# **CERTIFICATION REQUIREMENTS FOR ROPE ACCESS WORK**



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# **Revision History:**

Version 19A Board and SOC January 3<sup>rd</sup>, effective April 1<sup>st</sup> 2019

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## 1. Purpose and Scope

#### 1.1. Purpose

1.1.1. The purpose of this document is to provide certification criteria for *rope access technicians*. This document is to be used in conjunction with SPRAT's *Safe Practices for Rope Access Work*.

#### 1.2. Scope

- 1.2.1. This document is intended for use by *rope access technicians* whose specific job requires knowledge and skill proficiency in rope access techniques.
- 1.2.2. The SPRAT certification process is intended to establish a minimum baseline of knowledge and skill that a successful candidate will possess.
- 1.2.3. This document addresses minimum skills and certification requirements specific to rope access and does not address additional job specific skills (e.g. maintenance, construction, inspection).
- 1.2.4. This document does not purport to address all criteria that may be applicable to all types of rope access work.
  - 1.2.4.1. *Employers* of *rope access technicians* shall evaluate the job to be performed and provide for additional training as necessary.
  - 1.2.4.2. Additional consideration should be taken as necessary by an *employer* to verify a *rope access technician's* suitability to perform a given job/task.

## 2. General Certification Procedures of Rope Access Technicians

## 2.1. General Notes Regarding Evaluations

- 2.1.1. The SPRAT certification process is intended to establish a minimum baseline of knowledge and skill directly related to rope access.
  - 2.1.1.1. The evaluation session does not test industry-specific skills.
  - 2.1.1.2. Additional considerations may be required by an *employer* to verify the *rope access technician's* suitability to perform a given job/task.
- 2.1.2. These certification requirements are intended to be a performance-based standard.
  - 2.1.2.1. Equipment is not specified but should be appropriate for the application, meet relevant standards where applicable, and be used consistent with the manufacturer's specifications.
  - 2.1.2.2. Techniques are not specified, but the required skills are expected to be performed safely and efficiently.
  - 2.1.2.3. All candidates shall maintain two points of contact while at height during the evaluation session. Four points of contact may be required for some maneuvers.

## 2.1.3. Rescue Considerations

- 2.1.3.1. Candidate should have a working knowledge of rescue requirements as stated in *Safe Practices for Rope Access Work*.
- 2.1.3.2. Candidate shall maintain two connections to the casualty and to the ropes.
- 2.1.3.3. Consideration should be given to the effects of a two-person load on the equipment used.
- 2.1.3.4. Extra friction may be required for a two-person load.
- 2.1.3.5. Proper casualty management should be considered and demonstrated.
- 2.2. Rope Access Technician Certification Procedures

