

Rope Rescue Awareness and Operations

(NFPA 1006: Rope 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: February 2024

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Cover photo courtesy of Donald Chen, Donald Chen, San Diego Fire-Rescue Department.

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 Rope Rescue Awareness and Operations 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.

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 Rope Rescue Awareness and Operations (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. Rope Rescue Awareness and Operations (2021) **or** Rope Rescue Awareness/Operations (2017)

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: _____
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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 shaded in gray.

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 |

Rope Rescue Awareness and Operations 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 | | | | | | |

Introduction to Rope Rescue

| 2. Introduction to Rope Rescue (Topic 2-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Define “low-angle” rope rescue | | | | | | |
| b. Define “high-angle” rope rescue | | | | | | |
| c. Identify terrain and features common to the AHJ where rope rescue might be necessary | | | | | | |
| d. Identify technical rescue disciplines that incorporate or utilize rope rescue skills | | | | | | |
| e. Identify factors that determine incident complexity | | | | | | |
| 3. Standards and Regulations (Topic 2-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Identify industry standards applicable to rope rescue | | | | | | |
| b. Identify industry regulations applicable to rope rescue | | | | | | |
| c. Describe how Cal/OSHA 3270.1 applies | | | | | | |
| d. Identify AHJ policies and procedures | | | | | | |

PPE and Equipment

| 4. Select, Use, Inspect, and Maintain PPE (Topic 3-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe functions, construction, and operation of PPE | | | | | | |

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| b. Identify protections provided by PPE during rope rescue incidents | | | | | | |
| c. Identify limitations of PPE during rope rescue incidents | | | | | | |
| d. Identify when and how to don and doff PPE | | | | | | |
| e. Describe how to use AHJ record-keeping systems | | | | | | |
| f. Describe maintenance requirements and procedures | | | | | | |
| g. Describe how to use assembly and disassembly tools | | | | | | |
| h. Describe manufacturer and AHJ recommendations | | | | | | |
| i. Describe pre-use inspection procedures and determine operational readiness | | | | | | |
| j. Don and doff PPE | | | | | | |
| k. Inspect and maintain PPE | | | | | | |
| 5. Select, Use, Inspect, and Maintain Rescue Equipment (Topic 3-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe functions and operations of rescue equipment | | | | | | |
| b. Describe how to select and use maintenance tools | | | | | | |
| c. Describe methods for cleaning tools and equipment | | | | | | |
| d. Describe replacement protocols and procedures | | | | | | |
| e. Identify when and how to remove tools and equipment from service | | | | | | |
| f. Describe disposal methods | | | | | | |
| g. Describe AHJ standard operating procedures | | | | | | |
| h. Describe how to use record-keeping systems | | | | | | |

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|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| i. Identify guidelines for cleaning, inspecting, and maintaining tools and equipment | | | | | | |
| j. Select, use, and maintain tools and equipment | | | | | | |
| 6. Demonstrate Knots, Bends, and Hitches (Topic 3-3) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe rope and webbing types | | | | | | |
| b. Identify rope terminology | | | | | | |
| c. Describe knot efficiency | | | | | | |
| d. Describe when and how to use knots, bends, and hitches | | | | | | |
| e. Tie representative knots, bends, and hitches | | | | | | |

Incident Size Up, Planning, and Support

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| 7. Size Up a Rope Rescue Incident (Topic 4-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe components of a rope rescue size up | | | | | | |
| b. Describe a risk/benefit assessment | | | | | | |
| 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 | | | | | | |

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|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| g. Describe information gathering techniques and how that information is used in the size-up process | | | | | | |
| h. Describe basic search criteria for rope rescue incidents | | | | | | |
| i. Read technical rescue reference materials | | | | | | |
| j. Gather information | | | | | | |
| k. Relay information | | | | | | |
| l. Use information-gathering sources | | | | | | |
| 8. Recognize the Need for Technical Rescue Resources (Topic 4-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe resource types and deployment methods | | | | | | |
| b. Describe operational protocols | | | | | | |
| c. Describe how to complete specific planning forms | | | | | | |
| d. Describe types of incidents common to the AHJ | | | | | | |
| e. Describe hazards | | | | | | |
| f. Describe incident support operations and resources | | | | | | |
| g. Describe safety measures | | | | | | |
| h. Identify communications requirements, methods, and means | | | | | | |
| i. Apply operational protocols | | | | | | |
| j. Select specific planning forms based on types of incidents | | | | | | |
| k. Identify and evaluate various types of hazards within the AHJ | | | | | | |
| l. Match resources to operational needs | | | | | | |

