



Australian Government

AVIY0048 Taxi helicopter

Release: 1

AVIY0048 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 (CASA) 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.

Pre-requisite Unit

Not applicable.

Competency Field

Y – Aircraft Operation and Traffic Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

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| 1 Perform air taxiing manoeuvres | <ul style="list-style-type: none">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 aircraft1.2 Awareness of adverse effects of rotor downwash on surrounding aircraft, people, objects and environment is maintained1.3 Engine and rotor speed (revolutions per minute (RPM)/recommended revolutions per minute (RRPM)) are managed within normal operating limits |
| 2 Perform air transiting manoeuvres | <ul style="list-style-type: none">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 taxiing2.2 Helicopter performance is considered throughout air transit manoeuvres2.3 Awareness of adverse effects of rotor downwash on surrounding aircraft, people, objects and environment is maintained2.4 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 limits2.5 Air transit ground speed is adjusted to suit helicopter type, traffic conditions, congestion, and maintaining control, and to avoid collision with obstacles or other aircraft2.6 Lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility and terrain2.7 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 equivalent to AVIY0020 Taxi helicopter.

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 AVIY0048 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 (SOPs)
- 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) 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 (PPE) conforming to industry and WHS 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
- Civil Aviation Safety Regulation (CASR) Part 61 Manual of Standards (MOS) 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 (ATC) 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 CASRs and Civil Aviation Orders
- relevant WHS and environmental procedures and regulations
- taxiway and runway markings.

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

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