecting and using appropriate mitigation tools and equipment
 - Addressing operational requirement concerns
 - Conducting isolation procedures
 - Controlling access to the scene

Discussion Question

1. How can you provide adequate scene control to protect bystanders and the animal in need of technical rescue?
2. What is an acceptable level of residual risk after mitigation efforts? Who makes that determination?
3. What types of hazards have you encountered on rescue incidents? How would those impact an animal technical rescue?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 1-2

Draft

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to deliver the course.

Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master to complete the TLO.

Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Skill Sheet

The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.



Animal Technical Rescue Technician (2021)

Course Plan

Course Details

- Description:** This course provides the knowledge and skills to prepare an emergency responder to extricate animals in a safe and effective manner in accordance with AHJ policies and procedures. Topics include animal anatomy, physiology, handling, behavior, and safety; incident types; size up; hazards; planning scene management; animal manipulation and movement; rescue operations; animal care and decontamination; and incident termination. This course incorporates awareness, operations, and technician training based on NFPA 1006 (2021).
- Designed For:** Fire fighters with three years' full-time or six years' part-time/volunteer experience and any emergency personnel who perform animal technical rescue.
- Prerequisites:** Rope Rescue Technician (SFT)
IS-100, IS-200, IS-700, and IS-800 (FEMA)
- Standard:** Attend and participate in all course sections
Successful completion of all skills identified on the Training Record
- Hours:** 24 hours
(8 lecture / 16 application)
- Max Class Size:** 24
- Instructor Level:** SFT Registered Animal Technical Rescue Technician Instructor
- Instructor/Student Ratio:** 1:24 (lecture)
1:8 (skills/teaching demonstrations)
- Restrictions:** All instructors counted toward student ratios, including application components, must be SFT Registered Animal Technical Rescue Technician Instructors.
- SFT Designation:** FSTEP

Table of Contents

Course Details	1
Table of Contents	2
Required Resources	4
Instructor Resources	4
Online Instructor Resources	4
Student Resources	4
Facilities, Equipment, and Personnel.....	4
Time Table.....	9
Time Table Key.....	10
Unit 1: Introduction	11
Topic 1-1: Orientation and Administration.....	11
Unit 2: Working with Animals.....	12
Topic 2-1: Introduction to Animal Technical Rescue	12
Topic 2-2: Animal Anatomy and Physiology	13
Topic 2-3: Animal Handling and Behavior Principles.....	14
Topic 2-4: Rescuer Safety and Approach.....	15
Topic 2-5: Interacting with a Person on Scene Experiencing a Crisis	16
Unit 3: Scene Management	17
Topic 3-1: Common Animal Technical Rescue Incidents	17
Topic 3-2: Sizing Up an Animal Technical Rescue Incident.....	20
Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures.....	22
Topic 3-4: Developing an Animal Technical Rescue Plan.....	24
Unit 4: Animal Manipulation and Movement.....	25
Topic 4-1: Constructing Improvised Restraint Devices.....	25
Topic 4-2: Animal Manipulation and Movement.....	27
Topic 4-3: Animal Packaging and Immobilization	29
Unit 5: Operations.....	31
Topic 5-1: Constructing a Rope Mechanical Advantage System	31
Topic 5-2: Conducting Low-Angle Operations	33
Topic 5-3: Conducting High-Angle Operations	34
Topic 5-4: Conducting Helicopter Operations	36
Topic 5-5: Conducting Trailer Operations.....	38
Unit 6: Incident Termination.....	39
Topic 6-1: Animal Care and Decontamination.....	39
Topic 6-2: Terminating an Incident.....	40
Topic 6-3: Maintaining Rescue Equipment.....	41
Drill Ground Activities and Evolutions	42

How to Read a Course Plan..... 43

Draft

Required Resources

Instructor Resources

To teach this course, instructors need:

- NFPA 1006: Standard for Technical Rescue Personnel (2021) (physical or digital access to current edition)
- Full personal protective equipment per AHJ requirements (including hand, head, and eye protection)

Recommended resources:

- *Technical Large Animal Emergency Rescue* (Gimenez, Gimenez, and May, 2008, 1st edition, Wiley-Blackwell, ISBN: 978-0813819983)
- British Animal Rescue and Trauma Care Association ([BARTA](#))
- [The Horse Portal](#) (University of Guelph)
- Large Animal Sedation & Anesthesia Field Guide ([Loops Rescue](#))

Online Instructor Resources

The following instructor resources are available online at

<https://osfm.fire.ca.gov/divisions/state-fire-training/fstep-curriculum/>

- None

Student Resources

To participate in this course, students need:

- Full personal protective equipment per AHJ requirements (including hand, head, and eye protection)

Facilities, Equipment, and Personnel

Facilities

The following facilities are required to deliver this course:

- Standard learning environment or facility, which may include:
 - Writing board or paper easel chart
 - Markers, erasers
 - Amplification devices
 - Projector and screen
 - Laptop or tablet with presentation or other viewing software
 - Internet access with appropriate broadband capabilities
- An Animal Technical Rescue Technician training site with the NFPA 1006 required facilities, structures, work areas, materials, props, tools, and equipment of adequate size, type, and quantity to fully and safely support the cognitive and psychomotor training required to deliver the curriculum

Equipment

Student safety is of paramount importance when conducting the type of high-risk training associated with this Animal Technical Rescue Technician (2021) course.

- The equipment listed below is the minimum for the delivery of this course.
- The student is responsible for providing all PPE and ensuring that all PPE meets AHJ and site requirements.
- For all tools and equipment, ensure that you have the power source, operating supplies (blades, fuel, etc.), cleaning supplies, and appropriate PPE.

The following equipment is required to deliver this course:

Quantity Per 8-person Squad	Equipment
Self-Extrication	
Determined by scenario	Rescue straps
Determined by scenario	Rescue strap application tool (J-hook, shepherds crook, pike pole, etc.)
Determined by scenario	Improvised/commercial halters (must have at least one of the following) <ul style="list-style-type: none"> • Webbing, 1" minimum, various lengths • Cordage, various lengths
Determined by scenario	Rope*, various lengths
1	Flex guide (i.e., Connell flex guide)
1	Representative animal (live or manikin)
Stranded/Impaled	
1	Rescue straps
1	Rescue strap application tool (J-hook, shepherds crook, pike pole, etc.)
1	Improvised/commercial halters (must have at least one of the following) <ul style="list-style-type: none"> • Webbing, 1" minimum, various lengths • Cordage, various lengths
1	Head padding (recovery hood, life vest, etc.)
Determined by scenario	Rope*, various lengths
Determined by scenario	Fire hose, single jacket, 1½", 50' minimum
1	Rescue glide
2	HDP (high-density plastic) slip sheets
1	Flex guide (i.e., Connell flex guide)
1	Cargo netting, 6'x8'x6" (military-spec)
Determined by scenario	Animal first aid supplies (i.e., bandages)
1	Haul rope cache**

Determined by scenario	Hobbles, front and rear
1	Representative animal (live or manikin)
Recumbent/Anesthetized	
1	Rescue straps
1	Rescue strap application tool (J-hook, shepherds crook, pike pole, etc.)
1	Improvised/commercial halters (must have at least one of the following) <ul style="list-style-type: none"> • Webbing, 1" minimum, various lengths • Cordage, various lengths
1	Head padding (recovery hood, life vest, etc.)
Determined by scenario	Rope*, various lengths
Determined by scenario	Fire hose, single jacket, 1½", 50' minimum
1	Rescue glide
2	HDP (high-density plastic) slip sheets
1	Flex guide (i.e., Connell flex guide)
1	Cargo netting, 6'x8'x6" (military-spec)
Determined by scenario	Animal first aid supplies (i.e., bandages)
1	Haul rope cache**
Determined by scenario	Hobbles, front and rear
1	A-frame (improvised or commercial)
2	Slings (one improvised and one commercial) <ul style="list-style-type: none"> • Anderson Sling, or • Two-strap sling system (Becker), or • Large animal lift (LAL)
1	Ladder, folding or other
1	Representative animal (live or manikin)
Mud/Water (May be simulated in dry environment)	
1	Rescue straps
1	Rescue strap application tool (J-hook, shepherds crook, pike pole, etc.)
1	Improvised/commercial halters (must have at least one of the following) <ul style="list-style-type: none"> • Webbing, 1" minimum, various lengths • Cordage, various lengths
1	Head padding (recovery hood, life vest, etc.)
Determined by scenario	Rope*, various lengths
Determined by scenario	Fire hose, single jacket, 1½", 50' minimum
1	Rescue glide

2	HDP (high-density plastic) slip sheets
1	Flex guide (i.e., Connell flex guide)
1	Cargo netting, 6'x8'x6" (military-spec)
Determined by scenario	Animal first aid supplies (i.e., bandages)
1	Haul rope cache**
Determined by scenario	Hobbles, front and rear
1	A-frame (improvised or commercial)
2	Slings (one improvised and one commercial) <ul style="list-style-type: none"> • Anderson Sling, or • Two-strap sling system (Becker), or • Large animal lift (LAL)
1	Ladder, folding or other
1	Representative animal (live or manikin)
Transport Accident	
1	Rescue straps
1	Rescue strap application tool (J-hook, shepherds crook, pike pole, etc.)
1	Improvised/commercial halters (must have at least one of the following) <ul style="list-style-type: none"> • Webbing, 1" minimum, various lengths • Cordage, various lengths
1	Head padding (recovery hood, life vest, etc.)
Determined by scenario	Rope*, various lengths
Determined by scenario	Fire hose, single jacket, 1½", 50' minimum
1	Rescue glide
2	HDP (high-density plastic) slip sheets
1	Flex guide (i.e., Connell flex guide)
1	Cargo netting, 6'x8'x6" (military-spec)
Determined by scenario	Animal first aid supplies (i.e., bandages)
1	Haul rope cache**
Determined by scenario	Hobbles, front and rear
1	Remote carabiner application device
Determined by scenario	Cribbing (size dependent on load)
1	Ladder, folding or other
Determined by scenario	Edge pads for trailer rescues
Determined by scenario	Chains or additional webbing for trailer accidents (optional)
Determined by scenario	Mechanical winch (Capstan) (optional)
Determined by scenario	Wire rope haul device (GripHoist®) (optional)
1	Animal trailer (or equivalent prop)

1	Representative animal (live or manikin)
**Haul Rope Cache	
4	Webbing to cradle animal (tow straps, etc. - minimum width based on animal used)
1	Spreader bar
12	Carabiner (general use)
2	Static kernmantle (general use, w/ rope bag, long enough to complete operation)
6	2" pulleys (prusik minding)
2	Anchor strap
As needed	Edge pad
1	Collection plate
6	Prusik loops (short, 8 mm)
6	Prusik loops (long, 8 mm)
1	Gear bag
2	Descent control device (rigger rack recommended)
Consumables	
Determined by scenario	Determined by scenario and AHJ requirements
Personnel	
1	Veterinarian or animal control professional

** Any rescue equipment (hardware and software) used during a large animal technical rescue can never again be used for a human rescue. General use hardware and software that exceeds life safety requirements can continue to be used for non-life safety purposes.*

The provider or agency assumes all responsibility, liability, and maintenance for the engineering design, strength, stability, and adequacy of all props. The provider or agency further assumes all responsibility, liability, and maintenance for all tools, equipment, and supplies used at the site for the delivery of an Animal Technical Rescue Technician class.

