



Australian Government

AVIW2032 Fast rope from a helicopter

Release: 1

AVIW2032 Fast rope from a helicopter

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 fast rope from a helicopter, 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 fast roping operation, and emplaning and completing on-board procedures. It also includes fast roping from helicopter and de-servicing fast rope 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.

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

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.

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|---|--|
| 1 Apply aircraft safety procedures | 1.1 Dress and equipment is 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 flight crew instructions

1.3 Individual seating is occupied and restraint devices are applied

1.4 Identified hazards are communicated to fast rope team members

1.5 Flight crew instructions are followed

1.6 Environmental conditions and alternative routes to/from helicopter are identified |
| 2 Prepare for fast roping operation | 2.1 Fast roping descent 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 fast rope equipment including personal protective equipment (PPE) is selected and fitted in accordance with workplace procedures

2.4 Individual pre-flight check of fast rope equipment is conducted

2.5 Damage to operational, fast rope and safety equipment is reported and remedial action is taken in accordance with workplace procedures |
| 3 Emplane and complete on-board procedures | 3.1 Aircraft is approached and emplaned in accordance with workplace procedures

3.2 Fast ropes are secured to allocated rope attachment device, checked and prepared for flight

3.3 Ropers and operational equipment are secured prior to flight |

- | | | |
|---|-----|--|
| | 3.4 | Flight crew orders and instructions are complied with |
| | 3.5 | Fast ropes and operational equipment are monitored during flight |
| | 3.6 | Communications and directions are interpreted and relayed to ropers |
| | 3.7 | Individual in-flight safety checks are conducted |
| 4 Fast rope from helicopter | 4.1 | Fast rope exit positions are adopted under supervision of flight crew or safety officer |
| | 4.2 | Positions are resumed in aircraft on abort instruction from flight crew |
| | 4.3 | Fast ropes are deployed on instruction from flight crew or safety officer |
| | 4.4 | Aircraft is exited on instruction of flight crew or safety officer |
| | 4.5 | Aircraft emergency and fast rope contingency procedures are implemented as required |
| | 4.6 | Fast rope is descended in a controlled manner |
| | 4.7 | Landing and clearance of roping point is conducted in accordance with workplace procedures |
| | 4.8 | Equipment is gathered and taken to designated team assembly point |
| 5 De-service fast rope equipment | 5.1 | Area is cleared in preparation for de-servicing of fast rope equipment in accordance with workplace procedures |
| | 5.2 | Fast rope and operational equipment is de-serviced and stowed in accordance with workplace procedures |

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.

Hazards must include 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

Environmental conditions must 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

Aircraft emergency and fast rope contingency procedures must include one or more of the following:

- aborted operation
- aircraft fire
- aircraft malfunction prior to take-off
- aircraft collision
- aircraft crash landing
- damaged or kinked rope
- emergency landing procedures
- emergency retrieval of roper/s
- engine failure over landing site
- fast rope caught in tree
- in a Defence context – procedures to evade hostile action against aircraft or self
- loss of roper control during descent
- loss of visibility
- roper collision with others or obstacles
- roper falls on descent
- roper hang-up
- roper lost brake
- roper injury on landing
- roper inversion

Operational and fast rope

- communications equipment

- equipment must include:
- incident response equipment
 - individual load carrying equipment (ILCE)
 - military equipment relevant to fast roping operation
 - search and rescue equipment
- Personal protective equipment (PPE) must include one or more of the following:
- eye protection goggles
 - footwear
 - hearing protection
 - helmet
 - high visibility clothing
 - leg bags
 - life jacket
 - personal lighting and beacons
 - protective clothing
 - rappelling gloves
- Communications must include:
- hand signals
 - interpersonal communications
 - radio
- Individual in-flight safety checks must include:
- equipment checks
 - fast roping equipment checks
 - personal protective equipment checks
 - seatbelt/restraint device
 - weapons checks
- Fast rope exit positions must include:
- crouching
 - kneeling
 - sitting

Unit Mapping Information

This unit replaces and is equivalent to AVIW2032A Fast rope from a helicopter.

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 AVIW2032 Fast rope from a helicopter

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:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures
- applying organisational tactics, techniques and procedures
- applying precautions and required action to minimise, control or eliminate identified hazards
- approaching and exiting helicopter in a safe manner in accordance with workplace procedures and/or flight crew instructions
- communicating effectively with others
- completing relevant documentation
- conducting individual fast rope equipment and operational equipment pre-flight and in-flight checks
- descending fast rope in a controlled manner
- following relevant legislation and workplace procedures
- identifying, operating and controlling fast rope and operational equipment
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- 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 personal protective clothing and equipment conforming to industry and WHS/OHS 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:

- assembly point or marshalling area
- characteristics of helicopters including safety features and operating requirements
- hazards that exist when fast roping from a helicopter
- in a Defence context, relevant Defence Orders and Instructions
- manufacturer instructions for equipment used for fast roping from a helicopter
- problems that may occur when fast roping from a helicopter
- relevant Australian Standards
- relevant information/documents:
 - induction and training materials
 - operations manuals
 - workplace procedures and instructions and job specification
- relevant legislation, regulations, organisational policy and procedures in relation to fast roping from a helicopter
- relevant WHS/OHS and environmental procedures and regulations
- risks that exist when fast roping from a helicopter
- safety equipment operation.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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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 personal protective equipment currently used in industry.

Links

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