



Australian Government

MARF027 Apply basic survival skills in the event of vessel abandonment

Release: 1

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Modification History

Release 1. New unit of competency. Licensing/regulatory information has been incorporated in accordance with Regulatory requirements. Assessment Requirements have been strengthened in accordance with Regulatory requirements.

Application

This unit involves the skills and knowledge required to apply basic survival skills in the event of vessel abandonment. This unit applies to people working in the maritime industry in a deck and or engine room capacity on vessels up to 80 m and with propulsion power <3000 kW within the exclusive economic zone (EEZ). They could be working independently or as part of a vessel crew.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit. This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a General Purpose Hand NC, Coxswain Grade 2 NC, Coxswain Grade 1 NC, Marine Engine Driver Grade 3 NC, Master (Inland waters), Master <24 m NC, Marine Engine Driver Grade 2 NC, Mate <80m NC, Master < 35 m NC and Marine Engine Driver Grade 1 NC, as defined in the National Standard for Commercial Vessels (NSCV) Part D. The AMSA mandated practical assessment (AMPA) is a requirement for AMSA certification. The Australian Maritime Safety Authority (AMSA) mandated practical assessment (AMPA) will cover a range, but not all, of the requirements identified in the Performance Evidence and Knowledge Evidence. The AMPA shall be undertaken in accordance with its instructions.

Assessors of AMPA must hold as a minimum:

- a current certificate of competency issued under Marine Safety (Domestic Commercial Vessel) National Law Act 2012 at the same level as the qualification being assessed with at least 12 months relevant sea service, or
- a relevant seafarer certificate, as master, engineer or deck officer, issued under the Navigation Act 2012 or relevant skills and experience.

Pre-requisite Unit

Not Applicable

Competency Field

F – Operational Quality and Safety

Unit Sector

Not Applicable

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

- | | |
|--|---|
| 1 Prepare to abandon vessel | 1.1 Nature of emergency is determined to minimise potential dangers and threats

1.2 Muster and abandon vessel signals are responded to according to vessel safety procedures

1.3 Survival equipment is organised to maximise chances of survival

1.4 Emergency position indicating radio beacon (EPIRB) is operated to transmit distress signal

1.5 Distress calls are made using radio equipment on distress call frequency, if time allows, to communicate the nature of the emergency

1.6 Others are assisted to maximise their chances of survival |
| 2 Determine operational safety requirements | 2.1 Relevant maritime legislation is identified and implemented

2.2 Safety requirements for a range of near coastal vessels are identified, accessed and reviewed

2.3 Lifesaving and survival equipment required on board a near coastal vessel are accurately identified

2.4 Lifesaving equipment on board is checked and confirmed as serviceable

2.5 Lifesaving and survival equipment certificates and documentation are checked for validity

2.6 Vessel safety management systems (SMS) and plans are located, interpreted and applied |
| 3 Practise survival techniques | 3.1 Typical emergency alarms and types of alarm systems are accurately identified |

- 3.2 Need to abandon vessel is determined according to established safety practice and procedures
 - 3.3 In-water survival techniques are implemented according to established safety practice and procedures
 - 3.4 Threats to survival are identified and treatment options are outlined
- 4 Apply survival techniques**
 - 4.1 Lookout for vessels and aircraft is maintained and distress signals are released on sighting
 - 4.2 During an emergency, work is carried out collaboratively with other shipboard personnel and passengers as required
 - 4.3 During emergency and survival situations, appropriate communication skills and techniques are implemented
 - 4.4 Instructions given by rescue personnel to safely access rescue craft are followed
- 5 Operate lifesaving and survival equipment**
 - 5.1 Range of pyrotechnic and distress signals are operated according to established safety practice and procedures
 - 5.2 Survival equipment is operated according to instructions and accepted survival practice
 - 5.3 Survival radio equipment is operated according to manufacturer instructions and regulatory protocols
 - 5.4 Lifejackets and other lifesaving equipment are operated and used according to instructions
- 6 Participate in abandon vessel drills**
 - 6.1 Regulatory requirements and company procedures for musters and drills are identified and implemented
 - 6.2 Actions required for a range of muster signals are correctly identified
 - 6.3 Action is taken promptly to address problems that may arise when following vessel abandonment procedures
 - 6.4 Hazards are identified that may occur when abandoning vessel risks are minimised according to SMS, and established safety practice and procedures
 - 6.5 Information relevant to use of lifesaving equipment is accessed and applied