Personnel

The following personnel are required to deliver this course:

- Any instructor counted toward student ratios must be an SFT Registered Animal Technical Rescue Technician (2021) Instructor.

Time Table

Segment	Lecture	Application	Unit Total
Unit 1: Introduction			
Topic 1-1: Orientation and Administration	0.5	0.0	
Unit 1 Totals	0.5	0.0	0.5
Unit 2: Working with Animals			
Topic 2-1: Introduction to Animal Technical Rescue	0.5	0.0	
Topic 2-2: Animal Anatomy and Physiology	0.5	0.0	
Topic 2-3: Animal Handling and Behavior Principles	0.5	0.0	
Topic 2-4: Rescuer Safety and Approach	0.25	0.0	
Topic 2-5: Interacting with a Person on Scene Experiencing a Crisis	0.25	0.25	
Unit 2 Totals	2.0	0.25	2.25
Unit 3: Scene Management			
Topic 3-1: Common Animal Technical Rescue Incidents	0.25	0.0	
Topic 3-2: Sizing Up an Animal Technical Rescue Incident	0.5	0.25	
Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures	0.5	0.25	
Topic 3-4: Developing an Animal Technical Rescue Plan	0.25	0.25	
Unit 3 Totals	1.5	0.75	2.25
Unit 4: Animal Manipulation and Movement			
Topic 4-1: Constructing Improvised Restraint Devices	0.5	1.0	
Topic 4-2: Animal Manipulation and Movement	0.5	1.0	
Topic 4-3: Animal Packaging and Immobilization	0.5	1.0	
Unit 4 Totals	1.5	3.0	4.5
Unit 5: Operations			
Topic 5-1: Constructing a Rope Mechanical Advantage System	0.5	2.0	
Topic 5-2: Conducting Low-Angle Operations	0.5	2.0	
Topic 5-3: Conducting High-Angle Operations	0.5	3.0	
Topic 5-4: Conducting Helicopter Operations	0.5	2.5	
Topic 5-5: Conducting Trailer Operations	0.5	2.0	
Unit 5 Totals	2.5	11.5	14.0
Unit 6: Incident Termination			
Topic 6-1: Animal Care and Decontamination	0.25	0.25	
Topic 6-2: Terminating an Incident	0.25	0.25	
Topic 6-3: Maintaining Rescue Equipment	0.25	0.0	
Unit 6 Totals	0.75	0.5	1.25
Formative Assessments			

Segment	Lecture	Application	Unit Total
Determined by AHJ or educational institution	0.0	0.0	0.0
Summative Assessment			
Determined by AHJ or educational institution	0.0	0.0	0.0
Course Totals	8.0	16.0	24.0

Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.
5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, skills exercises, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Smoking locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus
 - Course objectives
 - Calendar of events
 - Course requirements
 - Student evaluation process
 - Assignments
 - Activities
 - Required student resources
 - Class participation requirements

Discussion Questions

1. Determined by instructor

Application

1. Have students complete all required registration forms.

Unit 2: Working with Animals

Topic 2-1: Introduction to Animal Technical Rescue

Terminal Learning Objective

At the end of this topic a student, given definitions and AHJ data, will be able to describe animal technical rescue.

Enabling Learning Objectives

1. Define animal technical rescue
 - Rescuing of an animal requiring technical skills, not to be confused with “animal rescue” which typically refers to abuse or neglect (NFPA 2500)
 - To extricate or manipulate an animal from a location that is dangerous to a place of safety by the most humane method with regard to the safety of all involved
2. Describe the purpose of animal technical rescue
3. Identify transferable technical rescue skills and how they can complement animal technical rescue efforts
4. Identify types of animal technical rescue incidents common to the AHJ

Discussion Question

1. What types of animals are common in, or unique to, your AHJ?
2. What types of animal technical rescue incidents are common in your AHJ?
3. What technical rescue skills do you already have that could be applied to animal technical rescue?

Application

1. Determined by instructor

Instructor Notes

1. None

CTS Guide Reference: None

Topic 2-2: Animal Anatomy and Physiology

Terminal Learning Objective

At the end of this topic a student, given animal anatomy and physiology information, will be able to identify vulnerable areas and systems of the animal skeletal structure so that anatomical features and purchase points can be used for equipment placement, extrication, and lifting to assist with moving an animal in need of technical rescue.

Enabling Learning Objectives

1. Identify animals common to the AHJ
 - Small (generally less than 300 lbs.)
 - Large (generally over 300 lbs.)
2. Identify the skeletal structure of an animal
 - Front leg system
 - Hind leg system
 - Equipment access and locations
3. Describe physiological systems of an animal
 - Circulatory system and vascular areas
 - Respiratory system
 - Nervous system
4. Describe how to monitor animal condition throughout a rescue
 - Physical, auditory, visible signs, vital signs, position of patient
 - Identify rescue timeframe (“golden hour”)
 - Determine viability and potential need to euthanize
 - Heartbeat
 - Brain stem response (corneal reflex test)

Discussion Question

1. How would you determine normal or baseline vital signs for an animal in need of technical rescue?
2. What is anatomically unique about a horse’s hind leg that will impact rescue efforts?
3. What are some other members of the equine family impacted by the “golden hour”?

Application

1. Determined by instructor

Instructor Notes

1. While animal technical rescue applies to many types of animals, this course predominantly focuses on horses.

CTS Guide Reference: None

Topic 2-3: Animal Handling and Behavior Principles

Terminal Learning Objective

At the end of this topic a student, given a representative animal, will be able to recognize basic animal handling and behavior principles so that the incident is managed, risks to rescuers are minimized, and risks to the animal are minimized.

Enabling Learning Objectives

1. Describe, select, and use hazard-specific PPE
 - Determined by AHJ
2. Describe the fight/flight animal behavior principle
3. Identify an animal's natural defensive behaviors
 - Biting
 - Kicking
 - Scratching
 - Trampling
 - Goring
 - Spitting
4. Identify species-specific behavioral cues
5. Describe species-specific containment methods and devices
 - Animal handling skills
 - Physical restraints
 - Chemical restraints
 - Sedation vs. anesthesia
6. Describe how to apply species-specific handling principles

Discussion Question

1. What are some non-invasive ways to calm an animal in need of technical rescue?
2. What PPE does your agency use during animal technical rescue?
3. How could you contain an animal in need of technical rescue?
4. What are some behavioral indicators that an animal is in distress and may become a hazard to the rescuer?

Application

1. Determined by instructor

Instructor Notes

1. For any objective that includes "Determined by AHJ", teach the content specific to the AHJ hosting the course but note that other jurisdictions may have different requirements.

CTS Guide Reference: CTS 2-1

Topic 2-4: Rescuer Safety and Approach

Terminal Learning Objective

At the end of this topic a student, given a representative animal, will be able to safely approach an animal in need of technical rescue so that the incident is managed, risks to rescuers are minimized, and risks to the animal are minimized.

Enabling Learning Objectives

1. Describe general considerations for approach
 - Scene arrival (minimize stress to animal)
 - Mechanism of incident
 - Hazards to rescuer and animal
 - Animal position (standing vs. recumbent)
 - Animal disposition
2. Describe how to approach an animal in need of technical rescue
 - Approach a standing animal from its left side shoulder (when possible)
 - Approach a recumbent animal from the side opposite its legs
 - Avoid kick zones
 - Maintain visual, verbal, or physical contact with animal
 - Approach slowly and quietly
 - When kneeling, stay on one foot and one knee (avoid two knees)

Discussion Question

1. How can you minimize stress to the animal while arriving and operating at an incident?
2. How can animal defense systems put rescuers at risk?
3. How do you prioritize rescuer safety around a distressed animal?

Application

1. Determined by instructor

Instructor Notes: None

CTS Guide Reference: None

Topic 2-5: Interacting with a Person on Scene Experiencing a Crisis

Terminal Learning Objective

At the end of this topic a student, given an animal emergency situation consistent with the mission of the agency, the policies and procedures of the organization, and a person in a crisis scenario, will be able to interact with a person on scene who is in an emotional or psychological crisis so that the condition is recognized and communicated to the team, the rescuer is prevented from harm, and the rescuer's actions do not escalate the incident.

