



Australian Government

AHCLPW201 Operate a handheld GPS device

Release: 1

AHCLPW201 Operate a handheld GPS device

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to operate a handheld Global Positioning System (GPS) device, including tablet and phone-based GPS systems, and record and use spatial information relating to points, tracks and routes.

The unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. This includes undertaking defined activities and work in a structured context.

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

Pre-requisite Unit

Nil

Unit Sector

Lands, Parks and Wildlife (LPW)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan GPS operations	1.1 Identify purpose and use of the GPS and data collected from supervisor instructions 1.2 Prepare equipment and materials for GPS operations 1.3 Identify key operational parameters, and adjust GPS device settings according to operator manual 1.4 Source and upload support data to GPS device

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Plan power supply strategy for field operations 1.6 Assist with the identification of fieldwork health and safety hazards, and apply controls according to supervisor instructions and workplace procedures
2. Collect, use and store GPS information in the field	2.1 Establish accuracy of device for current position 2.2 Clear GPS logs to establish starting point for temporal data sequence 2.3 Operate handheld device to perform basic functions and record spatial and temporal data 2.4 Manage power supply for portable devices for field operations
3. Use basic software to retrieve, manipulate, display and store GPS data	3.1 Select software required for GPS data manipulation 3.2 Upload/sync GPS data from handheld device 3.3 Sort and categorise data for storage according to workplace requirements 3.4 Manipulate and edit data and data sets according to software procedures 3.5 Create simple visual reports for data interpretation and display
4. Shut down, maintain and store handheld GPS equipment	4.1 Turn off GPS device and prepare for storage 4.2 Record GPS use and identified faults according to workplace procedures 4.3 Clean and store GPS device

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret instructions from supervisor and GPS operator's manual to effectively upload required GPS data, operate GPS equipment and download data requested

Skill	Description
Writing	Record and upload data using protocols for data transfer

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCLPW201 Operate a handheld GPS device	Not applicable	The unit has been created to address an emerging skill or task required by industry	Newly created

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCLPW201 Operate a handheld GPS device

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion, operated a handheld Global Positioning System (GPS) unit and software-based GPS on handheld portable devices, and has:

- navigated settings on the GPS/tablet to change datum, coordinate system and units
- adjusted display parameters to suit operating conditions
- managed power supply for portable devices
- identified and followed workplace health and safety procedures for fieldwork and reported unsafe situations to supervisor
- collected, used and stored GPS information in the field, including:
 - recorded and labelled points
 - recorded and labelled tracks
 - navigated to points
 - created a route using recorded waypoints
 - navigated a route
- used basic software to retrieve, manipulate, display and store GPS data, including:
 - edited symbols, labels and names
 - added notes and other information
 - created routes from waypoints and tracks
 - created and edited files and datasets of spatial information
 - used data to modify/update support dataset for future work
- used software to create simple visual reports for data interpretation and display
- decommissioned and stored GPS equipment, including:
 - updated retained dataset on device and checked labels/names
 - removed temporary and superfluous data from the device
 - restored settings according to workplace standards

- removed batteries.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic GPS function, principles and limitations of the technology
- a range of portable GPS devices
- a range of supporting devices and software, including:
 - chargers and power banks
 - laptops and tablets
 - memory cards
- mapping and reporting software, including stand-alone and web-based applications
- operational parameters, including:
 - datum
 - coordinate system
 - units
 - naming protocols
- sources of error in GPS
- enterprise procedures and practice for GPS operations.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in the field or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - handheld GPS device, phone or tablet with GPS capability
 - software for using a GPS and manipulating data
- specifications:
 - workplace procedures for use, storage and data management of handheld GPS device.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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