



Australian Government

Assessment Requirements for AVIY4058 Pilot a helicopter during external load operations

Release: 1

Assessment Requirements for AVIY4058 Pilot a helicopter during external load operations

Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

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 precautions and required action to minimise, control or eliminate identified hazards
- applying relevant helicopter aeronautical knowledge
- communicating effectively with others
- completing relevant documentation
- following relevant legislation and workplace procedures
- identifying and assessing vertical, horizontal and relative spatial distances in relation to aircraft fuselage, rotor system, mission and/or operational stores and equipment with regard to potential obstacles to flight safety
- identifying and correctly using equipment required when operating a helicopter during external load operations
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting hover performance and power available/power required from graphs/charts
- maintaining situational awareness
- managing abnormal and emergency situations:
 - load instability:
 - controllable
 - uncontrollable
 - inadvertent load release
 - single engine failure (single/multi-engine)
 - double engine failure (multi-engine only)
 - external load aircraft system failure
- 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

- performing external load scan techniques
- preparing and rigging sling load including all sub-tasks in accordance with workplace procedures and the aircraft flight manual (AFM)/ pilot's operating handbook (POH)
- reading and interpreting relevant instructions, procedures and information
- reporting and/or rectifying identified problems promptly, in accordance with regulatory requirements and workplace procedures
- 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 during external load operations
- working collaboratively with others
- 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:

- aerial delivery equipment inspection, operation, safe working loads and limitations
- aerial inspections for external load operations
- aircraft dimensions
- aircraft performance calculations (for all phases of flight)
- awareness of load rigging and preparation for flight
- cargo hook limitations, problems and hazards
- CASR Part 61 Manual of Standards Schedule 3 Aeronautical Knowledge relevant to helicopter external load operations
- communication procedure and terminology applicable to external load operations
- control effectiveness in all phases of flight
- engine performance checks for helicopter type to be flown
- external load operational planning and risk control
- external load operations on, or in vicinity of, non-controlled and controlled aerodromes or airstrips
- flight rules applicable to external load operations
- hazards that exist and problems that can occur when operating an aircraft during external load operations
- helicopter dimensions and operating weights:
 - helicopter landing site (HLS) requirements
 - all up weight (AUW)

- maximum all up weight (MAUW)
- human factors applicable to external load operations:
 - dehydration and its impact on pilot cognitive function and reaction time
 - fatigue and its impact on pilot cognitive function and situational awareness
 - stress and its short-term and long-term impact
 - drugs (particularly over the counter) impact on pilot cognitive function, reaction time and coordination
 - spatial disorientation and illusions:
 - night external load operations
- in a Defence context, relevant Defence Orders and Instructions
- internal and external load limitations for helicopter type to be flown
- load rigging and preparation for flight
- low-level flight techniques for external load operations
- meteorological requirements for external load operations
- operational planning requirements for external load operations:
 - pre-flight and after-flight inspections
 - operational inspections
- principles of aerodynamics
- privileges and limitations of a low-level rating
- procedures to address problems associated with a helicopter during external load operations
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- relevant WHS/OHS and environmental procedures and regulations
- vertical reference (long line) operation procedures.

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.

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

Links

Companion Volume implementation guides are found in VETNet -

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