



**Australian Government**

# **AHCLPW309 Operate remotely piloted system for conservation work**

**Release: 1**

# AHCLPW309 Operate remotely piloted system for conservation work

## 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 remotely piloted systems (RPS) for support, imaging and management for conservation work.

The unit applies to individuals who work under broad direction and take responsibility for their own work, including limited responsibility for the work of others. They use discretion and judgement in the selection and use of available resources.

Commonwealth, state/territory and local government licensing, legislative or certification requirements may apply to the use of RPS. Users are advised to check with the relevant regulatory authority.

## 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. Determine operational plan for use of remotely piloted system | 1.1 Clarify and confirm objectives of RPS operations plan<br>1.2 Confirm location and operational route of system<br>1.3 Identify operating conditions and hazards, assess risk and implement controls according to workplace health and safety procedures |

| Elements                                                               | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>                       | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                        | 1.4 Select equipment and materials required for RPS operations<br>1.5 Confirm workplace operating procedure to be followed with supervisor/controller<br>1.6 Verify licences, permits and agreements have been approved for operations according to workplace procedures and regulatory requirements                                                                                                                                                                        |
| 2. Prepare and transport equipment and resources                       | 2.1 Assemble equipment and materials required for RPS operations<br>2.2 Check equipment for correct operations and functionality according to operator instructions<br>2.3 Clean and maintain RPS ready for use, and rectify faults<br>2.4 Transport equipment to site/s and prepare for operation<br>2.5 Set parameters for RPS according to operations plan and operational route<br>2.6 Test and calibrate equipment under field conditions in preparation for operation |
| 3. Commence use of piloted system                                      | 3.1 Operate RPS according to safe operating procedures (SOP), planned route and regulatory requirements<br>3.2 Monitor and record operations<br>3.3 Perform RPS tasks according to RPS operations plan<br>3.4 Record and report incidents and unplanned events to supervisor/controller                                                                                                                                                                                     |
| 4. Finalise operation of remotely piloted system for conservation work | 4.1 Shut down and disassemble RPS according to operator instructions<br>4.2 Process data files<br>4.3 Maintain and store RPS according to workplace procedures<br>4.4 Report results of RPS operations according to workplace procedures                                                                                                                                                                                                                                    |

## 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  | <ul style="list-style-type: none"><li>Interpret maps, charts and plans for determining operational route of RPS</li></ul>                                                                             |
| Numeracy | <ul style="list-style-type: none"><li>Interpret and manipulate distances, altitude/depth and speed for determining operating parameters of RPS and inputting operational route into devices</li></ul> |

## Unit Mapping Information

| Code and title current version                                     | Code and title previous version | Comments                                                                            | Equivalence status |
|--------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|--------------------|
| AHCLPW309<br>Operate remotely piloted system for conservation work | 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 AHCLPW309 Operate remotely piloted system for conservation work

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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 remotely piloted system for conservation and land management work according to legislative and regulatory requirements.

There must also be evidence that the individual has:

- confirmed operational objectives, parameters and regulatory requirements with supervisor
- interpreted workplace procedures for operation of remotely piloted system (RPS)
- selected and prepared RPS equipment and resources
- maintained and transported RPS equipment to operations site
- checked RPS equipment for correct operation
- adjusted settings on RPS, controller and attachments according to operations plan and operational route objectives, including:
  - lens and camera adjustments for imaging objectives
  - adjustments of attachments
  - operational route perimeter and altitude
  - automated responses
  - safety factors
- operated RPS according to regulations, safe operating procedures and route plan
- monitored, recorded and reported operational information, incidents and unplanned events
- downloaded, sorted, labelled and stored digital and route data
- shut down, disassembled and stored RPS according to operator instructions and workplace procedures
- reported on operation.

## 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:

- regulations and the expectations of stakeholders in the area of operation
- permissions, permits and authorisation required for use of RPS in different land management settings
- workplace procedures and safe operating principles for operation of RPS
- RPS system components, controllers, cameras and other attachments and their safe operation
- calibration of RPS system components
- computing hardware and software to support RPS operation
- planning processes, including:
  - assessments of hazards, risk, and risk control
  - terrain
  - weather conditions
  - operational limitations
- transport and storage of remotely piloted systems equipment, including efficient use, recharge and storage of batteries
- operations for which RPS are commonly used in land management, including:
  - photography and videography
  - collecting samples from inaccessible sites
  - pest and weed control operations
  - monitoring and mapping activities
  - search and rescue operations
- recording, processing and storing data collected by RPS, including:
  - digital photographs and videos
  - operational route information
  - geographic information system (GIS) data
- reporting and recording methods and procedures.

## Assessment Conditions

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

- physical conditions:
  - skills must be demonstrated on a conservation and ecosystem management site
- resources, equipment and materials:
  - RPS and attachments specified in the operations plan
  - tools and equipment for assembling and maintaining the RPS
  - specific items of personal protective equipment
- specifications:

- workplace policies and procedures for operating and reporting on RPS use
- manufacturer operating instructions for RPS and attachments
- RPS operations plan
- regulations relating to the RPS
- relationships:
  - supervisor/controller
- timeframes:
  - according to times specified in operations plan and permits.

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

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