Enabling Learning Objectives

1. Identify individuals who might be experiencing an emotional or psychological crisis at an animal technical rescue incident
 - Animal owner
 - Bystander
 - Animal control/local government
 - Veterinarian
 - Other
2. Describe indicators of a person in emotional crisis
3. Describe typical triggers that can cause individuals to become agitated or anxious
4. Describe methods of interacting to prevent harm to the rescuer and the person in crisis
5. Describe best practices to de-escalate incidents involving persons in crisis
6. Employ methods of approach that minimize risk to the rescuer from persons whose psychological or emotional state is unknown
7. Use interview techniques that provide insight to the motives and state of mind of the person in crisis
8. Communicate and interact with the person in crisis in a manner that does not escalate the incident

Discussion Question

1. Who on scene might be experiencing an emotional or psychological crisis?
2. What are some positive ways to redirect or use those individuals to support the rescue?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 2-13

Unit 3: Scene Management

Topic 3-1: Common Animal Technical Rescue Incidents

Terminal Learning Objective

At the end of this topic a student, given historical and AHJ incident data, will be able to describe common types of animal technical rescue incidents so that incidents are managed and risks to rescuers and the animal are minimized.

Enabling Learning Objectives

1. Describe common types of animal technical rescue incidents
 - Stranded animal able to self-extricate
 - Stranded or entangled animal
 - Anesthetized or recumbent animal
 - Animal trapped in soil, mud, water, or ice
 - Animal involved in a transport incident
2. Describe what it means to self-extricate a stranded animal
 - Criteria for self-extrication
 - Physical and mental condition of animal
 - Animal history and capacity (if known)
 - Ability to stabilize footing
 - Ability to eliminate and/or control hazards and obstacles
 - Ability to contain animal after extrication
3. Describe what it means to assist with movement/extrication for a stranded or entangled animal
 - Removing an object from an animal
 - Best progression for removal
 - Appropriate equipment and tools for spreading, cutting, or dismantling
 - Potential barriers for animal and rescuers
 - Removing an animal from an object
 - Appropriate equipment for extrication
 - Scenario will transition to self-extrication or rescuing a recumbent or anesthetized animal
4. Describe what it means to extricate a recumbent or anesthetized animal
 - Animals can still move and create risk
 - Animal considerations escalate (circulation, breathing, muscle damage, etc.)
 - Resource needs increase
 - Larger workspace needed for animal recovery
5. Describe what it means to extricate an animal trapped in soil, mud, water, or ice
 - Types of conditions
 - Mud
 - Standing water
 - Moving water
 - Pools

- Ice/cold
- Rescuer safety and approach carry more risk
- Environmental impact on rescuer and animals
 - Temperature
 - Wind
 - Contaminates in water
- Resource needs increase
 - Need to break suction on animal's legs
 - Specialty water rescue resources
 - Personnel
 - Equipment (flotation, breaking suction, etc.)
- May be more difficult to position and apply equipment
- May increase decontamination needs
- 6. Describe what it means to extricate an animal from a transport accident
 - Types of transport vehicles common to the AHJ
 - Animal hauler vehicle anatomy
 - Vehicle hazards to animal and rescuers
 - Multiple animals may be involved
 - Animal entrapment
 - Restricted space considerations
 - Animal containment needs
 - Scene safety (traffic, hazardous materials, etc.)
 - Resource needs increase
 - Specialty vehicle extrication resources
 - Personnel
 - Equipment
- 7. Describe how rescuers can support animal technical rescue incidents
 - Staffing placement
 - Operational zones
 - Safe sheltering
 - Safe routes for animal and rescuers
 - Equipment and staffing resources

Discussion Question

1. How will your rescue efforts change if a person is trapped by an animal in need of technical rescue?
2. What resources are available in your AHJ to deal with righting a transport vehicle to assist with an animal technical rescue?
3. What other types of rescue incidents have you encountered and how were they resolved?

Application

1. Students will practice these rescue scenarios on the drill ground and perform each scenario once for evaluation.

Instructor Notes: None

CTS Guide Reference: None

Draft

Topic 3-2: Sizing Up an Animal Technical Rescue Incident

Terminal Learning Objective

At the end of this topic, a student given background information and applicable reference materials, will be able to size up an animal technical rescue incident so that the scope of the rescue is determined, the number of animals is identified, the last reported location of all animals 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.

Enabling Learning Objectives

1. Identify size-up considerations
 - Potential human victims
 - Type of animal(s)
 - Number of animals
 - Specific problem to address
 - Agencies having jurisdiction
 - Environment
 - Access and egress
 - Weather
 - Terrain
 - Time of day
 - Threat/hazard assessment
 - Triage
 - Determine rescue vs. recovery
 - Body recovery
 - Determined by AHJ
 - Drug residue in bodies
 - Assess injury severity
 - Determine animal care and rescue priorities
 - Align with resource capabilities
 - Use AHJ protocols and triage tags/markers
 - Resource needs
 - Personnel
 - Equipment (including mechanized)
 - Workspaces
 - Chance for secondary disaster
 - Transfer of care
2. Describe risk/benefit analysis methods and practices
3. Describe types of reference materials and their uses
 - AHJ standard operating procedures
4. Describe availability and capability of the resources
 - Types of resources
 - Personnel
 - Animal handler

- Animal control
- Public Information Officer
- Veterinarian (could have associated costs)
- Law enforcement
- Equipment
 - Containment
 - Transport
 - Technical rescue
 - Specialized equipment (could have associated costs)
- Process
 - Identify need
 - Request resources
 - Secure scene and render safe until additional resources arrive
 - Incorporate awareness-level personnel into operational plan
 - Traffic/perimeter control
 - Tool cache
 - Runners
 - Haul team
 - Communications (with animal owner, others)
 - Radio/operations relay
 - General scene support
- Operational protocols
- Planning forms
- 5. Describe elements of an incident action plan and related information
- 6. Describe relationship of size up to the incident management system
- 7. Describe information gathering techniques and how that information is used in the size-up process
- 8. Describe basic search criteria for animal technical rescue incidents
- 9. Read technical rescue reference material
- 10. Gather information
- 11. Use interview techniques
- 12. Relay information
- 13. Use information-gathering sources

Discussion Question

1. What additional factors should be considered as part of size up?
2. What additional resources would you need if you were dealing with a herd of animals?
3. If an animal owner is not present,
 - Who is responsible for animal welfare and associated costs on scene?
 - Who has the authority to euthanize the animal?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 1-1, CTS 1-3, CTS 1-4, CTS 2-3

Topic 3-3: Recognizing Incident Hazards and Initiating Isolation Procedures

Terminal Learning Objective

At the end of this topic a student, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, will be able to recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and animals are minimized; and rescue time constraints are considered.

Enabling Learning Objectives

1. Describe types and nature of incident hazards
 - Traffic
 - Terrain
 - Utilities
 - Weather
 - Hazardous materials
 - Zoonotic diseases
 - Transport vehicle hazards
 - Others
2. Describe how to mitigate on-scene hazards by:
 - Recognizing hazards
 - Identifying rescuer, animal, and bystander risks
 - Identifying necessary resources
 - Availability
 - Capabilities
 - Limitations
 - Cost
 - Consulting appropriate technical references
 - Selecting and using appropriate mitigation tools and equipment
 - Addressing operational requirement concerns
 - Conducting isolation procedures
 - Controlling access to the scene

Discussion Question

1. How can you provide adequate scene control to protect bystanders and the animal in need of technical rescue?
2. What is an acceptable level of residual risk after mitigation efforts? Who makes that determination?
3. What types of hazards have you encountered on rescue incidents? How would those impact an animal technical rescue?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 1-2

Draft

Topic 3-4: Developing an Animal Technical Rescue Plan

Terminal Learning Objective

At the end of this topic a student, given an incident, agency guidelines, and planning forms, will be able to develop a plan for an animal technical rescue incident so that size up is conducted and continued throughout the incident; a standard approach is used during training and operational scenarios; hazards are identified; isolation methods and scene security measures are considered; animal stabilization needs are evaluated; and resource needs, including veterinary personnel, are identified.

Enabling Learning Objectives

1. Describe common types of animal technical rescue incidents
 - Stranded animal able to self-extricate
 - Stranded or entangled animal
 - Anesthetized or recumbent animal
 - Animal trapped in soil, mud, water, or ice
 - Animal involved in a transport incident
2. Identify components included in an animal technical rescue plan
 - Size up information
 - Hazard assessment
 - Risk/benefit analysis
 - Animal approach and manipulation
 - Animal packaging and immobilization
 - Operations (low angle, high angle, helicopter)
 - Operational protocols
 - Resources (personnel and tools/equipment)
 - Timeframes
 - Termination
3. Describe, select, and use appropriate planning forms

Discussion Question

1. How do potential rescue costs impact the planning process?
2. What factors impact operational decisions during the planning process?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 2-9, CTS 2-10

Unit 4: Animal Manipulation and Movement

Topic 4-1: Constructing Improvised Restraint Devices

Terminal Learning Objective

At the end of this topic a student, given available rope, webbing, or accessory cord, will be able to construct an improvised restraint device so that the device includes a long enough standing end to ensure rescuer control and the representative animal is able to be maneuvered to a safe area.

Enabling Learning Objectives

1. Describe, select, and use hazard-specific PPE
 - Determined by AHJ
2. Describe how to apply knots
 - Hitches and bights
 - Quick release
 - Leashes and muzzles
3. Describe animal halter pressure principles
 - Place pressure behind ears
 - Don't restrict nose (horse)
 - Avoid positioning knots between animal and a hard surface
4. Describe how to select rope or webbing material
 - Determined by animal and incident
 - Anything used on a load that exceeds 600 lbs. can't be used as "life safety" for a human in the future
5. Describe device positioning techniques on animals
 - Small animals
 - Large animals
6. Describe access points, equipment placement, and proper pulling techniques for a horse tail tie
 - Tail tie knot required
 - Steady pull
 - Angle of pull
 - Maximum force restrictions
7. Tie knots
8. Construct and rig animal halters
9. Evaluate correct placement

Discussion Question

1. What PPE would you use to work with:
 - A small animal (cat or dog)?
 - A large animal (horse or llama)?
2. Why must life safety line go out of service if it's used for a load that exceeds 600 lbs.?
3. When is it appropriate to use a tail tie method on a horse?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 2-4

Draft

Topic 4-2: Animal Manipulation and Movement

Terminal Learning Objective

At the end of this topic a student, given webbing, rescue/lifting strap, J-hook, lunge whip, flex guide, rope, and a full-size manikin or live animal, will be able to apply equipment and perform basic animal manipulation operations so that incidents are managed and risks to rescuers and the animal are minimized.

