



Australian Government

Assessment Requirements for AVIY4057 Perform helicopter deck landing operations

Release: 1

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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 relevant helicopter aeronautical knowledge
- applying reporting procedures for identified problems
- approaching and landing on vessel helideck
- briefing deck landing operational requirements to relevant stakeholders:
 - helideck location and configuration
 - helideck markings
 - vessel configuration
 - obstructions
 - hazards associated with deck landing operations (ship movement, engine salt ingestion, wind direction and velocity, pitch, roll limitations)
 - crash on deck procedures
 - landing and take-off procedures
 - lighting signals
 - marshalling signals
 - aircraft securing procedures
 - communications procedures
 - transit route to and from ship
 - approach and departure procedures
 - ditching procedures
 - emergency situations (e.g. fire, engine/transmission/aircraft system malfunctions)
 - location and operation of survival equipment
 - aircraft evacuation procedures (on ditching)
- 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 relevant equipment
- identifying and justifying a decision to operate a helicopter during deck landing 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
- managing abnormal and emergency situations during deck landing operations:
 - crash on deck
 - ditching procedures (simulated)
 - emergency situations (e.g. fire, engine/transmission/aircraft system malfunctions)
 - fouled/obstructed landing deck
 - loss of communications
 - loss of visual aids or landing references
- 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
- 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
- solving problems associated with operating a helicopter during deck landing operations
- using instruments to monitor helicopter performance during deck landing 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:

- aircraft evacuation procedures
- aircraft performance calculations (for all phases of flight)
- basic global navigation satellite system (GNSS) principles
- CASR Part 61 Manual of Standards Schedule 3 Aeronautical Knowledge relevant to helicopter operations
- communication procedure and terminology applicable to deck landing operations
- control effectiveness in all phases of flight
- dead-reckoning navigation
- deck landing operational requirements:
 - helideck location and configuration
 - helideck markings
 - vessel configuration
 - obstructions
 - hazards associated with deck landing operations (ship movement, engine salt ingestion, wind direction and velocity, pitch, roll limitations)
 - crash on deck procedures
 - landing and take-off procedures
 - lighting signals
 - marshalling signals
 - aircraft securing procedures
 - communication procedures
 - transit route to and from ship
 - approach and departure procedures
 - ditching procedures
 - emergency situations (e.g. fire, engine/transmission/aircraft system malfunctions)
 - location and operation of survival equipment
 - aircraft evacuation procedures (on ditching)
- diversion considerations and procedures
- effects of excessive vessel movement on aircraft serviceability
- en route GNSS navigation principles
- engine performance checks for helicopter type to be flown
- functions and effects of all aircraft controls and instruments
- hazards that exist when controlling an aircraft during deck landing operations
- helicopter dimensions
- helideck markings
- in a Defence context, relevant Defence Orders and Instructions
- lighting and marshalling signals
- maximum payload and minimum fuel operations
- navigation techniques for extended over-water flights
- operation of night vision devices
- planning and briefing requirements for helicopter deck landing operations

- post flight debriefing techniques
- principles of aerodynamics
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- relevant WHS/OHS and environmental procedures and regulations
- survival equipment location and operation
- survival skills post ditching
- vessel movement limitations.

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.

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