



Australian Government

PUAFIR212B Rappel from helicopter

Release 2

PUAFIR212B Rappel from helicopter

Modification History

Release	TP Version	Comments
2	PUA12 V2	Application of the Unit added Unit updated to reflect current work requirements Required Knowledge clarified Method of assessment added
1	PUA00 V8.1	Primary release on TGA

Unit Descriptor

This unit covers the competency required to safely and effectively rappel from a hovering helicopter using a personal rappel line.

Aviation operations occur in a heavily regulated environment. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

This unit applies to personnel required to rappel from a helicopter. This work is undertaken in accordance with rappelling policies, regulations, protocols and procedures required to safely rappel from a helicopter.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

PUAFIR209B Work safely around aircraft

Employability Skills Information

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. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare operational rappel equipment	<p>1.1 <i>Rappel equipment</i> is selected and prepared in accordance with organisational requirements.</p> <p>1.2 Appropriate rappel and safety equipment is donned in accordance with organisational requirements.</p> <p>1.3 Pre-flight checks on clothing and equipment are undertaken in accordance with organisational requirements.</p> <p>1.4 Damage to rappel or safety equipment is reported to relevant supervisor for repair, replacement or disposal.</p>
2. Load rappel personnel and equipment into helicopter	<p>2.1 Rappel personnel, rappel and operational equipment are weighed and recorded.</p> <p>2.2 Pilot is informed of weights.</p> <p>2.3 Equipment is secured into helicopter under pilot or flight crew member supervision.</p> <p>2.4 Seat position is assumed and seatbelt secured.</p> <p>2.5 Pre-mission briefing instructions are obtained from operations officer or rappel crew leader and clarification of objectives and procedures is sought where required.</p> <p>2.6 Pre-flight safety briefing is obtained from pilot or <i>aircrew</i>.</p>
3. Prepare to rappel from hovering helicopter	<p>3.1 Rappel rope is attached and checked according to procedures.</p> <p>3.2 Movement to helicopter skids is undertaken as directed in accordance with procedures.</p> <p>3.3 Pre-descent checks are conducted in accordance with organisational requirements.</p> <p>3.4 <i>Emergency</i> procedures are conducted as required.</p> <p>3.5 Emergency commands are responded to in accordance with organisational requirements.</p>
4. Rappel from hovering helicopter	<p>4.1 Departure from skids is performed in accordance with commands and organisational procedures.</p> <p>4.1 Rappel rope descent is undertaken in accordance with organisational requirements.</p> <p>4.3 Landing is conducted in accordance with organisational requirements.</p> <p>4.4 Rappel rope is disconnected and landing area is cleared in accordance with organisational requirements.</p>

- 4.5 Emergency procedures are conducted as required.
- 4.6 Emergency commands are responded to in accordance with organisational requirements.
- 5. Retrieve rappel and firefighting equipment**
 - 5.1 Area is cleared in preparation for retrieval of rappel and firefighting equipment in accordance with organisational requirements.
 - 5.2 Equipment is connected and retrieval is conducted in accordance with organisational requirements.
- 6. Perform maintenance on rappel equipment**
 - 6.1 Equipment is inspected and required maintenance is performed in accordance with organisational or manufacturer requirements.
 - 6.2 Damage to fire and rappel equipment is reported to relevant supervisor for repair, replacement or disposal.
 - 6.3 Documentation related to maintenance or damage to equipment is completed and reported in accordance with procedures.

Required Skills and Knowledge

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

Required Skills

- operate rappel equipment in accordance with organisational operational procedures
- operate safely around a helicopter

Required Knowledge

- characteristics and operating principles of rappel equipment
- documentation requirements and reporting arrangements
- emergency procedures
- factors that can effect rappel descents including canopy height, slope, vegetation type, wind
- helicopter rappelling for the purpose of remote area fire suppression and training
- key roles and relevant responsibilities of helicopter crew including rappel dispatcher
- organisational operational rappel policy
- organisational requirements for rappel and safety equipment
- relevant regulations
- safe work practices when working in or around helicopters
- types of helicopters used by the agency for conducting rappelling operations

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

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

Assessment must confirm the ability to:

- operate in accordance with work health and safety procedures, legislative and operational guidelines
- implement correct procedures and techniques for sequencing and controlling rappelling, braking, landing and disconnecting
- follow pre-rappel checks and equipment donning procedures
- undertake appropriate communication processes with crew persons and rappel dispatcher including demonstration of emergency hand signals
- apply equipment maintenance and inspection techniques for all rappel equipment
- apply relevant workplace and organisational procedures including codes of practice, hazard policy and emergency procedures, procedures relating to safe use of equipment, housekeeping procedures
- adhere to briefing instructions
- take action promptly – report accidents and incidents within regulatory and organisational requirements
- complete work systematically in accordance with safe operating procedures to minimise risk of injury to self, others or damage to equipment

Consistency in performance

Competency should be demonstrated over time in a range of actual or simulated workplace environments.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed verbally and by multiple practical demonstrations in a number of scenarios.

All rappel operations are conducted under pilot and rappel dispatcher supervision. Each rappel descent once commenced is conducted without supervision.

Specific resources for assessment

Access is required to:

- rappelling equipment and materials

- personal protective and safety equipment
- area to conduct operations
- helicopter/s
- briefing reports and organisational procedural documentation
- appropriate personnel
- emergency information

Method of assessment

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an agency-approved simulated work environment. Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors
- written or oral questions

Range Statement

<p>The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording in the Performance Criteria is detailed below.</p>	
<p><i>Rappel equipment</i> must include:</p>	<ul style="list-style-type: none"> • agency coveralls, protective helmet, earmuffs, chin strap, goggles • agency specific descender devices and safety devices • full body harness • hook knife • rappel gloves • static Kernmantle rappel ropes • steel karabiner
<p><i>Air crew may</i> include:</p>	<ul style="list-style-type: none"> • co-pilot • rappel dispatcher • other member of the air crew
<p><i>Emergency may</i> include:</p>	<ul style="list-style-type: none"> • aborted operation • damaged or kinked rope • descent or landing injury • emergency retrieval • engine failure • loss of rappel control during descent • rappel rope caught in tree • rappeller caught in tree

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Not applicable.