WORK-AT-HEIGHT EVALUATION GUIDELINES

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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.

New terminology in this document that has not received approval for inclusion in SPRAT's *Defined Terms* is shown in ***bold*** type unless written in a primary section heading. Interim definitions for these terms are provided in Appendix 1 of SPRAT's *Work-at-Height Certification Requirements*.

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 serves as a supplement to SPRAT's *Work-at-Height Certification Requirements* and is to be used in conjunction with other SPRAT standards and supplements.

1.1.2. The purpose of this document is to provide candidates, Evaluation Session Hosts, and evaluators with the information and resources needed to fulfill their responsibilities within SPRAT's work-at-height certification program.

1.2. Scope

1.2.1. The document provides:

1.2.1.1. Responsibilities of involved parties.

1.2.1.2. Written test information.

1.2.1.3. Work-at-height evaluation policies.

1.2.1.4. Certification requirement perspective and training considerations.

1.2.1.5. Site, site station, and equipment requirements and recommendations.

1.2.2. The appendix in this document provides:

1.2.2.1. Fall protection equipment and system templates for the evaluation site's work-at-height plan.

1.2.2.2. Fall protection topics and where they are tested within the work-at-height evaluation and written test.

2. Responsibilities of Involved Parties

2.1. Candidate Responsibilities

2.1.1. Prior to participating in a work-at-height evaluation, candidates shall:

2.1.1.1. Provide proof of identification and age.

2.1.1.2. Ensure their personal information is accurate in SPRAT's system.

2.1.1.2.1. Candidate accounts are created when a candidate is first added to a roster.

2.1.1.2.2. SPRAT's Account Issue Report Form should be completed before the work-at-height evaluation to assist in updating personal information that is not editable within a candidate's account.

2.1.1.3. Receive training in accordance with *Work-at-Height Certification Requirements*.

2.1.1.4. Complete the written test requirements in accordance with Section 3.

2.1.1.5. Complete the Candidate Affidavit.

2.1.2. During a work-at-height evaluation, candidates shall:

2.1.2.1. Conduct themselves in a professional manner.

2.1.2.2. Complete requirements while adhering to performance principles in Section 4 of *Work-at-Height Certification Requirements*.

2.1.2.3. Ask questions, as needed, to clarify an evaluator's instructions.

2.1.3. After a work-at-height evaluation:

2.1.3.1. Candidates should provide feedback regarding the work-at-height evaluation to the SPRAT Office.

2.1.3.2. Candidates that do not pass the written test or work-at-height evaluation should retest in accordance with Section 3 and Section 4, respectively.

2.1.3.3. Candidates should ensure their personal information remains current within SPRAT's system.

2.1.3.4. Successful candidates should maintain their certification.

2.2. Evaluation Host Responsibilities

2.2.1. Prior to hosting a work-at-height evaluation, an Evaluation Session Host shall:

2.2.1.1. Maintain a Company or Company Premier membership with SPRAT.

2.2.1.2. Ensure a Host Agreement for the current calendar year is submitted and approved in SPRAT's system.

2.2.1.3. Ensure insurance documentation is submitted and approved in SPRAT's system in accordance with SPRAT's *Evaluation Session Insurance Policy*.

2.2.1.4. Provide or ensure provision of a site meeting the requirements of Sections 7, 8, and 9.

2.2.1.5. Establish an evaluation and assign an evaluator in SPRAT's system.

2.2.1.6. Schedule an evaluator to conduct the work-at-height evaluation.

2.2.1.7. Ensure accommodation in a work-at-height evaluation for all candidates in accordance with Section 4.

2.2.1.8. Ensure candidates meet eligibility and training requirements of *Work-at-Height Certification Requirements*.

2.2.1.9. Complete the evaluation roster in SPRAT's system, including:

2.2.1.9.1. Adding candidates with existing accounts.

2.2.1.9.2. Entering personal information for new candidates.

2.2.1.9.3. Taking and entering current photos of candidates.

2.2.1.9.3.1. Photographs shall be passport style headshots with a neutral background.

2.2.1.9.3.2. Photographs of candidates wearing hats or sunglasses are not accepted.

2.2.1.10. Verify that candidates have accessed and verified their personal information in SPRAT's system.

2.2.2. During a work-at-height evaluation, an Evaluation Session Host shall:

2.2.2.1. Provide or ensure provision for prompt rescue.

2.2.3. Following a work-at-height evaluation, an Evaluation Session Host shall:

2.2.3.1. Provide feedback regarding the work-at-height evaluation to the SPRAT Office.

2.2.3.2. Assist with the submittal and investigation of appeals and complaints.

2.2.3.3. Provide payment of work-at-height evaluation fees in a timely manner.

2.2.3.3.1. A fee of $100 is assessed for each candidate.

2.3. Evaluator Responsibilities

2.3.1. Prior to administering a work-at-height evaluation, an evaluator shall:

2.3.1.1. Maintain an evaluator appointment in accordance with approved procedures.

2.3.1.2. Ensure Evaluation Session Hosts and candidates meet eligibility requirements.

2.3.1.3. Verify site requirements.

2.3.1.4. Verify and supplement evaluation roster information in SPRAT's online system.

2.3.2. During the work-at-height evaluation, an evaluator shall:

2.3.2.1. Administer work-at-height evaluations in accordance with approved procedures.

2.3.2.2. Observe candidates' adherence to certification criteria.

2.3.2.3. Issue and explain session results to candidates and Evaluation Session Hosts.

2.3.3. Following a work-at-height evaluation, an Evaluator shall:

2.3.3.1. Submit work-at-height evaluation documentation to the SPRAT Office.

2.3.3.2. Assist with the investigation of complaints and appeals from a work-at-height evaluation.

2.4. SPRAT Office Responsibilities

2.4.1. The SPRAT Office shall:

2.4.1.1. Assist with general certification program enquiries.

2.4.1.2. Review, approve, and manage Evaluation Session Host information.

2.4.1.3. Compile and store work-at-height evaluation and written test information.

2.4.1.4. Collect and manage fees associated with certification processing.

2.4.1.5. Process certification documentation for all successful candidates.

2.4.1.6. Manage verification of current and expired SPRAT certifications.

3. Written Test Information

3.1. General

3.1.1. The written test evaluates candidates' understanding of SPRAT standards and supplements, including:

3.1.1.1. *Work-at-Height Certification Requirements.*

3.1.1.2. *Defined Terms.*

3.1.1.3. *Work-at-Height Evaluation Guidelines.*

3.1.1.4. *Clearance Requirement Guidelines.*

3.1.2. The test is comprised of 25 multiple choice and true-false questions.

3.1.3. There is only one correct answer for each question.

3.1.4. A score of 80% or better constitutes a passing score for the written test.

3.2. First Written Test Attempt

3.2.1. A candidate shall complete the written test prior to participating in the work-at-height evaluation.

3.2.2. The written test shall be completed no more than 10 days prior to the date of the work-at-height evaluation.

3.2.2.1. A successful written test may be used for multiple work-at-height evaluations within this time frame.

3.2.3. A candidate is permitted one opportunity to take the written test prior to the work-at-height evaluation.

3.2.4. A candidate that fails their first written test attempt may participate in a work-at-height evaluation.

3.3. Second Written Test Attempt

3.3.1. A candidate that fails their first written test attempt but passes their work-at-height may attempt the written test a second time within 10 days of the work-at-height evaluation to obtain a certification without reattending a work-at-height evaluation.

