

Modification history

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0.

AHCLPW3XX	Operate <u>unmanned aerial system</u> for conservation work
Application	<p>This unit of competency describes the skills and knowledge required to operate a remotely piloted aircraft (RPA) for support, imaging and control systems for conservation work.</p> <p>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.</p> <p>Federal, State and local government licensing, legislative or certification requirements may apply to the use of RPA. Operators of RPA's must comply with the requirements set out in Civil Aviation Safety Authority (CASA) regulations.</p>
Prerequisite Unit	Nil
Unit Sector	Lands, Parks and Wildlife (LPW)

Commented [RB1]: Should this be "remotely piloted system" since this is the terminology used in CASA regulations?

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 RPA	1.1 Clarify and confirm the objectives of RPA operations plan 1.2 Confirm location and flight parameters 1.3 Identify operating conditions and hazards, assess risk and implement controls according to workplace health and safety procedures 1.3 Select equipment and materials required for RPA operations 1.4 Prepare a flight plan for period specified in RPA operations plan 1.5 Confirm workplace operating procedure to be followed with supervisor/controller 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 RPA operations 2.2 Check equipment for correct operations and functionality according operator instructions 2.3 Clean and maintain RPA ready for use and rectify 2.4 Transport equipment to site/s and prepare for flight 2.5 Set parameters for RPA according to operations plan and flight plan 2.6 Test and calibrate equipment under field conditions in preparation for flight
3. Operate unmanned aerial system for conservation work	3.1 Operate RPA according to safe operating procedures (SOP), flight plan and regulations 3.2 Monitor and record flight operations 3.3 Perform RPA tasks according or RPA operations plan 3.4 Record and report incidents and unplanned events to supervisor/controller
4. Finalise operation of unmanned aerial system for conservation work	4.1 Shut down and disassemble RPA according to operator instructions 4.2 Process data files 4.3 Maintain and store RPA according to workplace procedures 4.4 Report results of RPA operations according to workplace procedures

Foundation Skills	
<i>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.</i>	
Skill	Description
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Commented [RB2]: RB to complete after confirmation of Performance Criteria

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
[SI Text]	New	New	No equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72
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TITLE	Assessment requirements for AHCLPW308 Operate unmanned aerial system for conservation work
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has on at least one occasion operated a remote piloted aircraft for conservation and land management work according to legislative and regulatory requirements.</p> <p>There must also be evidence that the individual has:</p> <ul style="list-style-type: none"> • confirmed operational objectives, parameters and regulatory requirements with supervisor • interpreted workplace procedures for operation of remote piloted aircraft (RPA) • selected and prepare RPA equipment and resources • maintained and transported RPA equipment to operations site • checked RPA equipment for correct operation • adjusted settings on RPA, controller and attachments according to operations plan and flight objectives, including: <ul style="list-style-type: none"> • lens and camera adjustments for imaging objectives • adjustments of attachments • operational flight perimeter and altitude • automated responses • safety factors • operated RPA according to regulations, safe operating procedures and flight plan • monitored, recorded and reported flight information, incidents and unplanned events • downloaded, sorted, labelled and stored digital and flight data • shut down, disassembled, and stored RPA according to operator instructions and workplace procedures • report on operation. 	
Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • CASA regulations and the expectations of stakeholders in the area of operation • permissions, permits and authorisation required for use of RPA 's in different land management settings • workplace procedures and safe operating principles for operation of RPA's • RPA system components, controllers, cameras and other attachments and their safe operation • calibration of RPA system components • computing hardware and software to support RPA operation • planning processes, including: <ul style="list-style-type: none"> • assessments of hazards, risk, and risk control • terrain • weather conditions • operational limitations • transport and storage of unmanned aerial systems equipment, including efficient use, recharge and storage of batteries • operations for which RPS's commonly used in land management, including: <ul style="list-style-type: none"> • 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 RPA, including: <ul style="list-style-type: none"> • digital photographs, and videos • flight information • geographic information system (GIS) data 	

Knowledge Evidence

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| <ul style="list-style-type: none">reporting and recording methods and procedures. |
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Assessment Conditions

Assessment of skills must take place under the following conditions:
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| <ul style="list-style-type: none">physical conditions:<ul style="list-style-type: none">skills must be demonstrated in a conservation or land management project as specified in the Performance Evidenceresources, equipment and materials:<ul style="list-style-type: none">use of RPA and attachments specified in the operations planuse of tools and equipment for assembling and maintaining the RPAuse of specific items of personal protective equipmentspecifications:<ul style="list-style-type: none">use of workplace policies and procedures for operating and reporting on RPA useuse of manufacturer's operating instructions for RPA and attachmentsuse of RPA operations planaccess to Civil Aviation Safety Authority (CASA) regulationsrelationships:<ul style="list-style-type: none">supervisor/controllertimeframes:<ul style="list-style-type: none">according to times specified flight plan and permits. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |
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