



Australian Government

MARF001 Apply basic survival skills in the event of vessel abandonment

Release: 2

MARF001 Apply basic survival skills in the event of vessel abandonment

Modification History

Release 2. Range of Conditions amended to better address NSCV requirements. Mapping information has been corrected.

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to apply basic survival skills in the event of vessel abandonment.

This unit applies to deck and engine workers working in the maritime industry on vessels up to 80 metres. They could be working independently or as part of a vessel crew.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

F – Operational Quality and Safety

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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| | 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, accessed and reviewed |
| | 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 | |
| | 5.1 | Range of pyrotechnic and distress signals are operated |

and survival equipment	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 correctly interpreted
	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.

- Survival equipment must include the following:
- EPIRBs
 - flares
 - life jackets
 - immersion suit

- person overboard combination light and smoke float
 - search and rescue transponders (SARTs)
 - survival craft
- Radio equipment includes one of the following:
- high frequency (HF)
 - very high frequency (VHF)
- Lifesaving and survival equipment must include the following :
- immersion suit
 - lifebuoy
 - personal floatation devices
- Certificates and documentation must include the following:
- instructions for use of lifesaving equipment
 - pyrotechnic expiry dates
 - record of inspection of equipment
- Emergency alarms must include one or more of the following:
- electronic alarms
 - muster and abandon vessel alarms
 - verbal communication
- In-water survival techniques must include the following:
- floating with or without a lifejacket
 - heat loss techniques
 - swimming with a lifejacket
- Threats to survival include the following:
- dehydration
 - hypothermia
 - ingestion of seawater
- Rescue craft include one of the following:
- another vessel
 - helicopter
- Pyrotechnic and distress signals include the following:
- orange smoke flare
 - red handheld flare
- Risks and hazards include the following:
- expired pyrotechnics
 - inaccessible lifejackets
 - no defined abandon ship procedures established
 - poorly maintained equipment

Unit Mapping Information

This unit replaces and is equivalent to MARF1001A 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 MARF001 Apply basic survival skills in the event of vessel abandonment

Modification History

Release 2. Clarification of guidance information in Performance Evidence, Knowledge Evidence and Assessment Conditions.

Release 1. New unit of competency.

Performance Evidence

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

- activating a red or orange hand held flare
- 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 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:
 - ensuring behaviour reflects statutory requirements pertaining to lifesaving appliances
 - locating survivors in simulated darkness
 - swimming in a lifejacket for a minimum of 50 metres
 - towing with a life jacket for a minimum of 25 metres
 - remaining afloat without a lifejacket for at least 10 minutes
 - assisting a survivor to don a lifejacket
 - maintaining a group huddle for at least 10 minutes
 - swimming in a group congo line for a minimum of 50 metres
 - holding heat escape lessening posture for at least 10 minutes
- donning various lifejacket and other lifesaving apparel
- identifying signs of hypothermia and providing appropriate treatment
- operating radio equipment
- 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 and plans, and using of lifesaving and survival equipment
- recognising and interpreting muster signals appropriately for indicated emergency
- swimming in a lifejacket

Knowledge Evidence

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

- appropriate techniques for:
 - first aid
 - maritime communication
 - survival
 - survival at sea
 - survival with a swamped, semi submerged tender or dingy
 - using survival equipment
- action to be taken in an emergency situation
- crew and passenger safety briefing
- construction, outfit and particular characteristics of various types of applicable survival equipment
- emergency muster and abandon vessel signals
- emergencies that may lead to vessel abandonment
- established safety practice and procedures
- importance of being ready for any shipboard emergency including using lifesaving equipment
- initial actions for survival on vessel abandonment
- location of:
 - lifesaving appliances on a vessel
 - survival equipment on vessel
- maintenance of lifesaving appliances
- personal protective equipment (PPE):
 - purpose
 - use
- procedures for:
 - abandoning vessel
 - correctly operating and using lifesaving appliances and PPE on board vessels and survival craft, and specifically donning a lifejacket, using a lifejacket light and whistle, 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
- standard safety symbols

- steps to be 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 and:
 - appropriate strategies for countering these threats
 - how to minimise dangers
- use of distress signals and penalty for misuse
- value of training and emergency drills for enhancing chances of survival at sea
- ways of maximising detect-ability using pyrotechnic distress signals, portable high frequency (VHF) radios, satellite Emergency position indicating radio beacons (EPIRBs).

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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.

Resources for assessment must include access to:

- tools, equipment, machinery, materials and personal protective equipment currently used in industry
- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant exercises, case studies and/or simulations.

Links

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