



Australian Government

MARN004 Manage seaworthiness of a vessel up to 80 metres

Release: 1

MARN004 Manage seaworthiness of a vessel up to 80 metres

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to manage vessel in a seaworthy condition for all stages of a voyage or operation being undertaken.

This unit applies to people working in the maritime industry on a range of vessels up to 80 metres.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

N – Seamanship

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 Supervise weather tight and watertight integrity of vessel

- 1.1 Principal structural components of vessel are identified from vessel drawings to understand the function of these components in relation to conventional vessel design
- 1.2 Pumping and pipeline systems of vessel are investigated to establish survivability of vessel in case of flooding and damage control
- 1.3 Procedures for maintaining weather tight and watertight integrity of vessel are interpreted and implemented according to vessel safety management plan and regulations
- 1.4 Crew are instructed on requirements of plan and their responsibilities

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| | 1.5 | Actions are instigated to confirm weather tight and watertight integrity of vessel at all times |
| 2 Take action to meet changed sea and weather conditions | 2.1 | Weather forecasts and observations of sea and weather conditions are used to predict situations that may jeopardise vessel weather tight and watertight integrity |
| | 2.2 | Effect of severe wind and rolling in associated sea conditions on vessel weather tight and watertight integrity is recognised |
| | 2.3 | Effect of water on deck on vessel weather tight and watertight integrity is ascertained |
| | 2.4 | Appropriate action is taken to maintain vessel weather tight and watertight integrity according to organisational procedures |
| 3 Maintain records | 3.1 | Relevant documents and records are completed and maintained as required according to regulatory and organisational requirements |
| | 3.2 | Relevant documents are sent to appropriate bodies and copies are filed according to regulatory and organisational requirements |
| | 3.3 | Documents are stored according to regulatory and organisational requirements |

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

Specifies 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.

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

environment.

Structural components must include:

- design characteristics attributing to watertight integrity
- principal components of vessel structure
- structural arrangements to restrain fires
- watertight and collision bulkheads

Actions include one or more of the following:

- closing openings
- ensuring passenger distribution does not exceed allowed limits
- ensuring stores, cargo and equipment are properly stowed and lashed
- establishing procedures for restoring or managing weather tight and watertight integrity during an emergency
- maintaining stability condition within approved limits
- methods for testing tanks and other watertight openings

Relevant documents and records include one or more of the following:

- deck and official logbook entries
- notes of protest
- safety management plan

Unit Mapping Information

This is a new unit. This unit is equivalent to MARN4001A Manage seaworthiness of a vessel up to 80 metres.

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 MARN004 Manage seaworthiness of a vessel up to 80 metres

Modification History

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 and performance criteria on at least one occasion and include:

- appropriately using bilge and other pumping arrangements
- assessing damage control measures
- completing required records
- maintaining weather tight and watertight integrity of vessel
- reading and interpreting vessel specifications, drawings and operational manuals.

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:

- bilge pumping arrangements
- different vessel types
- effects of adding and removing weights, water on deck, slack tanks, rolling period, stiff and tender vessel, additions or alterations to vessels
- principal parts of vessel and their various functions
- work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices.

Assessment Conditions

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

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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