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| m. Request support and resources | | | | | | |
| n. Determine required safety measures | | | | | | |
| 9. Support an Operations- or Technician-level Incident (Topic 4-3) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe AHJ operational protocols | | | | | | |
| b. Describe hazard recognition | | | | | | |
| c. Describe incident management | | | | | | |
| d. Describe PPE selection | | | | | | |
| e. Describe resource selection and use | | | | | | |
| f. Describe scene support requirements | | | | | | |
| g. Apply operational protocols | | | | | | |
| h. Function within an incident management system | | | | | | |
| i. Follow and implement an incident action plan | | | | | | |
| j. Report task progress status to a supervisor or incident command | | | | | | |
| 10. Recognize Incident Hazards and Initiate Isolation Procedures (Topic 4-4) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe types and natures of incident hazards | | | | | | |
| b. Describe resource capabilities and limitations | | | | | | |
| c. Describe equipment types and their use | | | | | | |
| d. Describe hazard recognition and terminology | | | | | | |

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| e. Describe isolation terminology, methods, equipment, and implementation | | | | | | |
| f. Identify operational requirement concerns | | | | | | |
| g. Describe common types of rescuer and victim risk | | | | | | |
| h. Describe risk/benefit analysis considerations | | | | | | |
| i. Describe methods for controlling access to the scene | | | | | | |
| j. Describe types of technical references | | | | | | |
| k. Identify resource capabilities and limitations | | | | | | |
| l. Identify incident hazards | | | | | | |
| m. Assess potential hazards to rescuers and bystanders | | | | | | |
| n. Place scene control barriers | | | | | | |
| o. Operate control and mitigation equipment | | | | | | |
| 11. Conduct a System Safety Check (Topic 4-5) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe system safety check procedures | | | | | | |
| b. Describe equipment replacement criteria | | | | | | |
| c. Perform a system safety check | | | | | | |

Anchor Systems

| 12. Construct Anchor Systems (Topic 5-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|--|------------------|-----------|---------------|------------------|-----------|---------------|
| a. Describe anchor selection criteria | | | | | | |
| b. Describe types of anchor slings | | | | | | |
| c. Describe selection and inspection criteria for hardware and software | | | | | | |
| d. Describe weight distribution issues and methods | | | | | | |
| e. Identify formulas to calculate safety factors for load distribution | | | | | | |
| f. Describe load types | | | | | | |
| g. Describe how to construct a single loop anchor sling | | | | | | |
| h. Describe how to construct a multi-loop anchor sling | | | | | | |
| i. Describe how to construct a basket/three-bight anchor sling | | | | | | |
| j. Describe how to construct a girth hitch anchor sling | | | | | | |
| k. Describe how to construct a double-locking girth hitch anchor sling | | | | | | |
| l. Describe how to construct a wrap three, pull two anchor sling | | | | | | |
| m. Describe how to construct a tensionless/no knot anchor sling | | | | | | |
| n. Describe how to use anchor slings to construct a single-point anchor system | | | | | | |
| o. Describe how to use anchor slings to construct a two-point anchor system | | | | | | |

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|--|--|--|--|--|--|--|
| p. Describe how to use anchor slings to construct a three-point anchor system | | | | | | |
| q. Describe how to use anchor slings to construct a tie-back anchor system | | | | | | |
| r. Describe rigging systems | | | | | | |
| s. Describe application of knots, bends, and hitches | | | | | | |
| t. Describe system safety check procedures | | | | | | |
| u. Select rope and equipment | | | | | | |
| v. Tie knots, bends, and hitches as required by the AHJ | | | | | | |
| w. Rig systems | | | | | | |
| x. Evaluate anchor points for required strength, location, and surface contour | | | | | | |
| y. Perform a system safety check | | | | | | |

Edge Protection

| 13. Place Edge Protection (Topic 6-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|------------------|-----------|---------------|------------------|-----------|---------------|
| a. Describe materials and devices that can be used to protect ropes or webbing from sharp or abrasive edges | | | | | | |
| b. Describe fall protection measures | | | | | | |
| c. Identify dangers associated with sharp or abrasive edges | | | | | | |
| d. Describe methods for negotiating sharp or abrasive edges | | | | | | |
| e. Select protective devices for rope and webbing | | | | | | |