- 2.2.1. Evaluation Session Host shall submit a request to host an evaluation session to the SPRAT Office prior to hosting an evaluation session.
  - 2.2.1.1. Evaluation Session Host information is available from the SPRAT Office or can be found under the Certification section of the SPRAT website at www.sprat.org.
- 2.2.2. The written test and field evaluation shall be representative of the skills and knowledge required by this standard and *Safe Practices for Rope Access Work* for the desired level of certification.
  - 2.2.2.1. The written test shall be administered consistent with the procedures maintained by the Evaluations Committee.
  - 2.2.2.2. An Evaluator shall conduct the field evaluation.
    - 2.2.2.2.1. An *Independent Evaluator* shall conduct the field evaluation for *Level II* and *Level III Technician* candidates.
- 2.2.3. An Evaluator shall issue a provisional result to the candidate immediately following the evaluation.
- 2.2.4. Evaluation result is based on fulfillment of pre-evaluation requirements and completion of a written exam and field evaluation.
- 2.2.5. The Evaluator shall be responsible for submission of all paperwork to the SPRAT Office for all candidates evaluated during the relevant evaluation session.
  - 2.2.5.1. All paperwork shall be submitted in a timely manner and in accordance with the appropriate Evaluator requirements.
- 2.2.6. Upon receipt of all paperwork, SPRAT will issue the final certification to the candidate.
- 2.3. Grading System for Field Evaluations
  - 2.3.1. Each skill is graded on P/F/D Pass/Fail/Discrepancy.
    - 2.3.1.1. Pass (P) denotes satisfactory performance during the exercise.
    - 2.3.1.2. One *Fail* (F) constitutes failure of evaluation.
    - 2.3.1.3. Three *Discrepancies* (D) constitutes failure of evaluation.
  - 2.3.2. The following is a non-exhaustive list of errors that constitute a *Fail* (F):
    - 2.3.2.1. Relying on one *rope system* when that system is your primary means of support
    - 2.3.2.2. Ineffectively used backup device (e.g. excessive slack above backup device; upside down backup device)
    - 2.3.2.3. Not capable of performing one or more of the tasks required
    - 2.3.2.4. Unacceptably slow at completing one or more of the tasks required
    - 2.3.2.5. Uncontrolled or dangerous descent or swing
    - 2.3.2.6. Descender threaded incorrectly and used in that manner
    - 2.3.2.7. No fall protection used when within 6 feet (1.8 meters) of an unprotected edge
    - 2.3.2.8. Use of inappropriate equipment as a backup device (e.g. toothed *ascender* that may damage rope when dynamically loaded)
    - 2.3.2.9. Unprofessional conduct
    - 2.3.2.10. No helmet while working at height
  - 2.3.3. The following is a non-exhaustive list of errors that constitute a *Discrepancy* (D):
    - 2.3.3.1. Unlocked carabiner in safety system

- 2.3.3.2. Helmet unfastened
- 2.3.3.3. Task is not completed in timely manner
- 2.3.3.4. Not providing additional friction to descent control devices as required by manufacturer specifications in certain circumstances (e.g. rescue pick-offs with two-person loads)
- 2.3.3.5. Dropped equipment

## 3. Training and Pre-Certification Requirements

- 3.1. Prior to certification all candidates shall:
  - 3.1.1. Be at least 18 years old.
  - 3.1.2. Sign a liability release form and statement of physical and mental fitness to perform rope access work.
- 3.2. Training Requirements
  - 3.2.1. A candidate shall receive training by a *competent trainer* prior to initial certification as a *Level II*, or *Level III Technician*. This training should be designed to prepare the candidate to demonstrate proficiency in the skills required at the desired level of certification.
    - 3.2.1.1. Proof of training shall be provided with experience documentation via a training affidavit.
  - 3.2.2. A candidate should receive training by a *competent trainer* prior to re-certification at the current level of certification. This training should be designed to prepare the candidate to demonstrate proficiency in the skills required at the level of certification.
- 3.3. Level I Technician Pre-Certification Requirements
  - 3.3.1. All general requirements outlined in Sections 3.1 and 3.2.
  - 3.3.2. No experience requirement prior to training.
- 3.4. Level II Technician Pre-Certification Requirements
  - 3.4.1. All general requirements outlined in Sections 3.1 and 3.2.
  - 3.4.2. 500 hours and 6 months of documented rope access experience as a *Level I Technician* or equivalent.
- 3.5. Level III Technician Pre-Certification Requirements
  - 3.5.1. All general requirements outlined in Sections 3.1 and 3.2.
  - 3.5.2. 500 hours and 6 months of documented rope access experience as a *Level II Technician* or equivalent (1000 hours total).
  - 3.5.3. The majority of the 500 hours experience should be directly related to the techniques and field environment that the candidate will be expected to supervise.

## 4. Maintaining Experience Logbooks

- 4.1. SPRAT logbooks are issued to all new successful candidates by the SPRAT Office with the *rope access technician's* name, photo, and SPRAT certification number on the first inside page.
  - 4.1.1. Logbooks are not issued to *rope access technicians* renewing or upgrading their certification.
  - 4.1.2. New logbooks can be requested from the SPRAT Office.
- 4.2. The logbooks shall be maintained by the *rope access technician* and signed by a *Rope Access Program Administrator*, *Rope Access Supervisor*, Evaluator, or client as applicable.
  - 4.2.1. The signatory, when possible, should add their SPRAT certification number in the signature field.