Enabling Learning Objectives

1. Describe the purpose of animal manipulation
 - Potentially extends rescue timeframe for animal
 - Prepare animal for movement
 - Forward
 - Backward
 - Sideways
 - Up
 - Down
2. Describe how to use animal manipulation tools and equipment
 - Webbing or strap
 - Girth hitch/lark's foot
 - Improvised sling
 - Forward/rear assist
 - J-hook or flex guide
 - Assists with equipment placement from a distance
 - Manipulate under a downed animal
 - Move animal's feet
 - Sling
 - Vertical lift
 - Commercial sling
 - Improvised sling (fire hose, tow straps, webbing, etc.)
 - Reach/grab tool
 - Assists with equipment placement from a distance
 - Keeps rescuer out of animal danger zone
 - Rope and associated hardware
 - Movement and packaging
 - Physical restraint
 - Hobbles
 - Restricting foot movement
 - Vertical lift (upside-down)
3. Describe proper approach and positioning
 - Rescuer safety
 - Approach a standing animal from its left side shoulder (when possible)
 - Approach a recumbent animal from the side opposite its legs
 - Avoid kick, bite, and scratch zones
 - Maintain visual, verbal, or physical contact with animal

- Approach slowly and quietly
- When kneeling, stay on one foot and one knee (avoid two knees)
- Animal position
 - Standing
 - Recumbent
 - Trapped (limited access)
- Animal safety
 - Secure and pad head
 - Protect eyes from debris
 - Extend head and neck to facilitate breathing
 - Pull down front leg (groundside leg) forward
 - Reduce friction on skeletal features
- 4. Describe how animal access points impact movement options
 - Standing animal
 - Recumbent animal
 - Sternal
 - Side
 - Back
 - Trapped animal
- 5. Describe how and where to place manipulation equipment
 - Support axial skeleton
 - Utilize natural body contours
- 6. Describe proper pulling techniques for:
 - Rolls
 - Sternal rolls
 - Side drags (animal on side)
 - Front drag/forward assist
 - Rear drag/rear assist
 - Lifts

Discussion Question

1. What common engine-based tools and equipment can be used to manipulate animals in need of technical rescue?
2. How might manipulation equipment and/or methods differ when working with large vs. small animals?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: None

Topic 4-3: Animal Packaging and Immobilization

Terminal Learning Objective

At the end of this topic a student, given a representative animal, animal packaging tools and equipment, and AHJ policies and procedures, will be able to package and immobilize an animal for rescue so that incidents are managed and risks to rescuers and the animal are minimized.

Enabling Learning Objectives

1. Describe the purpose of animal packaging
 - To support animal safety and injury prevention
 - To expedite removal
 - To prepare an animal for movement
2. Describe how to use animal packaging and immobilization tools and equipment
 - Ropes and hardware
 - Rescue glides
 - Slip sheets
 - Cargo netting
 - Webbing
 - Slings
 - Hobbles
 - Head protection
 - Restraint devices
3. Describe how to use immobilization devices
4. Describe immobilization techniques
 - Behavioral
 - Physical
 - Chemical
5. Describe when to use animal packaging tools and equipment
 - Ground level
 - Low angle
 - High angle
 - Helicopter
 - Trailer
6. Describe additional animal packaging considerations
 - Rope systems may be subjected to a sudden shock load
 - Create “cut aways” into a system
 - Account for load transfers
 - Use quick release knots/systems to quickly remove equipment from distressed animals
 - Consider how packaging time impacts:
 - Resource arrival/delivery times
 - Animal welfare/condition
 - Duration in high-angle environment

- Methods to reduce or prevent further injury
 - Sling selection
 - Ways to establish and maintain animal securement (physical and chemical)
7. Use immobilization, packaging, and transfer devices for specific situations
 8. Use immobilization techniques, including chemical with the assistance of AHJ designated personnel
 9. Apply medical protocols and safety features to immobilize, package, and transfer

Discussion Question

1. What considerations need to be made when packaging an animal?
2. What is the function of a cut away in a rescue system?
3. How does the amount of time it takes to package an animal impact other aspects of a technical rescue operation?
4. How does the amount of time an animal will be suspended during a lifting operation impact animal welfare? How can you prepare for that?

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes

1. Students will practice immobilizing animals using physical techniques in this course but are only required to discuss behavioral and chemical techniques.

CTS Guide Reference: CTS 2-11

Unit 5: Operations

Topic 5-1: Constructing a Rope Mechanical Advantage System

Terminal Learning Objective

At the end of this topic a student, given an incident, a representative animal load, an anchor system, general use rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, will be able to construct a mechanical advantage system so that the system constructed accommodates the load and reduces the force required to lift the load; operational interference is factored and minimized; the system is efficient; a system safety check is completed; and the system is connected to an anchor system and the load.

Enabling Learning Objectives

1. Identify the equipment used to construct a rope mechanical advantage system
 - All equipment should be rated for the load being moved
 - Rope (cable, rope)
 - Hardware
 - Software
2. Describe when to use:
 - A simple mechanical advantage system
 - A compound mechanical advantage system
3. Identify the benefits of a rope mechanical advantage system
 - Can be used in multiple planes
 - Reduces stress/impact to the animal
 - Try to use devices/equipment that allow you to feel resistance in the system
 - Reduces forces on rescue teams
 - Decreases the number of personnel needed
4. Identify the hazards, risks, or limitations of a rope mechanical advantage system
 - Potential to overload the system
 - Equipment can no longer be used for human rescue
 - Availability of equipment on scene
 - Interference concerns
5. Describe rope commands
6. Describe rigging principles
7. Describe methods for reducing excessive force to system components
8. Describe system safety check procedures
9. Describe methods of evaluating system components for compromised integrity
10. Determine incident needs as related to choosing simple rope systems
11. Select and use effective knots
12. Calculate expected loads
13. Perform a system safety check
14. Evaluate system components for compromised integrity

Discussion Question

1. What specialized equipment do you have in your AHJ to assist with rope rescue

applications?

Application

1. Students will practice constructing both simple and compound systems on the drill ground and perform each once for evaluation.

Instructor Notes

1. ELOs 5 and 6 are covered in the prerequisites for this course. They just need a quick refresh here.

CTS Guide Reference: CTS 2-14, CTS 2-15

Topic 5-2: Conducting Low-Angle Operations

Terminal Learning Objective

At the end of this topic a student, given an incident action plan, animal transfer device(s), a designated egress route, an animal removal systems specific to the rescue environment, and personal protective equipment, will be able to move a representative animal in a low-angle environment as a member of a team, so that hazards are identified, effort is coordinated, the designated egress routes are used, risks to rescuers are minimized from both the hazard and the representative animal, the integrity of a representative animal's securement within the transfer device is established and maintained, the means of attachment to the rope rescue system is maintained, and the representative animal is removed from the hazard.

Enabling Learning Objectives

1. Describe a low-angle operation
 - Majority of the load is on the ground versus on the system
2. Describe how to apply a low-angle operation for animal technical rescue
 - Front drag/forward assist
 - Rear drag/rear assist
 - Side drag
 - Packaged animal
 - Consider attaching to both animal and glide
3. Identify the benefits of a low-angle operation
 - Reduces injury to animals and rescue personnel
 - Potential incident time savings
 - Potential to avoid anesthesia
4. Identify the hazards, risks, or limitations of a low-angle operation
 - Potential for rescuer falls
 - Can overload system
 - Equipment can no longer be used for human rescue
 - Availability of equipment on scene
 - Animal falls out of back of packaging
5. Describe types of basic animal transport equipment and removal systems
6. Assemble and operate environment- or hazard-specific animal removal systems
7. Use techniques for moving the animal to a designated safe area

Discussion Question

1. Determined by instructor

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 2-11, CTS 2-5, CTS 2-6

Topic 5-3: Conducting High-Angle Operations

Terminal Learning Objective

At the end of this topic a student, given an incident, multiple rope rescue systems incorporating a compound rope mechanical advantage system, a representative animal load to be moved, and a specified minimum travel distance for the load, will be able to manage a highpoint anchor and multiple compound rope mechanical advantage systems in a high-angle environment, as a member of a team so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Enabling Learning Objectives

1. Describe a high-angle operation
 - Majority of the load is on the system versus the ground
 - Utilizes high directionals capable of supporting anticipated loads
 - Site evaluation needed to identify interference concerns and obstacle negotiation
 - Safe operating limits of the portable highpoint anchor
2. Describe how to apply a high-angle operation for animal technical rescue
 - Front lift/forward assist
 - Rear lift/rear assist
 - Side drag
 - Packaged animal
 - Consider attaching to both animal and glide
 - Center of gravity for animal
 - Lift from a vertical depth, across a horizontal path, and lower animal to a designated point
3. Identify the benefits of a high-angle operation
 - Reduces injury to animals and rescue personnel
 - Potential incident time savings
 - Can get the animal to a standing position
 - Can use when helicopter access is limited/unavailable
4. Identify the hazards, risks, or limitations of a high-angle operation
 - Potential for rescuer falls
 - Catastrophic system failure
 - Animal reaction once standing
 - Rope system/hardware/software can no longer be used for human rescue
 - Availability of equipment on scene
 - Height/load limitations of artificial high points
 - Animal falls out of back of packaging
 - System stress during operations
 - Animal stress during movement

5. Describe considerations for completing an animal technical rescue while suspended from a rope rescue system in a high-angle environment
 - Task-specific selection criteria for life safety harnesses
 - PPE selection criteria
 - Variations in litter design and intended purpose
 - Rigging principles
 - Techniques and practices for high-angle environments
 - Common hazards posed by improper maneuvering and harnessing
6. Describe system safety check protocol
7. Describe procedures to evaluate system components for compromised integrity
8. Describe common personnel assignments and duties
9. Determine incident needs
10. Assemble and operate environment-specific animal removal systems
11. Complete a system safety check
12. Evaluate system components for compromised integrity
13. Communicate with personnel effectively
14. Secure an animal to transport equipment
15. Manage load movement
16. Operate multiple mechanical advantage systems in balance
17. Evaluate for any potential problems

Discussion Question

1. Determined by instructor

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes

1. Students are not required to complete an animal technical rescue while suspended from a rope rescue system in a high-angle environment as part of this course. Operating while suspended is covered in Rope Rescue Technician, which is a course prerequisite.