3.3.1.1. The second written test attempt may be taken immediately following the work-at-height evaluation.

3.3.2. Following a successful second written test attempt, the work-at-height evaluation date is used to determine the expiration of the certification.

3.3.3. A candidate that fails their second written test attempt or fails to complete the written test within 10 days of the work-at-height evaluation must retake, in their entirety, both the written test and the work-at-height evaluation, to obtain a certification.

3.4. Written Test Administration

3.4.1. Candidates may consult SPRAT standards and supplements during the written test.

3.4.2. Candidates have 30 minutes to complete the written test.

3.4.3. Written tests should be taken online.

3.4.3.1. Written tests may be paper-based.

3.4.4. Written tests shall be administered by an evaluator or a designated ***proctor***.

3.4.4.1. A ***proctor*** may be designated by an evaluator or the SPRAT Office.

3.4.5. The evaluator or ***proctor*** shall:

3.4.5.1. Verify candidate identity and personal information.

3.4.5.2. Ensure consultation of only SPRAT standards and supplements.

3.4.5.3. Ensure no discussion among candidates.

3.4.5.4. Ensure no test materials are copied.

3.4.6. A candidate may have the test read to them.

3.4.7. If a candidate does not understand a question, clarification may be provided.

3.5. Online Written Tests

3.5.1. The SPRAT Office provides online written test access information to evaluators and Evaluation Session Hosts.

3.5.2. Results of online written tests are sent to the candidate or the individual that administers the written test.

3.5.3. Test results shall be retained to present to the evaluator.

3.6. Paper-based Written Tests

3.6.1. Written tests and answer keys shall remain secured and unavailable to a candidate prior to taking a paper-based written test.

3.6.2. Candidates should ensure that they mark their desired answer in a clear manner.

3.6.3. Unanswered questions are considered incorrect.

3.6.4. Written tests taken on paper should be graded immediately.

3.6.4.1. The correct answer for each incorrect question should be marked.

3.6.4.2. The test grade percentage should be written on top of the answer sheet.

3.6.5. Candidates shall have the opportunity to review their written test.

3.6.5.1. Candidates should place their initials adjacent to questions answered incorrectly.

3.6.6. The ***proctor*** shall complete and sign SPRAT's *Proctor Affidavit*.

3.6.7. The ***proctor*** shall return all testing materials to the evaluator.

3.6.7.1. If the ***proctor*** cannot return the written test materials to the evaluator, the ***proctor*** shall destroy the materials after the evaluator or SPRAT Office has confirmed receipt of the results.

4. Work-at-Height Evaluation Policies

4.1. General

4.1.1. A candidate may participate in one work-at-height evaluation per calendar day.

4.1.2. A work-at-height evaluation may consist of up to eight candidates.

4.1.2.1. Multiple evaluators may conduct work-at-height evaluations at a site simultaneously.

4.1.3. An evaluator may administer two work-at-height evaluations or one work-at-height evaluation and one rope access evaluation in one day.

4.2. Candidate Eligibility

4.2.1. Candidate eligibility shall be verified in accordance with *Work-at-Height Certification Requirements* prior to a candidate's participation in a work-at-height evaluation.

4.2.2. Written test results shall be verified in accordance with Section 3.

4.3. Constraints

4.3.1. Candidates may consult SPRAT documentation during the work-at-height evaluation.

4.3.2. Candidates may only have one attempt to complete each exercise.

4.3.3. Certification requirements are evaluated once unless needed to complete subsequent requirements.

4.3.4. Candidates may combine exercises while climbing.

4.3.4.1. A transition between fall arrest systems may satisfy requirements of only one exercise.

4.4. Grading

4.4.1. To obtain a passing result, all certification requirements must be completed during one work-at-height evaluation without being issued a ***fail*** or three ***discrepancies***.

4.4.2. A candidate may be evaluated until they and the evaluator have signed off on their result.

4.4.3. Grading is based on performance principles of Section 4 of *Work-at-Height Certification Requirements*.

4.4.4. Evaluators may seek clarity regarding a candidate's actions.

4.4.5. Evaluators may invoke time limits due to a lack of forward progress or inefficient technique.

4.4.5.1. Exercises are designed to take less than 10 minutes to complete.

4.4.6. The following table presents grading examples from SPRAT's *Evaluation Rubric*.

4.4.6.1. Circumstances with increased or reduced risk can cause an evaluator to deviate from this guidance.

	Fail **examples**	***Discrepancy*** **examples**
General	Inability to complete exercise No fall protection in ***fall zone***	***Free fall potential*** not reduced when candidate uses **positioning system**
Travel restraint system	Ineffective ***travel restraint system*** – free fall potential over edge ≥ 0.6 m (2 ft)	***Travel restraint system*** used in manner likely to render system ineffective
Overhead self-retracting device	Addition of incompatible equipment between harness and device	Device locking from uncontrolled climbing Stowing with device unreeled
Ladder fall arrest system	Ladder fall arrest device used as positioning system with no additional fall protection system	Removable ladder fall arrest device left unattended and unsecured on carrier
Horizontal lifeline	**Positioning system** used as sole connection for suspension or while not on stable surface	**Positioning system** used as sole connection while on stable surface
Backup system	***Free fall potential*** ≥ 1.2 m (4 ft) Backup device threaded incorrectly	***Free fall potential*** ≥ 0.6 m (2 ft)
Energy absorbing lanyard	***Free fall potential*** ≥ 2.0 m (6.5 ft)	***Free fall potential*** ≥ 1.8 m (5.9 ft) or length of assembly, whichever is less Y-lanyard leg attached to inappropriate location on harness while using other leg
Personal self-retracting device	***Free fall potential*** ≥ 1.2 m (4 ft)	***Free fall potential*** ≥ 0.6 m (2 ft) when candidate uses **positioning system**
Positioning lanyard	Suspension from **positioning system** with no **fall arrest system**	No **positioning system** during transition between **fall arrest systems** while not on stable working surface
Descender	***Descender*** threaded incorrectly	Excessive slack above descender

4.5. Results

4.5.1. All candidate results shall be obtained during one work-at-height evaluation.

4.5.1.1. Results from an unsuccessful work-at-height evaluation may not be used to fulfill requirements during a subsequent work-at-height evaluation.

