



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **SISOCVE302A Apply single pitch abseiling skills in caves**

**Release: 2**

## **SISOCVE302A Apply single pitch abseiling skills in caves**

### **Modification History**

Not Applicable

### **Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to independently abseil in single pitch situations within a cave environment. It includes belaying skills to belay self and others. It does not cover rigging an abseil.

### **Application of the Unit**

This unit applies to those working as caving guides or instructors either autonomously or as part of a team in familiar and unfamiliar situations within a range of natural cave locations with simple obstacles and vertical single pitches.

This unit also applies to outdoor recreation leaders working for outdoor education or adventure providers; volunteer groups; not-for-profit organisations or government agencies.

### **Licensing/Regulatory Information**

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

### **Pre-Requisites**

SISOCVE201A Demonstrate caving skills

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

### Elements and Performance Criteria

#### ELEMENT

#### PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

- |   |  |
|---|--|
| 1. Plan for the activity.                   | <ul style="list-style-type: none"> <li>1.1. Identify and plan <b><i>food and water requirements</i></b> according to the duration of the activity.</li> <li>1.2. Identify and select an appropriate activity site according to <b><i>contextual issues, relevant legislation and organisational policies and procedures.</i></b></li> <li>1.3. Access <b><i>relevant sources</i></b> to interpret detailed <b><i>weather information</i></b> that may impact on the activity plan.</li> <li>1.4. Select personal clothing and identify design and or construction features appropriate for the activity.</li> <li>1.5. Identify associated <b><i>hazards</i></b> and procedures to minimise <b><i>risks</i></b> to abseiler and belayer.</li> <li>1.6. Establish a suitable communication system to use while abseiling and belaying.</li> </ul> |
| 2. Select, fit and use abseiling equipment. | <ul style="list-style-type: none"> <li>2.1. Select and fit <b><i>personal equipment</i></b> according to organisational policies and procedures and manufacturer's recommendations.</li> <li>2.2. Select and attach descending <b><i>device</i></b> to the rope according to the situation.</li> <li>2.3. Tie <b><i>knots</i></b> suitable to the <b><i>belay system</i></b> that is being used.</li> <li>2.4. Perform <b><i>safety checks</i></b></li> </ul>  |
| 3. Demonstrate abseiling technique.         | <ul style="list-style-type: none"> <li>3.1. Apply correct posture and technique while abseiling, using single and double rope.</li> <li>3.2. Maintain communication with belayer throughout the descent.</li> <li>3.3. Negotiate <b><i>simple obstacles</i></b> and avoid or remove hazards to descend in a controlled and safe manner.</li> <li>3.4. Implement safety procedures at top and bottom of descent site.</li> <li>3.5. Apply techniques that minimise damage to the</li> </ul>   |

ELEMENT	PERFORMANCE CRITERIA
4. Demonstrate belaying technique.	<p>environment while abseiling.</p> <p>4.1. Determine the belay device and technique for the situation and perform all safety checks according to organisational policies and procedures.</p> <p>4.2. Follow procedures to ensure belayer safety in the event of an abseiler fall or rock fall.</p> <p>4.3. Confirm attachment of belayer to anchor to minimise movement during a fall.</p> <p>4.4. Demonstrate a safe and efficient escape from belay system, in a rescue situation, while ensuring abseiler safety.</p> <p>4.5. Maintain rope tension to ensure free flow and minimise fall distance while not restricting abseiler movement.</p> <p>4.6. Monitor abseiler progress constantly and respond appropriately to abseiler calls.</p> <p>4.7. Arrest falls promptly using technique suitable to the belaying device and situation.</p> <p>4.8. Demonstrate attachment to alternate belay or safety system when self-belaying to maintain safety in the event of a fall.</p>
5. Apply caving techniques	<p>5.1. Arrange personal laddering equipment safely, using <i>knots</i> suitable to the belay system</p> <p>5.2. Demonstrate posture and technique for descending and ascending ladder</p> <p>5.3. Negotiate cave hazards and <i>obstacles</i> according to caving techniques that minimise environmental damage</p> <p>5.4. Apply appropriate methods for resting on a ladder pitch</p> <p>5.5. Use communication and <i>strategies</i> to implement safety systems.</p>
6. Evaluate activity.	<p>6.1. Evaluate <i>relevant aspects</i> of the abseiling activity.</p> <p>6.2. Identify improvements for future abseiling experiences in a cave.</p>

