# **ROPE ACCESS CERTIFICATION REQUIREMENTS**



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Version 24A Board and SOC Approved August 2023 CRC-01

## **Registry Number:**

CRC-01

#### **Revision History:**

Version 24A Board and SOC Approved August 2023

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#### Notes for Use:

Terminology from SPRAT's *Defined Terms* used in this document is shown in *bold, italic* type unless written in a primary section heading.

Use of the word 'shall' denotes a mandatory requirement.

Use of the word 'should' denotes a recommendation. The word 'should' does not connote indifference or ambivalence regarding a statement.

Approximate conversions of units are presented in parentheses. These approximations are provided as a reference and are not the standard. When a value is presented as a limit, approximations are greater than an expressed minimum or less than an expressed maximum.



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## 1. Purpose and Scope

- 1.1. Purpose
  - 1.1.1. This document establishes a rope access certification with performance-based criteria that evaluates and verifies an individual's safe use of *rope access systems*.
  - 1.1.2. This document establishes requirements for three levels of certification that incorporate a minimum baseline of knowledge and skill that a *rope access technician* should possess at each certification level.
  - 1.1.3. This document is intended for use by:
    - 1.1.3.1. Individuals whose specific job requires knowledge and skill proficiency in rope access techniques.
    - 1.1.3.2. *Employers* managing a rope access program meeting the requirements of SPRAT's *Safe Practices for Rope Access Work*.
- 1.2. Scope
  - 1.2.1. This document provides:
    - 1.2.1.1. Candidate eligibility and training requirements.
    - 1.2.1.2. Performance principles and grading system for a rope access evaluation.
    - 1.2.1.3. Requirements for each certification level.
- 1.3. Exceptions
  - 1.3.1. A performance-based evaluation cannot address all knowledge and skill that may be applicable to all types of work requiring the use of *rope access systems*.
  - 1.3.2. Consideration should be given by an *employer* to determine additional training requirements for the specific *rope access systems*, equipment, and techniques used during the completion of, as well as an individual's suitability for a particular type of work.

#### 2. Rope Access Certification

- 2.1. General Information
  - 2.1.1. Successful completion of a rope access evaluation and an associated written test shall be required to obtain a SPRAT rope access certification.
  - 2.1.2. The rope access evaluation and written test shall be appropriate to evaluate the skills and knowledge required for the desired level of certification.
  - 2.1.3. The rope access evaluation and written test components shall be administered in accordance with policies and procedures maintained by the Evaluations Committee.
- 2.2. Rope Access Certification Process
  - 2.2.1. A rope access evaluation shall be conducted in accordance with policies and guidelines established by the Evaluations Committee.
  - 2.2.2. An Evaluation Session Host shall host a rope access evaluation.
  - 2.2.3. An *independent evaluator* shall administer the rope access evaluation.
  - 2.2.4. A provisional result shall be issued to the candidate after the completion of the rope access evaluation.
  - 2.2.5. Upon review of documentation demonstrating successful completion of requirements, SPRAT shall issue a rope access certification to a candidate.
- 2.3. Rope Access Certification Validity
  - 2.3.1. Initial certification is valid for three years from the date of the rope access evaluation.
  - 2.3.2. Any subsequent certification completed during the last 6 months of a current certification shall be valid for three years from the date of the current certification expiration.
    - 2.3.2.1. A subsequent certification completed outside of this period is valid for three years from the date of the rope access evaluation.

#### 2.4. Rope Access Certification Revocation

- 2.4.1. SPRAT may, at its discretion, revoke a certification.
  - 2.4.1.1. Causes for revocation include, but are not limited to:
    - 2.4.1.1.1. Fraud.
    - 2.4.1.1.2. Deceit.
    - 2.4.1.1.3. Submission of inaccurate data to obtain a certification.
- 2.4.2. Revocation of a certification shall follow the complaint process in accordance with Section 9.

