



Australian Government

Department of Education, Employment and Workplace Relations

AVIY3052A Conduct Helicopter Landing Site and Unprepared Helicopter Landing Site operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to conduct Helicopter Landing Site (HLS) and Unprepared Helicopter Landing Site (UHLS) operations. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.
Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable CASA compliance.
Operations are conducted across a variety of operational contexts within the Australian aviation industry.
Work is performed under limited supervision.
This unit of competency is nominally packaged at Certificate III.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1Prepare 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 completed and/or considered to meet operational requirements
- 1.3 Weather conditions in the operating environment are identified and the effects on the mission are considered and communicated to other crewmembers
- 1.4 A visual or map reconnaissance of the landing sight is conducted to operational standards
- 1.5 In-flight crew brief is conducted and applicable crew resource management and human factor concerns are addressed
- 1.6 Operational requirements are considered and concerns about the completion of the operation are raised to other crewmembers
- 1.7 Operational environments are identified
- 1.8 Safety hazards are identified and reported in accordance with the organisation's safety risk management procedures and regulatory requirements
- 1.9 Appropriate hazard mitigation strategies are determined and implemented in conjunction with other aircrew members in accordance with safety risk management procedures and regulatory requirements

2Conduct HLS/UHLS operations

- 2.1 Helicopter position in relation to the HLS/UHLS is assessed and the information is communicated to other crewmembers to meet operational standards
- 2.2 Obstacles are identified and their position, in relation to the aircraft, is related to other crewmembers
- 2.3 Situation awareness is maintained throughout the HLS/UHLS operation
- 2.4 Emergency situations are identified and communicated to the crew in sufficient time to prevent an incident

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Helicopter dimensions
- Helicopter capabilities and limitations
- Helicopter power and performance data factors
- HLS/UHLS operational and safety procedures
- Procedures for operating any electronic communications equipment with required protocol
- Communication procedures and terminologies applicable to HLS/UHLS operations
- Relevant OH&S and environmental protection procedures and guidelines
- CASA regulatory and organisational safety risk management policies and procedures

Required skills:

- Identify and assess 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
- Communicate any adjustments to the aircraft flight profile where necessary to the applicable/responsible flight crew member, in an efficient and effective manner
- Identify hazardous and/or dangerous situations that pose risks to safety of flight and personnel
- React appropriately to avoid hazardous situations and/or dangerous situations that pose risks to safety of flight and personnel
- Maintain situational awareness
- Complete documentation related to conducting HLS and UHLS operations
- Interpret and follow aircraft documentation
- Communicate, collaborate and interact effectively with others when conducting HLS and UHLS operations
- Read and interpret instructions and procedures relevant to conducting HLS and UHLS operations
- Interpret and follow operational instructions and prioritise work
- Identify and use required communication technology
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when conducting HLS and UHLS operations in accordance with workplace procedures
- Implement contingency plans for unanticipated situations that may arise when conducting HLS and UHLS operations
- Apply risk management principles and initiate required actions to identify, minimise, control

REQUIRED KNOWLEDGE AND SKILLS

or eliminate hazards that may exist when conducting HLS and UHLS operations

- Plan own work including predicting consequences and identifying improvements
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in communication equipment in accordance with standard operating procedures

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
 - In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Aircraft may include:	• single or multiple engine • rotary wing
Aircraft flight performance calculations may include:	• engine power • fuel • speed • aircraft weight • environmental conditions • aircraft configuration
Work environment may include:	• by day or by night • over land or over sea • Prepared or Unprepared rotary wing aircraft landing sites • urban, rural, mountainous, desert and wilderness operational environments
Environmental conditions may include:	• ambient temperature • prevailing wind direction and speed • sea state • airborne or ground effect turbulence • unforecast meteorological conditions
In-flight conditions may include:	• day • night • sea states • VMC • IMC • aviation relevant meteorological events
Operational requirements may include:	• internal/external load lift missions • VIP and general passenger transport • EMS/SAR task and mission support • hoisting • formation flight by day/night • fire-fighting operations • media operations • maritime support tasking
Abnormal/emergency situations may include:	• degraded or loss of situational awareness • ineffective crew resource management • aircraft fuselage or rotor system obstacle strike • bird/bat strike

RANGE STATEMENT

- aircraft system malfunction or failure
- abnormal or emergency situations related to aircraft, crew or mission factors
- loss of situational awareness, internal and external to the aircraft
- personal equipment failure
- loss of internal/external aircraft communications
- degraded/restricted visibility due to meteorological effect

RANGE STATEMENT

Safety hazards and obstacles may include:	• aircraft system malfunction and/or failure • rotor blade strike • fuselage strike • undetected proximity to ground obstacles • ambient light (sun/moon position) • moon luminance • cultural lighting • urban environment structures, both man-made and natural edifices • rural environment elements including man-made structures, terrain and wildlife • wilderness environment including vegetation, terrain and wildlife • maritime environment including sea state, vessels and weather • other aircraft • personnel within the vicinity of HLS/UHLS operations • HLS/UHLS area surface conditions
Helicopter position considerations may include:	• altitude • rate of descent/climb • rate of closure (speed) • aircraft lateral drift during hover sequences • heading/yaw orientation • rate of turn related to flight obstacles
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established procedures
Information/documentation may include:	• relevant sections of Civil Aviation Safety Regulations • in Defence context, relevant Defence Orders and Instructions • Flight Manual/Pilot's Operating Handbook (POH) • Aeronautical Information Publication (AIP) • charts • operations manuals • approved checklists • workplace procedures and instructions and job specification • induction and training materials • conditions of service, legislation and industrial agreements including workplace agreements and awards

RANGE STATEMENT

Applicable regulations and legislation may include:

- relevant Civil Aviation Safety Regulations and Civil Aviation Orders
- in Defence context, relevant Defence Orders and Instructions
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- relevant Australian Standards

Unit Sector(s)

Not applicable.

Competency field

Competency Field

Y - Aircraft Operation and Traffic Management