
AVALANCHE
**Lead a first party response team for an
avalanche search and rescue**

level:	5
credit:	10
planned review date:	June 2009
sub-field:	Snowsport
purpose:	<p>People credited with this unit standard are able to: assess and manage scene safety at an avalanche site, as a first party response team leader; manage the rescue of victims; and manage the safe withdrawal of personnel and recording of information.</p> <p>This unit standard covers the skills and knowledge required of a professional working without supervision, away from base resources; and may be of interest to patrollers, mountain guides, and other outdoor professionals working in a mountain environment.</p>
entry information:	Prerequisites: Unit 6400, <i>Manage first aid in emergency situations</i> ; and Unit 18128, <i>Contribute to the avalanche stability assessment for a snow safety programme</i> ; or demonstrate equivalent knowledge and skills.
accreditation option:	Evaluation of documentation and visit by NZQA and industry.
moderation option:	A centrally established and directed national moderation system has been set up by Sport, Fitness and Recreation Industry Training Organisation.
special notes:	1 In March 2001 this unit standard and unit standard 18140 replaced unit standard 8639, however unit standard 18140 was designated as expiring in June 2005.

AVALANCHE

Lead a first party response team for an avalanche search and rescue

- 2 Delivery of training for and assessment against this unit standard will require the use of simulated avalanche search and rescue. Parameters are defined in the following way: a team is a small group of 4 to 10 people; all of whom are competent in the non-glacial mountain environment, with skills in transceiver searching, probing, and digging. The avalanche scenario will not involve more than six victims, and will focus on the knowledge and skills required of a leader of a single team in the first phase of an avalanche search and rescue being initiated, that is, prior to a formal rescue operation being conducted with the full back-up of base resources.
- 3 New Zealand Police are responsible for the appointment, or confirmation of appointment, of Search and Rescue (SAR) jobs and responsibilities in the event of a Class II search and rescue operation. A Class II search and rescue operation is an operation that is police controlled but using volunteer civilian Field Controllers and Police and volunteer field teams.
- 4 All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments.
- 5 Documented industry protocols include – *Backcountry Vertical Rescue Standards*, (Wellington: Grant Pratley and New Zealand Land Search and Rescue, 2000), Don Bogie, *Alpine Rescue Techniques* (Wellington: New Zealand Mountain Safety Council, 1992); and *New Zealand Guidelines and Recording Standards for Weather, Snowpack and Avalanche Observations*, (Wellington: New Zealand Mountain Safety Council, 2003).

AVALANCHE
**Lead a first party response team for an
avalanche search and rescue**

- 6 There are minimum assessor requirements for assessment against this unit standard. The details of these requirements are available on the Sfrito website <http://www.sfrito.org.nz/>.

Elements and Performance Criteria

element 1

Assess and manage scene safety at an avalanche site, as a first party response team leader.

performance criteria

- 1.1 An avalanche search and rescue operation is initiated according to snowsport area requirements and/or documented protocols, and avalanche location.
- 1.2 Details are communicated to first party team members and appropriate personnel, regarding avalanche search and rescue operation.
- 1.3 The role of the New Zealand Police in Search and Rescue operations is described in terms of processes and resources.
- 1.4 The site, and access to it, are assessed for further hazards taking into account a range of variables.
- Range: variables may include – snow stability, rockfall, ice fall, buried victims, on-site resources (equipment and personnel), time of day, weather conditions, time since avalanche, availability and reliability of witnesses, access to base personnel and resources, availability of avalanche search dogs, options for communication with base personnel.
- 1.5 Existing hazards are managed.
- Range: abandon search, control hazard, activate search.

AVALANCHE
**Lead a first party response team for an
avalanche search and rescue**

- 1.6 The site is assessed for likely points of burial using knowledge of mountain topography, and the assessment is integrated into the search strategy.
- Range: terrain traps, last seen point, depth of debris, tracks, witness statements, surface clues.
- 1.7 On-site resources are evaluated and used to maximise the chances of survival for victims.
- Range: resources may include but are not limited to – personnel, medical expertise, actual and/or improvised equipment, witnesses, communication tools to on-site and off-site support.
- 1.8 On-site decisions and judgement calls ensure that the safety of team members is maintained at all times.
- Range: on-site decisions – abandon search, more resources required, continue search, modify search;
judgement calls – assessment of avalanche site, surrounding terrain, snow stability, weather conditions, time of day, individual and team levels of physical and emotional energy.
- 1.9 The integrity of the avalanche site is maintained at all times during the search and rescue operation.
- Range: parameters of site defined, critical points and evidence marked, litter and polluting avoided, spare equipment stored away from site, gear stored downwind of site, spectators.
- 1.10 Monitoring of team members' search techniques ensures search techniques match the identified requirements of the avalanche site and rescue priorities.
- Range: transceiver search, surface search, probe search (fine, coarse, selective), digging.

AVALANCHE
**Lead a first party response team for an
avalanche search and rescue**

element 2

Manage the rescue of victims.

performance criteria

- 2.1 The requirements of avalanche survivors are described with details about the first aid and medical priorities, issues of short term and potential ongoing management under difficult mountain conditions, and evacuation options.
- 2.2 The excavation and/or rescue of victims is coordinated throughout the search and rescue to maximise survival chances.
- Range: digging techniques, airway, gentle handling.
- 2.3 The treatment of survivors is managed to the standard required of a qualified first aider, taking into account the specific problems associated with avalanche burials.
- Range: assessment must include but is not limited to – snow in airways, chest constriction, hypothermia, contorted limbs.
- 2.4 The handling of fatalities is described according to Police requirements, with variations identified which may be necessitated by conditions, resources, and safety considerations.
- Range: police requirements – safety considerations, search for other victims.

element 3

Manage the safe withdrawal of personnel and recording of information.

performance criteria

- 3.1 Avalanche site records are kept of times, personnel, areas searched, and search strategies used, and the records match the requirements of a search coordinator for a Search and Rescue operation.
- Range: writing, drawing.

AVALANCHE
**Lead a first party response team for an
avalanche search and rescue**

- 3.2 Personnel are withdrawn safely and debriefed.
- 3.3 Requirements for report and data collection are completed according to company or snowsport area policy, and Police or Coroner requirements.

Range: fracture line profile, incident reports, debrief, notes.

Comments on this unit standard

Please contact the Sport, Fitness and Recreation Industry Training Organisation info@sfrito.org.nz if you wish to suggest changes to the content of this unit standard.

Please Note

Providers must be accredited by the Qualifications Authority or a delegated inter-institutional body before they can register 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 providers wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

This unit standard is covered by AMAP 0050 which can be accessed at <http://www.nzqa.govt.nz/site/framework/search.html>.