## 3. Candidate Eligibility Requirements

- 3.1. General
  - 3.1.1. A candidate shall be at least 18 years of age.
  - 3.1.2. A candidate shall provide proof of identification.
  - 3.1.3. A candidate shall sign an affidavit agreeing to policies established by the Evaluations Committee.
- 3.2. Training Requirements
  - 3.2.1. A candidate shall receive training by a *competent trainer* within six months prior to initial certification as a *Level 1, Level 2,* or *Level 3 Technician*.
  - 3.2.2. A candidate should receive training by a *competent trainer* within six months prior to participating in any subsequent rope access evaluation.
  - 3.2.3. Training shall include presentation, at a minimum, of:
    - 3.2.3.1. *Rope access system* and equipment information used during the rope access evaluation.
    - 3.2.3.2. Performance principles of Section 4 and their application to requirements for a candidate's desired certification level.
    - 3.2.3.3. Safe Practices for Rope Access Work.
    - 3.2.3.4. SPRAT's Rope Access Evaluation Guidelines.
- 3.3. Experience Requirements
  - 3.3.1. Certification advancement shall be completed in a consecutive manner unless approval is granted by the Evaluations Committee.
    - 3.3.1.1. Processes for obtaining Evaluations Committee approval shall be presented in *Rope Access Evaluation Guidelines*.
  - 3.3.2. No experience is required prior to becoming a *Level 1 Technician*.
  - 3.3.3. Candidates initially upgrading to the next higher level shall provide documentation in accordance with *Safe Practices for Rope Access Work* demonstrating at least 500 hours of rope access experience obtained with a valid certification at their current certification level.
  - 3.3.4. Candidates shall hold a certification level for a minimum of six months prior to being eligible for certification advancement to the next level.
    - 3.3.4.1. Candidates that have downgraded their certification level shall hold this current level of certification for a minimum of three months immediately prior to being eligible to upgrade to the next level.

## 4. Rope Access Evaluation Performance Principles

#### 4.1. General

- 4.1.1. Requirements shall be completed in a safe and efficient manner.
- 4.1.2. Specific equipment and techniques shall not be specified.
- 4.1.3. Site specific safety policies shall be followed.
- 4.1.4. A candidate or load is considered to be in a *fall zone* when moving or suspended at any height above the next lower level or within 2 m (6.6 ft) of an unprotected edge.
- 4.1.5. Provided all other performance principles are satisfied, the use of a fall arrest system, including a *backup system*, when available clearance is less than required clearance shall not affect grading.
- 4.2. Rope access systems
  - 4.2.1. *Rope access systems* shall be constructed and used in accordance with *Safe Practices for Rope Access Work*.
  - 4.2.2. Rope access systems shall incorporate appropriate anchorage systems.
  - 4.2.3. A backup system or other fall protection system shall be used when a candidate or load is in a fall zone.
  - 4.2.4. A *backup system* or other fall protection system shall be used in conjunction with any *main system*.
  - 4.2.5. Appropriate systems shall be used to minimize *free fall potential*.
    - 4.2.5.1. Free fall potential within a backup system or other fall protection system shall not exceed 1.2 m (4 ft).
    - 4.2.5.2. *Free fall potential* within a *backup system* should not exceed 0.6 m (2 ft).
    - 4.2.5.3. Free fall potential within a main system shall not exceed 0.6 m (2 ft).
    - 4.2.5.4. Free fall potential within a main system should not exceed 0.3 m (1 ft).
  - 4.2.6. Appropriate systems shall be used to minimize potential *swing falls*.
    - 4.2.6.1. Potential swing fall distance shall not exceed 0.6 m (2 ft).
    - 4.2.6.2. Potential *swing fall distance* should not exceed 0.3 m (1 ft).
    - 4.2.6.3. If a *main system* or *directional anchorage system* adjusts the *fall line* by greater than 0.6 m (2 ft) and creates a potential *swing fall* with a pendulum angle in excess of 20 degrees, a second system shall be used to protect against failure of the first system.
  - 4.2.7. Appropriate steps shall be taken to ensure a candidate or load cannot become inadvertently detached from a *main* or *backup system*.
- 4.3. Rope access equipment
  - 4.3.1. Rope access equipment shall be used in accordance with *Safe Practices for Rope Access Work*.
  - 4.3.2. Helmets shall be used while in a *hazard zone*.
    - 4.3.2.1. Helmets with fastened chinstraps shall be used while in a *fall zone*.
  - 4.3.3. Rope and other components shall be protected from damage as required by the rope access evaluation site.
  - 4.3.4. Harness connections shall be used in accordance with the manufacturer.
    - 4.3.4.1. Harness connections used with rope access equipment should be used in accordance with the *presiding regulatory authority* where the rope access evaluation is conducted.
  - 4.3.5. Failure of a component between an *anchorage* and a harness shall not result in a free fall or *swing fall* in excess of the limits described in Section 4.2, unless the introduced component:
    - 4.3.5.1. Is manufactured as a closed component that cannot be opened without permanent damage.
    - 4.3.5.2. Has no moving parts.
    - 4.3.5.3. Is designed to accommodate multiple connections.
    - 4.3.5.4. Has a minimum strength of either 24kN (5400 lbf), or two times the highest calculated required *anchorage system* strength within the *rope access system*.
- 4.4. Rescue considerations
  - 4.4.1. Rescue requirements shall be completed with an appropriate *backup system* or other fall protection system.
  - 4.4.2. Candidates shall maintain an appropriate *backup system* or other secondary system for rescue subjects during the completion of rescue requirements.

