



Australian Government

Department of Education, Employment and Workplace Relations

AVIW2033A Rappel from a helicopter

Revision Number: 1

AVIW2033A Rappel from a helicopter

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required by an individual to rappel from a helicopter using a personal rappel line. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work involves the application of safety and rappelling policies, regulations, protocols and procedures required to safely rappel from a helicopter

Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable Civil Aviation Safety Authority (CASA) compliance.

Work is performed under limited supervision within organisational guidelines.

This unit of competency is nominally package at Certificate II.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills 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. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Observe helicopter safety	1.1 Dress and equipment is secured for operating in and around a helicopter 1.2 Helicopter is approached and exited in a safe manner in accordance with workplace procedures and/or aircrew instructions 1.3 Individual seating is occupied and restraint devices are applied 1.4 Identified hazards are communicated to rappel team members 1.5 Aircrew instructions are followed 1.6 Environmental conditions and alternative routes to/from helicopter are identified
2 Prepare for rappelling operation	2.1 Rappelling descent instructions are received and confirmed as required 2.2 Workplace procedures, OH&S requirements and safety control measures are applied 2.3 Operational and rappel equipment including personal protective equipment (PPE) is selected and fitted in accordance with workplace procedures 2.4 Individual and supervisor pre-flight checks of rappel equipment are conducted 2.5 Damage to operational, rappel and safety equipment is reported and remedial action taken in accordance with workplace procedures
3 Emplane and complete onboard procedures	3.1 Aircraft is approached and emplaned in accordance with workplace procedures 3.2 Ropes are secured to allocated rope attachment device (RAD), checked and prepared for flight 3.3 Rappellers and operational equipment are secured prior to flight 3.4 Aircrew orders and instructions are complied with 3.5 Rappelling and operational equipment is monitored during flight 3.6 Communications and directions are interpreted and relayed to rappel team members 3.7 Individual in-flight safety checks are conducted
4 Prepare to rappel from hovering helicopter	4.1 Rappelling exit positions are adopted under supervision of aircrew and safety officer 4.2 Positions are resumed within the aircraft on abort instruction from aircrew
5 Rappel from helicopter	5.1 Aircraft is exited on instruction of aircrew or safety officer 5.2 Rappeller descends in a controlled manner in accordance with

ELEMENT	PERFORMANCE CRITERIA
	workplace procedures 5.3 Emergency and contingency procedures are completed as required 5.4 Situational awareness is maintained 5.5 Rappeller lands in a controlled manner in accordance with workplace procedures 5.6 All clear signals are communicated to aircrew once descent is complete 5.7 Rappeller disconnects rope on landing and clears landing area in accordance with workplace procedures 5.8 Individual, team and equipment are gathered at designated assembly point
6 De-service rappel equipment	6.1 Area is cleared in preparation for de-servicing of rappel equipment in accordance with workplace procedures 6.2 Rappelling and operational equipment is de-serviced and stowed in accordance with workplace procedures

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge:

- Regulations, legislation, organisational policy and procedures in relation to rappelling from a helicopter
- Relevant OH&S and environmental procedures and regulations
- In Defence context, relevant Defence Orders and Instructions
- Characteristics of helicopters including their safety features and operating requirements
- Hazards that exist when rappelling from a helicopter
- Safety equipment operation
- Manufacturers instructions for equipment used for rappelling from a helicopter
- Risks that exist when rappelling from a helicopter
- Problems that may occur when rappelling from a helicopter

Required skills:

- Operate helicopter restraint, safety and emergency equipment
- Apply the tactics, techniques and procedures of rappelling applicable to the organisation
- Follow defined organisational and aircraft OH&S policy and procedures
- Identify, operate and control rappelling and operational equipment
- Communicate effectively with others including working as a member of a team when rappelling from a helicopter
- Read, interpret and follow instructions, regulations, procedures and other information relevant to rappelling from a helicopter
- Complete documentation related to rappelling from a helicopter
- Work collaboratively with others when rappelling from a helicopter
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems that may occur when rappelling from a helicopter in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when rappelling from a helicopter
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when rappelling from a helicopter
- Monitor and anticipate operational problems and hazards and take appropriate action
- Monitor work activities in terms of planned schedule
- Modify activities dependent on differing workplace contingencies, situations and environments

REQUIRED KNOWLEDGE AND SKILLS

- Work systematically with required attention to detail without injury to self, others or damage to goods or equipment
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Select and use required personal protective clothing and equipment conforming to industry and OH&S standards

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

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

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of:
 - applying the underpinning knowledge and skills
 - following relevant legislation and workplace procedures
 - approaching and exiting helicopter in a safe manner in accordance with workplace procedures and/or aircrew instructions
 - conducting rappel, operational and safety equipment individual and supervisor pre-flight and in-flight checks
 - descending landing in a controlled manner in accordance with workplace procedures
 - de-servicing and stowing rappelling and operational equipment in accordance with workplace procedures

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

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.

Hazards may include:

- wire/powerlines/fences
- livestock
- native fauna
- masts/aerials
- terrain
- weather conditions
- poor visibility
- public
- trees
- dust
- vehicles
- buildings

Environmental conditions may 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

Dependent on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures
- standard operating procedures
- manufacturers instructions

Emergency and contingency procedures may include:

- aircraft fire
- aircraft malfunction prior to take-off
- emergency landing procedures
- aircraft crash landing
- aircraft collision
- engine failure over landing site
- (for Defence) procedures to evade hostile action against aircraft or self
- rappeller hang-up
- rappeller lost brake
- rappeller injury on landing
- rappeller collision with others or obstacles
- rappeller inversion

RANGE STATEMENT

- loss of visibility
 - rappelling rope caught in tree
 - damaged or kinked rope
 - loss of rappel control during descent
 - aborted operation
 - emergency retrieval of rappeller(s)
 - rappeller lost balance during transition (premature exit)
- Operational and rappel equipment may include:
- search and rescue equipment
 - incident response equipment
 - communications equipment
 - military equipment
 - commercial in-service rappelling harness
 - improvised tubular webbing harness
 - descending device(s)
 - descent rope
 - individual load carrying equipment (ILCE)
- Personal protective equipment (PPE) may include:
- hearing protection
 - eye protection goggles
 - protective clothing
 - footwear
 - life jacket
 - high visibility clothing
 - personal lighting and beacons
 - helmet
 - rappelling gloves
 - leg bags
- Communications may include:
- interpersonal communications
 - radio
 - hand signals
- Individual in-flight safety checks may include:
- seatbelt/restraint device
 - weapons checks
 - equipment checks
 - rappelling equipment checks
 - personal protective equipment checks
- Rappel exit positions may include:
- 'L' position
 - forward exit
- Situational awareness may include:
- monitoring altitude/height
 - orientation to ground and/or aircraft
 - monitoring the position of other team members

RANGE STATEMENT

Assembly point may include:

- marshalling area

Information/documents may include:

- relevant Civil Aviation Safety Regulations and Civil Aviation Orders
- in Defence context, relevant Defence Orders and Instructions
- operations manuals
- workplace procedures and instructions and job specification
- induction and training materials

Applicable regulations and legislation may include:

- relevant Civil Aviation Safety Regulations and Civil Aviation Orders
- in Defence context, relevant Defence Orders and Instructions
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- relevant Australian Standards

Unit Sector(s)

Not applicable.

Competency field

Competency Field

W - Equipment and Systems Operations