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|--|--|--|--|--|--|--|
| f. Protect personnel from falls while working near edges | | | | | | |
| g. Secure edge protection | | | | | | |
| h. Secure ropes or webbing in a specific location | | | | | | |

Fall Protection

| 14. Use Fall Protection Systems (Topic 7-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe fall factor and its effects on anchors, equipment, and people | | | | | | |
| b. Define fall arrest | | | | | | |
| c. Define fall arrest attachments | | | | | | |
| d. Define fall restraint | | | | | | |
| e. Define fall restraint attachments | | | | | | |
| f. Define travel restraint | | | | | | |
| g. Describe fall protection devices and their applications | | | | | | |
| h. Operate fall protection | | | | | | |
| 15. Construct a Fixed Rope System (Topic 7-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe the purpose of a fixed rope system | | | | | | |
| b. Describe how to construct a fixed rope system | | | | | | |

| 16. Construct and Operate a Belay System (Topic 7-3) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe principles of belay systems | | | | | | |
| b. Describe belay devices | | | | | | |
| c. Describe application of knots, bends, and hitches | | | | | | |
| d. Describe rigging principles | | | | | | |
| e. Describe proper operation of belay systems in conjunction with lowering and raising operations | | | | | | |
| f. Describe operational commands | | | | | | |
| g. Describe system safety check procedures | | | | | | |
| h. Select a system | | | | | | |
| i. Tie knots, bends, and hitches | | | | | | |
| j. Perform rigging | | | | | | |
| k. Attach to anchor system and load | | | | | | |
| l. Don and use task-specific PPE | | | | | | |
| m. Perform a system safety check | | | | | | |
| n. Operate a belay system | | | | | | |
| o. Assess system effectiveness | | | | | | |
| p. Properly attach a rope to a belay device | | | | | | |
| q. Communicate belay system status | | | | | | |

| 17. Belay a Falling Load (Topic 7-4) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe effective emergency operation of belay devices to arrest falls | | | | | | |
| b. Describe operating procedures | | | | | | |
| c. Operate a belay system as designed | | | | | | |
| d. Tie approved knots, bends, and hitches | | | | | | |
| e. Use task-specific PPE | | | | | | |
| f. Recognize and arrest a falling load | | | | | | |
| g. Communicate belay system actuation | | | | | | |
| 18. Construct and Operate a Twin-tension Rope System (Topic 7-5) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe TTRS principles | | | | | | |
| b. Describe TTRS devices | | | | | | |
| c. Describe application of knots, bends, and hitches | | | | | | |
| d. Describe rigging principles | | | | | | |
| e. Describe proper operation of TTRS during lowering and raising operations | | | | | | |
| f. Describe operational commands | | | | | | |
| g. Describe system safety check procedures | | | | | | |
| h. Select a system | | | | | | |
| i. Tie knots, bends, and hitches | | | | | | |

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|-------------------------------------|--|--|--|--|--|--|
| j. Perform rigging | | | | | | |
| k. Attach to anchor system and load | | | | | | |
| l. Don and use task-specific PPE | | | | | | |
| m. Perform a system safety check | | | | | | |
| n. Operate a TTRS | | | | | | |
| o. Assess system effectiveness | | | | | | |

Rescue Systems

| 19. Construct, Operate, and Direct the Operation of a Lowering System (Topic 8-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|---|------------------|-----------|---------------|------------------|-----------|---------------|
| a. Describe the purpose of a lowering system | | | | | | |
| b. Describe various descent control devices | | | | | | |
| c. Describe capabilities and limitations of various lowering systems | | | | | | |
| d. Describe how to construct a lowering system | | | | | | |
| e. Identify safety concerns | | | | | | |
| f. Describe how to operate lowering systems | | | | | | |
| g. Describe how to direct a lowering operation | | | | | | |
| h. Construct, operate, and directing the operation of a lowering system | | | | | | |

