



Australian Government

AVIY0028 Operate remotely piloted aircraft in excluded category sub-2 kg operations

Release: 1

AVIY0028 Operate remotely piloted aircraft in excluded category sub-2 kg operations

Modification History

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

Application

This unit of competency involves the skills and knowledge to operate a Remotely Piloted Aircraft System (RPAS) in excluded sub-2 kg category operations. It includes operating within the relevant regulatory requirements of the Civil Aviation Safety Authority (CASA).

This unit addresses flight planning, pre-flight inspection, operating an RPAS during normal flight, managing an RPAS during abnormal or emergency procedures and landing.

The unit is applicable to personnel who pilot Remotely Piloted Aircraft (RPA) in excluded category sub-2 kg operations in visual line of sight (VLOS). They may work individually or under supervision as part of a team. Authorisation to perform this role is subject to organisational policies and procedures.

Excluded category operators are still required to obtain necessary CASA approvals.

Legislative or certification requirements to fly in this category apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Y - Aircraft Operation and Traffic Management.

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 Plan flight

1.1 Flight requirements are identified

1.2 Relevant CASA approved apps are consulted

1.3 Permission is obtained from relevant stakeholders prior to operations

1.4 Hazards are identified, risks are assessed and risk controls are implemented

1.5 Awareness of current and forecast weather conditions is maintained

1.6 Effects of wind velocity, adverse environmental conditions and contingency actions are planned for

2 Perform pre-flight inspection

2.1 RPAS hardware and software checks are carried out in accordance with manufacturer's instructions

2.2 Pre-operating inspection is recorded where applicable and in accordance with organisational requirements

3 Take off and climb RPAS

3.1 Take-off is conducted appropriate to RPAS type, with allowance for environmental conditions

3.2 Pre-departure control inputs are verified

3.3 RPAS control is maintained and aligned in the departure direction

3.4 CASA standard operating conditions for operating a RPAS are followed

3.5 RPAS climb is conducted in accordance with operational requirement

3.6 RPAS performance is monitored

3.7 Airspace awareness is consistently maintained

4 Control RPAS in flight

4.1 Power, altitude and configuration are set to achieve stable flight

4.2 Indications of height change are identified and responded to, to appropriately maintain safe operation

4.3 RPAS operating limits are maintained in accordance with manufacturer's instructions

	4.4	Flight path is observed and risks are managed in accordance with operational requirement
5 Manage RPAS during abnormal or emergency situations	5.1	Abnormal or emergency situations are identified and communicated to relevant personnel
	5.2	Appropriate abnormal or emergency action is decided and implemented
6 Descend and land RPAS	6.1	Appropriate inputs are made to altitude and power to achieve required descent rate
	6.2	Flight path is observed during descent and risks managed in accordance with requirements
	6.3	Landing is conducted appropriate to RPAS type, with allowance for environmental conditions
	6.4	Control of RPAS is maintained for safe landing
	6.5	RPAS is powered down according to RPAS type
7 Complete post-flight requirements	7.1	Flight time recording requirements are accurately transcribed
	7.2	After landing checks are performed in accordance with approved checklist or manufacturer's instructions or operational requirements
	7.3	Post-flight paperwork is completed and submitted as required

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.

Non-essential conditions may be found in the AVI Aviation Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. 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 AVIY0028 Operate remotely piloted aircraft in excluded category sub-2 kg operations

Modification History

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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:

- adjusting altitude and power to achieve required Remotely Piloted Aircraft System (RPAS) altitude, configuration to achieve straight and level flight, and descent rate
- assessing risks and implementing risk controls
- completing RPAS climb
- completing pre-departure checks, including one or more of the following:
 - global positioning system (GPS) lock
 - loitering
 - control inputs to hover
 - controls checked, including return to home
- conducting landing appropriate to RPAS type with allowance for environmental conditions
- following Civil Aviation Safety Authority (CASA) standard operating conditions and regulations
- identifying and managing hazards
- identifying and communicating abnormal and/or emergency situations
- implementing appropriate abnormal or emergency actions
- maintaining airspace awareness
- monitoring current and forecast weather conditions
- observing flight path during ascent and descent
- operating a RPAS during normal flight, including launch, maintaining a straight line, turning, descending, landing and responding to indications of height change
- operating the RPAS within CASA regulations for excluded category
- performing post-landing checks
- planning for flight and effects of wind velocity, adverse environmental conditions and contingency actions
- recording pre-operating inspection where applicable
- checking relevant CASA approved apps
- stopping an RPAS within designated area
- transcribing applicable flight time records.

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:

- actions in event of lithium battery fire
- approved CASA apps
- appropriate post-flight documentation, including:
 - incident reporting
 - damage reports
 - flight logs
- environmental considerations, including:
 - noise and wildlife considerations
 - populated and unpopulated areas
- factors affecting directional control of RPAS
- functions and effects of all RPAS controls
- functions and effects of RPAS software control systems
- manufacturers' specifications for operating an RPAS
- pre-launch and after launch checks
- relevant air space classification
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders related to sub-2 kg drones for business use - excluded category required flight documentation
- RPAS performance limitations
- relevant CASA regulations for RPAS registration, licensing and certification
- safe transport of lithium batteries on commercial aircraft
- standard operating conditions of operating in the excluded category
- work health and safety (WHS) requirements related to RPAS.

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 a simulated workplace operational situation that reflects workplace conditions.

Flight time must include a range of distances, heights and tasks within visual line of sight that allows the student to demonstrate competence.

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 exercise 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

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