- 4.3. Under the heading *Details of Work Tasks*, the *rope access technician* should note the type of rope access skills used as well as the application (e.g. *aid climbing*/inspection or descent/ascent/painting)
- 4.4. *Hours* worked shall be the time actually spent carrying out rope access tasks including rigging, training, working *on-rope*, and on-site safety management.
- 4.5. Experience documentation can be presented in other formats provided the following information is presented:
  - 4.5.1. Date of Work
  - 4.5.2. The *employer* for which the work was done
  - 4.5.3. Details of rope access tasks and application
  - 4.5.4. Location and type of structure
  - 4.5.5. Hours worked meeting the requirements of Section 4.4
  - 4.5.6. Signature of Rope Access Program Administrator, Rope Access Supervisor, or client verifying hours worked
- 4.6. It is recommended that *rope access technicians* and *employers* maintain electronic records of hours worked in the event the logbook is destroyed or misplaced.

## 5. Certification Validity, Re-certification, Certification Advancement and Certification Expiry

- 5.1. Certification Validity
  - 5.1.1. Upon successful skills demonstration, written exam results, and receipt of all paperwork, SPRAT will issue the final certification to the candidate.
  - 5.1.2. Certification is valid for three (3) years from the date of the evaluation session.
- 5.2. Re-certification
  - 5.2.1. Rope access technicians should attend an evaluation session prior to the expiration of their current certification.
  - 5.2.2. Re-certifications completed within 6 months prior to expiration of the current certification will be valid for three (3) years from the date of the previous certification expiration.
- 5.3. Certification Advancement
  - 5.3.1. Rope access technicians that have met the experience and time requirements while holding a valid certification at their current level qualify to advance to the next level.
  - 5.3.2. Upon successful skills demonstration, written exam results, and receipt of all paperwork, SPRAT will issue a new certification.
  - 5.3.3. The new certification is valid for three (3) years from the date of the evaluation session.
- 5.4. Certification Downgrade
  - 5.4.1. Rope access technicians with current or expired certifications may elect to downgrade their certification to any lower level.
  - 5.4.2. Upon successful skills demonstration, written exam results and receipt of all paperwork, SPRAT will issue a new certification at this lower level.
  - 5.4.3. This new certification will be valid for three (3) years from the date of the evaluation session.
  - 5.4.4. Prior to attempting to upgrade to the next higher level, the *rope access technician* shall remain at this new lower level for a minimum of three (3) months.
  - 5.4.5. Advancement from this lower level shall be done in a consecutive manner.
- 5.5. Certification Expiration

- 5.5.1. Upon expiration, SPRAT issued certifications become invalid.
- 5.5.2. Rope access hours acquired without a valid certification will not be counted toward the required hours for certification advancement.
- 5.5.3. Candidates with expired certifications wishing to re-certify or advance to the next level shall complete all skills at the desired level of certification.
- 5.5.4. Candidates with expired Level I certifications, with the proper experience (as required in Section 3.4), shall advance to a Level II certification prior to earning qualifications for advancement to a Level III certification.

