



Australian Government

AVIW0014 Be airborne extracted using suspended extraction equipment

Release: 1

AVIW0014 Be airborne extracted using suspended extraction equipment

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 using suspended extraction equipment 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 suspended extraction equipment.

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

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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 extraction by suspended equipment

- 2.1** Extraction by suspended equipment 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 individual extraction equipment, including personal protective equipment (PPE), is selected and fitted in accordance with nature of recovery activity being undertaken and workplace procedures
- 2.4** Damage to operational, individual extraction and safety equipment is reported and remedial action taken in accordance with workplace procedures

3 Extract by suspended equipment

- 3.1** Extraction point is identified and attended in accordance with instructions
- 3.2** Individual equipment checks are conducted in accordance with workplace procedures
- 3.3** Individual extraction equipment is secured to recovery equipment in accordance with workplace procedures
- 3.4** Security device is attached to individual and operational equipment in accordance with workplace procedures
- 3.5** Suspended equipment is used to ascend and aircraft is emplaned in accordance with supervisor or aircrew

instructions

- 3.6** Extraction and operational equipment are monitored for stability during extraction
- 3.7** Verbal and non-verbal communications are maintained
- 3.8** Aircraft emergency and suspended extraction contingency procedures are implemented as required

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 AVIW2031 Be airborne extracted using suspended extraction equipment.

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 AVIW0014 Be airborne extracted using suspended extraction equipment

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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, including:
 - operational equipment
 - harness and ascender
 - personal protective equipment (PPE) checks
- operating 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, including one or more of the following:
 - buildings
 - dust
 - livestock
 - masts/aerials
 - native fauna
 - poor visibility
 - public
 - terrain
 - trees
 - vehicles
 - weather conditions
- wire/power lines/fences ascending suspended equipment and emplaning aircraft in accordance with supervisor or aircrew instructions
- conducting aircraft emergency and suspended extraction contingency procedures must include 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
- extraction equipment caught in obstacles
- in a Defence context – procedures to evade hostile action against aircraft or self
- loss of visibility
- communicating effectively with others, including:
 - interpersonal communications
 - radio
 - hand signals
- 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 during 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
 - variations due to vegetation and urban structures
 - ground conditions including dust and other particles
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring extraction and operational equipment stability during extraction
- monitoring work activities in terms of planned schedule
- observing helicopter safety, including safe approach and exit
- operating helicopter restraint, safety and emergency equipment
- 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 PPE conforming to industry and WHS standards, including:
 - eye protection goggles
 - footwear
 - hearing protection
 - helmet

- high visibility clothing
- life jacket
- personal lighting and beacons
- protective clothing
- rappelling gloves
- 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 their safety features and operating requirements
- hazards that exist when being airborne extracted using suspended extraction equipment
- in a Defence context, relevant Defence Orders and Instructions
- manufacturer instructions for equipment used for airborne extraction using suspended extraction equipment
- problems that may occur when being airborne extracted using suspended extraction equipment
- relevant Australian Standards
- relevant information/documents, including:
 - induction and training materials
 - operations manuals
 - workplace procedures and instructions, and job specification
- relevant legislation, regulations, organisational policy and procedures in relation to airborne extraction using suspended extraction equipment
- relevant WHS/OHS and environmental procedures and regulations
- risks that exist when being airborne extracted using suspended extraction equipment
- suspended extraction procedures, including:
 - normal
 - abnormal
 - emergency
- suspended extraction safety equipment operation, including:
 - casualty evacuation equipment
 - casualty evacuation litter
 - caving ladder
 - commercial in-service rappelling harness
 - communications equipment
 - improvised tubular webbing harness

- mechanical friction device and lanyard
- military equipment relevant to airborne extraction operation
- rope attachment device (locking karabiner)
- search and rescue equipment
- winch.

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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