level: 2

credit: 3

planned review date: October 2008

sub-field: Outdoor Recreation

**purpose:** People credited with this unit standard are able to

demonstrate knowledge of navigation tools and navigate in

the outdoors in good visibility.

**entry information:** Open.

**accreditation option:** Evaluation of documentation by NZQA and industry.

**moderation option:** A centrally established and directed national moderation

system has been set up by the Sport, Fitness and Recreation Industry Training Organisation – Outdoor Recreation Advisory

Group.

special notes: 1 Definitions

Aiming off is deliberately aiming to one side of a point

on a linear feature.

Attack point is an interim navigation goal.

Back bearings are compass bearings that are the

reverse of the direction of travel.

Good visibility is where the horizon is visible.

Catching features indicate to the navigator they have

gone too far.

Handrails are the linear features to follow.

*Horizon* is where the sky meets the terrain. Examples

of this could include river, ridgeline, and cliff.

2 NZMS 260 maps are topographical maps published by Land Information New Zealand and available from map selling agencies throughout New Zealand.

- All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the *New Zealand Environmental Care Code*, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments. *The New Zealand Environmental Care Code* is available from the Department of Conservation, Head Office, PO Box 10420, Wellington.
- 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

Demonstrate knowledge of navigation tools.

Range: map, compass.

#### performance criteria

1.1 Map features and their functions are identified using a variety of maps.

Range: features may include but are not limited to – scales, symbols, grid

lines, contours, shading;

maps may include but are not limited to - park, NZMS 260,

orienteering.

1.2 An accurate position is fixed on a topographical map using a six-figure grid reference and map number.

1.3 The uses of a compass are identified and demonstrated.

Range: uses must include but are not limited to – measuring distances on

a map, orientating the map north, taking and following bearings.

1.4 Navigation techniques are explained in terms of how and when they are most effectively used.

Range: navigation techniques must include but are not limited to – aiming

off, attack points, handrails, catching features, back bearings.

1.5 The difference between magnetic and grid bearings are explained.

### element 2

Navigate in the outdoors in good visibility.

Range in at least two different locations using NZMS 260 maps.

### performance criteria

- 2.1 The map is orientated using surrounding natural features.
- 2.2 Position is correctly identified to within 100 metres using map and surrounding features as references.
- 2.3 A predetermined point is reached, following a route using map to ground techniques and navigating around hazards.
- 2.4 Accurate compass bearings are taken from a map and followed correctly with a compass.
- 2.5 Present position is identified on the map by taking a resection using three features.
- 2.6 Factors that impact on the time taken to get from one point to another are identified.

Range: factors may include but are not limited to – bridges, river crossings, obstacles, up hill, rest stops, size of group, injury.

2.7 The amount of time required to walk from one given point to another in a variety of tracked terrain is estimated and the variation to the actual time taken is justified.

#### 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 interinstitutional 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 0102 which can be accessed at http://www.nzqa.govt.nz/site/framework/search.html.