| 20. Construct, Operate, and Direct the Operation of a Simple Rope Mechanical Advantage System (Topic 8-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe the purpose of a simple rope mechanical advantage system | | | | | | |
| b. Describe principles of mechanical advantage | | | | | | |
| c. Describe a 1:1 simple rope mechanical advantage system | | | | | | |
| d. Describe a 2:1 simple rope mechanical advantage system | | | | | | |
| e. Describe a 3:1 simple rope mechanical advantage system | | | | | | |
| f. Describe a 4:1 simple rope mechanical advantage system | | | | | | |
| g. Describe a 5:1 simple rope mechanical advantage system | | | | | | |
| h. Describe various simple rope mechanical advantage systems | | | | | | |
| i. Describe how to construct simple rope mechanical advantage systems | | | | | | |
| j. Identify safety concerns | | | | | | |
| k. Describe how to operate simple rope mechanical advantage systems | | | | | | |
| l. Describe how to direct the operation of a simple rope mechanical advantage system | | | | | | |
| m. Construct, operate, and direct the operation of a simple rope mechanical advantage system | | | | | | |
| 21. Construct, Operate, and Direct the Operation of a Compound Rope Mechanical Advantage System (Topic 8-3) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe the purpose of a compound rope mechanical advantage system | | | | | | |

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| b. Describe types of compound rope mechanical advantage systems | | | | | | |
| c. Describe various compound rope mechanical advantage systems | | | | | | |
| d. Describe how to construct compound rope mechanical advantage systems | | | | | | |
| e. Identify safety concerns | | | | | | |
| f. Describe how to operate compound rope mechanical advantage systems | | | | | | |
| g. Describe how to direct the operation of a compound rope mechanical advantage system | | | | | | |
| h. Construct, operate, and direct the operation of a compound rope mechanical advantage system | | | | | | |
| 22. Construct, Operate, and Direct the Operation of a Complex Rope Mechanical Advantage System (Topic 8-4) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe the purpose of a complex rope mechanical advantage system | | | | | | |
| b. Describe types of complex rope mechanical advantage systems | | | | | | |
| c. Describe various complex rope mechanical advantage systems | | | | | | |
| d. Describe how to construct complex rope mechanical advantage systems | | | | | | |
| e. Identify safety concerns | | | | | | |
| f. Describe how to operate compound rope mechanical advantage systems | | | | | | |
| g. Describe how to direct the operation of a compound rope mechanical advantage system | | | | | | |

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| h. Construct, operate, and direct the operation of a complex rope mechanical advantage system | | | | | | |
| 23. Construct, Operate, and Direct the Operation of Ladder Rescue Systems (Topic 8-5) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe the purpose of a ladder system | | | | | | |
| b. Identify ladder systems | | | | | | |
| c. Describe ladder systems | | | | | | |
| d. Describe how to construct a moving ladder system | | | | | | |
| e. Describe how to construct a ladder slide system | | | | | | |
| f. Describe how to construct a ladder A-frame system | | | | | | |
| g. Describe how to operate ladder systems | | | | | | |
| h. Identify safety considerations | | | | | | |
| i. Describe how to direct the operation of a ladder system | | | | | | |
| j. Explain safety considerations for ladder rescue systems | | | | | | |
| k. Construct, operate, and direct the operation of ladder rescue systems | | | | | | |

Rescue Operations

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|---|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| 24. Negotiate an Edge (Topic 9-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe common hazards imposed by projections and edges | | | | | | |

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|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| b. Describe techniques and practices for negotiating projections and edges along a travel path while attached to a functioning rope-based lowering and raising mechanical advantage system | | | | | | |
| c. Select and use harness and PPE for common environments | | | | | | |
| d. Attach the rescuer to rope rescue system | | | | | | |
| e. Maneuver across projections and edges along travel path | | | | | | |
| f. Evaluate surroundings for potential hazards | | | | | | |
| 25. Prepare a Victim for Transfer (Topic 9-2) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe how to establish victim rapport | | | | | | |
| b. Describe victim access methods | | | | | | |
| c. Describe victim assessment considerations | | | | | | |
| d. Describe victim stabilization considerations | | | | | | |
| e. Describe packaging methods | | | | | | |
| f. Describe victim rescue methods | | | | | | |
| g. Describe how to transfer a victim to EMS | | | | | | |
| h. Assess and stabilize a victim | | | | | | |
| i. Use victim immobilization, packaging, and treatment methods | | | | | | |
| j. Provide victim transfer reports, both verbally and in written format | | | | | | |