## 5. Grading System for Rope Access Evaluations

- 5.1. Candidate performance is graded on their adherence to the performance principles of Section 4.
- 5.2. Candidate performance is graded as a Pass (P), *Fail* (F), or *Discrepancy* (D).
  - 5.2.1. Pass (P) denotes satisfactory performance during the exercise.
  - 5.2.2. One *Fail* (F) constitutes failure of the rope access evaluation.
  - 5.2.3. Three *Discrepancies* (D) constitutes failure of the rope access evaluation.
    - 5.2.3.1. Multiple *discrepancies* may be issued within one exercise.
- 5.3. The evaluator of a rope access evaluation has the sole authority to issue *discrepancies* and *fails*.
- 5.4. An explanation shall be provided for any issued *fail* or *discrepancy*.
- 5.5. Any *fail* or *discrepancy* shall be issued prior to the candidate being assigned their next exercise.

## 6. Level 1 Technician Requirements

- 6.1. Performance Principles
  - 6.1.1. Candidate shall adhere to the performance principles in Section 4 throughout the rope access evaluation.
- 6.2. Fundamental Maneuvers
  - 6.2.1. A candidate shall ascend and descend at least 2 m (6.6 ft) using a *two-rope system* with:
    - 6.2.1.1. A *descender* as their primary connection within the *main system*.
    - 6.2.1.2. An *ascender* as their primary connection within the *main system*.
  - 6.2.2. While using a *two-rope system*, a candidate shall:

6.2.2.1. Transition from *ascent mode* to *descent mode*.

- 6.2.2.2. Transition from *descent mode* to *ascent mode*.
- 6.3. Edge Negotiation with Rope Protection
  - 6.3.1. Candidate shall ascend and descend a *two-rope system* past an edge obstruction that creates an interior angle of less than 120 degrees.
  - 6.3.2. Candidate shall pass rope protection installed on the *two-rope system* at the edge obstruction.
- 6.4. Deviation
  - 6.4.1. Candidate shall ascend and descend past a *directional anchorage system* that adjusts the *fall line* of a *two-rope system* by approximately 20 degrees.
- 6.5. Knot Pass
  - 6.5.1. Candidate shall ascend and descend past knots located at a similar height in both ropes of a *two-rope system*.
- 6.6. Rope-to-Rope Transfer
  - 6.6.1. Candidate shall transfer from one *two-rope system* to another located at least 2 m (6.6 ft) from the initial *two-rope system*.
- 6.7. Re-anchor
  - 6.7.1. Candidate shall ascend and descend past *fixed anchorage systems* that adjust the *fall line* of a *two-rope system* by at least 2 m (6.6 ft).
- 6.8. Aid Climbing: Horizontal

6.8.1. Candidate shall demonstrate *aid climbing* horizontally for a distance of at least 3 m (10 ft).

- 6.9. Knots
  - 6.9.1. Candidate shall tie knots that can be used to:
    - 6.9.1.1. Attach a rope to an anchorage connector or *anchorage* (i.e., termination knot).
    - 6.9.1.2. Isolate a bight that allows the rope to be loaded in line (i.e., middle knot).
    - 6.9.1.3. Prevent descending off the end of ropes (i.e., stop knot).
    - 6.9.1.4. Join two ropes together (i.e., join knot).

#### 6.10. Two-Rope System

- 6.10.1. Candidate shall construct a *two-rope system*.
- 6.10.2. Candidate shall construct the *anchorage system* for each *rope system* using either:
  - 6.10.2.1. A single *anchorage*.
  - 6.10.2.2. Two anchorages or anchorage connectors located less than 1 m (3.3 ft) apart.
- 6.11. Raising and Lowering
  - 6.11.1. From the ground or a platform, candidate shall construct and operate a system to raise and lower an individual or load at least 3 m (10 ft) along an unobstructed *fall line*.
- 6.12. Rescue: Adjacent Rope Set, Ascent to Descent Transition
  - 6.12.1. Candidate shall approach an individual that is in *ascent mode* on an adjacent *two-rope system*.
  - 6.12.2. Candidate shall transition the individual from *ascent mode* to *descent mode*.
  - 6.12.3. Candidate shall transition the individual and themself to the same *rope access system*.
  - 6.12.4. Candidate shall descend with the individual to the next lower level.