6.6 Range of emergencies that may lead to vessel abandonment are outlined

Foundation Skills

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

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This unit replaces and is equivalent to MARF001 Apply basic survival skills in the event of vessel abandonment.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARF027 Apply basic survival skills in the event of vessel abandonment

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- collecting, managing and interpreting information on the use of lifesaving equipment and procedures to be followed when order to abandon vessel is given
- communicating effectively with other personnel and passengers during simulated and/or actual abandon vessel musters and emergencies
- determining type and extent of emergency and appropriate survival action to be taken
- donning a lifejacket in water and:
 - assisting a survivor to don a lifejacket
 - holding heat escape lessening posture for at least 5 minutes
 - maintaining a group huddle for at least 10 minutes
 - swimming in a group conga line for a minimum of 50 metres
 - swimming in a lifejacket for a minimum of 50 metres
 - towing with a life jacket for a minimum of 25 metres
- ensuring behaviour reflects statutory requirements pertaining to lifesaving appliances
- operating radio equipment, including very high frequency (VHF) or high frequency (HF) radios
- operating and using lifesaving and survival equipment, including:
 - orange smoke flares or red handheld flares
 - life buoys
 - life jacket or personal floatation devices
- planning timing and sequence of individual survival actions to be appropriate to prevailing circumstances and conditions of emergency, and minimising potential dangers and threats to other survivors
- reading and interpreting instructions on emergency procedures, safety management systems (SMS) and plans
- recognising and interpreting alarms and muster signals appropriately
- remaining afloat without a lifejacket for at least 5 minutes.

Knowledge Evidence

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

- appropriate techniques for:
 - first aid
 - maritime communication
 - survival with a swamped, semi-submerged tender or dingy
 - using survival equipment
- action to be taken in an emergency situation
- certificates and documentation, including:
 - instructions for use of lifesaving equipment
 - lifesaving and survival equipment certificates
 - pyrotechnic expiry dates
 - record of inspection of equipment
- crew and passenger safety briefing
- construction, outfit and particular characteristics of various types of applicable survival equipment
- distress signals, their use and penalty for misuse
- emergency muster and abandon vessel signals
- emergencies that may lead to vessel abandonment
- established safety practice and procedures
- hazards, including:
 - expired pyrotechnics
 - inaccessible lifejackets
 - no defined abandon ship procedures established
 - poorly maintained equipment
- importance of being ready for any shipboard emergency, including initial actions for survival on vessel; abandonment
- location of:
 - lifesaving appliances on a vessel
 - survival equipment on vessel
- maintenance of lifesaving appliances
- person overboard combination light and smoke float
- purpose and use of relevant personal protective equipment (PPE)
- procedures for:
 - abandoning vessel
 - correctly operating and using lifesaving appliances on board vessels and survival craft, specifically donning a lifejacket, using a lifejacket light and whistle and using handheld pyrotechnics
 - emergency response on board vessels, including abandoning vessel

- regulatory requirements and company procedures for musters and drills
- relevant manufacturer guidelines relating to operating and using survival equipment, including instructions on equipment capability and limitations
- relevant maritime regulations related to required survival equipment on a vessel
- relevant work health and safety (WHS)/occupational health and safety (OHS) legislation and policies, including SMS, plans, processes and techniques
- signs of hypothermia and appropriate treatment
- search and rescue transponders (SARTs)
- standard safety symbols
- steps taken after collision, grounding or other marine casualty and resulting hull damage
- symptoms of hypothermia, its prevention and treatment and related use of protective covers and garments
- threats to survival after abandoning vessel, including dehydration and ingestion of seawater and:
 - appropriate strategies for countering these threats
 - how to minimise dangers
- using survival equipment, including:
 - emergency position indicating radio beacons (EPIRBs)
 - immersion suits
 - SARTs
- value of training and emergency drills for enhancing chances of survival at sea
- ways of maximising detectability using pyrotechnic distress signals, portable high frequency (HF) radios and EPIRBs.

Assessment Conditions

Assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment. As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment. 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.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions. Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, safety management systems, workplace procedures and operational manuals, including:
 - abandon vessel procedures
 - emergency procedures

- information on the use of lifesaving equipment
- instructions for the use of lifesaving and survival equipment
- lifesaving and survival equipment certificates
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>