Perform specialist rope rescues

Level **4**

Credits **15**

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 specialist rope rescue; prepare and rig a transfer device for high angle use, using double line technique; and perform specialist rope rescue techniques to recover patient using raising, lowering, and highline methods.

Subfield Specialist Rescue

Domain Rope Rescue

Status Registered

Status date 24 August 2006

Date version published 24 August 2006

Planned review date 31 December 2010

Entry information Prerequisite: Unit 20538*, Perform descender based rope rescue*, 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.

© New Zealand Qualifications Authority 2006

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 over eight metres and more than 60 degrees.

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.
Transfer device refers to a device used to package and allow safe removal of a patient from a specific rescue environment with rope rescue systems. It includes litters, rescue strops, diapers, harnesses.
Double line technique includes a single line technique with independent safety.

Elements and performance criteria

Element 1

Demonstrate knowledge of equipment for specialist rope rescue.

Performance criteria

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

© New Zealand Qualifications Authority 2006

1.2 Rescue rope characteristics, maintenance and applications are described in accordance with the references.

Range stretch, diameter, fibre, certification, construction, washing, inspection, storage.

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

Range pulley, mechanical rope grab, mechanical belay devices, descenders, ascenders, karabiners, rigging plates.

Element 2

Prepare and rig a transfer device for high angle use, using double line technique.

Performance criteria

2.1 Patient is packaged into transfer device for evacuation in accordance with the references.

Range patient mobility, patient protection from environment and hazards.

2.2 Transfer device and attendant is prepared and rigged in accordance with the references.

Element 3

Perform specialist rope rescue techniques to recover patient using raising, lowering, and highline methods.

Range double line technique, focused multipoint anchor.

Performance criteria

3.1 Self-equalising anchor (SEA) that can support a rope rescue system is prepared and rigged, using a minimum of three anchor points in accordance with the references.

Range rope or webbing-based SEA.

3.2 Rope-based systems for a patient and an attendant are selected, constructed and used in accordance with the references.

Range evacuation, raising, lowering, belay, cableway, patient protection, attendant protection, day operation, night operation, calculate mechanical advantage, high angle.

© New Zealand Qualifications Authority 2006

3.3 Knots are passed through rope rescue systems in accordance with the references.

Range lowering system, hauling system, independent belay.

3.4 Direction of rope rescue system under load is changed over in accordance with the references.

Range lower to raise, raise to lower.

3.5 Communication is maintained with other personnel for the duration of the incident in accordance with the emergency service provider's requirements.

3.6 An artificial high anchor point is constructed to support rope rescue operations in accordance with the references.

Range improvised or proprietary.

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.

© New Zealand Qualifications Authority 2006