



Australian Government

AVIY0092 Conduct airborne extraction operations

Release: 1

AVIY0092 Conduct airborne extraction 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 extraction 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 extraction, performing airborne extraction operations, and responding to airborne extraction 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 extraction

- 1.1** Helicopter and airborne extraction equipment are checked to determine serviceability in accordance with workplace procedures
- 1.2** Extraction zone characteristics and dimensions are determined and calculated
- 1.3** Extraction personnel characteristics are considered in scope of mission planning
- 1.4** Crew is briefed about mission in accordance with workplace procedures
- 1.5** Airborne extraction supervisor is briefed
- 1.6** Static ground rehearsals are conducted with personnel and equipment

2 Prepare for airborne extraction

- 2.1** Extraction equipment is attached and checked for security in accordance with workplace procedures
- 2.2** Helicopter safety hazards are communicated in accordance with workplace procedures
- 2.3** Extraction checks are conducted prior to extraction equipment deployment
- 2.4** Wind speed and direction are communicated to relevant personnel
- 2.5** Approach and overshoot paths are communicated to relevant personnel

3 Perform airborne extraction operations

- 3.1** Helicopter is manoeuvred to extraction point
- 3.2** Extraction equipment is deployed in accordance with workplace procedures
- 3.3** Personnel are supervised and directed to attach to extraction equipment in accordance with workplace procedures
- 3.4** Situational awareness of extraction position and aircraft flight performance is maintained
- 3.5** Progress of extraction operation is communicated to relevant personnel

- | | | |
|---|------------|---|
| | 3.6 | Personnel are directed to detach from extraction equipment |
| | 3.7 | Personnel are supervised and directed to restrain within the aircraft in accordance with workplace procedures |
| | 3.8 | Record relevant pre- and post-task documentation in accordance with workplace procedures |
| 4 Respond to airborne extraction emergencies and abnormal situations | 4.1 | Airborne extraction emergencies and abnormal situations are identified, diagnosed and communicated |
| | 4.2 | Airborne extraction 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 AVIY0067 Conduct airborne extraction 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 AVIY0092 Conduct airborne extraction 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, 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
- applying relevant helicopter aeronautical knowledge
- attaching and security checking extraction equipment
- briefing crew and supervisor in accordance with workplace procedures
- communicating extraction operation progress in accordance with workplace procedures
- communicating helicopter safety hazards, wind speed and direction, approach and overshoot paths
- communicating to pilot, information relevant to aircraft vertical/horizontal position
- completing airborne extraction equipment pre-flight serviceability checks
- completing relevant documentation
- determining and calculating extraction zone characteristics and dimensions
- determining wind speed and direction
- directing personnel to attach and detach from extraction equipment in accordance with workplace procedures
- following relevant legislation and workplace procedures
- identifying, communicating and diagnosing airborne extraction emergencies in accordance with workplace procedures
- operating and adapting to differences in communications equipment in accordance with workplace procedures
- performing operational personnel/equipment weight calculations
- 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, organisational policy and workplace 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:

- airborne extraction emergencies, including:
 - aircraft emergencies
 - extracted personnel unable to detach from rope
 - extraction equipment malfunction
 - extraction equipment or extracted personnel snagged in trees or obstacles
- airborne extraction emergency procedures
- airborne extraction equipment capabilities, correct configuration and limitations
- airborne extraction risk management processes
- airborne extraction safety and configuration
- airborne extraction supervisory personnel
- airborne extraction verbal and non-verbal communication procedures
- aircraft earthing procedures
- approved operational procedures and processes for different airborne extraction operations
- extraction personnel characteristics including:
 - experience of personnel (advanced and beginners)
 - size
 - variations in extraction equipment
 - weight
- 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 extraction 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 personal protective equipment (PPE) 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>