



Australian Government

Assessment Requirements for AVIY0027 Operate multi-rotor remote pilot aircraft systems

Release: 1

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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 multi-rotor RPAS, sub-systems (equipment) and devices
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- undertaking fault finding in multi-rotor 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 multi-rotor RPAS operations
- effective communication
- risk identification, analysis and control in relation to multi-rotor RPAS operations

- flight environment information, including:
 - head-up display (HUD) suitable for flight
 - multi-rotor RPAS control systems suitable for flight indications, including height, speed, direction and location
- RPAS as applicable to rating/endorsement requirements in relation to multi-rotor RPAS type if relevant
- risk identification, analysis and control in relation to multi-rotor RPAS operations
- autorotation principles
- gyroscopic principles
- RPAS components, including location and function of electrical parts
- aerodynamics – multirotor lift and drag, hovering and forward flight
- aerodynamics – abnormal operations
- principles of operation – flight controls
- RPAS as applicable to rating/endorsement requirements in relation to multi-rotor RPAS type if relevant
- battery/fuel/power system, including:
 - 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, including:
 - likely faults that may affect electrical system
- detection and avoidance systems, including:
 - surveillance and collision avoidance functions of detection and avoidance systems
 - system limitations
 - ‘return to home’ failsafe function
 - control link corruption the loss of command and control link procedures in accordance with the RPAS operator’s documented practices and procedures
 - safe forced landing and collision avoidance
- automated systems, including:
 - 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>