## 6. Direct Entry Requirements for Level II and Conversion Requirements for Level III

- 6.1. The Direct Entry and Conversion process is intended to allow *rope access technicians* who have obtained rope access skills and experience on an industrial two rope system, outside the SPRAT certification system, to be evaluated for SPRAT certification at a level commensurate with their skill and experience.
  - 6.1.1. The Direct Entry or Conversion process is only available to individuals who have not previously held any SPRAT certification.
- 6.2. Direct Entry and Conversion applicants shall submit the appropriate documentation, outlined in Sections 6.3 and 6.4, to the Evaluations Committee for review and approval.
  - 6.2.1. Applications should be submitted no less than five weeks in advance of the scheduled evaluation date.
  - 6.2.2. Applications may be submitted by the individual, the Evaluation Session Host, or training provider.
- 6.3. Direct Entry to Level II
  - 6.3.1. Direct Entry applicants shall provide documentation of work experience employing a *two-rope system* of at least 500 hours (hours should be signed off by a *Rope Access Program Administrator, Rope Access Supervisor*, or client).
    - 6.3.1.1. Documentation of work experience should include details of the type of work, dates of work, number of hours *on-rope* and the forms of access (e.g. descending, ascending, rope transfer, hauling, rigging, etc.).
  - 6.3.2. Applicants shall provide a work at height resume that includes 2 professional references, *employers*, pertinent experience, position(s), responsibilities and previous training.
  - 6.3.3. To become a *Level II Technician*, approved applicants shall attend an evaluation session and successfully complete:
    - 6.3.3.1. A Level II Technician written test.
    - 6.3.3.2. A Level II Technician field evaluation by an Independent Evaluator.
      - 6.3.3.2.1. Direct Entry Candidates will be evaluated on all skills required for a *Level I* and *Level II*Technician.
- 6.4. Conversion to Level III
  - 6.4.1. Rope access technicians who hold an active Level III certification in a recognized rope access association may apply to be evaluated for SPRAT certification as a *Level III Technician*.
  - 6.4.2. Applicants shall provide their logbook or similar documentation of work experience.
    - 6.4.2.1. Documentation of work experience should include details of the type of work, dates of work, number of hours on rope and the forms of access (e.g. descending, ascending, rope transfer, hauling, rigging, etc.).

- 6.4.3. Applicants shall provide a work at height resume that includes 2 professional references, *employers*, pertinent experience, positions (including supervisory or foreman type roles), responsibilities, and previous training.
- 6.4.4. Applicants shall provide a letter of recommendation from a *Rope Access Program Administrator*, *Rope Access Supervisor*, or client.
- 6.4.5. To become a *Level III Technician*, approved applicants shall attend an evaluation session and successfully complete:
  - 6.4.5.1. A Level III Technician written test.
  - 6.4.5.2. A Level III Technician field evaluation by an Independent Evaluator
    - 6.4.5.2.1. Conversion candidates will be evaluated on all skills required for a *Level, I Level II* and *Level III*Technician.

## 7. Level I Technician Requirements

- 7.1. Roles and Responsibilities
  - 7.1.1. Candidate shall be able to demonstrate an understanding of the responsibilities of a *Level I Technician* and how these fit into the overall responsibilities of a rope access program.
- 7.2. Equipment Use and Inspection
  - 7.2.1. Candidate shall be able to demonstrate understanding of proper use, inspection, and care of all equipment required for the technical skills of a *Level I Technician*.
  - 7.2.2. Candidate shall also understand the requirements of an *employer's* equipment management program as required by *Safe Practices for Rope Access Work*.
- 7.3. Job Safety
  - 7.3.1. Candidate shall be able to demonstrate an understanding of an *employer's* safety management program, relevant policies, work permits, work zones, and *job safety analysis* as required by *Safe Practices for Rope Access Work*.
  - 7.3.2. Candidate should also be aware of evaluation site hazards and emergency procedures.
- 7.4. Knots
  - 7.4.1. Candidate shall demonstrate the tying of the following knots and have an awareness of their applications, strengths, and limitations:
    - 7.4.1.1. End or termination knot (e.g. Figure 8 on a bight, Figure 9 on a bight, Bowline)
    - 7.4.1.2. Knot to join two ropes (e.g. Double Fisherman's Bend, Flemish Bend)
    - 7.4.1.3. Middle knot (e.g. Alpine Butterfly)
    - 7.4.1.4. Stopper knot to prevent descending off end of ropes (e.g. barrel knot)
- 7.5. Use of Backup Devices:
  - 7.5.1. Candidate shall demonstrate the use of a backup device in accordance with manufacturer specifications.
  - 7.5.2. Candidate should pay attention to:
    - 7.5.2.1. Positioning the device to minimize free fall potential.
    - 7.5.2.2. Connecting to the device with a compatible lanyard type and length.
    - 7.5.2.3. Pairing the device to a compatible rope type and diameter.
    - 7.5.2.4. Not defeating the device through improper handling.

