



**Australian Government**

# **AVIW0028 Operate and manage remote pilot aircraft systems**

**Release: 1**

# AVIW0028 Operate and manage remote pilot aircraft systems

## Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

## Application

This unit involves the skills and knowledge required to operate and manage remote pilot aircraft systems (RPAS) in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes operating and managing RPAS during normal flight, and managing RPAS during abnormal and emergency procedures.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to equipment and system operations of flight or ground operations personnel and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of recreational, commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision within a single-pilot or multi-crew RPAS environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

## Pre-requisite Unit

Not applicable.

## Competency Field

W – Equipment and Systems Operations

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential    Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

**1 Operate and manage RPAS during normal flight**

- 1.1** RPAS, sub-systems and devices are operated to achieve operational requirements
- 1.2** RPAS, sub-systems and devices are monitored using a systematic scan technique
- 1.3** RPAS and flight environment information is analysed to identify actual and potential threats or errors
- 1.4** RPAS automation is utilised to manage control station workload
- 1.5** Checklist procedures are implemented during normal RPAS operations

**2 Manage RPAS during abnormal and emergency procedures**

- 2.1** Abnormal or emergency situations are identified, diagnosed and communicated
- 2.2** RPAS control is maintained at all times
- 2.3** RPAS abnormal or emergency checklist procedures are implemented to maintain safety of flight
- 2.4** Course of action is decided, implemented, evaluated and revised to achieve safest outcomes
- 2.5** Location and operation of emergency systems applicable to RPAS are explained

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

## Unit Mapping Information

This unit replaces and is equivalent to AVIW3038 Operate and manage remote pilot aircraft

systems.

## Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>

# Assessment Requirements for AVIW0028 Operate and manage remote pilot aircraft systems

## Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures (SOPs)
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- completing relevant documentation
- identifying and correctly using relevant equipment
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting remote pilot aircraft systems (RPAS) displays
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- operating electronic communications equipment to required protocol
- performing systematic scan technique for monitoring RPAS, sub-systems (equipment) and devices
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- undertaking fault finding in RPAS
- using automated systems to manage workload
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- aeronautical decision-making processes relevant to RPAS operations
- effective communication
- team briefings
- risk identification, analysis and control in relation to RPAS operations

- emergency plans
- emergency equipment
- emergency manoeuvres to avoid collision
- flight environment information, including:
  - head-up display (HUD) suitable for flight
  - RPAS control systems suitable for flight indications, including height, speed, direction and location
- RPAS as applicable to rating/endorsement requirements in relation to RPAS type if relevant:
  - battery/fuel/power system:
    - likely faults that may affect battery/fuel/power system
    - emergency operating procedures for battery/fuel/power system
    - operation of /battery/fuel/power selector panel or display full battery/fuel capacity and fuel grade
  - electrical system:
    - likely faults that may affect electrical system
  - detection and avoidance systems:
    - surveillance and collision avoidance functions of detection and avoidance systems
    - system limitations
  - automated systems:
    - limitations of automated systems.

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment (PPE) currently used in industry.

## Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>