4.5.2. Once results of successful completion of a work-at-height evaluation and written test are submitted, provisional certification information, valid for 60 days, is available on SPRAT's online system.

4.5.3. Certificates are available within a certified individual's account and certification cards are processed after the SPRAT Office has received fees and verified certification information.

4.5.4. Any current certification is retained in case of failure of a work-at-height evaluation.

4.6. Complaints and Appeals.

4.6.1. Complaints and appeals must be submitted within 60 days of a work-at-height evaluation.

4.6.2. When possible, the SPRAT Office shall anonymize documentation of a complaint or appeal prior to providing the redacted information to the Evaluations Committee.

4.6.3. Complaints and appeals are addressed once by the Evaluations Committee and Board of Directors.

5. Introduction to Requirement Supplementary Information

5.1. Supplementary information for the *Work-at-Height Certification Requirements* (*WCR*), linked in the following table, is provided in Section 6.

WCR #	Requirement
6.1	Performance Principles
6.2	***Travel restraint system*** exercise
6.3	Overhead self-retracting device exercise
6.4	Ladder **fall arrest system** exercise
6.5	Horizontal lifeline exercise
6.6	Energy absorbing lanyard and ***backup system*** exercise
6.7	Energy absorbing lanyard and ***descent mode*** exercise

5.1.1. Additional information for configuring an evaluation site can be found in Sections 7, 8, and 9.

5.2. Following each requirement, a table is provided with the following headings:

5.2.1. Perspective.

5.2.2. Performance.

5.2.3. Training.

Perspective.

SPRAT's work-at-height evaluation is a test instrument to observe candidate knowledge and skills during the completion of requirements, with a focus on aspects of **fall protection systems** that candidates can control to reduce their risk while performing work-at-height. The perspective section provides the purpose of each requirement, work-at-height applications, and configurations specific to the evaluation environment.

Exercises in the *Work-at-Height Certification Requirements* are generally presented in the order of increasing ***free fall potential***. Most exercises require a minimum of two transitions: one transition away from, and one transition to a specific **fall protection system**. In most exercises, these transitions are between **fall arrest systems**. Frequently, the second **fall arrest system** within an exercise is not specified. Fixed length systems or personal self-retracting devices may be used as energy absorbing lanyards in any exercise.

Performance.

The performance principles in Section 4 of *Work-at-Height Certification Requirements* establish expectations of candidates throughout the work-at-height evaluation. The performance section for each requirement complements these performance principles by providing expectations specific to the requirement.

Printable flashcards presenting successful completion of each exercise can be found in Appendix 3. As SPRAT work-at-height evaluations are performance-based, there can be multiple ways to successfully complete exercises in accordance with SPRAT's performance principles.

Training.

Knowledge and skills to complete requirements can sometimes be trained more efficiently through separate lessons or exercises. The following training sequence is recommended to prepare candidates for the work-at-height evaluation:

1. Travel restraint systems.
2. Fall arrest systems.
3. Positioning systems.
4. Transitions between fall arrest systems.
5. Transitions between positioning systems.
6. Fall protection system construction.
7. Practice of work-at-height exercises.

Evaluation Session Hosts are encouraged to perform a needs assessment prior to training to incorporate learning objectives, suitable equipment, and supplementary information that are relevant to candidates and their potential work environments. Evaluation Session Hosts are also encouraged to perform a risk assessment to determine appropriate policies for their site during both training and the work-at-height evaluation.

6. Requirement Supplementary Information

6.1. Performance Principles

6.1.1. Candidate shall adhere to the Performance Principles in Section 4 {*Work-at-Height Certification Requirements*} throughout the work-at-height evaluation.

Perspective.

The performance principles in Section 4 of *Work-at-Height Certification Requirements* provide a foundation of expectations for candidates while participating in a work-at-height evaluation. Performance principles are the basis for grading candidates and apply during the entire work-at-height evaluation.

Performance principles:

- Establish the work-at-height evaluation as a performance-based test instrument.
  - Candidates may use equipment and techniques of their choosing to complete requirements.
- Require timely completion of requirements.
  - As stated in Section 4, evaluators may invoke time limits due to a lack of forward progress or inefficient technique.
- Require adherence to the site work-at-height plan.
- Require the appropriate inspection, selection, and use of equipment.
- Focus on maintaining continuous fall protection, minimizing ***free fall potential***, and potential ***swing fall***.

Performance.

As part of meeting these performance principles, candidates are expected to:

- Complete requirements in a timely manner.
- Follow the site work-at-height plan throughout the work-at-height evaluation.
- Inspect, select, and use equipment appropriately, including*:*
  - Inspecting equipment before initial use and following rest breaks.
  - Connecting equipment to appropriate attachments on the harness.
  - Ensuring that equipment is threaded or loaded correctly before use.
  - Protecting equipment from damage.
- Minimize ***free fall potential*** and potential ***swing fall*** throughout the work-at-height evaluation.
- Use a **positioning system** when performing transitions between **fall arrest systems**.
- Further reduce their ***free fall potential*** when performing transitions between **fall arrest systems** and when using **positioning systems**.

Training.

Considerations to prepare candidates to successfully complete the requirement include:

- Review of *Safe Practices for Rope Access Work*.
- Review of performance principles and their relation to requirements of a candidate's testing level.
- Review of site ***access work plan***.
- Review of manufacturer instructions for equipment used to complete requirements.

6.2. ***Travel restraint system*** exercise

6.2.1. Candidate shall construct a ***travel restraint system***.

6.2.2. Candidate shall access at least 3 m (9.9 ft) of a platform edge with the ***travel restraint system***.

6.2.3. Candidate shall disassemble the ***travel restraint system***.

Perspective.

The purpose of this exercise is to demonstrate selection and use of equipment to establish and maintain an effective a ***travel restraint system***.

Anchorages or horizontal lifelines used within travel restraint systems should be located outside of the ***fall zone***.

