



Australian Government

AVIY0020 Taxi helicopter

Release: 1

AVIY0020 Taxi helicopter

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 taxi a helicopter, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes performing air taxiing manoeuvres and air transiting manoeuvres.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational duties of flight crew, 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 within a single-pilot or multi-crew environment.

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

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

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 outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Perform air taxiing manoeuvres

- 1.1 Helicopter is manoeuvred over the ground on a prescribed track at constant height associated with ground effect and speed is adjusted to suit helicopter type, surface conditions, congestion, maintenance of control and to avoid collision with obstacles or other aircraft
- 1.2 Awareness of adverse effects of rotor downwash on surrounding aircraft, people, objects and environment is maintained
- 1.3 Engine and rotor speed (RPM/RRPM) is managed within normal operating limits

2 Perform air transiting manoeuvres

- 2.1 Helicopter is manoeuvred, while allowing for prevailing conditions, over a prescribed track within aerodrome boundaries that is clear of obstacles at a height not above 100 feet (ft) above ground level (AGL) at airspeeds greater than speeds used for air taxiing
- 2.2 Helicopter performance is considered throughout air transit manoeuvres
- 2.3 Awareness of adverse effects of rotor downwash on surrounding aircraft, people, objects and environment is maintained
- 2.4 Instruments, switches or devices are manipulated when safe to do so, including when the release of the collective pitch level is required, while maintaining height, heading, speed, and attitude and not exceeding RPM or power limits
- 2.5 Air transit ground speed is adjusted to suit helicopter type, traffic conditions, congestion, and maintaining control, and to avoid collision with obstacles or other aircraft
- 2.6 Lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility and terrain
- 2.7 Appropriate risk management is applied during air transit manoeuvres

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

This unit replaces and is not equivalent to AVIY4013B Taxi helicopter.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>

Assessment Requirements for AVIY0020 Taxi helicopter

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:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures
- applying air safety practices and regulations
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant helicopter aeronautical knowledge
- applying relevant legislation and workplace procedures
- communicating effectively with others when taxiing helicopter
- completing relevant documentation
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting and applying air traffic control instructions
- interpreting/using a helicopter manufacturer height-velocity diagram/graph
- 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 equipment
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards
- setting local or area barometric pressure adjusted for sea level (QNH) at appropriate stages of flight
- using instruments to monitor helicopter performance
- working collaboratively with others when taxiing helicopter
- 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:

- adverse effects of rotor wash
- aerodrome and helicopter landing site markings and their meanings
- application of a height/velocity diagram/graph
- basic principles of aerodynamics
- CASR Part 61 Manual of Standards Schedule 3 Aeronautical Knowledge relevant to helicopter operations
- causes and effects of ground resonance and related action that should be taken
- causes and effects of loss of tail rotor effectiveness and related action that should be taken
- effects of rotor wash and related precautions that should be taken
- functions and effects of all helicopter controls
- ground resonance and action to be taken when it occurs
- hazards and risks associated with conducting air taxi and air transit manoeuvres, and precautions for controlling the risks
- height-velocity diagram
- helicopter braking and steering systems
- light and marshalling signals relevant to helicopter operations
- local air traffic control procedures and instructions
- loss of tail rotor effectiveness and action to be taken when it occurs
- problems that may occur when taxiing a helicopter and appropriate action that should be taken in each case
- purpose and functions of helicopter systems
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- relevant WHS/OHS and environmental procedures and regulations
- taxiway and runway markings.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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assessment.

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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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 currently used in industry.

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