

Provide initial response at rope rescue incidents

Level 4

Credits 6

Purpose This unit standard is for people who are required to respond to a rope rescue incident.

People credited with this unit standard are able to: demonstrate knowledge of equipment for rope rescue; establish simple fixed (load sharing) anchors to support a rope rescue system; perform double line rope rescue techniques to access patient in a high angle environment; and assess and stabilise a patient in a high angle environment to prevent further injury or trauma using the double line rope rescue technique.

Subfield Specialist Rescue

Domain Rope Rescue

Status Registered

Status date 24 August 2006

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Entry information Prerequisite: Unit 20536, *Demonstrate awareness of rope rescue operations and hazards*; Unit 6400, *Manage first aid in emergency situations* or current First Aid Certificate; or demonstrate equivalent knowledge and skills.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Fire and Rescue Services Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0039

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 Legislation and guidelines applying to this unit standard include the – Health and Safety in Employment Act 1992, Fire Service Act 1975, Police Act 1958, Civil Defence Emergency Management Act 2002, Health and Safety in Employment Regulations 1995, and OSH *Prevention of Falls Guidelines*, and their subsequent amendments.
- 2 Assessment against this unit standard may take place under real or simulated practical conditions.
- 3 Practical high angle sites during assessment are to be between 8 and 40 metres only.
- 4 The references for this unit standard include but are not limited to – the American Society for Testing and Materials (ASTM) *Standard Guide for Using Whistle Signals During Rope Rescue Operations*, available from <http://www.astm.org>; James A. Frank, *CMC Rope Rescue Manual* (1998); Smith and Padgett, *On Rope* (2000); Hudson and Vines *High Angle Rescue Techniques* (2004).
- 5 Practical assessment must not compromise the safety of people. Appropriate safety and technical equipment must be used.
- 6 Definitions
Patient is a term that has been used to reflect a subject requiring rescuing from a high angle environment either in a simulation or actual rope rescue incident.
Positive contact is a term that indicates a life supportive link between a rescue rope and an approved connection point on a rescuer's harness.
High angle defines an environment in which one must be secured with rope and other safety equipment to keep from falling from a height (generally above three metres) and more than 60 degrees.
Double line technique includes single line technique with independent safety.

Elements and performance criteria

Element 1

Demonstrate knowledge of equipment for rope rescue.

Performance criteria

- 1.1 Rope rescue hardware characteristics, maintenance and applications are described in accordance with the references.

Range mechanical descender, mechanical ascender, karabiner.
- 1.2 Rope rescue software characteristics, maintenance and applications are described in accordance with the references.

Range prussik cord, full body rescue harness, anchor webbing, static and or low stretch, rescue rope, dynamic climbing rope.

- 1.3 Rope rescue protective and related safety equipment characteristics, maintenance and applications are described in accordance with the references.
- Range edge protection, eye protection, whistle, rope cutter, boots, overalls, gloves.
- 1.4 An equipment maintenance record is completed for rope rescue equipment after use in accordance with the references.

Element 2

Establish simple fixed (load sharing) anchors to support a rope rescue system.

Performance criteria

- 2.1 Five anchor point options suitable to sustain rope rescue systems are identified in accordance with the references.
- Range natural, structural, artificial.
- 2.2 A simple fixed (load sharing) anchor system is prepared and rigged to support a rope rescue system in accordance with the references.
- Range rope or webbing based anchor, edge protection, single anchor, multiple anchors.
- 2.3 Calculations determine safety limits in accordance with the references.
- Range angle forces (vectoring), fall factors, static system safety factors, white board analysis, critical point analysis.

Element 3

Perform double line rope rescue techniques to access patient in a high angle environment.

Performance criteria

- 3.1 Safety checking techniques are demonstrated in accordance with the references.
- Range touch and buddy checks.
- 3.2 Locate and access a patient under naturally illuminated conditions while descending in accordance with the references.
- 3.3 Locate and access a patient aided by night operations equipment while descending under darkened conditions in accordance with the references.
- Range light sticks, high visibility garments, headlamps.
- 3.4 Lock off, or stop during descent in accordance with the references.

- 3.5 Ascend fixed rope in accordance with the references.
- Range mechanical or prussik based ascent, two points of positive contact with rope.
- 3.6 Complete a personal or team rope rescue incident record or log after activity in accordance with the references.
- 3.7 Communication is maintained with other personnel for the duration of the incident in accordance with the emergency service provider's requirements.
- 3.8 Independent safety rope is rigged to responder and managed in accordance with the references.
- 3.9 A self-recovery system is operated in accordance with the references.

Element 4

Assess and stabilise a patient in a high angle environment to prevent further injury or trauma using the double line rope rescue technique.

Performance criteria

- 4.1 Patient is physically stabilised in accordance with the references.
- Range protect patient from hazards, secure patient.
- 4.2 Patient is medically stabilised using first aid or basic life support methods in accordance with the emergency service provider's procedures or medical protocols.
- 4.3 Patient is emotionally stabilised in accordance with the references.
- 4.4 Patient is prepared for recovery by specialist tier level unit, in accordance with the references.
- Range patient records, patient briefs, patient handover.

Please note

Providers must be accredited by the Qualifications Authority, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Fire and Rescue Services Industry Training Organisation info@frsito.org.nz if you wish to suggest changes to the content of this unit standard.