#### 7.6. Use of *Descenders*:

- 7.6.1. Candidate shall demonstrate the proper use of a *descender* in accordance with manufacturer's specifications.
- 7.6.2. Candidate shall demonstrate:
  - 7.6.2.1. Descending in a controlled manner.
  - 7.6.2.2. Stopping, and locking or tying off the *descender* as appropriate.
  - 7.6.2.3. Ascending at least 2 m (6.6 ft).
- 7.6.3. Candidate should pay attention to:
  - 7.6.3.1. Locking or tying off the *descender* when candidate is stopped and not in control of the slack end of the rope.
  - 7.6.3.2. Not operating or triggering a *descender* without proper control of the slack end of the rope.

#### 7.7. Use of Ascenders

- 7.7.1. Candidate shall demonstrate the proper use of ascenders in accordance with manufacturer's specifications.
- 7.7.2. Candidate shall demonstrate:
  - 7.7.2.1. Ascending 10 m (33 ft).
  - 7.7.2.2. Down-climbing 2 m (6.6 ft).
- 7.7.3. Candidate should pay attention to:
  - 7.7.3.1. Properly attaching the *ascenders* to the harness to increase safety and prevent equipment from being inadvertently dropped.
  - 7.7.3.2. Using *ascenders* in such a way to eliminate a dynamic fall onto an *ascender*.
    - 7.7.3.2.1. A single *ascender* connection to the *main rope* is acceptable as long as the free fall potential is limited to less than 30 cm (1 ft) or eliminated entirely.

#### 7.8. Change-overs

- 7.8.1. Candidate shall demonstrate switching from ascent to descent and from descent to ascent.
- 7.8.2. Candidate should pay attention to careful handling of equipment and proper loading of *carabiners* during the maneuver.

## 7.9. Passing Knots

- 7.9.1. Candidate shall demonstrate ascending and descending past knots tied in both backup and main ropes.
- 7.9.2. Knots to be passed shall not be used as an attachment point.

## 7.10. Rope-to-Rope Transfer

- 7.10.1. Candidate shall demonstrate transferring from one *two-rope system* to another separated by more than 2 m (6.6 ft).
- 7.10.2. A proper connection to 4 ropes is expected to control the swing potential if one rope were to fail during the maneuver.
- 7.10.3. Two backup devices may be used; however, candidate may use an appropriate knot as a backup.

#### 7.11. Deviation

7.11.1. Candidate shall demonstrate ascending and descending past a *directional anchorage system* that deviates the *fall line* of a *two-rope system* by no more than 20 degrees.

- 7.11.1.1. A single *directional anchorage system* is acceptable if there is no safety consequence of its failure.
- 7.11.1.2. The *directional anchorage system* shall not be relied upon as a primary point of connection.
- 7.11.1.3. Provision for returning to the *directional anchorage system* from above and facilitating a rescue or repeated use from below should be considered.

#### 7.12. Re-anchor

- 7.12.1. Candidate shall demonstrate ascending and descending past intermediate *fixed anchorage systems* that adjust the fall line of a *two-rope system* by more than 2 m (6.6 ft).
- 7.12.2. The candidate should use four-point technique similar to that used in a rope-to-rope transfer and shall not pull the rope from below the *anchorages* across the area during the maneuver.

## 7.13. Negotiate Edge

- 7.13.1. Candidate shall demonstrate safely negotiating an edge obstruction in ascent mode and descent mode.
- 7.13.2. This task should simulate field conditions experienced when negotiating the edge of a roof, cliff face, or parapet wall.
- 7.13.3. The *anchorages* should be at least 2 m (6.6 ft) from an unprotected edge and be located on the horizontal surface or within 2 m (6.6 ft) above the horizontal surface.
- 7.13.4. If the edge is protected by a railing, candidate may need to climb under or through the railing to demonstrate the edge negotiation.
- 7.13.5. Proper edge protection, controlled movement, and avoidance of dynamic loads shall be demonstrated.

