



Australian Government

AVIY0051 Conduct helicopter landing site and unprepared helicopter landing site operations

Release: 1

AVIY0051 Conduct helicopter landing site and unprepared helicopter landing site operations

Modification History

Release 1. This is the first release of this qualification in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to conduct helicopter landing site (HLS) and unprepared helicopter landing site (UHLS) operations in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes preparing for and conducting HLS/UHLS operations.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) for 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 under limited or no 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

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

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|--|---|
| 1 Prepare for HLS/UHLS operations | 1.1 Helicopter cabin and/or mission equipment is configured for HLS/UHLS operations

1.2 Helicopter flight performance calculations are assessed to meet operational requirements

1.3 Weather conditions in operating environment are identified and effects on mission are considered and communicated to other crew members

1.4 Visual or map reconnaissance of HLS/UHLS is conducted

1.5 In-flight crew briefing is conducted and applicable crew resource management (CRM) and human factor concerns are addressed

1.6 Operational requirements are considered and concerns about completing the operation are raised to other crew members

1.7 Safety hazards are identified and reported to other flight crew members

1.8 Appropriate hazard mitigation strategies are determined and implemented in conjunction with other flight crew members |
| 2 Conduct HLS/UHLS operations | 2.1 Helicopter position in relation to HLS/UHLS is assessed and information is communicated to other flight crew members to meet operational standards

2.2 Obstacles are identified and relative aircraft position is communicated to crew members to maintain situational awareness

2.3 Abnormal and emergency situations are identified and communicated to crew to maintain safety of flight |

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 AVIY3052 Conduct helicopter landing site and unprepared helicopter landing site operations.

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 AVIY0051 Conduct helicopter landing site and unprepared helicopter landing site 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, performance criteria and range of conditions on at least one occasion and include:

- assessing helicopter flight performance calculations
- applying risk management principles and initiating required actions to identify, minimise, control or eliminate identified hazards
- communicating adjustments to aircraft flight profile to applicable/responsible flight crew member as required in an efficient and effective manner
- communicating, collaborating and interacting effectively with others
- completing relevant documentation
- identifying and assessing vertical, horizontal and relative spatial distances in relation to the aircraft fuselage, rotor system, mission and/or operational stores and equipment, with regard to potential obstacles to the safety of flight
- identifying and using required communications technology
- identifying hazardous and/or dangerous situations that pose risks to safety of flight and personnel
- implementing contingency plans
- interpreting and following aircraft documentation
- interpreting and following operational instructions and prioritising work
- maintaining situational awareness
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in communications equipment in accordance with standard operating procedures (SOPs)
- planning own work including predicting consequences and identifying improvements
- reacting appropriately to avoid hazardous situations and/or dangerous situations that pose risks to safety of flight and personnel
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly in accordance with workplace procedures
- 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:

- flight performance calculations, including:
 - aircraft configuration
 - aircraft weight
 - engine power
 - environmental conditions
 - fuel
 - speed
- aviation risk management processes
- helicopter positions considerations, including:
 - aircraft lateral drift during hover sequences
 - altitude
 - heading/yaw orientation
 - rate of closure (relative speed)
 - rate of descent or climb (relative speed)
 - rate of turn related to flight obstacles
- helicopter landing site (HLS)/unprepared helicopter landing site (UHLS) operating environment, including:
 - over land or over sea
 - prepared or unprepared rotary wing aircraft landing sites
 - urban, rural, mountainous, desert and wilderness operational environments
- operational requirements, including:
 - emergency medical services (EMS)/search and rescue (SAR) task and mission support
 - fire-fighting operations
 - formation flight by day/night
 - hoisting
 - internal/external load lift missions
 - maritime support tasking
 - media operations
 - VIP and general passenger transport
- communication procedures and terminologies applicable to conduct HLS/UHLS operations
- helicopter capabilities and limitations
- helicopter dimensions
- helicopter power and performance data factors

- HLS/UHLS operational and safety procedures
- abnormal and emergency situations, including:
 - abnormal or emergency situations related to aircraft, crew or mission factors
 - aircraft fuselage or rotor system obstacle strike
 - aircraft system malfunction or failure
 - bird/bat strike
 - degraded or loss of situational awareness
 - degraded/restricted visibility due to meteorological effect
 - ineffective crew resource management
 - loss of internal/external aircraft communications
 - loss of situational awareness, internal and external to the aircraft
 - personal equipment failure
- procedures for operating electronic communications equipment and required protocol
- safety hazards and obstacles, including:
 - aircraft system malfunction and/or failure
 - ambient light (sun/moon position)
 - cultural lighting
 - fuselage strike
 - HLS/UHLS area surface conditions
 - maritime environment, including sea state, vessels and weather
 - moon luminance
 - other aircraft
 - personnel within the vicinity of HLS/UHLS operations
 - rotor blade strike
 - urban environment structures, both man-made and natural edifices
 - rural environment elements, including man-made structures, terrain and wildlife
 - undetected proximity to ground obstacles
 - wilderness environment including vegetation, terrain and wildlife
- relevant work health and safety (WHS) and environmental protection procedures and guidelines.

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.

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