| 26. Lower and Raise a Litter in a Low-Angle Environment (Topic 9-3) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|--|-------------------------|------------------|----------------------|-------------------------|------------------|----------------------|
| a. Describe the purpose of a litter lower/raise operation | | | | | | |
| b. Identify safety concerns in a low-angle environment | | | | | | |
| c. Describe litter-tender functions and limitations in the low-angle environment | | | | | | |
| d. Describe how to lower and raise a litter in a low-angle environment | | | | | | |
| e. Describe how to direct a litter lowering and raising operation | | | | | | |
| f. Lower and raise or direct a litter-lowering or litter-raising operation | | | | | | |
| 27. Operate as a Litter Tender (Topic 9-4) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe task-specific selection criteria for life safety harnesses | | | | | | |
| b. Describe PPE selection criteria | | | | | | |
| c. Describe litters | | | | | | |
| d. Describe low-angle litter and rescuer attachment principles | | | | | | |
| e. Describe rescue techniques and practices | | | | | | |
| f. Describe common hazards imposed by terrain | | | | | | |
| g. Describe considerations for litter tender teams | | | | | | |
| h. Select and use rescuer harnesses and PPE for common environments | | | | | | |
| i. Attach life safety harness to rope rescue system | | | | | | |

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| j. Maneuver across terrain | | | | | | |
| k. Manage litter while supported by rope rescue system | | | | | | |
| l. Evaluate surroundings for potential hazards | | | | | | |
| 28. Lower and Raise a Litter in a High-Angle Environment (Topic 9-5) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe the purpose of a litter lower/raise operation | | | | | | |
| b. Identify safety concerns in a high-angle environment | | | | | | |
| c. Describe litter positioning options (vertical and horizontal) | | | | | | |
| d. Describe how to lower and raise a litter in a high-angle environment | | | | | | |
| e. Lower and raise a litter or direct a litter-lowering or litter-raising operation in a high-angle environment | | | | | | |
| f. Describe how to direct a litter lowering and raising operation in a high-angle environment | | | | | | |
| 29. Descend a Fixed Rope (Topic 9-6) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
| a. Describe task-specific selection criteria for PPE and life safety harnesses and systems for descending a fixed rope | | | | | | |
| b. Describe descent control devices | | | | | | |
| c. Describe safe rigging principles | | | | | | |
| d. Describe descending techniques | | | | | | |
| e. Describe hazards associated with descending operations | | | | | | |
| f. Select and use rescuer harnesses, a system for descending a fixed rope, and PPE for common environments | | | | | | |

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| g. Attach life safety harness to rope rescue system | | | | | | |
| h. Attach descent control device to rope and life safety harness | | | | | | |
| i. Operate descent control device | | | | | | |
| j. Maneuver around existing environment and system-specific obstacles | | | | | | |
| k. Evaluate surroundings for potential hazards | | | | | | |

Termination

| 30. Terminate a Technical Rescue Incident (Topic 10-1) | Course Code (E1) | Date (E1) | Initials (E1) | Course Code (E2) | Date (E2) | Initials (E2) |
|--|------------------|-----------|---------------|------------------|-----------|---------------|
| a. Describe Incident Command functions and resources | | | | | | |
| b. Describe PPE characteristics | | | | | | |
| c. Describe hazard and risk identification | | | | | | |
| d. Describe equipment removal procedures | | | | | | |
| e. Describe isolation techniques | | | | | | |
| f. Identify statutory requirements | | | | | | |
| g. Identify responsible parties | | | | | | |
| h. Describe logistics and resource management | | | | | | |
| i. Describe personnel accountability systems | | | | | | |
| j. Describe personnel rehab procedures or protocols | | | | | | |
| k. Describe documentation and reporting requirements | | | | | | |

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| l. Describe post-incident analysis techniques | | | | | | |
| m. Select and use hazard-specific PPE | | | | | | |
| n. Decontaminate PPE | | | | | | |
| o. Recognize hazards and analyze risk | | | | | | |
| p. Use barrier protection techniques | | | | | | |
| q. Implement data collection and record-keeping/reporting protocols | | | | | | |
| r. Conduct post-incident analysis activities | | | | | | |

Application

| 31. 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. Size up a rope rescue incident | | | | | | |
| b. Recognize the need for technical rescue resources | | | | | | |
| c. Support an operations- or technician-level incident | | | | | | |
| d. Recognize incident hazards and initiate isolation procedures | | | | | | |
| e. Conduct a system safety check | | | | | | |
| f. Terminate a rope rescue incident | | | | | | |
| g. Don and doff PPE | | | | | | |
| h. Demonstrate an end-of-line loop | | | | | | |
| i. Demonstrate a midline loop | | | | | | |