#### 7.14. Rope and Sling Protection

- 7.14.1. Candidate shall demonstrate awareness and proper use of rope and sling protection as required by the Evaluation Session Host site.
- 7.14.2. The candidate shall pass a rope protector installed on both the main and backup ropes.

## 7.15. Rigging Anchorage Systems

- 7.15.1. Simple Structural Anchorage System
  - 7.15.1.1. Candidate shall demonstrate establishing an *anchorage system* using a structural member (e.g. steel beam).
  - 7.15.1.2. Proper use of hardware, choice of sling material, and appropriate sling protection shall be considered.

## 7.15.2. Load Sharing Anchorage System

- 7.15.2.1. The candidate shall demonstrate establishing a load sharing *anchorage system* with two *anchorages* or *anchorage connectors* less than 1 m (3.3 ft) apart horizontally (e.g. bolt anchors in concrete or rock).
- 7.15.2.2. Considerations for establishing a load-sharing *anchorage system* should include:
  - 7.15.2.2.1. Failure consequences.
  - 7.15.2.2.2. Anchorage location.
  - 7.15.2.2.3. Bridle angle.
  - 7.15.2.2.4. Anchorage connector loading.
  - 7.15.2.2.5. Sling Choice.
  - 7.15.2.2.6. Edge protection.

## 7.16. Horizontal Aid Climbing

- 7.16.1. Candidate shall demonstrate *aid climbing* while maintaining connections to two independent *anchorage systems*.
- 7.16.2. The candidate shall demonstrate horizontal movement using either *fixed* or movable *anchorage systems*.

#### 7.17. Level I Technician Rescue Scenario

- 7.17.1. Candidate shall perform a pick-off rescue of a casualty that is in ascent mode.
- 7.17.2. Candidate shall approach casualty on an adjacent set of ropes.
- 7.17.3. Candidate shall change-over the casualty from ascent mode to descent mode.
- 7.17.4. Candidate shall then perform a rescue from descent.
- 7.18. Rigging and Operating a Hauling and Lowering System
  - 7.18.1. While working from a platform or ground level, a lone candidate shall demonstrate lowering and raising a load while using an appropriate descent control device attached to an *anchorage system*.
  - 7.18.2. Candidate may be asked to stop and lock-off the device. A *fixed backup system* shall be utilized and properly managed by the candidate.
  - 7.18.3. Candidate may begin with lowering or raising the load, and shall not be required to negotiate an edge with the load.
  - 7.18.4. A mechanical advantage system shall be used when raising the load.

## 8. Level II Technician Requirements

- 8.1. Candidate shall provide proof of at least 500 hours of work experience as a Level I Technician or equivalent.
- 8.2. Candidate may be asked to demonstrate proficiency in the skills and knowledge required of a *Level I Technician* in addition to those specified below.
- 8.3. Roles and Responsibilities
  - 8.3.1. Candidate shall demonstrate an understanding of the responsibilities of a *Level II Technician* and how these fit into the overall responsibilities of an *employer's* rope access program.
- 8.4. Equipment Use and Inspection
  - 8.4.1. Candidate shall be able to demonstrate understanding of proper use, inspection, and care of all equipment required for the technical skills of a *Level II Technician*.
  - 8.4.2. The candidate should understand an *employer's* equipment management program as required by *Safe Practices for Rope Access Work*.
- 8.5. Job Safety
  - 8.5.1. Candidate shall be able to demonstrate an understanding of an *employer's* safety management program, relevant policies, work permits, work zones, and *job safety analysis* as required by *Safe Practices for Rope Access Work*.
- 8.6. Rigging and System Dynamics
  - 8.6.1. Candidate should understand the forces involved in rigging *rope access systems*, including concepts such as angle physics and dynamic loading.
- 8.7. Knots and Hitches
  - 8.7.1. In addition to the knots required of a *Level I Technician*, the candidate shall demonstrate the proper tying and dressing of:

- 8.7.1.1. Prusik hitch
- 8.7.1.2. Tied-off Münter hitch

## 8.8. Load-sharing Anchorage Systems

- 8.8.1. Candidate shall be asked to demonstrate establishing a 2-point load sharing *anchorage system* in one of the following situations:
  - 8.8.1.1. Two *anchorages* or *anchorage connectors* greater than 2 m (6.6 ft) apart horizontally (perpendicular to the plane of the rope).
  - 8.8.1.2. Two *anchorages* or *anchorage connectors* greater than 2 m (6.6 ft) apart vertically (parallel to the plane of the rope).
- 8.8.2. Considerations for establishing load-sharing *anchorage system* should include:
  - 8.8.2.1. Failure consequences.
  - 8.8.2.2. Anchorage location.
  - 8.8.2.3. Bridle angle.
  - 8.8.2.4. Anchorage connector loading.
  - 8.8.2.5. Sling Choice.
  - 8.8.2.6. Edge protection.

## 8.9. Retrievable Rope Systems

- 8.9.1. Candidate shall demonstrate a method to retrieve ropes from a structural anchorage after descent.
- 8.9.2. Considerations include:
  - 8.9.2.1. Connector loading.
  - 8.9.2.2. Edge protection.
  - 8.9.2.3. Rope abrasion.

#### 8.10. Vertical Aid Climbing

- 8.10.1. Candidate shall demonstrate vertical *aid climbing* on *anchorage systems* spaced 45 cm (18 in) apart or less, for a minimum distance of 3 m (10 ft).
- 8.11. Pick-off Rescue of Casualty Through Knots
  - 8.11.1. Candidate shall be asked to perform a pick-off rescue of a casualty, from either ascent or descent mode, with knots in both *backup* and *main ropes*.
  - 8.11.2. The casualty shall be suspended a distance of at least 60 cm (24 in) above both knots.
  - 8.11.3. The candidate shall then descend with the casualty while negotiating the obstacle.
  - 8.11.4. Knots to be passed shall not be used as an attachment point.
- 8.12. Rescue from Horizontal Aid Climbing
  - 8.12.1. Candidate shall demonstrate rescuing a casualty from horizontal *aid climbing* to a designated location below one side of the traverse.
  - 8.12.2. Candidate shall utilize a rope-to-rope transfer to reach the designated location with the casualty.
- 8.13. Rigging and Operating a *Rope Access System* Pre-rigged to Lower
  - 8.13.1. Candidate shall establish a *two-rope system* for another *rope access technician* to use that allows for a *remote rescue*.

- 8.13.2. Once the *rope access technician* is *on-rope*, candidate shall demonstrate lowering the *rope access technician* to the ground.
- 8.14. Pitch Head Break in and Lower
  - 8.14.1. Candidate shall demonstrate breaking into and lowering a load suspended from a *rope access system*.
  - 8.14.2. Candidate shall be in suspension while performing this maneuver.
  - 8.14.3. Load shall be suspended at least 1 m (3.3 ft) above grade, and shall be lowered to the grade.
  - 8.14.4. Candidate may access the *anchorage systems* via any means.
  - 8.14.5. Connections shall not be made to the load or the *two-rope system* suspending the load until the candidate is suspended from the *anchorage systems*.

#### 8.15. Cross-haul

- 8.15.1. Candidate shall demonstrate using two hauling systems in concert to move a load vertically and horizontally.
- 8.15.2. The load may start from the ground or platform level.
- 8.15.3. Candidate may operate both systems or may direct another person to operate one side of the system.