CTS Guide Reference: CTS 2-8, CTS 2-16, CTS 3-1, CTS 3-2, CTS 3-3

Topic 5-4: Conducting Helicopter Operations

Terminal Learning Objective

At the end of this topic a student, given an incident, a representative animal load to be moved, appropriate tools and equipment, and a helicopter, will be able to use a helicopter to move an animal in need of technical rescue, as a member of a team, so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Enabling Learning Objectives

1. Describe when to consider a helicopter operation
 - Remote location/long distance to travel
 - Inaccessible terrain
 - Equipment limitations
2. Describe how to apply a helicopter operation for animal technical rescue
 - Lifts
 - Used in conjunction with commercial slings (AHJ dependent)
 - Configured to jettison loads (AHJ dependent)
 - Properly trained flight and ground crews
 - Packaging team (vet on site)
 - Receiving team (vet on site)
 - Designate a landing zone based on:
 - Availability and anesthesia limitation
 - Transport modalities
 - Other factors
3. Identify the benefits of a helicopter operation
 - Reduces injury to animals and rescue personnel
 - Potential incident time savings
 - Can get the animal to a standing position
 - Extrication from extreme terrain
4. Identify the hazards, risks, or limitations of a helicopter operation
 - Catastrophic system failure
 - Helicopter incapable of carrying anticipated loads
 - Weather conditions
 - Altitude/temperatures/density altitude
 - Man-made/environmental obstruction
 - Need a landing zone large enough to receive animal and additional equipment
 - No bystanders
 - Clear overhead obstructions
 - Safe for animal/crew
 - Heightened risk to flight and ground crews
 - Rescuer fall potential may exist

- Animal reaction once standing
 - Requires anesthesia for flight
 - Sedation-to-anesthesia conversion when helicopter arriving
 - Short acting anesthesia may dictate flight time
 - Availability of equipment on scene
 - Potential associated costs
5. Describe system safety check protocol
 6. Describe procedures to evaluate system components for compromised integrity
 7. Describe personnel assignments and duties

Discussion Question

1. Determined by instructor

Application

1. Determined by instructor

Instructor Notes

1. All cognitive aspects of this topic are required content even if the AHJ is unable to provide a helicopter for the course. SFT strongly recommends using a helicopter to demonstrate these operations whenever possible.

CTS Guide Reference: CTS 3-4

Topic 5-5: Conducting Trailer Operations

Terminal Learning Objective

At the end of this topic a student, given an incident, webbing, rescue straps, a flex guide, ropes, slip sheets, a rescue glide, a representative animal, and a trailer, will be able to extricate an animal in need of technical rescue from a trailer, as a member of a team, so that hazards to rescuers and the animal are minimized operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

Enabling Learning Objectives

1. Describe vehicle anatomy
2. Describe fire suppression and safety measures
3. Describe the dynamics of a trailer incident
4. Identify the best access points for equipment application
5. Describe how to release the dividers from the exterior of the trailer
6. Describe how to handle an animal tethered in a transport vehicle
 - Tethering methods
 - When to cut a tethered animal down and the consequences
7. Describe how to attach a long lead line
8. Describe when removal of the animal is and is not appropriate
 - Terminally injured animal
 - Medically impaired animal
 - Damaged trailer
9. Describe how to apply a rescue strap without entering the trailer
 - Equipment placement
 - Proper pulling techniques

Discussion Question

1. What equipment available on a fire engine could you substitute for equipment listed above?
2. What are the additional uses of lunge whips?
3. When is “tethering” the rescuer appropriate?

Application

1. Students will practice this skill on the drill ground and must perform it once for evaluation.

Instructor Notes

1. None

CTS Guide Reference: CTS 3-5

Unit 6: Incident Termination

Topic 6-1: Animal Care and Decontamination

Terminal Learning Objective

At the end of this topic a student, given a first aid kit and an actual or simulated EMS agency, will be able to stabilize a representative animal so that rescuers and a representative animal are protected from hazards, the representative animal's injuries or illnesses are assessed and managed, and the representative animal is delivered to the appropriate EMS provider with information regarding the history of the rescue activity and the representative animal's condition with the assistance of local-policy-determined personnel, when available.

Enabling Learning Objectives

1. Describe animal and scene assessment methods
2. Describe animal treatment methods
 - Heating or cooling
 - Hydration
 - Bleeding control
3. Identify medical resource availability
4. Describe medical information management and communication methods
5. Identify situations where decontamination may be needed
 - Mud/water conditions
 - Chemical exposures
 - HazMat team considerations
 - Disease situations
6. Identify situations where decontamination is not advised
7. Describe technique, tools, and equipment for animal decontamination
 - Small animal
 - Large animal
8. Describe safety considerations associated with stabilization and decontamination
9. Use animal care methods appropriate to the situation
10. Provide animal transfer reports, both verbally and in writing

Discussion Question

1. Who is available for animal technical rescue medical care in your AHJ?
2. What type of animal care does your AHJ allow you to perform?
3. What are some situations where decontamination is not advised?

Application

1. Determined by instructor

Instructor Notes: None

CTS Guide Reference: CTS 2-2

Topic 6-2: Terminating an Incident

Terminal Learning Objective

At the end of this topic a student, given personal protective equipment specific to the incident, isolation barriers, and a tool cache, will be able to terminate an incident 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 material 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.

Enabling Learning Objectives

1. Describe PPE characteristics
 - Decontamination requirements
2. Describe hazard and risk identification
 - Reevaluate mitigated and ongoing hazards
 - Resources in transition
 - Complacency
 - Normalized deviance
 - Fatigue
3. Describe tool recovery procedures
4. Describe isolation techniques
5. Describe statutory requirements identifying responsible parties
 - Determined by AHJ
6. Describe accountability system use
7. Describe reporting methods
8. Describe post-incident analysis techniques
 - Determined by AHJ
 - Critical incident stress debriefing
9. Select and use hazard-specific PPE
10. Use barrier protection techniques
11. Use data collection and record keeping/reporting protocols
12. Conduct post-incident analysis activities

Discussion Question

1. Determined by instructor

Application

1. Students will practice this skill on the drill ground and perform it once for evaluation.

Instructor Notes: None

CTS Guide Reference: CTS 2-12

Topic 6-3: Maintaining Rescue Equipment

Terminal Learning Objective

At the end of this topic a student, given maintenance logs and records, tools, resources, manufacturer's guidelines, and organizational standard operating procedures, which should include keeping the large animal technical rescue cache subjected to greater than 600 lb. (272 kg) loads separate from the regular cache, will be able to maintain rescue equipment so that the operational status of equipment is verified and documented, components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement protocol are correctly disposed of and changed.

Enabling Learning Objectives

1. Describe functions and operations of rescue equipment
2. Describe how to use record-keeping systems
3. Describe manufacturer and organizational care and maintenance requirements
4. Describe how to select and use maintenance tools
5. Describe replacement protocol and procedures
6. Describe disposal methods
7. Describe organizational standard operating procedures
8. Identify wear and damage indicators for rescue equipment
9. Evaluate operation readiness of equipment
10. Complete logs and records
11. Select and use maintenance tools

Discussion Question

1. When does rope used for animal technical rescue need to be removed from life safety service?

Application

1. Determined by instructor

Instructor Notes

1. Students will not be completing the psychomotor components of this topic as part of this course.

CTS Guide Reference: CTS 2-7

Drill Ground Activities and Evolutions

The following components must be covered in the drill ground activities and/or evolutions but can be combined and completed in the order that best suits the props available and AHJ policies and procedures.

Drill ground activities must incorporate the following animal movements:

- Roll
- Sternal role
- Front drag/assist
- Back drag/assist
- Side drag
- Lift

Drill ground activities must incorporate the following learning objectives:

- Interact with a person on the scene who is in an emotional or psychological crisis
- Size up an animal technical rescue incident
- Recognize incident hazards and initiate isolation procedures
- Develop a plan for an animal technical rescue incident
- Construct an improvised restraint device
- Apply equipment and perform basic animal manipulation operations
- Package and immobilize an animal for rescue
- Terminate an incident

Drill ground activities must address the following operations:

- Simple mechanical advantage system
- Compound mechanical advantage system
- Low-angle rescue
- High-angle rescue
- Lift, transport horizontally, and lower
- Helicopter operations (strongly recommended but not required)

Drill ground activities must incorporate the following rescue scenarios:

- Animal is able to self-extricate
- Animal is stranded or entangled
- Animal is recumbent or anesthetized
- Animal is trapped in mud or water
- Animal is involved in a transport vehicle incident

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to deliver the course.

Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master to complete the TLO.

Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Skill Sheet

The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.



