



Australian Government

Department of Education, Employment and Workplace Relations

A VIW2031A Be airborne extracted using suspended extraction equipment

Revision Number: 1

AVIW2031A Be airborne extracted using suspended extraction equipment

Modification History

Not applicable.

Unit Descriptor

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This unit involves the skills and knowledge required by an individual to be extracted from the ground by a helicopter using suspended extraction equipment. Licensing, legislative regulatory or certification requirements are applicable to this unit.

Application of the Unit

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Work involves the application of safety and suspended extraction policies, regulations, protocols and procedures required to be extracted using suspended extraction equipment from a helicopter.

Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable Civil Aviation Safety Authority (CASA) compliance.

Work is performed under limited supervision as part of a team and within organisational guidelines.

This unit of competency is nominally packaged at Certificate II.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Observe helicopter safety	1.1 Dress and equipment is secured for operating in and around a helicopter 1.2 Helicopter is approached and exited in a safe manner in accordance with workplace procedures and/or aircrew instructions 1.3 Individual seating is occupied and restraint devices are applied 1.4 Identified hazards are communicated to team members 1.5 Aircrew and 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, OH&S 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 the nature of the 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 the recovery equipment in accordance with workplace procedures 3.4 Security device is attached to the 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 Situational awareness is maintained 3.9 Emergency and contingency procedures are conducted as required

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Regulations, legislation, organisational policy and procedures in relation to airborne extraction using suspended extraction equipment
- In Defence context, relevant Defence Orders and Instructions
- Relevant OH&S and environmental procedures and regulations
- Characteristics of helicopters including their safety features and operating requirements
- Hazards that exist when being airborne extracted using suspended extraction equipment
- Safety equipment operation
- Manufacturers instructions for equipment used for airborne extraction using suspended extraction equipment
- Risks that exist when being airborne extracted using suspended extraction equipment
- Problems that may occur when being airborne extracted using suspended extraction equipment

Required skills:

- Operate helicopter restraint, safety and emergency equipment
- Apply the tactics, techniques and procedures applicable to the organisation
- Follow defined organisational and aircraft OH&S policy and procedures
- Identify, operate and control applicable operational equipment
- Communicate effectively with others including as a member of a team when being airborne extracted using suspended extraction equipment
- Read, interpret and follow instructions, regulations, procedures and other information relevant to being airborne extracted using suspended extraction equipment
- Complete documentation related to being airborne extracted using suspended extraction equipment
- Work collaboratively with others when being airborne extracted using suspended extraction equipment
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems that may occur when being airborne extracted using suspended extraction equipment in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when being airborne extracted using suspended extraction equipment
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when being airborne extracted using suspended extraction equipment

REQUIRED KNOWLEDGE AND SKILLS

- Monitor and anticipate operational problems and hazards and take appropriate action
- Monitor work activities in terms of planned schedule
- Modify activities dependent on differing workplace contingencies, situations and environments
- Work systematically with required attention to detail without injury to self, others or damage to goods or equipment
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Select and use required personal protective clothing and equipment conforming to industry and OH&S standards

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of:
 - applying the underpinning knowledge and skills
 - observing helicopter safety including safe approach and exit
 - applying individual equipment safety checks
 - ascending suspended equipment and emplaning aircraft in accordance with supervisor or aircrew instructions
 - monitoring extraction and operational equipment stability during extraction

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
 - In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Hazards may include:

- wire/powerlines/fences
- livestock
- native fauna
- masts/aerials
- terrain
- weather conditions
- poor visibility
- public
- trees
- dust
- vehicles
- buildings

Environmental conditions may include:

- 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

Dependent on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures
- standard operating procedures
- manufacturers instructions

Emergency and contingency procedures may include:

- aircraft fire
- aircraft malfunction prior to take-off
- emergency landing procedures
- aircraft crash landing
- aircraft collision
- engine failure over landing site
- (for Defence) procedures to evade hostile action against aircraft or self
- suspended equipment failure
- hang-up
- collision with others or obstacles
- inversion
- loss of visibility

RANGE STATEMENT

- rappel rope caught in tree
 - damaged or kinked rope
 - loss of rappel control during ascend
 - aborted operation
 - emergency retrieval
- Operational and suspended extraction equipment may include:
- search and rescue equipment
 - casualty evacuation equipment
 - communications equipment
 - military equipment
 - commercial in-service rappelling harness
 - improvised tubular webbing harness
 - rope attachment device (locking karabiner)
 - winch
 - caving ladder
 - casualty evacuation litter
 - mechanical friction device and lanyard
- Personal protective equipment (PPE) may include:
- hearing protection
 - eye protection goggles
 - protective clothing
 - footwear
 - life jacket
 - high visibility clothing
 - personal lighting and beacons
 - helmet
 - rappelling gloves
- Individual equipment safety checks may include:
- operational equipment
 - harness and ascender
 - weapons checks
 - personal protective equipment checks
- Security device may include:
- chest ascender
 - winch collar
- Communications may include:
- interpersonal communications
 - radio
 - hand signals
- Situational awareness may include:
- monitoring altitude/height
 - orientation to ground and/or aircraft
 - monitoring the position of other team members
- Information/documents may include:
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
 - in Defence context, relevant Defence Orders and

RANGE STATEMENT

Applicable regulations and legislation may include:

- Instructions
- operations manuals
 - workplace procedures and instructions and job specification
 - induction and training materials
 - relevant Civil Aviation Safety Regulations and Civil Aviation Orders
 - in Defence context, relevant Defence Orders and Instructions
 - relevant state/territory OH&S legislation
 - relevant state/territory environmental protection legislation
 - relevant Australian Standards

Unit Sector(s)

Not applicable.

Competency field

Competency Field

W - Equipment and Systems Operations