Skills required to complete this exercise can be used to:

- Access a location with a ***travel restraint system*** to access a location for completing a task or for transitioning to another **fall protection system**.
- Incorporate multiple ***travel restraint systems*** to access locations with a risk of falling in multiple directions, such as the corner of a roof.

Performance. (*WCR 6.1*)

Candidates are expected to:

- Construct a travel restraint system using compatible equipment while performing a pre-use inspection.
  - Candidates may attach the ***travel restraint system*** to a single ***anchorage*** or a horizontal lifeline.
- Enter the fall zone and set the initial length of the travel restraint system while perpendicular to the platform edge.
  - Candidates should use equipment in a manner to maintain effectiveness of the ***travel restraint system***.
- Eliminate ***free fall potential*** and swing fall to a lower level while accessing the platform edge.
  - The evaluator may designate multiple locations to access along the span of the platform edge.
  - Candidates may use multiple ***anchorages*** to access designated locations with a travel restraint system.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Establishing and maintaining an effective ***travel restraint system***, considering
  - The effect of angle of the ***travel restraint system*** in relation to an edge.
  - The effect of sag on ***travel restraint systems*** that incorporate a horizontal lifeline.

6.3. Overhead self-retracting device exercise

6.3.1. Candidate shall climb up a structure a minimum of 3 m (9.9 ft) while using an overhead self-retracting device.

6.3.2. Candidate shall transition from the overhead self-retracting device to another **fall arrest system**.

6.3.3. Candidate shall climb up or down a structure a minimum of 1 m (3.3 ft).

6.3.4. Candidate shall transition from the other **fall arrest system** to an overhead self-retracting device.

6.3.5. Candidate shall climb down the structure while using an overhead self-retracting device.

Perspective.

The purpose of this exercise is to demonstrate the use of overhead self-retracting devices, including transitions to and from the **fall arrest system** while at height.

Skills required for completion of this exercise can be used to:

- Access a location to complete a task or transition to another **fall arrest system**.
- Install and remove overhead self-retracting devices.

To ensure understanding of fall protection concepts, this exercise must be completed separately, including at sites with policies requiring the use self-retracting devices while using other **fall arrest systems**.

Performance. (*WCR 6.1*)

Candidates are expected to:

- Establish a **fall arrest system** with overhead self-retracting device while performing a pre-use inspection.
- Perform a pre-use inspection of equipment.
- Climb the structure in a controlled manner.
- Transition to another **fall arrest system**.
  - Candidates may use any other **fall arrest system**, such as energy absorbing lanyards.
- Climb on the structure with the other **fall arrest system**.
- Transition to an overhead self-retracting device.
- Climb to the next lower level in a controlled manner.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Climbing up and down a structure using an overhead self-retracting device.
- Climbing up and down a structure with another **fall arrest system**, such as energy absorbing lanyards.
- Establishing and adjusting a positioning lanyard while using a **fall arrest system**.
- Transitioning between an overhead self-retracting device and another **fall arrest system**.

6.4. Ladder **fall arrest system** exercise

6.4.1. Candidate shall climb up a structure a minimum of 3 m (9.9 ft) with a ladder **fall arrest system**.

6.4.2. Candidate shall transition from the ladder fall arrest system to another **fall arrest system**.

6.4.3. Candidate shall climb up or down a structure a minimum of 1 m (3.3 ft)

6.4.4. Candidate shall transition from the other **fall arrest system** to the ladder fall arrest system.

6.4.5. Candidate shall climb down the structure with a ladder fall arrest system.

Perspective.

The purpose of this exercise is to demonstrate the use of ladder fall arrest systems, including transitions to and from the **fall arrest system** while at height.

Skills required for completion of this exercise can be used to:

- Access a location to complete a task or transition to another **fall arrest system**.
- Bypass another worker on a ladder fall arrest system.

To ensure understanding of fall protection concepts, this exercise must be completed separately, including at sites with policies requiring the use self-retracting devices while using other **fall arrest systems**.

Performance. (*WCR 6.1*)

Candidates are expected to:

- Establish a **fall arrest system** with a ladder **fall arrest system** while performing a pre-use inspection.
- Climb the structure in a controlled manner.
- Transition to another **fall arrest system**.
  - Candidates may use any other **fall arrest system**, such as energy absorbing lanyards.
- Remove the ladder fall arrest device from or secure the ladder fall arrest device to the carrier.
- Climb on the structure with the other **fall arrest system**.
- Transition to a ladder **fall arrest system**.
- Climb to the next lower level in a controlled manner.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Climbing up and down a structure using ladder fall arrest system.
- Climbing up and down a structure with another **fall arrest system**, such as energy absorbing lanyards.
- Establishing and adjusting a positioning lanyard while using a **fall arrest system**.
- Transitioning between a ladder fall arrest system and another **fall arrest system**.

6.5. Horizontal lifeline exercise

6.5.1. Candidate shall use a **fall arrest system** to access a horizontal lifeline in a ***fall zone***.

6.5.2. Candidate shall transition to incorporate a horizontal lifeline as part of their **fall arrest system**.

6.5.3. Candidate shall traverse a minimum of 3 m (9.9 ft) with the horizontal lifeline.

6.5.4. Candidate shall transition from the horizontal lifeline to another **fall arrest system**.

Perspective.

The purpose of this exercise is to demonstrate the use of horizontal lifelines within a **fall arrest system**, including transitions to and from the **fall arrest system** while at height.

Skills required for completion of this exercise can be used to:

- Access a location to complete a task or transition to another **fall arrest system**.
- Bypass other workers.

To ensure understanding of fall protection concepts, this exercise must be completed separately, including at sites with policies requiring the use self-retracting devices while using other **fall arrest systems**.

Performance. (*WCR 6.1*)

Candidates are expected to:

- Perform a pre-use inspection of equipment.
- Access a horizontal lifeline with another **fall arrest system**.
  - Candidates may use any other **fall arrest system**.
- Transition to use the horizontal lifeline within their **fall arrest system**.
- Traverse the horizontal lifeline.
  - Candidates may use a positioning lanyard in addition to their **fall arrest system** while traversing the horizontal lifeline.
- Transition to another **fall arrest system**.
- Climb to the next lower level in a controlled manner.

Candidate may initiate and complete the exercise using a horizontal lifeline system but must transition to another **fall arrest system** and move at least 1 m (3.3 ft) away from the horizontal lifeline prior to returning and transitioning to the horizontal lifeline during the exercise.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Climbing up and down a structure using a **fall arrest system**, such as energy absorbing lanyards.
- Establishing a compatible **fall arrest system** that incorporates a horizontal lifeline system.
- Establishing and adjusting a positioning lanyard while using a **fall arrest system**.
- Moving horizontally using a horizontal lifeline system.
- Transitioning between **fall arrest systems**.