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

- communication skills to inform progress and interact with abseiler and or belayer
- problem-solving skills to:
  - negotiate obstacles and hazards when abseiling
  - assess application of rope tension when belaying
  - arrest client falls when belaying
- planning and organising skills to:
  - select, fit and use equipment and resources
  - perform relevant safety checks
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

### Required knowledge

- legislation and organisational policies and procedures to enable safe conduct of all abseiling and belaying activities
- minimal impact abseiling codes to ensure protection of the environment
- equipment types, characteristics and technology used for abseiling and belaying in caves, the advantages and disadvantages of the range of equipment, and factors affecting appropriate selection of equipment
- use, care and maintenance of equipment to ensure prolonged life span and safety requirements
- abseiling techniques and common communication systems and calls used between abseilers and belayers to reduce risk
- belay techniques and devices appropriate for single pitch surfaces in caves
- basic weather information to ascertain possible conditions and their affect on the activity
- hazards and risks that may be experienced while abseiling and belaying in caving environments
- safety and emergency procedures relevant to the location to ensure safety of self and others.

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- applies relevant planning processes for abseiling activities including independently selecting, fitting and checking equipment
- arranges a suitable communication system with other participants to monitor safety and progress
- negotiates simple obstacles and hazards while abseiling in a cave, and adapts to problems or issues that may arise to ensure safety of self and other participants
- evaluates and reflects on own performance to identify strengths, weaknesses and areas that need improvement.

#### Context of and specific resources for assessment

Assessment must ensure participation in multiple single pitch abseiling and belaying activities in caving environments that reflect local conditions to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information regarding abseiling and belaying to plan for the activity
- a suitable natural cave site with simple obstacles and vertical pitches that allow participants to demonstrate abseiling and belaying skills
- other abseiling participants to belay
- abseiling, belaying and safety equipment.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of relevant legislation and organisational policies and procedures to enable safe conduct of all abseiling and belaying activities
- observation of safe participation and demonstration of abseiling and belaying skills
- observation of dealing with contingencies, such as equipment failure or change in weather conditions

- third-party reports from a supervisor detailing performance.

Industry has determined that this unit must be assessed with the following units:

- SISOCVE305A Apply caving specific single rope techniques
- SISOCVE306A Rig ropes and establish belays in caves.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Food and water requirements*** may include:

- menu planning and preparation
- range of foods suitable to the cave environment.

***Contextual issues*** may include:

- abseilers abilities
- weight ratio of abseiler to belayer
- group size
- pitch height
- soundness of rock
- access and egress
- weather conditions

***Relevant legislation*** may include:

- occupational health and safety
- permits or permission for access
- environmental regulations.

***Organisational policies and procedures*** may include:

- occupational health and safety
- use, maintenance and storage of equipment
- emergency procedures
- communication protocols
- minimal impact environmental and caving codes
- Australian Speleological Federation Codes and Guidelines
- code of ethics.

***Relevant sources*** may include:

- bureau of meteorology
- media
- national parks and wildlife centres
- police.

***Weather information*** may include:

- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- weather warnings.

***Hazards*** may include:

- confined or awkward start to pitch
- water pools and streams
- rock fall
- vertical squeezes



- falling water
  - abrasion points
  - tangled rope
  - loose clothing and hair
  - strong cave breezes
  - elevated carbon dioxide levels
  - bat guano.
- Risks** may include:
- hypothermia
  - injuries and illnesses
  - exhaustion
  - dehydration
  - stings or bites
  - equipment failure.
- Personal equipment** may include:
- helmets
  - protective clothing
  - karabiners
  - maillons
  - harnesses
  - gloves
  - footwear
  - caving lights
  - descending devices.
- Device** may include:
- auto locking devices
  - circular devices
  - plate devices
  - tubular devices
  - improvised devices
  - in line devices
- Knots** may include:
- end-of-rope knots
  - midline knots
  - stopper knots
  - friction hitches.
- Belay system** may include:
- top belay
  - bottom belay
  - self belay.
- Safety checks** may include:
- A - anchors - secure and suitable to application
  - B - buckles - locked as per manufacturers recommendations
  - C- connector - locked, secured and orientated
  - D - devices - threaded correctly and secured
  - E- everything else including end or rope knots, friction hitches, belayer ready, helmet chin

strap, clothing, jewellery and hair secured.

*Simple obstacles* may include:

- F- friend - cross check.
- ledges
- falling water
- overhangs
- squeezes
- traverses.

*Relevant aspects* may include:

- planning process
- communication calls between abseilers and belayers
- abseiling and belaying skills.

## **Unit Sector(s)**

Outdoor Recreation

## **Competency Field**

Caving