



Australian Government

SISOCVE003 Abseil single pitches in caves

Release: 1

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Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to abseil single pitches in caves. It also requires the ability to belay abseilers and to self-belay.

It applies to leaders, guides or instructors, who use these skills when leading participants during caving activities. Leadership skills are provided in complementary units.

This unit applies to any type of organisation that delivers outdoor recreation activities including commercial, not-for-profit and government organisations.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Caving

Unit Sector

Outdoor Recreation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1. Prepare for the cave abseil.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Select clothing, footwear and personal protective equipment suitable for the cave abseil and conditions.
- 1.2. Confirm activity safety and emergency response procedures to ensure compliance during activities.
- 1.3. Confirm protocols for communications between abseiler and belayer.
- 1.4. Interpret route description; identify position of natural features and the abseil route.
- 1.5. Attach descending device to abseil rope and tie knots

- suitable for the established belay system.
- 1.6. Complete equipment safety checks prior to abseiling or belaying.
2. Abseil vertical cave pitches.
 - 2.1. Use safety procedures at top of and throughout descent to minimise risk to self and others present.
 - 2.2. Use appropriate posture and abseiling techniques to execute descents.
 - 2.3. Safely approach, avoid or negotiate hazards to descend in a controlled manner.
 - 2.4. Maintain effective communication with belayer throughout descent.
 - 2.5. Use techniques that minimise damage to equipment and the cave environment during abseil.
 3. Belay abseilers during cave descents.
 - 3.1. Avoid or negotiate hazards and use safety procedures to minimise risk to self and others present.
 - 3.2. Establish belaying position and attach self to anchor, as required, to allow effective and safe use of belay system.
 - 3.3. Maintain rope tension to minimise fall distance and ensure abseiler movement is not unduly restricted.
 - 3.4. Monitor abseiler progress constantly, and maintain clear communication with abseiler.
 - 3.5. Arrest falls promptly using technique suitable to belaying device and situation.
 - 3.6. Safely and efficiently secure abseiler using tie off techniques; release tie off and allow abseiler to continue.
 4. Self-belay during cave descents.
 - 4.1. Attach self to suitable belay device for descent with back up to maintain safety in the event of a fall.
 - 4.2. Use appropriate posture and abseiling techniques to execute self-belayed descents.
 - 4.3. Control self-belay system to execute safe and controlled descents.
 - 4.4. Utilise features of back up belay system in the event of a fall to self-arrest, self-rescue and complete descent.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS

DESCRIPTION

- | | |
|------------------------------------|---|
| Reading skills to: | <ul style="list-style-type: none">• interpret detailed and familiar organisational safety and emergency response procedures. |
| Oral communications skills to: | <ul style="list-style-type: none">• use clear and unambiguous verbal and non-verbal communications to make intent known. |
| Numeracy skills to: | <ul style="list-style-type: none">• visually estimate angles, estimate load on ropes to determine appropriate tension for abseiling and belaying. |
| Planning and organising skills to: | <ul style="list-style-type: none">• manage own timing to complete activities within planned timeframes. |

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>

Assessment Requirements for SISOCVE003 Abseil single pitches in caves

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- complete the following single pitch abseils in natural caves:
 - four descents with a belayer
 - two self-belayed descents
- during each of the above abseils, consistently:
 - follow safety procedures and safely negotiate hazards to descend in a controlled manner
 - connect self to abseil and belay system using appropriate device and or knots
- complete two additional self-belayed descents, simulating a self-arrest and self-rescue to complete the descent
- belay abseilers according to safety procedures, and complete the following:
 - three top rope, top belayed descents
 - one bottom braked descent
 - two simulated abseiler falls, and safely and efficiently secure and release abseilers to continue.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational safety and emergency response procedures for caving activities
- purpose, features, and correct fit for safety, of personal protective equipment for abseiling in caves to include:
 - clothing
 - footwear
 - gloves
 - caving helmets
 - headlamps
 - harnesses of different types, advantages and disadvantages
- features, functions and operation of abseiling equipment used in caves:
 - carabiners

- maillon rapides
- static and dynamic rope and when each might be used
- tape
- sewn sling
- personal attachment systems, including cow's tails
- Prusik cord
- descending devices:
 - assisted locking
 - inline
 - plate
 - figure 8
 - tubular
 - improvised
- belay systems:
 - top rope top belay
 - bottom brake
 - self-belay
- belay devices:
 - assisted locking
 - inline
 - plate
 - figure 8
 - tubular
 - improvised
- types of equipment and knots used, and how to tie them, when:
 - attaching descending devices to abseil ropes
 - attaching belay system to anchors
 - attaching self to back up belay system for self-belays
 - attaching self to anchor
- types of personal and equipment safety checks completed prior to abseiling and belaying
- caving abseiling techniques, and appropriate posture for descents to include those for:
 - walking backwards on wet and dry surfaces
 - self-belayed descents
- techniques for belaying others during cave abseils to include those for:
 - establishing belaying position for effective and safe use of belay system
 - rope handling and maintaining adequate rope tension
 - controlling bottom brake system
 - arresting abseiler falls
 - securing abseiler, tying off belay system and releasing
- reasons for attaching belayer to anchor system when belaying others including:

- minimising belayer movement to retain stable position and stance
- minimising effects of force of abseiler fall and risk of injury to belayer
- minimising risks of belayer fall
- communication protocols used between abseilers and belayers to include:
 - calls
 - hand signals
 - whistles
- typical hazards for single pitch abseiling in caves, and techniques used to safely negotiate these:
 - water pools, streams and seepage
 - falling rocks, water, debris, gear
 - abrasion points
 - sharp edges
 - vertical squeezes and overhangs
 - strong cave breezes
 - darkness
 - rising waters
 - tangled rope
- how to care for abseiling equipment during caving activities to avoid damage, and promote long lifespan
- techniques used to minimise damage to the cave environment when abseiling in caves.

Assessment Conditions

Skills must be demonstrated in a natural cave where single pitch abseils are completed as part of recreational caving activities.

The following resources must be available to replicate industry conditions of operation:

- first aid equipment
- communication equipment for emergency response
- rescue equipment.

Assessment must ensure use of:

- participants with whom the individual interacts during caving activities
- personal protective equipment to include:
 - caving helmets
 - headlamps
 - gloves
 - harnesses
- anchors which can include:
 - fixed artificial

- naturally occurring
- artificial removable
- abseiling equipment to include:
 - carabiners
 - maillon rapides
 - rope which can include static and or dynamic rope
 - rope protectors
 - tape or sewn sling
 - personal attachment systems, including cow's tails
 - Prusik cords
 - descending devices
 - belay devices
- template safety checklists
- organisational safety and emergency response procedures for caving activities.

Assessors must satisfy the Standards for Registered Training Organisations requirements for assessors, and:

- have a collective period of at least three years' experience as a caving leader, guide or instructor, where they have applied the skills and knowledge covered in this unit of competency; the three years' experience can be part time or full time experience.

Links

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