



Australian Government

**AVIW0044 Use automated flight
management systems for remotely piloted
aircraft**

AVIW0044 Use automated flight management systems for remotely piloted aircraft

Modification History

Release	Comments
1	This unit of competency was first released in AVI Aviation Training Package Release 12.0.

Application

This unit involves the skills and knowledge required to use automated flight management systems in remotely piloted aircraft (RPA), in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes preparing and using automated flight management systems and using emergency procedures.

This unit incorporates aviation non-technical skill requirements (mental, social and personal-management abilities) related to safety management duties of flight 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 as a single operator or within a team environment.

Licensing/Regulatory Information

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

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

W - Equipment and Systems Operations

Unit sector(s)

Not applicable

Elements and Performance Criteria

Elements		Performance Criteria	
Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Prepare automated flight management systems	1.1	Ensure the automated flight management system software is current
		1.2	Load flight plans for the automated operation of the RPA
		1.3	Create an automated emergency recovery or a return to home flight plan
		1.4	Manage crew resources prior to operations and conduct briefings including work health and safety procedures, radio protocols and relevant regulations
		1.5	Process relevant documentation according to workplace procedures
2	Use automated flight management systems	2.1	Conduct automated launch and initial climb of the RPA
		2.2	Modify the pre-programmed flight path while the RPA is in flight
		2.3	Conduct an automated approach and landing of an RPA
3	Use emergency procedures	3.1	Interrupt an automated operation of the RPA and redirect to a safe point
		3.2	Conduct a baulked landing according to system limitations
		3.3	Simulate an in-flight termination of the automated operation of the RPA according to workplace procedures

Range of conditions

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

Refer to the AVI Aviation Companion Volume Implementation Guide for non-essential items for this unit of competency.

Assessment Requirements for AVIW0044 Use automated flight management systems for remotely piloted aircraft

Performance Evidence

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

- implementing work health and safety procedures and relevant regulations
- modifying pre-programmed flight paths while the RPA is in flight
- preparing and using automated flight management systems
- using emergency procedures when required.

Knowledge Evidence

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

- automated flight management system faults
- automated flight management system in abnormal and emergency situations
- automated flight management systems for remotely piloted aircraft systems
- crew briefings
- degraded automated flight management systems and solutions
- limitations of an automated flight management system
- precautions when programming an automated flight management system
- radio protocols.

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 it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate 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

- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
	Newly created	This unit has been created to address a skill or task required by industry that is not covered by an existing unit of competency

Links

Companion volumes, including implementation guides, are found on the national training register - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>.