



Australian Government

PMAWHS214 Undertake helicopter safety and escape

Release: 1

PMAWHS214 Undertake helicopter safety and escape

Modification History

Release 1. Supersedes and is equivalent to PMAOHS214B Undertake helicopter safety and escape

Application

This unit of competency covers the skills and knowledge required to exit a helicopter under abnormal conditions at sea.

This unit of competency applies to personnel who are required to undertake pre-flight preparation, escape from an inverted and/or submerged helicopter, don and successfully employ a life jacket, deploy safety and emergency equipment, deploy life rafts and help other survivors.

This unit of competency applies to all persons who regularly travel by helicopter, for example, to any of the following installations or facilities:

- offshore rig/installation
- floating facility (e.g. floating storage and offloading (FSO), floating production, storage and offloading (FPSO), and floating liquefied natural gas (FLNG))
- support vessel.

Some jurisdictions may require the holder of this unit to be licensed or certified and users should check with the relevant authorities.

Pre-requisite Unit

Nil

Competency Field

Work health and safety

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|---|---------------------------|-----|--|
| 1 | Prepare for flight | 1.1 | Listen to and follow pre-flight instructions from pilot or boarding controller |
|---|---------------------------|-----|--|

- 1.2 Undertake pre-flight preparation, including wearing appropriate clothing and personal protective equipment (PPE), such as immersion suits and personal floatation devices (life jacket)
 - 1.3 Check own gear for suitability, including covered footwear, long trousers, and no loose items or hats
 - 1.4 Check the supplied safety gear is fitted and worn correctly
- 2 **Board the helicopter**
 - 2.1 Approach helicopter as directed by the pilot or ground crew
 - 2.2 Put on seat belt and hearing protection
 - 2.3 Familiarise oneself with the helicopter layout
 - 2.4 Locate and identify all the safety equipment
 - 2.5 Locate and identify primary and secondary exits
 - 2.6 Listen to instructions on emergency egress from the aircraft
- 3 **Prepare for helicopter ditching**
 - 3.1 Facilitate a controlled and safe egress from a ditched helicopter from a knowledge of helicopter layout, including the location and operation of emergency exits and equipment
 - 3.2 Secure personal items within the cabin prior to the evacuation to facilitate escape
 - 3.3 Check harnesses, seat belts and life jackets to ensure that they are properly fastened and secured prior to the ditching in order to minimise personal injury or gear failure
 - 3.4 Adopt the required brace position in order to allow for proper positioning prior to ditching
 - 3.5 Acknowledge and respond to information communicated by the helicopter crew advising the nature and extent of the situation

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|---|---|-----|--|
| 4 | Undertake evacuation from the helicopter | 4.1 | Identify appropriate primary and secondary escape routes in order to determine the locations through which the evacuation will be undertaken |
| | | 4.2 | Wait until rotors have stopped turning and all movement has ceased |
| | | 4.3 | Undo, in a controlled sequential manner, seat belts and harnesses to facilitate exit from the helicopter |
| | | 4.4 | Deploy available safety equipment as instructed in order to assist the individual's sea survival after evacuation has been safely completed |
| | | 4.5 | Acknowledge and respond to information communicated by the helicopter crew advising the nature and extent of the situation |
| | | | |
| 5 | Facilitate recovery process | 5.1 | Deploy position indicating devices and use appropriate signalling devices to facilitate the location of personnel by air-sea rescue group |
| | | 5.2 | Use emergency supplies and equipment to ensure that available supplies are maximised and are able to meet the nature and extent of the emergency |
| | | 5.3 | Apply appropriate helicopter/vessel rescue techniques to the recovery process |
| | | | |
| 6 | Control hazards | 6.1 | Identify and act upon potential hazards to minimise injury to personnel or damage to equipment |
| | | 6.2 | Manage use of life raft by applying knowledge of life raft operation and requirements |
| | | 6.3 | Apply suitable swimming techniques (whilst wearing life jacket) in the water in order to aid movement and boarding of the deployed life raft |
| | | 6.4 | Rescue and recover persons in the water, minimising further potential for injury through the appropriate raft boarding and righting techniques |

- 6.5 Employ suitable techniques, both in the life raft and in the water, in order to delay the onset of hypothermia
- 6.6 Assess and treat hypothermia, as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Regulatory framework** The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:
- legislative requirements, including work health and safety (WHS)
 - industry codes of practice and guidelines
 - environmental regulations and guidelines
 - Australian and other standards
 - licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

- Procedures** All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)

- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Equipment Equipment includes one or more of the following:

- helicopter simulators
- beacons
- life rafts
- distress flares
- life jackets
- emergency position-indicating radio beacon (EPIRB)

Routine problems Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of the following:

- jammed or damaged survival equipment
- personal injury or injury to others
- trapped personnel
- loose or damaged equipment
- adverse weather conditions

Known solutions are drawn from one or more of the following:

- procedures
- training
- remembered experience

Non-routine problems must be reported according to according to relevant procedures.

Hazards Hazards include one or more of the following:

- heat, smoke, darkness, dust or other atmospheric hazards
- electricity
- equipment failures
- equipment or product mass
- noise, rotational equipment or vibration

- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- drowning and hypothermia
- other hazards that might arise

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMAOHS214B Undertake helicopter safety and escape

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>

Assessment Requirements for PMAWHS214 Undertake helicopter safety and escape

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include the ability to:

- correctly fit and wear required personal emergency equipment
- respond instantly to pilot commands
- deploy life rafts or other emergency equipment
- orient oneself whilst upside down under water
- remove doors and/or windows from the aircraft
- extricate oneself from the aircraft
- correctly inflate life jacket
- locate and gain access to life raft where deployed
- locate other survivors and assist them
- apply rescue and recover procedures
- assess and treat hypothermia.

Knowledge Evidence

- Evidence must be provided that demonstrates knowledge of:
- helicopter escape techniques
- integral equipment functions to the level needed to act rationally and recognise and resolve problems
- hazards boarding and departing from helicopters under normal and emergency situations
- inverted and submerged helicopter escape techniques
- life jacket operation
- emergency equipment deployment techniques
- life raft operation and deployment
- rescue and recovery techniques

hypothermia prevention and reduction techniques (delaying and offsetting).

Assessment Conditions

- Assessment for this unit of competency will involve a helicopter simulator. The unit will be assessed in as holistic a manner as is practical and the judgement of competence based on a holistic assessment of the evidence.

- Assessment may be integrated with the assessment of other relevant units of competency, for example:
 - PMAWHS215 Apply offshore facility abandonment and sea survival procedures and practices.
- Simulation should be based on actual helicopter ditchings and will include walk-throughs of the relevant competency components. Simulations may also include the use of case studies/scenarios, role plays and 3-D virtual reality interactive systems. In the case of evacuation training or training for competencies practised in life threatening situations, simulation may be used for the bulk of the training.
- The collection of performance evidence:
 - should provide evidence of the ability to perform over the range of situations which might be expected to be encountered, including typical disruptions to normal, smooth work conditions
 - must include the use of a simulated helicopter ditching in real water of sufficient depth for complete immersion, appropriate tools, equipment and safety gear
 - may also use other industry-based simulation particularly where safety, lack of opportunity or significant cost is an issue.
- Off-the-job assessment must sufficiently reflect realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- 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.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition, the assessor or anyone acting in subject matter expert role in assessment must demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they must assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions
- Currency can be demonstrated through one or more of:

- being currently employed undertaking the type of work being assessed
- being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation's policies and procedures
- having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
- conducting on-the-job training/assessments of the type of work being assessed
- being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work.

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