Animal Technical Rescue Technician (2021) Training Record

Name: _____

SFT ID Number: _____

	Skill	Course Plan Topic	Evaluator Initials
1.	Describe animal technical rescue	2-1	
2.	Identify vulnerable areas and systems of the animal skeletal structure	2-2	
3.	Recognize basic animal handling and behavior principles	2-3	
4.	Safely approach an animal in need of technical rescue	2-4	
5.	Interact with a person on the scene who is in an emotional or psychological crisis	2-5	
6.	Describe common types of animal technical incidents	3-1	
7.	Size up an animal technical rescue incident	3-2	
8.	Recognize incident hazards and initiate isolation procedures	3-3	
9.	Develop a plan for an animal technical rescue incident	3-4	
10.	Construct an improvised restraint device	4-1	
11.	Apply equipment and perform basic animal manipulation operations	4-2	
12.	Package and immobilize an animal for rescue	4-3	
13.	Construct a simple mechanical advantage system	5-1	
14.	Construct a compound mechanical advantage system	5-1	
15.	Move a representative animal in a low-angle environment	5-2	
16.	Manage a highpoint anchor and multiple compound rope mechanical advantage system in a high-angle environment	5-3	
17.	Lift an animal from a vertical depth, across a horizontal path, and lower animal to a designated point	5-3	
18.	Use a helicopter to move an animal in need of technical rescue	5-4	
19.	Extricate an animal in need of technical rescue from a trailer	5-5	
20.	Rescue an animal that is able to self-extricate	3-1	
21.	Rescue an animal that is stranded or entangled	3-1	

22.	Rescue an animal that is recumbent or anesthetized	3-1	
23.	Rescue an animal that is trapped in mud or water	3-1	
24.	Rescue an animal that is involved in a transport vehicle accident	3-1	
25.	Stabilize a representative animal	6-1	
26.	Terminate an incident	6-2	

A candidate has successfully completed the skill when they perform it to the corresponding Terminal Learning Objective standard found in State Fire Training's Animal Technical Rescue Technician course.

SFT Course ID: _____

Course Delivery Date: _____

Instructor of Record: _____

Instructor SFT ID Number: _____

Animal Technical Rescue Technician

(NFPA 1006: Animal Technical Rescue
Awareness/Operations/Technician)

Instructor Task Book (2021)



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

Overview

Authority

This instructor task book includes the training standards set forth in:

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

Published: **Month Year**

Published by: State Fire Training, PO Box 944246, Sacramento, CA 94244-2460

Cover photo courtesy of Gary Johnson, Fire Captain, Sonoma Valley Fire District.

Purpose

The State Fire Training instructor task book is a performance-based document. It lists the minimum requirements a candidate must meet to teach a specific State Fire Training course or course series.

Assumptions

Except for Fire Fighter and Emergency Vehicle Technician (EVT) certifications, a candidate may begin the task book initiation process upon completion of all required education components (courses).

Each job performance requirement (JPR) shall be evaluated after the candidate initiates the task book.

State Fire Training task books do not count towards the NWCG task book limit. There is no limit to the number of State Fire Training task books a candidate may pursue at one time if the candidate meets the initiation requirements for each.

It is the candidate's responsibility to routinely check the State Fire Training website for updates to an initiated task book. All State Fire Training issued updates to an initiated task book are required for task book completion.

A candidate must complete a task book within three years of its initiation date. Otherwise, a candidate must initiate a new task book using the curriculum's current published version.

Roles and Responsibilities

Candidate

The candidate is the individual pursuing instructor registration.

Initiation

The candidate shall:

1. Complete the Initiation Requirements section.
 - Please print.
2. Complete a block on the Signature Verification page with a handwritten signature.

Completion

The candidate shall:

1. Complete all Job Performance Requirements.
 - Ensure that an evaluator initials, signs, and dates each task to verify completion.
2. Complete the Completion Requirements section.
3. Sign and date the Candidate verification section on the Review and Approval page with a handwritten signature.
4. Obtain their fire chief's handwritten (not stamped) signature on the Fire Chief verification section on the Review and Approval page.
5. Create and retain a physical or high-resolution digital copy of the completed task book.

Submission

The candidate shall:

1. Submit a copy (physical or digital) of the completed task book and any supporting documentation to State Fire Training.
 - See Submission and Review below.

A candidate should not submit a task book until they have completed all requirements and obtained all signatures. State Fire Training will reject and return an incomplete task book.

Evaluator

An evaluator is any individual who verifies that the candidate can satisfactorily execute a job performance requirement (JPR).

A qualified evaluator is a Registered Animal Rescue Technician Instructor designated by the candidate's fire chief (or authorized designee). For instructor task books that do not require fire chief initiation, academy instructors serve as or designate evaluators.

An instructor task book may have more than one evaluator.

All evaluators shall:

1. Complete a block on the Signature Verification page with a handwritten signature.
2. Review and understand the candidate's instructor task book requirements and responsibilities.
3. Verify the candidate's successful completion of one or more job performance requirements through observation.
 - Do not evaluate any job performance requirement (JPR) until after the candidate initiates the task book.
 - Sign all appropriate lines in the instructor task book with a handwritten signature or approved digital signature (e.g., DocuSign or Adobe Sign; a scanned copy of a signature is not acceptable) to record demonstrated performance of tasks.

Fire Chief

The fire chief is the individual who initiates (when applicable) and then reviews and confirms the completion of a candidate's instructor task book.

A fire chief may identify an authorized designee already on file with State Fire Training to fulfill any task book responsibilities assigned to the fire chief. (See *State Fire Training Procedures Manual*, 4.2.2: Authorized Signatories)

Initiation

The fire chief shall:

1. Review and understand the candidate's instructor task book requirements and responsibilities.
2. Complete a block on the Signature Verification page with a handwritten signature.
3. Designate qualified evaluators.

Completion

The fire chief shall:

1. Confirm that the candidate has obtained the appropriate signatures to verify successful completion of each job performance requirement.
 - Ensure that all job performance requirements were evaluated after the initiation date.

2. Confirm that the candidate meets the Completion Requirements.
3. Sign and date the Fire Chief verification statement under Review and Approval with a handwritten signature.
 - If signing as an authorized designee, verify that your signature is on file with State Fire Training.

Submission and Review

A candidate should not submit a task book until they have completed all requirements and obtained all signatures. State Fire Training will reject and return an incomplete task book.

To submit a completed task book, please send the following items to the address below:

1. A copy of the completed task book (candidate may retain the original)
2. All supporting documentation
3. Payment

State Fire Training
Attn: Instructor Registration
PO Box 944246
Sacramento, CA 94244-2460

State Fire Training reviews all submitted task books.

- If the task book is complete, State Fire Training will authorize the task book and retain a digital copy of the authorized task book in the candidate's career file.
- If the task book is incomplete, State Fire Training will return the task book with a notification indicating what needs to be completed prior to resubmission.

Completion of this instructor task book is one step in the instructor registration process. Please refer to the *State Fire Training Procedures Manual* for the complete list of qualifications required to teach Animal Technical Rescue Technician (2021).

Initiation Requirements

The following requirements must be completed prior to initiating this task book.

Candidate Information

Name: _____

SFT ID Number: _____

Fire Agency: _____

Initiation Date: _____

Prerequisites

The candidate meets one of the following prerequisites.

1. OSFM Instructor 1, Training Instructor I, or Fire Instructor I certification
2. OSFM Registered Instructor

Include documentation to verify prerequisite requirements when you submit your instructor task book unless verification is already documented in your SFT User Portal.

Education

The candidate has completed the following courses.

1. Animal Technical Rescue Technician (2021); **or** Animal Technical Rescue (2017) and Rope Rescue Technician (SFT)

Include documentation to verify education requirements when you submit your instructor task book unless verification is already documented in your SFT User Portal.

Fire Chief Approval

State Fire Training confirms that a fire chief's approval is not required to initiate this task book.

Signature Verification

The following individuals have the authority to verify portions of this instructor task book using the signature recorded below.

Please print except for the Signature line where a handwritten signature is required.
Add additional signature pages as needed.

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Name: _____
Job Title: _____
Organization: _____
Signature: _____

Job Performance Requirements

Job Performance Requirements

The candidate must complete each job performance requirement (JPR) in accordance with the standards of the authority having jurisdiction (AHJ) or the National Fire Protection Association (NFPA), whichever is more restrictive.

When California requirements exceed or require revision to the NFPA standard, the corresponding Office of the State Fire Marshal approved (OSFM) additions or revisions appear in italics.

All JPRs must be completed within a California fire agency or State Fire Training Accredited Regional Training Programs (ARTP).

Each JPR shall be evaluated after the candidate initiates the task book.

Each task must be performed twice.

- The two instances must occur during two different courses.
- The same evaluator cannot sign off on the same task twice.
- In the tables, E1 represents the candidate's first evaluation and E2 represents their second evaluation.

Examples of correct and incorrect evaluation:

Correct: Task completed during two separate courses and evaluated by two separate individuals.

1. Assemble a comprehensive burn plan ("burn book") that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ
b. Identify components of a live fire burn plan ("burn book")	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	BBB123	5/15/18	CWJ

Incorrect: Task completed twice during one course but evaluated by two separate individuals.

1. Assemble a comprehensive burn plan ("burn book") that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ
b. Identify components of a live fire burn plan ("burn book")	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	AAA123	2/8/18	CWJ

Incorrect: Task completed during two separate courses but evaluated by the same individual.

