



Australian Government

AVIW0009 Conduct aerial delivery/retrieval operations using remote piloted aircraft systems

Release: 1

AVIW0009 Conduct aerial delivery/retrieval operations using remote piloted 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 conduct aerial delivery/retrieval operations using remote piloted aircraft systems (RPAS) in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

This unit addresses aviation technical skill requirements (physical, mental and task management abilities) related to air traffic control (ATC) duties that complement the non-technical skills of air traffic controllers and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of commercial and military air traffic services across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision as a single operator or within a team environment.

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

Pre-requisite Unit

Not applicable.

Competency Field

Y – Aircraft operation

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 Prepare for delivery and retrieval

- 1.1** External load characteristics and dimensions are determined and calculated
- 1.2** Aerial delivery equipment is prepared and checked as required in accordance with equipment manuals and publications
- 1.3** Remote pilot aircraft connection system is prepared and checked
- 1.4** Safety hazards are identified and addressed using established procedures
- 1.5** Remote pilot aircraft power availability is calculated to transport load effectively
- 1.6** Wind speed and direction are determined which may affect operation
- 1.7** Load-lifting location and surrounds are checked for suitability
- 1.8** Plan for delivery/retrieval is followed

2 Perform load delivery/retrieval operation

- 2.1** Remote piloted aircraft operational checks are conducted
- 2.2** Load is connected/released to/from remote pilot aircraft using appropriate operational method
- 2.3** Situational awareness of RPAS load stability and aircraft flight performance is maintained
- 2.4** External load is delivered/retrieved at nominated delivery point
- 2.5** Operation documentation is completed to organisational standards

3 Respond to external load operational emergencies and abnormal situations

- 3.1** External load operational emergencies are identified, diagnosed and communicated
- 3.2** External load operational emergency or remedial actions are undertaken to maintain safety of flight

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

No equivalent unit.

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 AVIW0009 Conduct aerial delivery/retrieval operations using remote piloted 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 and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant remote pilot aircraft systems (RPAS) aeronautical knowledge
- applying relevant legislation and workplace procedures
- completing aerial delivery equipment assembly
- completing relevant documentation
- determining wind speed and direction
- identifying and using required communications technology
- implementing contingency plans
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating aerial delivery equipment
- operating and adapting to differences in communications equipment in accordance with standard operating procedures (SOPs)
- performing weight calculations
- planning own work, predicting consequences and identifying improvements
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly in accordance with workplace procedures
- using communication skills for RPAS control
- working collaboratively with others
- 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 and performance criteria and include knowledge of:

- approach and overshoot considerations

- approved operational procedures and processes for different external load-lifting operations
- cargo hook system and aerial delivery equipment capabilities and limitations
- Civil Aviation Safety Regulation (CASR) Part 61 Manual of Standards (MOS) Schedule 3 Aeronautical Knowledge relevant to external load operations
- correct aerial delivery equipment configuration
- external load safety and configuration
- external load-lifting emergency procedures
- external load-lifting risk assessment principles
- external load-lifting verbal/non-verbal communication procedures
- organisational policies and procedures for load-lifting operations
- practices concerning external load-lifting operations
- procedures and protocols for using communications systems during an emergency
- typical problems that may occur when conducting external load-lifting operations and appropriate action and solutions
- work health and safety (WHS) issues applicable to operations, aircraft and personnel safety.

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 and appropriate 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>