



Australian Government

AVIY0093 Conduct airborne rappelling operations

Release: 1

AVIY0093 Conduct airborne rappelling operations

Modification History

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

Application

This unit involves the skills and knowledge required to conduct airborne rappelling operations in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes preparing helicopter and personnel for airborne rappelling operations, preparing for and performing airborne rappelling operations, and responding to airborne rappelling emergencies and abnormal situations.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational duties of flight crew and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted across a variety of operational contexts within the Australian aviation industry.

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

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

- 1 Prepare helicopter and personnel for airborne rappelling operations**
 - 1.1** Helicopter and airborne rappelling attachment device are pre-flight checked to determine serviceability in accordance with workplace procedures
 - 1.2** Airborne rappelling location and surrounds are assessed for suitability
 - 1.3** Rappelling personnel characteristics and operational variations are considered in scope of mission planning
 - 1.4** Crew is briefed during mission brief in accordance with workplace procedures
 - 1.5** Airborne rappelling supervisor is briefed by pilots
 - 1.6** Static ground rehearsals are conducted with relevant personnel and equipment
 - 1.7** Fitness of rappelling personnel to complete task is confirmed in accordance with workplace procedures
- 2 Prepare for airborne rappelling operations**
 - 2.1** Ropes are attached to airborne rappelling attachment device and are checked for security
 - 2.2** Rappellers are restrained in aircraft prior to take-off in accordance with workplace procedures
 - 2.3** Fitting of rappeller personnel protective equipment is checked in accordance with workplace procedures
 - 2.4** Deployment checks are conducted prior to rope deployment in accordance with workplace procedures
 - 2.5** Helicopter safety hazards are communicated in accordance with workplace procedures
 - 2.6** Wind speed and direction are communicated to relevant personnel
 - 2.7** Approach and overshoot paths are communicated to relevant personnel
- 3 Perform airborne rappelling operations**
 - 3.1** Helicopter position over the rappelling point is communicated in accordance with workplace procedures
 - 3.2** Ropes and rappellers are deployed in accordance with workplace procedures
 - 3.3** Situational awareness of rappelling position and aircraft flight performance is maintained in accordance with

- workplace procedures
- 3.4 Rappelling ropes are recovered or released in accordance with workplace procedures
- 3.5 Clearance for aircraft departure is provided by airborne rappelling dispatcher at completion of deployment
- 3.6 Complete relevant pre- and post-task documentation in accordance with workplace procedures
- 4 **Respond to airborne rappelling emergencies and abnormal situations**
 - 4.1 Airborne rappelling emergencies and abnormal situations are identified, diagnosed and communicated to relevant personnel
 - 4.2 Airborne rappelling emergency or remedial actions are undertaken to maintain safety of flight and personnel

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.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to AVIY0068 Conduct airborne rappelling operations.

Links

Companion Volume Implementation Guides are found in VETNet' -

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

Assessment Requirements for AVIY0093 Conduct airborne rappelling 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:

- applying precautions and required action to minimise, control or eliminate identified hazards
- assessing suitability of airborne rappelling location and surrounds
- attaching and security checking ropes to airborne rappelling device
- briefing crew and airborne rappelling supervisor in accordance with workplace procedures
- communicating helicopter safety hazards, wind speed and direction, approach and overshoot paths
- communicating rappelling operation progress in accordance with workplace procedures
- completing airborne rappelling attachment device pre-flight serviceability checks
- completing relevant documentation of equipment use and serviceability and personnel currency in accordance with workplace procedures
- conducting deployment checks prior to rope deployment in accordance with workplace procedures
- conducting fitting checks of rappeller personnel protective equipment (PPE) in accordance with workplace procedures
- conducting serviceability pre-flight checks of helicopter and airborne rappelling attachment device
- deploying ropes and rappellers, and recovery/release of ropes in accordance with workplace procedures
- determining wind speed and direction
- following relevant legislation and workplace procedures
- identifying, communicating and diagnosing rappelling emergencies in accordance with workplace procedures
- operating airborne rappelling attachment device
- operating and adapting to differences in communications equipment in accordance with workplace procedures
- performing weight calculations
- providing clearance for aircraft departure once all ropes are clear or secured
- reporting and/or rectifying identified problems, faults or malfunctions promptly in accordance with workplace procedures
- taking actions in a remedial and/or emergency situation in accordance with aircraft flight

- manuals, workplace policies and procedures
- using communication skills for helicopter control
- 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, performance criteria and range of conditions and include knowledge of:

- rappelling personnel characteristics, including:
 - experience of personnel (advanced and beginners)
 - size
 - variations in rappelling equipment to be worn
 - weight
- airborne rappelling attachment device capabilities and limitations
- airborne rappelling equipment
- airborne rappelling supervisory personnel
- airborne rappelling emergency procedures, including:
 - aircraft emergencies
 - rappelling equipment/personnel snagged in trees/obstacles
 - rappelling equipment malfunction
 - rappelling personnel unable to detach from rope/s
- airborne rappelling risk assessment principles
- airborne rappelling techniques
- airborne rappelling verbal and non-verbal communication procedures
- approved operational procedures and processes for different airborne rappelling operations
- correct airborne rappelling safety equipment configuration
- helicopter approach and overshoot considerations
- helicopter capabilities and limitations as defined in aircraft publications and documentation
- helicopter safety hazards
- procedures and protocols for using communication systems during an emergency
- relevant regulations, legislation, organisational policy and procedures
- work health and safety issues applicable to rappelling operations, aircraft and personnel safety.

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 it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate 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
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

Links

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