Australian Government

Assessment Requirements for AVIY0029 Operate rotary wing 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 and performance criteria 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 aircraft aeronautical knowledge
- applying relevant legislation and workplace procedures
- communicating effectively with others when controlling aircraft in normal flight
- completing relevant documentation
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritise work
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying identified problems promptly in accordance with regulatory requirements and workplace procedures
- selecting and using relevant controls, including throttle, rotor controls, anti-torque pedals and collective and cyclic pitch controls
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- setting local or area barometric pressure adjusted for sea level (QNH) at appropriate stages of flight
- solving problems associated with controlling an aircraft in normal flight
- turning an aircraft with the following parameters:
  - level turns
  - climbing turns with 20° bank angle

  - powered descending turn with 30° bank angle
- using instruments to monitor aircraft performance
- working collaboratively with others when controlling aircraft in normal flight
- 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:

- application of a height/velocity diagram/graph
- application of heading and track
- Civil Aviation Safety Regulation (CASR) Part 101 Manual of Standards (MOS) aeronautical knowledge relevant to remote pilot aircraft operations
- cause and effects of retreating blade stall
- circuit patterns and procedures
- circumstances and procedures for the use of carburettor heat
- conditions leading to loss of tail rotor/anti-torque control during descent
- dangers of wind shear, turbulence and wake turbulence
- effect of turning and acceleration on magnetic compass accuracy
- forces and moments acting on an aircraft and precautions to manage their effects
- functions, and primary and secondary effects of all aircraft controls
- hazards and risks when controlling an aircraft in normal flight and precautions for controlling the risks, including:
  - in a climb
  - in a turn
  - in straight and level flight
- aircraft instruments and monitoring aircraft performance
- managing non-normal and emergencies in the circuit area
- principles of aerodynamics
- problems that may occur when controlling an aircraft in normal flight and appropriate action that should be taken in each case
- procedures for setting power in normally aspirated, turbocharger, supercharged or turbine engines
- recognition and avoidance of settling with power/vortex ring state
- relevant sections of CASRs and Civil Aviation Orders
- relevant WHS and environmental procedures and regulations
- rotational and induced airflow
- theory and application of best rate and angle of climb
- use of instruments to monitor aircraft performance and significance of colour coding
- vortex ring state
- wind shear, turbulence and wake turbulence.

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 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