



Australian Government

AVIW0013 Be airborne extracted by suspended rope

Release: 1

AVIW0013 Be airborne extracted by suspended rope

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 be airborne extracted by suspended rope in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes applying aircraft safety procedures, preparing for suspended extraction and extracting using fixed suspended extraction rope.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to equipment and system operations of flight or ground operations personnel and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of recreational, commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision as a single operator or within a team environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

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 Apply aircraft safety procedures

- 1.1** Dress and equipment are secured for operating in and around a helicopter
- 1.2** Helicopter is approached, entered and exited in a safe manner in accordance with workplace procedures and/or aircrew instructions
- 1.3** Individual seating is occupied and restraint devices applied
- 1.4** Identified hazards are communicated to team members
- 1.5** Aircrew or safety officer instructions are followed
- 1.6** Environmental conditions and alternative routes to/from helicopter are identified

2 Prepare for suspended extraction

- 2.1** Extraction by suspended rope instructions are received and confirmed as required
- 2.2** Workplace procedures, work health and safety (WHS)/occupational health and safety (OHS) requirements and safety control measures are applied
- 2.3** Operational and suspended rope extraction equipment, including personal protective equipment (PPE), is selected and fitted in accordance with workplace procedures
- 2.4** Damage to operational, suspended extraction and safety equipment is reported and remedial action is taken in accordance with workplace procedures

3 Extract using fixed suspended extraction rope

- 3.1** Extraction point is identified and attended in accordance with instructions
- 3.2** Individual equipment safety checks are conducted in accordance with workplace procedures
- 3.3** Individual extraction equipment is secured to fixed suspended rope ready for extraction in accordance with workplace procedures

- 3.4 Security device is attached to individual and operational equipment in accordance with workplace procedures
- 3.5 Extraction techniques are performed in accordance with workplace procedures
- 3.6 Aircraft emergency and suspended extraction contingency procedures are applied as required in accordance with workplace procedures
- 3.7 Extraction and operational equipment are monitored for stability during extraction
- 3.8 Verbal and non-verbal communications are maintained

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.

Unit Mapping Information

This unit replaces and is equivalent to AVIW2030 Be airborne extracted by suspended rope.

Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>

Assessment Requirements for AVIW0013 Be airborne extracted by suspended rope

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:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures (SOPs)
- applying individual equipment safety checks must include:
 - harness and ascender
 - karabiner attached to bottom loop
 - operational equipment
 - personal protective equipment (PPE) checks
- applying security devices, including:
 - chest ascender
 - winch collar
- applying organisational tactics, techniques and procedures
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying suspended extraction emergency and contingency procedures in accordance with workplace procedures
- communicating effectively with others, including:
 - hand signals
 - interpersonal communications
 - radio
- completing relevant documentation
- identifying, operating and controlling applicable operational equipment
- implementing contingency plans
- implementing work health and safety (WHS) procedures and relevant regulations
- maintaining situational awareness when conducting suspended extraction operations
- modifying activities depending on workplace contingencies, situations and environments, including:
 - climate and weather variations
 - geographical and geological variations, including sloping and unstable ground
 - ground conditions including dust and other particles

- variations due to vegetation and urban structures
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- observing helicopter safety including safe approach and exit
- operating helicopter restraint, safety and emergency equipment
- performing extraction techniques in accordance with workplace procedures for one or more of the following:
 - aborted operation
 - aircraft collision
 - aircraft crash landing
 - aircraft fire
 - aircraft malfunction prior to take-off
 - collision with others or obstacles
 - damaged or kinked rope
 - emergency landing procedures
 - engine failure over landing site
 - fixed rope caught in obstacles
 - in a Defence context – procedures to evade hostile action against aircraft or self
 - loss of visibility
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying identified problems promptly in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- working collaboratively with others
- working systematically with required attention to detail without injury to self, 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:

- characteristics of helicopters, including safety features and operating requirements
- hazards that exist when being airborne extracted by suspended rope, including:
 - buildings
 - dust
 - livestock
 - masts/aerials
 - native fauna

- poor visibility
- public
- terrain
- trees
- vehicles
- weather conditions
- wire/power lines/fences
- in a Defence context, relevant Defence Orders and Instructions
- manufacturer instructions for equipment used for airborne extraction by suspended rope
- problems that may occur when being airborne extracted by suspended rope
- relevant Australian Standards
- relevant information/documents, including:
 - induction and training materials
 - operations manuals
 - workplace procedures and instructions, and job specifications
- PPE including:
 - eye protection goggles
 - footwear
 - hearing protection
 - helmet
 - high visibility clothing
 - life jacket
 - personal lighting and beacons
 - protective clothing
 - rappelling gloves
- relevant legislation, regulations, organisational policy and procedures in relation to airborne extraction by suspended rope
- relevant WHS/OHS and environmental procedures and regulations
- risks that exist when being airborne extracted by suspended rope
- operational and suspended extraction equipment, including:
 - commercial in-service rappelling harness
 - communications equipment
 - improvised tubular webbing harness
 - individual load carrying equipment (ILCE)
 - military equipment relevant to airborne extraction operation
 - rope attachment device (locking karabiner)
 - search and rescue equipment
- suspended extraction procedures, including:
 - normal
 - abnormal

- emergency
- suspended extraction safety equipment operation.

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 this is not appropriate, assessment must occur in simulated workplace operational situations that reflect 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
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

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