6.6. Energy absorbing lanyard and backup system exercise

6.6.1. Candidate shall climb up a structure a minimum of 3 m (9.9 ft) with energy absorbing lanyards.

6.6.2. Candidate shall construct a ***rope system***.

6.6.3. Candidate shall transition from the energy absorbing lanyards to a ***backup system***.

6.6.4. Candidate shall climb down and up the structure a minimum of 2 m (6.6 ft) with the ***backup system***.

6.6.5. Candidate shall transition from the ***backup system*** to energy absorbing lanyards.

6.6.6. Candidate shall disassemble the ***rope system***.

6.6.7. Candidate shall climb down the structure with energy absorbing lanyards.

Perspective.

The purpose of this exercise is to demonstrate:

- The use of energy absorbing lanyards.
- The construction, use, and removal of a ***backup system***.
- Transitions between these two **fall arrest systems** while at height.

Skills required for completion of this exercise can be used to:

- Access a location to complete a task or transition to another **fall arrest system**.
- Establish a ***rope system*** to minimize use of energy absorbing lanyards within a work team.

Fixed length systems or personal self-retracting devices may be used as energy absorbing lanyards in this exercise.

Performance. (*WCR 6.1*)

Candidates are expected to:

- Establish a **fall arrest system** with energy absorbing lanyards while performing a pre-use inspection.
- Climb the structure in a controlled manner.
- Construct a rope system using an appropriate ***anchorage*** and transition to a ***backup system***.
  - Candidates may use ropes with any appropriate termination.
- Climb down and up the structure using the ***backup system***.
- Transition to energy absorbing lanyards, disassemble the ***rope system***, and climb down the structure.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Climbing up and down a structure with energy absorbing lanyards.
- Climbing up and down a structure with a ***backup system***.
- Establishing and adjusting a positioning lanyard while using a **fall arrest system**.
- Transitioning between energy absorbing lanyards and a ***backup system*** as a **fall arrest system**.
- Establishing a ***rope system*** using an appropriate ***anchorage***, ***anchorage connectors***, and rope.

6.7. Energy absorbing lanyard and descent mode exercise

6.7.1. Candidate shall climb up a structure a minimum of 3 m (9.9 ft) with energy absorbing lanyards.

6.7.2. Candidate shall construct a ***two-rope system***.

6.7.3. Candidate shall transition from the energy absorbing lanyards to ***descent mode*** on the ***two-rope system***.

6.7.4. Candidate shall descend a minimum of 2 m (6.6 ft) in ***descent mode***.

6.7.5. Candidate shall ascend a minimum of 0.6 m (2 ft) in ***descent mode***.

6.7.6. Candidate shall transition from ***descent mode*** to energy absorbing lanyards.

6.7.7. Candidate shall disassemble the ***two-rope system***.

6.7.8. Candidate shall climb down the structure with energy absorbing lanyards.

Perspective.

The purpose of this exercise is to demonstrate:

- The use of energy absorbing lanyards
- The construction, use, and disassembly of a ***rope access system*** in ***descent mode***.
- Back-feeding of a ***descender***.
- Transition between both different **fall arrest systems** and different **positioning systems**.

Skills required for completion of this exercise can be used to:

- Access a location to complete a task or transition to another **fall arrest system**.
- Establish a ***rope access system*** to minimize use of energy absorbing lanyards.
- Establish better positioning while in ***descent mode***.
- Use a ***descender*** for self-rescue in limited applications.

Fixed length systems or personal self-retracting devices may be used as energy absorbing lanyards in this exercise.

Performance. (*WCR 6.1*)

- Establish a **fall arrest system** with energy absorbing lanyards while performing a pre-use inspection.
- Climb the structure in a controlled manner.
- Use appropriate ***anchorages*** to construct a ***two-rope system*** and transition to ***descent mode***.
  - Candidates may use ropes with any appropriate termination.
  - Candidates should perform a function check of their ***descender*** prior to removing their positioning lanyard.
  - Candidates may use a work seat but the ***descender*** must be connected to a harness attachment.
- Descend adjacent to the structure in a controlled manner.
- Ascend with their ***descender***.
  - Candidates may use the structure, an ***ascender*** with a foot loop, or a knot in the ***backup rope*** to assist in this ascent.
- Climb the structure to the ***anchorages*** for the ***two-rope system***.
  - Candidates may climb the structure with the ***backup system*** or energy absorbing lanyards.
- Transition to energy absorbing lanyards and a positioning lanyard, disassemble the ***two-rope system***, and climb down the structure.

Training.

Considerations to prepare candidates to successfully complete this exercise include:

- Review of work-at-height plan, including pre-use inspection of all equipment used in the exercise.
- Climbing up and down a structure with energy absorbing lanyards.
- Climbing up and down a structure with a ***backup system***.
- Establishing and adjusting a positioning lanyard while using a **fall arrest system**.
- Transitioning between energy absorbing lanyards and a ***backup system***.
- Transitioning between positioning lanyards and a ***descender*** incorporated into a ***main system***.
- Back-feeding a ***descender*** using a structure, ***ascender*** and foot loop, or a knot in a ***backup rope***.
- Establishing a ***two-rope system*** using an appropriate ***anchorage***, ***anchorage connectors***, and rope.

7. Site Requirements and Recommendations

7.1. General Information

7.1.1. All site requirements shall be met for a work-at-height evaluation to proceed.

7.1.1.1. Evaluation Session Hosts should consult SPRAT's *Work-at-Height Evaluation - Host Preparation Checklist*.

7.1.1.2. Site recommendations should be met to increase efficiency of the work-at-height evaluation.

7.1.1.3. If any requirement is not met, an evaluator has the right to refuse to conduct a work-at-height evaluation.

7.1.1.3.1. The Evaluation Session Host shall provide proof of addressing any requirement deficiencies to the SPRAT Office prior to the scheduling of another work-at-height evaluation at that location.

7.1.2. The site shall be suitable to administer the work-at-height evaluation and administer the written test.

7.1.2.1. Equipment used during a work-at-height evaluation shall meet the requirements of *Safe Practices for Rope Access Work* and the ***presiding regulatory authority***.