1. Assemble a comprehensive burn plan ("burn book") that contains all documentation necessary to conduct a live fire training evolution in accordance with NFPA standards and the policies and procedures of State Fire Training (SFT) and the authority having jurisdiction (AHJ).	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe purpose of a live fire burn plan	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS
b. Identify components of a live fire burn plan ("burn book")	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS
c. Identify records-retention requirements for burn plans	AAA123	2/8/18	JAS	BBB123	5/15/18	JAS

Animal Technical Rescue Technician Instructor

Course Administration and Application

1. Course administration and orientation	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Complete and submit course scheduling request						
b. Order student textbooks (if applicable)						
c. Identify facility requirements						
d. Confirm facilities set up and safety						
e. Identify classroom requirements						
f. Confirm equipment (based on number of students)						
g. Complete instructor assignments						
h. Organize skill stations (location, equipment, timing, complexity)						
i. Confirm prop set up and safety						
j. Complete class rosters						
k. Review course syllabus						

Working with Animals

2. Describe animal technical rescue (Topic 2-1)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Define animal technical rescue						
b. Describe the purpose of animal technical rescue						
c. Identify transferable technical rescue skills and how they can complement animal technical rescue efforts						
d. Identify types of animal technical rescue incidents common to the AHJ						
3. Identify vulnerable areas and systems of the animal skeletal structure (Topic 2-2)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Identify animals common to the AHJ						
b. Identify the skeletal structure of an animal						
c. Describe physiological systems of an animal						
d. Describe how to monitor patient condition throughout the rescue						
4. Recognize basic animal handling and behavior principles (Topic 2-3)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe, select, and use hazard-specific PPE						
b. Describe the fight/flight animal behavior principle						
c. Identify an animal's natural defense behaviors						
d. Identify species-specific behavioral cues						

e. Describe species-specific containment methods and devices						
f. Describe how to apply species-specific handling principles						
5. Safely approach an animal in need of technical rescue (Topic 2-4)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe general considerations for approach						
b. Describe how to approach an animal in need of rescue						
6. Interact with a person on scene who is in an emotional or psychological crisis (Topic 2-5)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Identify individuals who might be experiencing an emotional or psychological crisis at an animal technical rescue incident						
b. Describe indicators of a person in emotional crisis						
c. Describe typical triggers that can cause individuals to become agitated or anxious						
d. Describe methods of interacting to prevent harm to the rescuer and the person in crisis						
e. Describe best practices to de-escalate incidents involving persons in crisis						
f. Employ methods of approach that minimize risk to the rescuer from persons whose psychological or emotional state is unknown						
g. Use interview techniques that provide insight to the motives and state of mind of the person in crisis						
h. Communicate and interact with the person in crisis in a manner that does not escalate the incident						

Scene Management

7. Describe common types of animal technical incidents (Topic 3-1)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe common types of animal technical rescue incidents						
b. Describe what it means to self-extricate a stranded animal						
c. Describe what it means to assist with movement/extrication for a stranded or entangled animal						
d. Describe what it means to extricate a recumbent or anesthetized animal						
e. Describe what it means to extricate an animal trapped in soil, water, mud, or ice						
f. Describe what it means to extricate an animal from a transport accident						
g. Describe how rescuers can support animal technical rescue						
8. Size up an animal technical rescue incident (Topic 3-2)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Identify size-up considerations						
b. Describe risk/benefit analysis methods and practices						
c. Describe types of reference materials and their uses						
d. Describe availability and capability of resources						
e. Describe elements of an incident action plan and related information						
f. Describe relationship of size up to the incident management system						

g. Describe information gathering techniques and how that information is used in the size-up process						
h. Describe basic search criteria for animal technical rescue incidents						
i. Read technical rescue reference materials						
j. Gather information						
k. Use interview techniques						
l. Relay information						
m. Use information-gathering sources						
9. Recognize incident hazards and initiate isolation procedures (Topic 3-3)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe types and nature of incident hazards						
b. Describe how to mitigate on-scene hazards						
10. Develop a plan for an animal technical rescue incident (Topic 3-4)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Identify components included in an animal technical rescue plan						
b. Describe, select, and use appropriate planning forms						

Animal Manipulation and Movement

11. Construct an improvised restraint device (Topic 4-1)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe, select, and use hazard-specific PPE						

b. Describe how to apply knots						
c. Describe animal halter pressure principles						
d. Describe how to select rope or webbing material						
e. Describe device positioning techniques on animals						
f. Describe access points, equipment placement, and proper pulling techniques for a horse tail tie						
g. Tie knots						
h. Construct and rig animal halters						
i. Evaluate correct placement						
12. Apply equipment and perform basic animal manipulation operations (Topic 4-2)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe the purpose of animal manipulation						
b. Describe how to use animal manipulation tools and equipment including: webbing or straps, J-hook or flex guide, sling, reach/grab tool, rope and associated hardware, hobbles						
c. Describe proper approach and positioning						
d. Describe how animal access points impact movement options						
e. Describe how and where to place manipulation equipment						
f. Describe proper pulling techniques for: rolls, sternal rolls, side drags (animal on side), front drag/forward assist, rear drag/rear assist, and lifts						

13. Package and immobilize an animal for rescue (Topic 4-3)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe the purpose of animal packaging						
b. Describe how to use animal packaging and immobilization tools and equipment including: ropes and hardware, rescue glides, slip sheets, cargo netting, webbing, slings, and hobbles						
c. Describe how to use immobilization devices						
d. Describe immobilization techniques						
e. Describe when to use animal packaging tools and equipment						
f. Describe additional animal packaging considerations						
g. Use immobilization, packaging, and transfer devices for specific situations						
h. Use immobilization techniques, including chemical with the assistance of AHJ designated personnel						
i. Apply medical protocols and safety features to immobilize, package, and transfer						

Operations

14. Construct a rope mechanical advantage system (Topic 5-1)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Identify the equipment used to construct a rope mechanical advantage system						
b. Describe when to use a simple mechanical advantage system						

c. Describe when to use a compound mechanical advantage system						
d. Identify the benefits of a rope mechanical advantage system						
e. Identify the hazards, risks, or limitations of a rope mechanical advantage system						
f. Describe rope commands						
g. Describe rigging principles						
h. Describe methods for reducing excessive force to system components						
i. Describe system safety check procedures						
j. Describe methods of evaluating system components for compromised integrity						
k. Determine incident needs as related to choosing simple rope systems						
l. Select and use effective knots						
m. Calculate expected loads						
n. Perform a system safety check						
o. Evaluate system components for compromised integrity						
p. Construct a simple mechanical advantage system						
q. Construct a compound mechanical advantage system						
15. Move a representative animal in a low-angle environment (Topic 5-2)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe a low angle operation						
b. Describe how to apply a low-angle operation for animal technical rescue						

c. Identify the benefits of a low-angle operation						
d. Identify the hazards, risks, or limitations of a low-angle operation						
e. Describe types of basic animal transport equipment and removal systems						
f. Assemble and operate environment- or hazard-specific animal removal systems						
g. Use techniques for moving the animal to a designated safe area						
16. Manage a highpoint anchor and multiple compound rope mechanical advantage system in a high-angle environment (Topic 5-3)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe a high-angle operation						
b. Describe how to apply a high-angle operation for animal technical rescue						
c. Identify the benefits of a high-angle operation						
d. Identify the hazards, risks, or limitations of a high-angle operation						
e. Describe considerations for completing an animal technical rescue while suspended from a rope rescue system in a high-angle environment						
f. Describe system safety check protocol						
g. Describe procedures to evaluate system components for compromised integrity						
h. Describe common personnel assignments and duties						
i. Determine incident needs						
j. Assemble and operate environment-specific animal removal systems						

k. Complete a system safety check						
l. Evaluate system components for compromised integrity						
m. Communicate with personnel effectively						
n. Secure an animal to transport equipment						
o. Manage load movement						
p. Operate multiple mechanical advantage systems in balance						
q. Evaluate for any potential problems						
r. Manage a highpoint anchor and multiple compound rope mechanical advantage system in a high-angle environment						
s. Lift an animal from a vertical depth, across a horizontal path, and lower animal to a designated point						
17. Use a helicopter to move an animal in need of technical rescue (Topic 5-4)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe when to consider a helicopter operation						
b. Describe how to apply a helicopter operation for animal technical rescue						
c. Identify the benefits of a helicopter operation						
d. Identify the hazards, risks, or limitations of a helicopter						
e. Describe system safety check protocol						
f. Describe procedures to evaluate system components for compromised integrity						
g. Describe personnel assignments and duties						

18. Extricate an animal in need of technical rescue from a trailer (Topic 5-5)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe vehicle anatomy						
b. Describe fire suppression and safety measures						
c. Describe the dynamics of a trailer incident						
d. Identify the best access points for equipment application						
e. Describe how to release the dividers from the exterior of the trailer						
f. Describe how to handle an animal tethered in a transport vehicle						
g. Describe how to attach a long lead line						
h. Describe when removal of the animal is and is not appropriate						
i. Describe how to apply a rescue strap without entering the trailer						

Incident Termination

19. Stabilize a representative animal (Topic 6-1)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe animal and scene assessment methods						
b. Describe animal treatment methods						
c. Identify medical resource availability						
d. Describe medical information management and communication methods						

e. Identify situations where decontamination may be needed						
f. Identify situations where decontamination is not advised						
g. Describe techniques, tools, and equipment for animal decontamination						
h. Describe safety considerations associated with stabilization and decontamination						
i. Use animal care methods appropriate to the situation						
j. Provide animal transfer reports, both verbally and in writing						
20. Terminate an incident (Topic 6-2)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe PPE characteristics						
b. Describe hazard and risk identification						
c. Describe tool recovery procedures						
d. Describe isolation techniques						
e. Describe statutory requirements identifying responsible parties						
f. Describe accountability system use						
g. Describe reporting methods						
h. Describe post-incident analysis techniques						
i. Select and use hazard-specific PPE						
j. Use barrier protection techniques						
k. Use data collection and record keeping / reporting protocols						

I. Conduct post-incident analysis activities						
21. Maintain rescue equipment (Topic 6-3)	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Describe functions and operations of rescue equipment						
b. Describe use of record-keeping systems						
c. Describe manufacturer and organizational care and maintenance requirements						
d. Describe selection and use of maintenance tools						
e. Describe replacement protocol and procedures						
f. Describe disposal methods						
g. Describe organizational standard operating procedures						
h. Identify wear and damage indicators for rescue equipment						
i. Evaluate operation readiness of equipment						
j. Complete logs and records						
k. Select and use maintenance tools						

Application

22. Set up, demonstrate, and oversee drill ground operations and/or demonstrations	Course Code (E1)	Date (E1)	Initials (E1)	Course Code (E2)	Date (E2)	Initials (E2)
a. Move an animal using a roll						
b. Move an animal using a sternal roll						
c. Move an animal using a front drag/assist						
d. Move an animal using a back drag/assist						
e. Move an animal using a side drag						
f. Move an animal using a lift						
g. Interact with a person on scene who is in an emotional or psychological crisis						
h. Size up an animal technical rescue incident						
i. Recognize incident hazards and initiate isolation procedures						
j. Develop a plan for an animal technical rescue incident						
k. Construct an improvised restraint device						
l. Apply equipment and perform basic animal manipulation operations						
m. Package and immobilize an animal for rescue						
n. Terminate an incident						
o. Build a simple mechanical advantage system						
p. Build a compound mechanical advantage system						

q. Conduct a low-angle rescue						
r. Conduct a high-angle rescue						
s. Lift, transport horizontally, and lower an animal						
t. Conduct helicopter operations						
u. Rescue an animal that is able to self-extricate						
v. Rescue an animal that is stranded or entangled						
w. Rescue an animal that is recumbent or anesthetized						
x. Rescue an animal that is trapped in soil, mud, or water						
y. Rescue an animal involved in a transport vehicle incident						

Completion Requirements

The following requirements must be completed prior to submitting this task book.

