SISOFLD007 Navigate in difficult tracked environments

Release: 1
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Modification History
Not applicable.

Application
This unit describes the performance outcomes, skills and knowledge required to navigate in difficult tracked environments during any type of outdoor recreation activity.

The unit provides skills to navigate in environments where tracks, natural and constructed features marked on maps may be unreliable. Tracks are generally distinct, but may be indistinct in some places. They have signage at the track head, and have route markers but provide limited signage en route. There may be many natural obstacles and, along with changes in weather and visibility, adjustments to the planned route may be necessary. Tracks could be graded according to the Australian Walking Track Grading System and might include features of grade 4.

This unit applies to any type of organisation that delivers outdoor recreation activities including commercial, not-for-profit and government organisations.

It applies to leaders, guides or instructors who use these skills when leading participants during activities where navigation skills are required.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit
Nil

Competency Field
Field Operations

Unit Sector
Outdoor Recreation

Elements and Performance Criteria

<table>
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<tr>
<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
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<tr>
<td>Elements describe the essential outcomes</td>
<td>Performance criteria describe the performance needed to demonstrate achievement of the element.</td>
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<tr>
<td>1. Plan for navigation.</td>
<td>1.1. Obtain and become familiar with maps, appropriate for the activity, and features that will assist with navigation</td>
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1. Navigate in difficult tracked environments
   
   1.1. Interpret map symbols and information to plan an efficient route according to specific activity requirements.

   1.2. Select a compass suitable for navigation requirements.

   1.3. Calculate grid, magnetic and true north bearings using map, compass and protractor.

   1.4. Prepare a navigation data sheet, and identify emergency or contingency escape routes.

2. Navigate a route in difficult tracked environments.

   2.1. Orientate map to surroundings using landmarks and compass and identify factors that affect accuracy.

   2.2. Follow the planned route using map, route markers, natural and constructed features and compass to assist.

   2.3. Use a global positioning system (GPS) as a navigational aid to maintain route.

   2.4. Use techniques to estimate distance travelled.

   2.5. Maintain, where necessary, a compass course to bypass obstacles.

   2.6. Identify unfamiliar features in the field using map and compass to maintain route.

   2.7. Utilise navigation techniques to identify unfamiliar features and fix position when lost.

   2.8. Make required adjustments to route according to prevailing conditions, and navigate using map, route markers, natural and constructed features, compass and GPS as required.

**Foundation Skills**

*Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.*

**SKILLS**

**DESCRIPTION**

Reading skills to:

- interpret detailed and potentially unfamiliar information on maps and track signage
- interpret factual activity plan information in familiar formats.

Writing skills to:

- develop detailed navigation data sheets using correct terminology and symbols.

Numeracy skills to:

- interpret and calculate detailed numerical data involving, distances, times, altitudes, heights, depths and gradients.
• interpret and calculate degrees, mils and angles.

Technology skills to:
• use a range of technologies to access information about routes.

Unit Mapping Information
No equivalent unit.

Links
Companion Volume Implementation Guides -