7.1.2.2. Completion of requirements shall not require major adjustments during the work-at-height evaluation.

7.1.2.2.1. The site should have a floor area of at least 130 m² (1400 ft²).

7.1.2.3. Current SPRAT documentation shall be available during the work-at-height evaluation.

7.1.2.4. Manufacturer instructions of equipment used during the work-at-height evaluation shall be available.

7.1.2.5. A poster depicting candidates' evaluation scheme should be provided.

7.1.2.6. A white board or blank paper and implements shall be provided.

7.1.2.7. The site shall have suitable locations to observe candidates.

7.1.2.7.1. Vertical separation shall not exceed 15 m (49 ft) between any location required for the completion of requirements and either the next lower level or the ground.

7.2. Site Safety Requirements

7.2.1. Work-at-height plan

7.2.1.1. A work-at-height plan shall be available to all parties involved in the work-at-height evaluation, as well as any other affected individuals.

7.2.1.2. The work-at-height plan shall provide:

7.2.1.2.1. Evaluation Session Host representatives and candidate names and contact information.

7.2.1.2.2. ***Hazard*** and ***fall zones*** information in accordance with Safe Practices for Rope Access Work.

7.2.1.2.3. ***Anchorage*** information for **fall protection systems**.

7.2.1.2.4. **Fall protection system** and equipment information as detailed in Appendix 1.

7.2.1.2.5. A risk assessment in accordance with *Safe Practices for Rope Access Work*.

7.2.1.2.6. Required protective equipment.

7.2.1.2.7. Rescue plans for exercise stations.

7.2.2. ***Hazard*** and ***fall zones*** shall be identified and marked in accordance with *Safe Practices for Rope Access Work*.

7.2.3. Candidate emergency contact information shall be available.

7.2.4. Provision shall be made to ensure no conflicting activities are present during the work-at-height evaluation.

7.2.5. Provision shall be made to ensure prompt rescue.

7.2.6. A suitable first aid kit and fire extinguisher shall be readily available.

7.2.7. Emergency egress signage and lighting should be provided as appropriate.

7.3. Site Environment

7.3.1. The site shall have appropriate noise and lighting levels.

7.3.1.1. Noise levels should be below 85dBA per eight-hour period.

7.3.1.2. Lighting levels should be between 300 and 800 lux.

7.3.2. The site should be protected from adverse weather.

7.3.3. The site should have regulated temperature between 7°C (45°F) and 38°C (100°F).

7.3.4. The site should have ventilation to facilitate a minimum of four air changes per hour.

7.4. Platform

7.4.1. The site shall have at least one platform at least 0.3 m (1 ft) above the next lower level.

7.4.2. The platform should be accessible without the use of fall protection systems.

7.4.3. The platform shall have the ability for a ***fall zone*** to extend a minimum of 3 m (9.9 ft) along one edge.

7.4.4. The platform shall have suitable ***anchorages*** to accommodate ***travel restraint systems***.

7.4.5. The platform shall accommodate at least four people.

7.4.5.1. A platform or platforms that accommodate a total of at least eight people are recommended.

7.5. ***Anchorage Systems***

7.5.1. ***Anchorage systems*** shall meet the requirements of the ***presiding regulatory authority***.

7.5.1.1. In the absence of a ***presiding regulatory authority***, ***anchorage systems*** intended for use for fall arrest shall have a ***minimum breaking strength*** of 12 kN (2700 lbf) or two times the ***maximum arrest force*** of the ***fall arrest*** system, whichever is greater.

7.5.1.2. A documented inspection report prepared by a professional structural engineer appropriate to the ***presiding regulatory authority*** of the work-at-height evaluation site is recommended.

7.5.2. ***Anchorage systems*** should be located to accommodate clearance requirements of **fall protection systems**.

7.5.2.1. During the performance of certification requirements, no additional protection is required where required clearance is lower than the available clearance.

7.6. Climbing structure requirements

7.6.1. Structures used for exercises requiring climbing shall have a minimum of 5 m (16.5 ft) of vertical climbing surface available.

7.6.2. Structures used for exercises requiring climbing shall be no more than 10 degrees from vertical.

7.6.3. Suitable ***anchorages*** for **fall arrest systems** shall be available at the top of structures used for exercises requiring climbing.

7.6.4. Structures used for demonstrating energy absorbing lanyards or personal self-retracting devices shall have a minimum of six ***anchorage systems*** spaced no farther apart than 0.6 m (1.9 ft) vertically.

7.6.5. Ladder structures or structures simulating ladder climbing shall have rungs or equivalent spaced no farther apart than 0.6 m (1.9 ft).

7.6.5.1. Spacing for ladder climbing structure rungs should not exceed 0.45 m (1.4 ft) vertically.

8. Site Station Requirements and Recommendations

8.1. General

8.1.1. At least eight faces of climbing structure should be available for exercise stations.

8.1.2. Faces of climbing structures may accommodate multiple exercise stations.

8.1.2.1. All faces of free-standing climbing structures may be used for exercise stations if visibility of candidates is not compromised.

8.1.2.2. No more than two faces of any mounted structure should be required to meet the exercise station requirements.

8.1.3. All designated exercise stations shall be readily available, distinct, and able to be used simultaneously.

8.2. ***Travel restraint system*** exercise

8.2.1. ***Anchorage systems*** for ***travel restraint systems*** should be located outside of the ***fall zone***.

8.2.2. One dedicated ***travel restraint system*** exercise station shall be available.

8.2.3. A minimum of two ***travel restraint system*** exercise stations is recommended.

8.2.3.1. ***Travel restraint system*** exercise stations may use the same platform edge.

8.3. Overhead self-retracting device exercise

8.3.1. One structure face per four candidates shall be dedicated for the demonstration of the overhead self-retracting device exercise.

8.3.2. A minimum of four overhead self-retracting exercise stations is recommended.

8.4. Ladder **fall arrest system** exercise

8.4.1. One structure face per four candidates shall be dedicated for the demonstration of the ladder **fall arrest system** exercise.

8.4.2. Ladder **fall arrest systems** should be constructed with wire rope or a rigid rail.

8.4.2.1. Synthetic ***rope systems*** and backup devices may be used to simulate the ladder **fall arrest system** if the length of components connecting the backup device to the harness is less than 25 cm (9.8 inches).

8.4.3. A minimum of four ladder **fall arrest system** exercise stations is recommended.

8.5. Horizontal lifeline exercise

8.5.1. A minimum of one horizontal lifeline shall be available for completion of the horizontal lifeline exercise.

8.5.2. Horizontals lifelines shall have a minimum span of 3 m (9.9 ft).

8.5.3. Horizontal lifelines may be constructed with wire rope, synthetic rope, or a rigid rail.

8.5.4. The horizontal lifeline shall be installed a minimum of 1.2 m (4 ft) above the walking surface.

8.5.4.1. Connecting equipment shall enable use while maintaining ***free fall potential*** below 2 m (6.5 ft).

8.5.5. The walking surface shall have a minimum width of 0.3 m (1 ft).

8.6. Energy absorbing lanyard and ***backup system*** exercise

8.6.1. One structure face per four candidates shall be available for the demonstration of the energy absorbing lanyard and ***backup system*** exercise.