Experience

The candidate meets the following experience requirements.

- Have a minimum of three years’ full-time or six years’ volunteer or part-time paid suppression/rescue experience in a recognized fire agency in California

Agency	Experience	Start Date	End Date

Include documentation to verify prerequisite requirements when you submit your instructor task book unless verification is already documented in your SFT User Portal.

Position

State Fire Training confirms that there are no position requirements for instructor registration.

Updates

The candidate has completed and enclosed all updates to this instructor task book released by State Fire Training since its initial publication.

Number of enclosed updates: _____

Completion Timeframe

A candidate must complete a task book within three years of its initiation date. Otherwise, a candidate must initiate a new task book using the curriculum’s current published version.

Initiation Date (see Initiation Date under Initiation Requirements): _____

Review and Approval

Candidate

Candidate (please print): _____

I, the undersigned, am the person applying to teach Animal Technical Rescue Technician. I hereby certify under penalty of perjury under the laws of the State of California, that the completion of all requirements documented herein is true in every respect. I understand that misstatements, omissions of material facts, or falsification of information or documents may be cause for rejection or revocation.

Signature: _____ Date: _____

Fire Chief

Candidate's Fire Chief (please print): _____

I, the undersigned, am the person authorized to verify the candidate's qualifications to teach Animal Technical Rescue Technician. I hereby certify under penalty of perjury under the laws of the State of California, that the completion of all requirements documented herein are true in every respect. I understand that misstatements, omissions of material facts, or falsification of information or documents may be cause for rejection.

Signature: _____ Date: _____



Animal Technical Rescue (2021) Interim Procedures

Issued: **Month** 2023

Procedure Changes

Edition: May 2022 edition of the State Fire Training Procedures Manual

Effective Date: **Month**, **##**, 2023 (anticipated)

Section Changes: Modify and update the following sections:

- 6.7.9: Fire Fighting and Rescue Instructor

Justification: Following approval by the State Board of Fire Services (SBFS), the new Animal Technical Rescue Awareness (2021) and Animal Technical Rescue Technician (2021) curriculum will go into effect on September 1, 2023. The new curriculum provides directive for Instructor qualifications.

SFT Contact: SFT Staff assigned to Instructor Registration.

Note: All new text appears in underline. All deleted text appears in ~~strikeout~~.

6.7.9: FIRE FIGHTING AND RESCUE INSTRUCTOR

6.7.9.1: Eligible Courses

Table 6.7.9.1: Fire Fighting and Rescue Instructor Eligible Courses

CFSTES Courses	FSTEP Courses
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Aircraft Rescue and Firefighting Awareness • <u>Animal Technical Rescue Awareness</u> • <u>Animal Technical Rescue Technician</u> • Confined Space Rescue Awareness • Fire Fighter Survival • Incident Safety Awareness for Hired Vendors • Low Angle Rope Rescue Operational (LARRO) • Open Water Rescuer – Basic • Open Water Rescue Boat Operator – Small Vessel • Open Water Rescue Boat Operator – Large Vessel • Personal Watercraft Operations • Rapid Intervention Crew (RIC) Operations • Rescue Boat Operations • River and Flood Water Rescue • River/Flood Rescue Technician • River and Flood Rescue Boat Technician (2019) • Trench Rescue • Vehicle Extrication

6.7.9.2: General Qualifications

- A. A Registered ~~Primary~~ Instructor for a Fire Service Training and Education Program (FSTEP) Fire Fighting and Rescue course shall meet the following the qualifications required of all State Fire Training (SFT) Registered ~~Primary~~ Instructors.
1. See 6.2.1: Qualifications.

6.7.9.3: Course Work

- A. Attending and passing SFT’s Confined Space Rescue Technician course meets the requirement for attending and passing Confined Space Rescue Awareness.
- B. Registered Low Angle Rope Rescue Operational Instructors must have attended and passed ICS-200: Basic ICS.

- C. Attending and passing SFT’s Auto Extrication (1996) course meets the requirement for attending and passing Vehicle Extrication.

- D. Incident Safety Awareness for Hired Vendors instructors must have attended and passed Incident Safety Awareness for Hired Vendors (2018); Introduction to Incident Command System (ICS-100); Firefighter Training (S-130); Introduction to Wildland Fire Behavior (S-190); Intermediate Wildland Fire Behavior (S-290); Human Factors in the Wildland Fire Service (L-180); ICS for Single Resources and Initial Action Incidents (IS-200.B); and National Incident Management System - An Introduction (NIIMS 700.A).

6.7.9.4: Teaching Experience

- A. It is recommended that a new instructor for SFT’s Incident Safety Awareness for Hired Vendors co-teach with a primary instructor during their first course presentation.

6.7.9.5: Professional Experience

- A. A Registered Primary Instructor for an FSTEP Fire Fighting and Rescue course shall meet the professional experience qualifications listed below.
 1. Performing in an “acting” capacity does not qualify.

Table 6.7.9.5: Fire Fighting and Rescue Instructor Professional Experience

FSTEP Course	Experience
<ul style="list-style-type: none"> • Aircraft Rescue and Firefighting Awareness 	<ul style="list-style-type: none"> • Held the rank of Fire Fighter and/or performed rescue duties within a recognized fire agency in California for a minimum of three (3) years; or worked in a volunteer position or paid call firefighter with a Recognized Fire Agency in California for a minimum of five (5) years. • Have a minimum of three years’ experience within a recognized fire agency in California in the field of aircraft rescue and fire fighting
<ul style="list-style-type: none"> • <u>Animal Technical Rescue Awareness</u> • <u>Animal Technical Rescue Technician</u> 	<ul style="list-style-type: none"> • <u>Have a minimum of three (3) years’ full-time or six (6) years’ part-time/volunteer experience performing suppression/rescue duties within a recognized fire agency in California</u>
<ul style="list-style-type: none"> • Confined Space Rescue Awareness • Low Angle Rope Rescue Operational 	<ul style="list-style-type: none"> • Held the rank of Fire Fighter and/or performed rescue duties within a recognized fire agency in California for a minimum of two (2) years
<ul style="list-style-type: none"> • Low Angle Rope Rescue Operational 	<ul style="list-style-type: none"> • Held the rank of Fire Fighter and/or performing suppression/rescue duties within a recognized

FSTEP Course	Experience
<ul style="list-style-type: none"> • Open Water Rescuer - Basic • Personal Watercraft Operations • Rescue Boat Operations • River and Flood Water Rescue • Trench Rescue 	<p>fire agency in California for a minimum of two (2) years</p>
<ul style="list-style-type: none"> • Incident Safety Awareness for Hired Vendors 	<p>Letter verifying the following experience:</p> <ul style="list-style-type: none"> • Minimum of five (5) years' full-time paid experience in a federal, state, local, or provincial fire agency and holds the rank of Company Officer • Has responded as a Single Resource or Overhead assignment which has gone through a check-in, briefing, and demobilization (completed a Shift Ticket) process on a campaign fire • Has working knowledge, skills, and abilities performing within Incident Command • Has been assigned to an incident within the last five (5) years (Red Card currency)
<ul style="list-style-type: none"> • Rapid Intervention Crew (RIC) Operations • Fire Fighter Survival 	<ul style="list-style-type: none"> • Have five (5) years suppression/rescue experience, of which two (2) years must be while holding the rank of Fire Fighter performing suppression/rescue duties within a recognized fire agency in California
<ul style="list-style-type: none"> • Open Water Rescue Boat Operator – Small Vessel • Open Water Rescue Boat Operator – Large Vessel • River and Flood Rescue Boat Technician 	<ul style="list-style-type: none"> • Held the rank of Fire Fighter and/or performed rescue duties within a recognized fire agency in California for a minimum of three (3) years; or worked in a volunteer position or paid call Fire Fighter with a Recognized Fire Agency in California for a minimum of five (5) years. • Specific expertise in Technical Rescue as it relates to Open Water Search and Rescue Boat Operations and Seamanship. Expertise must be relative to the size of the vessel and power configuration and qualify based on the scope required for the curriculum chosen to facilitate.
<ul style="list-style-type: none"> • River and Flood Rescue Technician 	<ul style="list-style-type: none"> • Held the rank of Fire Fighter and/or performed rescue duties within a recognized fire agency in California for a minimum of two (2) years; or worked in a volunteer position or paid call Fire Fighter with a Recognized Fire Agency in California for a minimum of four (4) years.

FSTEP Course	Experience
<ul style="list-style-type: none">• Vehicle Extrication	<ul style="list-style-type: none">• Have three (3) year's suppression/rescue experience performing suppression/rescue duties within a recognized fire agency in California

6.7.9.6: Task Book

A. Animal Technical Rescue Technician

1. A new Instructor applicant shall complete the Animal Technical Rescue Technician Task Book.

B. Fire Fighter Survival

1. An Instructor applicant for Fire Fighter Survival shall complete the appropriate instructor trainee task book.
2. A Registered Fire Fighter Survival Primary Instructor must sign off on the applicant's task book within two (2) years of its initiation.

C. Low Angle Rope Rescue Operational

1. An Instructor applicant for Low Angle Rope Rescue Operational (LARRO) shall complete the appropriate instructor trainee task book.
2. A Registered LARRO Primary Instructor must sign off on the applicant's task book within two (2) years of its initiation.

D. Rapid Intervention Crew Operations

1. An Instructor applicant for Rapid Intervention Crew Operations shall complete the appropriate instructor trainee task book.
2. A Registered Rapid Intervention Crew Operations Primary Instructor must sign off on the applicant's task book within two (2) years of its initiation.