



Australian Government

PUAFIR219 Undertake helicopter winch operations

Release: 1

PUAFIR219 Undertake helicopter winch operations

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge required to winch in and out of a helicopter when the degree of slope, nature of ground or presence of obstacles prohibits a safe landing or a hover-exit. It applies to personnel engaged in entering and exiting a helicopter via a winch.

The fire sector is those sections of government departments, statutory authorities or organisations that have responsibility under jurisdictional arrangements for the delivery of firefighting and fire management services.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

It is essential that the prerequisite units listed below are obtained prior to the issuance of this unit to individuals within the fire sector or the units contributing to the attainment of a fire qualification.

PUAFIR209 Work safely around aircraft

Competency Field

Fire

Unit Sector

Fire

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for winch-exit

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Equipment appropriate to helicopter winch operations is

operations		selected and prepared, in accordance with organisational procedures and requirements
	1.2	Appropriate clothing and equipment is selected and worn during winch operations, in accordance with organisational procedures and requirements
	1.3	Pre-flight checks on clothing and equipment are undertaken, in accordance with organisational procedures
	1.4	Damage to firefighting and safety equipment is reported to the supervisor for repair, replacement or disposal
	1.5	Pre-flight aircraft safety and winch briefings are obtained from pilot or flight crew and is acted upon
2 Load winch personnel and equipment into helicopter	2.1	Firefighting equipment and personnel are assembled, weighed and recorded
	2.2	Pilot is informed of equipment and personnel weights
	2.3	Equipment is loaded into helicopter and secured under supervision of pilot or flight crew
	2.4	Personnel are secured in seatbelts, in accordance with organisational procedures and instructions
	2.5	Instructions are obtained from pre-mission briefing and clarification of objectives and procedures is sought, as required
	2.6	Pre-flight safety briefing is obtained from pilot or flight crew
3 Prepare to winch-exit from helicopter	3.1	Following clearance from pilot, instructions are received to prepare for exit
	3.2	Winch cable is attached and checked, in accordance with organisational procedures and requirements
	3.3	Pre-descent checks are conducted, in accordance with organisational procedures and requirements
	3.4	Seat belt is released and then re-secured, in accordance with organisational procedures and instructions received from flight crew
	3.5	Movement towards helicopter door and assumption of winching position is undertaken, in accordance with

- organisational procedures and instructions
- 3.6** Clearance is obtained from the pilot to commence winch-exit
- 3.7** Emergency procedures are conducted, as required
- 3.8** Emergency commands are responded to, in accordance with organisational procedures
- 4 Winch-exit from helicopter**
- 4.1** Winch-exit operations are undertaken and conducted, in accordance with organisational procedures and Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements
- 4.2** Actions are undertaken to minimise uncommanded movement and spinning or swaying during descent to ground
- 4.3** Appropriate landing technique is selected and used, in accordance with ground and safety conditions
- 4.4** Winch equipment is detached and the all clear signal is communicated to pilot or flight crew when landing activity is complete
- 4.5** Assembly point for individuals and equipment is identified and reached, in accordance with organisational procedures
- 4.6** Emergency procedures are conducted, as required
- 4.7** Emergency commands are responded to, in accordance with organisational procedures
- 5 Winch on board helicopter**
- 5.1** Individuals and equipment are located at nominated assembly point in preparation for winching on board
- 5.2** Winching equipment is donned and attached to winch cable and all clear signal is communicated to flight crew, in accordance with organisational procedures
- 5.3** Actions to minimise uncommanded movement and spinning or swaying during ascent of the helicopter are undertaken, in accordance with organisational procedures
- 5.4** Movement on board the helicopter and towards seat is undertaken, in accordance with organisational procedures and instructions

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| | 5.5 | Seat belts are secured, until clearance is obtained to commence movement within the helicopter, in accordance with organisational, safe work practices and instructions from flight crew |
| | 5.6 | Winch cable is detached under instruction and handed to flight crew |
| | 5.7 | Seat belts remain secured until helicopter has landed and clearance is obtained to commence movement |
| 6 Perform maintenance on equipment | 6.1 | Equipment is inspected and maintenance is performed, in accordance with organisational procedures and/or manufacturers' guidelines |
| | 6.2 | Damage to equipment is reported to supervisor for repair, replacement or disposal |
| | 6.3 | Maintenance or damage to equipment is documented and reported, in accordance with organisational 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.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR217 Undertake helicopter winch operations.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR219 Undertake helicopter winch operations

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements
- conducting winch operations
- following instructions and procedures within helicopter
- implementing legislative, regulatory, organisational and operational guidelines
- loading winch personnel and equipment into helicopter
- minimising movement during ascent and descent from helicopter
- participating in briefings
- performing inspections and maintenance on equipment
- preparing for helicopter winch-exit operations
- preparing to winch-exit from helicopter including applying organisational procedures for entering, exiting, ascending and descending from helicopter
- preparing, taking carriage of and stowing equipment prior, during and following exiting from helicopter
- reporting accidents and incidents
- responding to emergency commands
- undertaking organisational procedures including using codes of practice, briefing procedures, work instructions and complying with hazard policies and procedures, safe use of equipment and conducting emergency procedures
- using communication processes with flight crew
- working as a team member in the transfer of personnel and equipment between helicopter and ground

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of

- areas and slope suitable to conducting operations
- authorised personnel including airbase or helibase manager, flight crew and pilot

- briefing reports and formats
- characteristics, limitations and operating principles of winch-exit equipment including winch and related equipment and materials
- formats for briefings
- inspection of equipment and maintenance procedures
- organisational documentation requirements
- organisational policies and procedures including emergency procedures and emergency command procedures
- personal protective clothing and safety equipment
- regulatory reporting arrangements
- safe work practices when working in and around aircraft
- safe work procedures for winch operations including roles and responsibilities of individuals, firefighting and helicopter crew
- types of equipment appropriate to winch operations
- types of firefighting equipment that must be weighed and assembled
- types of helicopters used by emergency service organisations for conducting winch-exit operations
- types of landing techniques
- winch-exit operations
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) legislated requirements including risk mitigation

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 processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Competency should be assessed in a simulated environment followed by assessment by an accredited operator on the job.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
 - winch and related equipment and material, personal protective and safety equipment, area

- to conduct operations, helicopters, briefing reports and appropriate personnel
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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