



Australian Government

DEFSU011B Survive at sea

Release: 2

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Modification History

Release	TP Version	Comments
2	DEF12V2	Layout adjusted. No changes to content.
1	DEF12V1	Primary release.

Unit Descriptor

This unit covers the competency required to survive at sea.

The context of this competency would typically be when a ship is sunk or an aircraft is downed over water.

This unit also includes immediate measures that would need to be taken upon exposure to the water including both surface and sub-surface swimming, treading water, rigging improvised and purpose flotation devices, and adopting heat-loss minimisation positions. It also covers the use of purpose survival craft and equipment including water procurement, food procurement and emergency signalling devices.

Application of the Unit

As agreed in the creation of this Training Package, applications for units transferred from the PUA00 Public Safety Training Package will be developed as part of continuous improvement plans, and taking into account the change in Unit of Competency format as detailed in templates for Streamlined Training Packages.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

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. Survive in the water

- 1.1 ***Dangerous situation*** is escaped from using ***surface and underwater swimming techniques***
- 1.2 Water is entered from a height and surfaced from using appropriate techniques
- 1.3 Heat-retaining positions are assumed in the water as an individual and in a group environment
- 1.4 Buoyancy is supplemented through ***improvised flotation devices***
- 1.5 Purpose personal flotation device (PFD) is fitted and buoyancy is maintained through manual techniques

2. Operate and maintain survival flotation craft and its resources

- 2.1 ***Survival flotation craft*** are deployed, inflated, righted (upon inversion) and boarded
- 2.2 Survival flotation craft are escaped from (i.e. inside) after inversion
- 2.3 Survival flotation craft are ***rigged*** for protection from the elements and optimisation (or minimisation) of movement
- 2.4 Survival flotation craft are ***inspected*** and ***maintained*** throughout the survival period
- 2.5 Survival ***resources*** are ***managed*** during the survival situation
- 2.6 ***Water procurement*** and ***food procurement devices*** are deployed and operated
- 2.7 ***Signal equipment*** is operated safely and effectively from the survival flotation craft
- 2.8 ***Recognition and response signals*** from search aircraft are interpreted and responded to

Required Skills and Knowledge

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

Required Skills

- fit life-vests
- swim, tread water, duck-dive
- team work
- tie knots and lashes

Required Knowledge

- aircraft response signals
- emergency signalling
- heat escape lessening position
- improvised flotation techniques
- life jacket operation
- work health and safety
- priorities of survival (shelter, water, food, warmth)
- threat to survival from elements (water, wind, rain, sun)

Evidence Guide

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

Assessment must confirm the ability to:

- swim 30 metres in clothing
- tread water for a minimum of five minutes in clothing
- adopt the HELP for at least ten minutes
- rig and use two different improvised flotation devices for at least five minutes each
- survive at sea over three hours using a multi person raft by:
 - rigging the drogue
 - rigging the canopy
 - rigging water procurement devices including solar stills and reverse osmosis machines, and producing at least 300 ml of water
 - bailing
 - inspection the craft
 - rig and safely employ the following signalling devices from the survival craft:
 - heliograph - accurately illuminating a target at least 300 m away
 - sea marker dye - deploying a sea marker dye effectively and safely using prevailing currents to optimise signature
 - flare - employing a signal flare effectively without threatening persons or survival equipment

Consistency in performance

Competency should be demonstrated over time in a range of situations that could be expected in a survival situation.

Context of and specific resources for assessment

Context of assessment

Competency must be assessed in a simulated workplace environment.

All aspects of competence must be tested as part of an unbroken continuum from entry into the water at the individual level to the boarding and conduct aboard a survival flotation craft.

Specific resources for assessment

Access to a suitable sea-survival area, buoyancy devices, signalling devices and life-rafts.

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.

<i>Dangerous situations</i> may include:	• burning oil • downed aircraft • sunken vessel
<i>Surface and underwater swimming techniques</i> include:	• duck-diving • swimming while clothed • treading water in location
<i>Improvised flotation devices</i> may include:	• buoyant flotsam • personal clothing: • trouser (tied) floats • inflated shirts/jumpers
<i>Survival flotation craft</i> includes:	• single person life raft • multi person life raft
<i>Survival flotation craft rigging</i> may include:	• using canopy/overhead protection • using drogue/sea anchor
<i>Inspection and maintenance of survival flotation craft</i> may include:	• inspecting for/of leaks • manual inflation • operating purpose and improvised bailing equipment • repairing punctures • security of knots • security of tie-down points • strength of ropes
<i>Survival resources</i> may include:	• food • food procurement devices (fishing gear) • signalling equipment • water • water procurement devices
<i>Managing survival resources</i> may include:	• accounting • protecting • rationing
<i>Water procurement and food procurement devices</i> may include:	• improvised collection techniques during periods of rain • reverse osmosis machine • solar stills
<i>Signal equipment</i> may	• flares

include:	• heliographs • marker panels • sea marker dyes
<i>Search aircraft recognition and response signals</i> may include:	• message received and understood • message received but not understood

Unit Sector(s)

Not applicable.