



Australian Government

PUAFIR311B Dispatch rappel personnel and equipment from a helicopter

Release 2

PUAFIR311B Dispatch rappel personnel and equipment from a helicopter

Modification History

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

Unit Descriptor

This unit covers the competency required to dispatch operational rappel personnel and equipment from a hovering helicopter for fire suppression purposes.

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 who supervise other personnel rappelling from a hovering helicopter. This work involves adherence to rappelling policies, regulations, protocols and procedures required for these activities.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

PUAFIR212B Rappel from helicopter

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 dispatch equipment

- 1.1 *Specialist rappel and dispatch equipment* is selected and prepared in accordance with organisational safe work practices.
- 1.2 Appropriate rappel and dispatch equipment is donned in accordance with organisational requirements.
- 1.3 Personal equipment pre-flight check is conducted in accordance with organisational requirements.
- 1.4 Rappel and cargo ropes are loaded into the helicopter and secured.
- 1.5 Equipment faults are reported to relevant supervisor for rectification or replacement.

2. Conduct helicopter pre-flight check and preparation

- 2.1 Helicopter cabin area is prepared in accordance with organisational requirements.
- 2.2 *Aircraft emergency equipment* is located and checked.
- 2.3 Rappel rope attachment points are inspected and operational status confirmed.
- 2.4 Rappel ropes are attached to rope attachment points.
- 2.5 Helicopter *communications system* is tested and operational status confirmed.
- 2.6 Helicopter equipment faults are reported to pilot.
- 2.7 Pre-mission brief details are confirmed with appropriate personnel.

3. Load rappellers and equipment into helicopter

- 3.1 Weight of rappel personnel, rappel and firefighting equipment is obtained.
- 3.2 Equipment is secured in helicopter according to weight and balance requirements.
- 3.3 Rappellers are appropriately secured in seats.
- 3.4 Personal attachment to helicopter is confirmed.
- 3.5 Pre-flight operational checks and briefs are undertaken in accordance with organisational requirements.

4. Conduct rappel site inspection

- 4.1 Overfly of prospective rappel site is undertaken in accordance with organisational requirements.
- 4.2 Hazard assessment of proposed dispatch site is undertaken.
- 4.3 Pilot and rappel crew leader are informed as to *site suitability*.
- 4.4 Possible escape routes from fire are identified and

- conveyed to rappel crew.
- 5. Dispatch rappel crew and their equipment**
- 5.1 Pre-dispatch checks of rappellers, attachment to rappel ropes, and equipment are conducted in accordance with organisational requirements.
 - 5.2 Pilot is directed to maintain helicopter over rappel site in accordance with organisational requirements.
 - 5.3 Pilot's approval to conduct a rappel is obtained.
 - 5.4 Rappel rope is attached and checked prior to commencing the dispatch.
 - 5.5 Rappellers are directed to helicopter skids using relevant hand signals in accordance with organisational requirements.
 - 5.6 Rappeller and equipment descent and landing are monitored.
 - 5.7 Communication is maintained with rappellers, pilot and control organisation.
 - 5.8 Emergency procedures are invoked as required in accordance with organisational requirements.
- 6. Retrieve personnel and equipment**
- 6.1 Appropriate ropes and equipment for the retrieval of rappellers are prepared.
 - 6.2 Pre-retrieval checks of rappellers, attachment to rappel ropes, and equipment are conducted in accordance with organisational requirements.
 - 6.3 Pilot is briefed on proposed retrieval operation.
 - 6.4 Equipment and personnel extraction is conducted in accordance with organisational requirements.
 - 6.5 Personnel extraction is conducted in accordance with organisational requirements.
- 7. Complete rappel operations**
- 7.1 Debrief of rappellers and pilot is conducted in accordance with organisational requirements.
 - 7.2 Relevant helicopter equipment is inspected and stowed and identified helicopter equipment faults are reported to pilot.
 - 7.3 Rappel equipment and rope attachment points are inspected in accordance with organisational requirements.
 - 7.4 Damage to rappel equipment is reported to appropriate personnel for assessment and/or repair/replacement or disposal in accordance with organisational *procedures and practices*.
 - 7.5 **Reports** on operations are completed in accordance with organisational requirements.

Required Skills and Knowledge

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

Required Skills

- communicate effectively with colleagues and other personnel
- implement lowering and retrieving (including static extraction) rappelling techniques
- operate rappel equipment
- use hand signals appropriately

Required Knowledge

- aircraft coming procedures
- emergency procedures
- helicopter environment awareness
- helicopter safety
- key roles and relevant responsibilities of helicopter crew
- organisational operational rappel policy
- organisational rappel policy
- organisational requirements and relevant Civil Aviation Safety Authority regulations with which rappel and safety equipment must comply
- weight distribution principles and effects on aircraft

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:

- undertake operations in accordance with work health and safety procedures, legislative and operational guidelines
- prepare and stow/seat equipment and rappellers prior to, during and following rappelling from the helicopter
- apply correct procedures and techniques for sequencing and controlling rappelling operations
- apply appropriate communication processes with crew and rappellers
- implement inspection and maintenance procedures
- plan and implement briefing and debriefing procedures
- apply relevant workplace procedures including codes of practice, hazard policy and emergency procedures, flight instructions, procedures relating to safe use of equipment, housekeeping procedures
- 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 in a simulated environment followed by assessment by a certified operator on-the-job encompassing a number of scenarios.

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

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

<p><i>Specialist rappel and dispatch equipment</i> may include:</p>	<ul style="list-style-type: none"> • communications helmet • fire equipment packs • rappel harness • hook knives • protective overalls • descent device • protective gloves • static rappel ropes • karabiner or other attachment device • emergency release device • wander harness
<p><i>Aircraft emergency equipment</i> will include:</p>	<ul style="list-style-type: none"> • emergency exits • emergency location beacon • fire extinguishers • first aid kit • life vests • survival kit
<p><i>Communications systems</i> may include:</p>	<ul style="list-style-type: none"> • aeronautical radio • intercom system • organisation radio
<p><i>Site suitability</i> will be determined by:</p>	<ul style="list-style-type: none"> • canopy height • fire location • hazards • pilot ability • slope • vegetation type and density • weather conditions
<p><i>Procedures and practices</i> may include:</p>	<ul style="list-style-type: none"> • civil aviation legislation • helicopter company operations manual and supplements • organisational operations manual and supplements
<p><i>Reports</i> must include:</p>	<ul style="list-style-type: none"> • flight following • crew safety • crew progress • search and rescue

Unit Sector(s)

Not applicable.