8.6.2. A minimum of four energy absorbing lanyard and ***backup system*** exercise stations is recommended.

8.7. Energy absorbing lanyard and ***descent mode*** exercise

8.7.1. One structure face per four candidates shall be available for the demonstration of the energy absorbing lanyard and ***descent mode*** exercise.

8.7.2. A minimum of four energy absorbing lanyard and ***descent mode*** exercise stations is recommended.

9. Site Equipment Requirements and Recommendations

9.1. Candidate Individual Equipment

9.1.1. Personal equipment shall meet the requirements of the ***presiding regulatory authority***.

9.1.2. Each candidate shall be individually equipped, at a minimum, with the following equipment:

9.1.2.1. Helmet.

9.1.2.2. Harness.

9.1.2.3. Energy absorbing lanyards that accommodate two ***anchorage*** connections.

9.1.2.3.1. Personal self-retracting devices may be used in place of energy absorbing lanyards.

9.1.2.4. One backup device with connecting equipment.

9.1.2.5. ***Descender***.

9.1.2.6. Positioning lanyard.

9.1.2.6.1. Adjustable positioning lanyards are recommended.

9.1.2.7. ***Carabiners*** to accommodate personal equipment.

9.1.2.8. Personal protective equipment required in accordance with the work-at-height plan.

9.1.3. Individual equipment available in multiple sizes should be available to accommodate candidates.

9.1.3.1. A minimum of 16 helmets is recommended.

9.1.3.2. A minimum of 16 harnesses is recommended.

9.2. Shared Equipment

9.2.1. Sufficient hardware and other suitable equipment to accommodate requirements shall be available.

9.2.1.1. At least 16 ***carabiners*** should be available.

9.2.2. A minimum of eight ropes to accommodate the heights of climbing structures shall be available.

9.2.2.1. A minimum of 16 ropes is recommended.

9.2.3. Sufficient slings and other ***anchorage connectors*** to accommodate requirements shall be available.

9.2.3.1. At least 16 slings should be available.

Appendix 1. Work-at-Height Plan Equipment Information

A.1.1. Introduction

A.1.1.1. The following information shall be included as part of the work-at-height plan for the evaluation site.

A.1.1.2. Reference to information sources (e.g., location in manufacturer instructions) shall be provided, as appropriate.

A.1.2. Personal equipment

A.1.2.1. Harness.

Feature	Description	Reference
Manufacturer and model.		
Harness style.	☐ Y-Style ☐ H-Style ☐ Other	
Harness attachments and applications.	☐ Dorsal ☐ Sternal ☐ Ventral ☐ Lateral ☐ Rear Waist ☐ Other	
Visual indicators.		
Locations for stowing energy absorbing lanyards.		

A.1.2.2. Energy Absorbing Lanyard.

Feature	Description	Reference
Manufacturer and model.		
Total length.		
Visual indicators.		
Connection at same height permitted.	☐ Yes ☐ No	
Back-clip of lanyard permitted.	☐ Yes ☐ No	
Harness attachments.	☐ Dorsal ☐ Sternal ☐ Other	

A.1.2.3. Positioning lanyard.

Feature	Description	Reference
Manufacturer and model.		
Equipment description.		
Harness attachments.	☐ Lateral to Lateral ☐ Ventral basket ☐ Ventral linear ☐ Other	

A.1.2.4. Backup device

Feature	Description	Reference
Manufacturer and model.		
Connecting equipment description.		
Visual indicators.		
Harness attachments.	☐ Dorsal ☐ Sternal ☐ Other	

A.1.2.5. Descender

Feature	Description	Reference
Manufacturer and model.		
Visual indicators.		
Harness attachments.	☐ Ventral ☐ Other	

A.1.3. Additional equipment for exercises

A.1.3.1. Travel restraint system exercise.

Feature	Details	Reference
Anchorage system description.		
Connecting equipment description.		
Harness attachments.	☐ Ventral ☐ Sternal ☐ Rear Waist ☐ Other	

A.1.3.2. Overhead self-retracting device exercise.

Feature	Description	Reference
Manufacturer and model.		
External energy absorber.	☐ Yes ☐ No	
Visual indicators.		
Harness attachments.	☐ Dorsal ☐ Sternal ☐ Other	

A.1.3.3. Ladder fall arrest system exercise.

Feature	Description	Reference
Manufacturer and model.		
Carrier construction and diameter.		
External energy absorber.	☐ Yes ☐ No	
Visual indicators.		
Number and spacing of users.		
Harness attachments.	☐ Sternal ☐ Ventral ☐ Other	

A.1.3.4. Horizontal lifeline exercise.

Feature	Description	Reference
Manufacturer and model.		
Energy absorber.	☐ Yes ☐ No	
Visual indicators.		
Number and spacing of users		
Connecting equipment description.		
Harness attachments.	☐ Dorsal ☐ Sternal ☐ Other	

A.1.3.5. Rope systems

Feature	Description	Reference
Manufacturer and model.		
Rope construction and diameter.		
Terminations.		
Anchorage system description.		

Appendix 2. Fall Protection Concepts and SPRAT's Work-at-Height Certification

A.2.1. The following table provides a list of fall protection topics and where they are tested within SPRAT's work-at-height evaluation and written test.

A.2.1.1. The symbol 'x' denotes where a topic is addressed.

A.2.1.2. The symbol 'o' denotes where a topic may be addressed.

