



Australian Government

FWPCOT3202 Navigate in remote or trackless areas

Release: 2

FWPCOT3202 Navigate in remote or trackless areas

Modification History

Release	Comments
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

Application

This unit of competency describes the outcomes required to navigate in untracked, remote areas in situations where difficult environmental conditions and poor visibility are likely to occur. The unit includes interpretation and use of maps and other navigation aids.

The unit applies to a Forestry Worker, Plantation Worker, Forest Harvester, Harvesting Technical Forestry Technician, Tree Planter, Mobile Equipment Operator and Arboriculture Technician.

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

Pre-requisite Unit

Nil

Unit Sector

Forest Growing and Management

Harvesting and Haulage

Sawmilling and Processing

Elements and Performance Criteria

Element	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Prepare for navigation	1.1 Identify and gather information and relevant factors and check with appropriate personnel.

	1.2 Select suitable maps, equipment and navigation aids and check for accuracy, currency and operational effectiveness. 1.3 Detect and correct faults or errors in maps and equipment. 1.4 Establish communication with others in line with WHS and organisational requirements
2. Plan the route	2.1 Plan route in line with work instructions and WHS requirements. 2.2 Examine maps to identify relevant symbols, information, navigation data and environmental requirements. 2.3 Calculate accurate grid and magnetic bearings using maps and equipment in line with assignment instructions. 2.4 Plan emergency exit routes and contingencies to combat other risks.
3. Conduct navigation	3.1 Undertake navigation in line with planned route and schedule. 3.2 Orientate maps are correctly to surroundings in line with planned route. 3.3 Use equipment and navigation aids in line with manufacturer recommendations. 3.4 Navigate alternative routes to bypass obstacles and improve efficiency of course. 3.5 Minimise impact on the environment as a result of navigation. 3.6 Record and report navigation activities.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	- interpret scales, symbols, grid references, distance and data included on maps and navigation equipment - estimate travel time and distances - locate own position on a map.
Planning and organising skills to:	- estimate resource and equipment requirements - effectively bypass obstacles.
Problem solving skills to:	identify and solve problems with equipment and navigation route.

Range of Conditions

Not Applicable

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3202 Navigate in remote or trackless areas Release 2	FWPCOT3202 Navigate in remote or trackless areas Release 1	Minor typographical errors corrected	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3202 Navigate in remote or trackless areas

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Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- follow organisational policies and procedures for navigating in a remote or trackless area
- select, interpret, and use maps and other written and diagrammatic information for navigation
- use maps, compass and navigation aids to plan routes and navigate in remote or trackless area which must be either:
 - standard magnetic compass using latitude/longitude and Universal Transverse Mercator (UTM) coordinate systems
 - global positioning system (GPS)
 - cadastral maps (maps that show the boundaries and ownership of land parcels)
 - topographic maps
 - general maps
- plan and conduct an efficient navigation, effectively bypassing obstacles within designated timeframes
- maintain navigation tools and equipment
- establish and maintain effective communication with appropriate personnel as required
- record navigation activities.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- regulations, standards, codes of practice and established safe practices for navigating in a remote or trackless area

- environmental protection requirements, including the safe disposal of waste material and returning the environment to its original or near to original condition on completion of activity
- organisational and site standards, requirements, policies and procedures for navigating in remote or trackless areas
- factors that may affect navigation, including:
 - types of terrain and gradient
 - weather conditions
 - obstacles
 - distance
 - estimated travelling time
 - availability of resources, including water, rest stops, camp sites
 - access and exit routes
- use and features of various maps, images and charts including:
 - cadastral and topographic maps
 - charts
 - guide books
 - photographs and other digital imagery
 - sketches
 - diagrams
- representation of topographic features on maps and plans, including:
 - grid lines and numbers
 - contour lines
 - magnetic variation
 - scale
 - map legend
 - local features
 - markers and beacons
 - water depth
- common scales and reference information used on maps and plans
- features and uses of environmental navigation aids:
 - survey markers
 - track markers and beacons
 - signs
 - arrows
 - natural landmarks and reference points
- purpose, features and operation of navigation equipment, and procedures for their safe use and maintenance, including
 - global positioning system (GPS) device
 - magnetic compass, including adjustment for local magnetic variation
 - locator beacons

- personal protective equipment and clothing
- techniques for estimating distance travelled within a particular activity context
- established communication modes, methods and protocols
- procedures for recording and reporting workplace information.

Assessment Conditions

The following resources must be made available:

- site to navigate
- navigation equipment
- work order, workplace requirements and site standards for navigating in remote or trackless areas.
- communication devices.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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