## 9. Level III Technician Requirements

- 9.1. Candidate shall provide proof of at least 500 hours of work experience as a *Level II Technician* or equivalent (1000 hours total).
- 9.2. Candidate may be asked to demonstrate proficiency in the skills and knowledge required of a *Level II Technician* in addition to those specified below.
- 9.3. Roles and Responsibilities
  - 9.3.1. Candidate shall demonstrate a clear understanding of the responsibilities of a *Level III Technician* and how these fit into the overall responsibilities of an *employer's* rope access program as required by *Safe Practices for Rope Access Work*.
- 9.4. Management and Communication
  - 9.4.1. Candidate shall demonstrate an ability to manage the safety of other rope access technicians and the public.
  - 9.4.2. Candidate shall demonstrate clear communication skills and be able to read, write, and speak in the language of the work place (unless provisions are made by an *employer* to provide a consistent and reliable translator).
  - 9.4.3. Candidate should also be familiar with using communication methods available in various field environments.
- 9.5. Equipment Use and Inspection
  - 9.5.1. Candidate shall be able to demonstrate a thorough understanding of proper use, inspection, and care of all equipment required on a rope access work site.
  - 9.5.2. Candidate should be able to manage and carry out an *employer's* equipment management program as required by *Safe Practices for Rope Access Work*.
- 9.6. Job Safety
  - 9.6.1. Candidate shall be able to carry out an *employer's* safety management program including comprehensive knowledge of a *job safety analysis* as stated in *Safe Practices for Rope Access Work*.
- 9.7. Rigging and System Dynamics

- 9.7.1. Candidate shall understand the forces involved in rigging rope access systems including concepts such as angle physics and dynamic loading.
- 9.8. Team Scenario
  - 9.8.1. Candidate will be given a rescue or work task to complete with the assistance of one or more individuals.
  - 9.8.2. The Level III Candidate will be evaluated on their ability to effectively:
    - 9.8.2.1. Communicate and delegate tasks.
    - 9.8.2.2. Safely manage the completion of the scenario.
  - 9.8.3. Candidates supporting the operation are accountable for accomplishing tasks at their desired skill level and will be evaluated accordingly.
    - 9.8.3.1. Supporting candidates that have completed their evaluation shall not be evaluated while supporting a team scenario.
- 9.9. Pick-off Rescue of Casualty while Negotiating Obstacles
  - 9.9.1. Candidate shall be asked to perform a pick-off rescue of a casualty and descend with the casualty while negotiating one of the following:
    - 9.9.1.1. **Deviation**
    - 9.9.1.2. Re-anchor
  - 9.9.2. Candidate shall be asked to perform a pick-off rescue of a casualty from within an obstacle. The casualty shall be mid-transfer in one of the following:
    - 9.9.2.1. Re-anchor
    - 9.9.2.2. Rope-to-Rope Transfer
- 9.10. Hauling and Lowering Through Knots
  - 9.10.1. Candidate shall demonstrate raising and lowering a casualty or load with knots located in both *backup* and *main ropes* located at a similar height while working from a platform or while suspended from *anchorage systems*.
  - 9.10.2. The casualty or load shall be suspended at least 2 m (6.6 ft) below knots that are at least 2 m (6.6 feet) below the *anchorage systems*.
  - 9.10.3. Load shall be raised to the *anchorage systems* and returned to its initial location.
  - 9.10.4. Candidate may access the *anchorage systems* via any means.
  - 9.10.5. Connections shall not be made to the load or the *two-rope system* supporting the load until the candidate is located at the *anchorage systems*.
  - 9.10.6. Knots will be located at a similar height.
  - 9.10.7. Knots to be passed shall not be used as an attachment point.
- 9.11. Tensioned Rope Systems
  - 9.11.1. Candidate shall demonstrate transporting a load along a horizontal or angled tensioned rope system.
  - 9.11.2. Candidate shall know how to estimate forces placed on the system.
  - 9.11.3. Rigging considerations should include potential failure of the tensioned rope(s) in the system.

## 10. Complaints and Appeals

- 10.1. 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.
- 10.2. 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.
- 10.3. 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.