



**Australian Government**

# **AVIY3052 Conduct helicopter landing site and unprepared helicopter landing site operations**

**Release: 1**

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## **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 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.

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

Elements describe the essential outcomes.

#### **1 Prepare for HLS/UHLS operations**

### PERFORMANCE CRITERIA

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

- 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 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.

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| Helicopter flight performance calculations assessment must include one or more of the following: | <ul style="list-style-type: none"><li>• aircraft configuration</li><li>• aircraft weight</li><li>• engine power</li><li>• environmental conditions</li><li>• fuel</li><li>• speed</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| HLS/UHLS operating environment must include one or more of the following:                        | <ul style="list-style-type: none"><li>• over land or over sea</li><li>• prepared or unprepared rotary wing aircraft landing sites</li><li>• urban, rural, mountainous, desert and wilderness operational environments</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                 |
| Operational requirements must include one or more of the following:                              | <ul style="list-style-type: none"><li>• emergency medical services (EMS)/search and rescue (SAR) task and mission support</li><li>• firefighting operations</li><li>• formation flight by day/night</li><li>• hoisting</li><li>• internal/external load lift missions</li><li>• maritime support tasking</li><li>• media operations</li><li>• VIP and general passenger transport</li></ul>                                                                                                                                                                                                                                     |
| Abnormal and emergency situations must include one or more of the following:                     | <ul style="list-style-type: none"><li>• abnormal or emergency situations related to aircraft, crew or mission factors</li><li>• aircraft fuselage or rotor system obstacle strike</li><li>• aircraft system malfunction or failure</li><li>• bird/bat strike</li><li>• degraded or loss of situational awareness</li><li>• degraded/restricted visibility due to meteorological effect</li><li>• ineffective crew resource management</li><li>• loss of internal/external aircraft communications</li><li>• loss of situational awareness, internal and external to the aircraft</li><li>• personal equipment failure</li></ul> |
| Safety hazards and obstacles must include one or more of the following:                          | <ul style="list-style-type: none"><li>• aircraft system malfunction and/or failure</li><li>• ambient light (sun/moon position)</li><li>• cultural lighting</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

- 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
- Helicopter position considerations must include one or more of the following:
- 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

## Unit Mapping Information

This unit replaces and is equivalent to AVIY3052A Conduct Helicopter Landing Site and Unprepared Helicopter Landing Site operations.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>