



Australian Government

PUAFIR015 Undertake helicopter winch operations

Release: 1

PUAFIR015 Undertake helicopter winch operations

Modification History

Release 1.0 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 for personnel and their equipment, where required, to be winched in and out of a hovering helicopter during an incident in accordance with civil aviation orders. It includes preparing for winch-exit operations, loading personnel and equipment into helicopter, preparing to winch-exit from helicopter, winching-exiting from a helicopter, winching on board helicopter and documenting maintenance of equipment.

The unit is applicable to personnel who undertake helicopter winch exit-entry as a part of their duties. Operations are typically conducted within a team environment.

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.

PUAFIR017 Work safely around aircraft

Competency Field

Fire

Unit Sector

Fire

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 Prepare for winch-exit operations

- 1.1** Equipment, where required, is appropriate to helicopter winch-exit operations and is selected and prepared
- 1.2** Personal protective clothing and safety equipment is selected and worn during winch-exit operations
- 1.3** Checks on personal protective clothing and equipment are undertaken
- 1.4** Instructions of pilot and/or air crew are followed during helicopter activities including emergencies

2 Load personnel and equipment into helicopter

- 2.1** Personnel and equipment, where required, are assembled, weighed and recorded
- 2.2** Pilot or air crew is informed of equipment, where required, and personnel weights
- 2.3** Equipment, where required, is loaded into helicopter and secured under supervision of pilot or air crew
- 2.4** Personnel boarding helicopter are secured with seatbelt in accordance with instructions from pilot or air crew
- 2.5** Pre-flight safety briefing is obtained from pilot or air crew

3 Prepare to winch-exit from helicopter

- 3.1** Following clearance from pilot or air crew, instructions are received to prepare for exit
- 3.2** Winch cable is attached and checked
- 3.3** Pre-descent checks are conducted
- 3.4** Seat belt is released in accordance with instructions received from air crew
- 3.5** Movement towards helicopter door and assumption of winching position is undertaken
- 3.6** Clearance is obtained from pilot or air crew to commence helicopter 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 operations are conducted in accordance with legislation, regulations, organisational procedures and Work, Health and Safety (WHS)/ Occupational Health and Safety (OHS) requirements
- 4.2** Actions are undertaken to minimise uncommanded movement, 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 air crew when landing activities are complete
- 4.5** Assembly point is identified and reached
- 4.6** Emergency procedures and commands are followed
- 4.7** Emergency commands are responded to in accordance with organisational procedures

5 Winch on board helicopter

- 5.1** Individuals and equipment, where required, are located at assembly point in preparation for winching on board
- 5.2** Winching equipment is donned and attached to winch cable and the all clear signal is communicated to air crew
- 5.3** Actions to minimise uncommanded movement, spinning or swaying during ascent are undertaken
- 5.4** Movement on board helicopter and towards allocated seat is undertaken
- 5.5** Seat belt is secured until clearance is obtained to commence movement within helicopter
- 5.6** Winch cable is detached under instruction and handed to air crew
- 5.7** Seat belt remains secured during landing until helicopter has landed and clearance is obtained to commence movement

6 Document maintenance of equipment

- 6.1** Damage to equipment is reported for maintenance, where required

6.2 Damage to equipment is documented, where 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.

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

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR219 Undertake helicopter winch operations.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR015 Undertake helicopter winch operations

Modification History

Release 1.0 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
- assembling, weighing and recording personnel and equipment, where required, and informing pilot or air crew
- documenting equipment maintenance
- ensuring seatbelt is secured
- following instructions and procedures within a helicopter
- identifying an assembly point
- implementing legislative, regulatory, organisational and operational guidelines
- loading personnel and equipment, where required, into a helicopter
- minimising movement during ascent and descent of a helicopter
- participating in pre-flight safety briefings
- preparing and conducting helicopter winch exit-entry operations including being winched to the ground from a helicopter and being winched into the helicopter from the ground
- responding to emergency procedures and commands
- selecting and wearing personal protective clothing and safety equipment.

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

- aircraft operator policies and procedures
- areas and slope suitable to conducting operations
- authorised personnel including airbase or helibase manager, air 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
- organisational documentation requirements

- organisational policies and procedures including emergency procedures and emergency command procedures
- personal protective clothing and safety equipment
- regulatory reporting arrangements
- risk mitigation
- safe work practices when working in and around aircraft
- safe work procedures for winch operations including roles and responsibilities of individuals and helicopter crews
- types of equipment appropriate to winch operations
- types of equipment, where required, 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 and winch-entry operations
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements.

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 operational situations or in simulated operational training 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 exercises, case studies and/or simulations
- appropriate materials, equipment and tools currently used in industry including
 - an area to conduct winching
 - a helicopter with pilot and authorised winch operator
 - personal protective clothing and safety equipment
- applicable documentation including organisational procedures, standards, equipment specifications, regulations, codes of practice and operational manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>