#### 7. Level 2 Technician Requirements

- 7.1. Candidate shall be proficient in *Level 1 Technician* requirements.
- 7.2. Performance Principles
  - 7.2.1. Candidate shall adhere to the performance principles in Section 4 throughout the rope access evaluation.
- 7.3. System Analysis
  - 7.3.1. Candidate shall demonstrate the ability to estimate potential forces and clearance requirements within *rope access systems* used during the completion of requirements.
- 7.4. Aid Climbing: Vertical
  - 7.4.1. Candidate shall demonstrate *aid climbing* vertically or at an angle for a distance of at least 3 m (10 ft).
- 7.5. Two-Rope System for Edge Negotiation
  - 7.5.1. Candidate shall construct a *two-rope system* that passes an edge obstruction creating an interior angle of less than 120 degrees.
  - 7.5.2. Candidates shall construct *anchorage systems* for each *rope system* using two *anchorages* or *anchorage connectors* located between 1 m (3.3 ft) and 4 m (13.1 ft) apart.
- 7.6. Retrievable Two-Rope System
  - 7.6.1. Candidate shall construct a retrievable *two-rope system*.
  - 7.6.2. Candidate shall descend at least 2 m (6.6 ft) on the *two-rope system*.
  - 7.6.3. Candidate shall retrieve the *two-rope system* without returning to the *anchorage(s)*.
- 7.7. Raising and Lowering: Suspended Candidate
  - 7.7.1. While suspended by a *rope access system*, candidate shall construct and operate a system to raise and lower an individual or load at least 3 m (10 ft) along an unobstructed *fall line*.
- 7.8. Raising and Lowering: Suspended Load
  - 7.8.1. While located by *the anchorage systems*, candidate shall lower an individual or load suspended by a *two-rope system* constructed with *fixed anchorage systems*, to the next lower level.
  - 7.8.2. The individual or load shall start suspended at least 1 m (3.3 ft) above the next lower level.
- 7.9. Lateral Operations: Cross-Haul
  - 7.9.1. Candidate shall use multiple raising and lowering systems to move an individual or load laterally from one designated location to another.

#### 7.10. Remote rescue system

- 7.10.1. Candidate shall construct a *remote rescue system* that permits the lowering of an individual that is located anywhere along a *two-rope system*.
- 7.10.2. With an individual using the constructed *two-rope system* in *ascent mode* or *descent mode*, candidate shall lower the individual to the next lower level.
- 7.11. Rescue: Same Rope Set, Rope-to-Rope Transfer
  - 7.11.1. Candidate shall approach an individual that is in *ascent mode* on the same *two-rope system*.
  - 7.11.2. Candidate shall transition the individual and themself to the same *rope access system*.
  - 7.11.3. Before reaching the next lower level, candidate shall transfer with the individual to another *two-rope system* located at least 2 m (6.6 ft) from the initial *two-rope system*.
- 7.12. Rescue: From Fall Arrest System
  - 7.12.1. While supported by a *rope access system*, candidate shall demonstrate rescuing an individual that is suspended from energy absorbing lanyards.

#### 8. Level 3 Technician Requirements

- 8.1. Candidate shall be proficient in *Level 1* and *Level 2 Technician* requirements.
- 8.2. Performance Principles
  - 8.2.1. Candidate shall adhere to the performance principles in Section 4 throughout the rope access evaluation.
- 8.3. System Analysis
  - 8.3.1. Candidate shall demonstrate the ability to estimate potential forces and clearance requirements within *rope access systems* used during the completion of requirements.
- 8.4. Two-Rope System for Deviation or Re-anchor
  - 8.4.1. Candidate shall construct a *deviation* or *re-anchor* to adjust the *fall line* of a *two-rope system*.
  - 8.4.2. Candidate shall negotiate the maneuver or perform a rescue from the maneuver.
- 8.5. Raising and Lowering: Knot Pass
  - 8.5.1. From the ground, a platform, or while suspended from *anchorage systems*, candidate shall demonstrate raising and lowering an individual or load suspended by a *two-rope system* with knots located at a similar height in both ropes.
- 8.6. Lateral Operations: Tensioned Rope System
  - 8.6.1. Candidate shall construct and use a tensioned *rope system* to move an individual or load laterally from one designated location to another.

#### 8.7. Rescue: From Maneuvers

- 8.7.1. Candidate shall perform rescue of an individual from two of the following maneuvers:
  - 8.7.1.1. Deviation.
  - 8.7.1.2. Knot Pass.
  - 8.7.1.3. Rope-to-Rope Transfer.
  - 8.7.1.4. Re-anchor.
  - 8.7.1.5. Aid Climbing.

8.7.2. The individual shall be located in a position expected when the maneuver is being completed successfully.

## 9. Complaints and Appeals

- 9.1. In the case of a complaint or dispute, the aggrieved party should submit a written statement to the SPRAT Office detailing the circumstances of the complaint and requested action. The SPRAT Office shall forward all complaints and appeals to the Evaluations Committee and the Board of Directors.
- 9.2. Complaints and appeals will be considered and ruled on by the Evaluations Committee. A written response shall be provided to the aggrieved party and copied to the Board of Directors within sixty (60) days of the written complaint. Any candidate affected by the decisions of the Evaluations Committee may choose to appeal to the Board of Directors.
- 9.3. The Board of Directors can choose to reconsider any action taken by the Evaluations Committee if the Board of Directors deems the action inconsistent with established certification requirements or finds the action inconsistent with the best interests of the membership.