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| j. Demonstrate securing rope around desired objects | | | | | | |
| k. Demonstrate joining rope or webbing ends together | | | | | | |
| l. Demonstrate friction hitches | | | | | | |
| m. Construct a single loop single-point anchor system | | | | | | |
| n. Construct a multi loop single-point anchor system | | | | | | |
| o. Construct a basket/three-bight single-point anchor system | | | | | | |
| p. Construct a girth hitch single-point anchor system | | | | | | |
| q. Construct a double-locking girth hitch single-point anchor system | | | | | | |
| r. Construct a wrap three, pull two single-point anchor system | | | | | | |
| s. Construct a tensionless/no knot single-point anchor system | | | | | | |
| t. Construct a picket system | | | | | | |
| u. Construct a two-point anchor system | | | | | | |
| v. Construct a three-point anchor system | | | | | | |
| w. Construct a tie-back anchor system | | | | | | |
| x. Place edge protection | | | | | | |
| y. Operate fall protection equipment | | | | | | |
| z. Construct a fixed rope system | | | | | | |
| aa. Construct and operate a dedicated belay system with a dedicated main during lowering or raising operations | | | | | | |
| bb. Belay a falling load in a high-angle environment | | | | | | |

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| cc. Construct and operate a TTRS during lowering or raising operations | | | | | | |
| dd. Construct a lowering system in a low-angle environment | | | | | | |
| ee. Operate a lowering system in a low-angle environment | | | | | | |
| ff. Direct the operation of a lowering system in a low-angle environment | | | | | | |
| gg. Construct a lowering system in a high-angle environment | | | | | | |
| hh. Operate a lowering system in a high-angle environment | | | | | | |
| ii. Direct the operation of a lowering system in a high-angle environment | | | | | | |
| jj. Perform a knot pass during a lowering operation | | | | | | |
| kk. Construct a 3:1 simple rope mechanical advantage system | | | | | | |
| ll. Operate a 3:1 simple rope mechanical advantage system | | | | | | |
| mm. Direct the operation of a 3:1 simple rope mechanical advantage system | | | | | | |
| nn. Construct a 5:1 simple rope mechanical advantage system | | | | | | |
| oo. Operate a 5:1 simple rope mechanical advantage system | | | | | | |
| pp. Direct the operation of a 5:1 simple rope mechanical advantage system | | | | | | |
| qq. Perform a knot pass during a raising operation | | | | | | |
| rr. Construct a compound rope mechanical advantage system | | | | | | |
| ss. Operate a compound rope mechanical advantage system | | | | | | |
| tt. Direct the operation of compound rope mechanical advantage system | | | | | | |
| uu. Construct a complex rope mechanical advantage system | | | | | | |

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| vv. Operate a complex rope mechanical advantage system | | | | | | |
| ww. Direct the operation of complex rope mechanical advantage system | | | | | | |
| xx. Construct a moving ladder system | | | | | | |
| yy. Operate a moving ladder system | | | | | | |
| zz. Construct a ladder slide system | | | | | | |
| aaa. Operate a ladder slide system | | | | | | |
| bbb. Construct a ladder A-frame system | | | | | | |
| ccc. Operate a ladder A-frame system | | | | | | |
| ddd. Negotiate an edge while attached to a rope rescue system | | | | | | |
| eee. Assess and stabilize a victim | | | | | | |
| fff. Package an ambulatory victim in a low-angle environment | | | | | | |
| ggg. Perform an ambulatory victim rescue in a low-angle environment | | | | | | |
| hhh. Raise and lower a litter in a low-angle environment | | | | | | |
| iii. Direct a raising and lowering operation in a low-angle environment | | | | | | |
| jjj. Package a victim in a litter in a low-angle environment | | | | | | |
| kkk. Perform a litter rescue as part of a three-person litter tender configuration in a low-angle environment | | | | | | |
| lll. Raise and lower a litter in a high-angle environment | | | | | | |
| mmm. Direct a raising and lowering operation in a high-angle environment | | | | | | |
| nnn. Descend a fixed rope in a high-angle environment | | | | | | |

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| ooo. Lock-off a descent control device (to facilitate hands-free operations) | | | | | | |
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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 |
|--------|------------|------------|----------|
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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 Rope Rescue Awareness and Operations. 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 Rope Rescue Awareness and Operations. 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: _____