Category	Item	Written test	Travel restraint	Overhead self-retracting device	Ladder fall arrest system	Horizontal lifeline	Energy Absorbing Lanyard and *Backup system*	Energy Absorbing Lanyard and *Descent mode*
Fall Protection Application								
Travel Restraint			x					
Fall arrest				x	x	x	x	x
Positioning			o	x	x	o	x	x
Self-rescue								x
Theory								
Work-at-height plan		x	x	x	x	x	x	x
Clearance requirements	***Free fall potential***	x	x	x	x	x	x	x
	Activation Distance	x						
	Deceleration distance	x						
	Total fall distance	x						
	Clearance required below platform	x						
Regulations and standards		x						
Equipment								
General Concepts	Fall protection applications	x	x	x	x	x	x	x
	Harness attachments	x	x	x	x	x	x	x
	Compatibility considerations	x	x	x	x	x	x	x
	Pre-use inspection	x	x	x	x	x	x	x
	Transitions between systems			x	x	x	x	x
General Equipment	Helmets		x	x	x	x	x	x
	Harnesses		x	x	x	x	x	x
	Connectors, ***anchorage connectors***		x	x	x	x	x	x
	Self-retracting devices (incl. personal)			x	o	o	o	o
	Ladder climb devices and systems				x			
	Energy absorbing lanyards		o	o	o	o	x	x
	Positioning lanyards		o	x	x	o	x	x
	Horizontal lifelines		o			x		
	Backup systems		o				x	x
	Descenders		o					x
	Ropes		o				x	x
	Work seats							o

Appendix 3. Work-at-Height Evaluation Exercise Flash Cards

A.3.1. Instructions for Use:

A.3.1.1. Print out one copy (single sided) per exercise station.

A.3.1.2. Cut horizontally above SPRAT logo.

A.3.1.3. Fold along dashed line.

A.3.1.4. Trim excess paper as desired.

A.3.1.5. Laminate each exercise card.

A.3.1.6. Affix at exercise station.

Legend

Ω	Pre-use inspection
+	Attaching equipment or establishing system
↑	Moving up with system
↔	Moving horizontally with system
↕	Moving up or down with system
↓	Moving down with system
→←	Adjusting system
↗	Transition
–	Removing equipment or deconstructing system

Legend

Ω	Pre-use inspection
+	Attaching equipment or establishing system
↑	Moving up with system
↔	Moving horizontally with system
↕	Moving up or down with system
↓	Moving down with system
→←	Adjusting system
↗	Transition
–	Removing equipment or deconstructing system

WCR 6.2

Travel restraint system exercise

Ω	Pre-use inspection
+	Travel restraint system
↔	Approach edge
↔	Move along edge
↔	Return to safe zone
–	Remove travel restraint system

WCR 6.2

Travel restraint system exercise

Ω	Pre-use inspection
+	Travel restraint system
↔	Approach edge
↔	Move along edge
↔	Return to safe zone
–	Remove travel restraint system

WCR 6.3

Overhead self-retracting device exercise

Ω	Pre-use inspection
+	Self-retracting device
↑	Self-retracting device
+	Positioning
+	Other fall arrest system
–	Self-retracting device
–	Positioning
↕	Other fall arrest system
+	Positioning
+	Self-retracting device
–	Other fall arrest system
–	Positioning
↓	Self-retracting device

WCR 6.3

Overhead self-retracting device exercise

Ω	Pre-use inspection
+	Self-retracting device
↑	Self-retracting device
+	Positioning
+	Other fall arrest system
–	Self-retracting device
–	Positioning
↕	Other fall arrest system
+	Positioning
+	Self-retracting device
–	Other fall arrest system
–	Positioning
↓	Self-retracting device

WCR 6.4

Ladder fall arrest system exercise

Ω	Pre-use inspection
+	Ladder fall arrest system
↑	Ladder fall arrest system
+	Positioning
+	Other fall arrest system
–	Ladder fall arrest device
–	Positioning
↕	Other fall arrest system
+	Positioning
+	Ladder fall arrest device
–	Other fall arrest system
–	Positioning
↓	Ladder fall arrest system

WCR 6.4

Ladder fall arrest system exercise

Ω	Pre-use inspection
+	Ladder fall arrest system
↑	Ladder fall arrest system
+	Positioning
+	Other fall arrest system
–	Ladder fall arrest device
–	Positioning
↕	Other fall arrest system
+	Positioning
+	Ladder fall arrest device
–	Other fall arrest system
–	Positioning
↓	Ladder fall arrest system

WCR 6.5

Horizontal lifeline exercise

Q	Pre-use inspection
+	Other fall arrest system
↑	Other fall arrest system
+	Positioning
↗	Horizontal lifeline system
–	Positioning
↔	Horizontal lifeline system
+	Positioning
↗	Other fall arrest system
–	Positioning
↓	Other fall arrest system

WCR 6.5

Horizontal lifeline exercise

Q	Pre-use inspection
+	Other fall arrest system
↑	Other fall arrest system
+	Positioning
↗	Horizontal lifeline system
–	Positioning
↔	Horizontal lifeline system
+	Positioning
↗	Other fall arrest system
–	Positioning
↓	Other fall arrest system

WCR 6.6

Energy absorbing lanyard and ***backup system*** exercise

Q	Pre-use inspection
+	Energy absorbing lanyards
↑	Energy absorbing lanyards
+	Positioning
+	Rope system
+	Backup device
–	Energy absorbing lanyards
–	Positioning
↓	Backup system
↑	Backup system
+	Positioning
+	Energy absorbing lanyards
–	Backup device
–	Rope system
–	Positioning
↓	Energy absorbing lanyards

WCR 6.6

Energy absorbing lanyard and ***backup system*** exercise

Q	Pre-use inspection
+	Energy absorbing lanyards
↑	Energy absorbing lanyards
+	Positioning
+	Rope system
+	Backup device
–	Energy absorbing lanyards
–	Positioning
↓	Backup system
↑	Backup system
+	Positioning
+	Energy absorbing lanyards
–	Backup device
–	Rope system
–	Positioning
↓	Energy absorbing lanyards

WCR 6.7

Energy absorbing lanyard and ***descent mode*** exercise

Q	Pre-use inspection
+	Energy absorbing lanyards
↑	Energy absorbing lanyards
+	Positioning
+	Two-rope system
+	Backup device
–	Energy absorbing lanyards
+	Descender
–	Positioning
↓	Descent mode
↑	Descent mode (Back-feed descender)
+	Positioning
–	Descender
–	Positioning
↑	Backup system
+	Positioning
+	Energy absorbing lanyards
–	Backup device
–	Two-rope system
–	Positioning
↓	Energy absorbing lanyards

WCR 6.7

Energy absorbing lanyard and ***descent mode*** exercise

Q	Pre-use inspection
+	Energy absorbing lanyards
↑	Energy absorbing lanyards
+	Positioning
+	Two-rope system
+	Backup device
–	Energy absorbing lanyards
+	Descender
–	Positioning
↓	Descent mode
↑	Descent mode (Back-feed descender)
+	Positioning
–	Descender
–	Positioning
↑	Backup system
+	Positioning
+	Energy absorbing lanyards
–	Backup device
–	Two-rope system
–	Positioning
↓	Energy absorbing lanyards