



Australian Government

MARK001 Handle a vessel up to 12 metres

Release: 2

MARK001 Handle a vessel up to 12 metres

Modification History

Release 2. Change to items in the Range of Conditions to 'include one or more of the following'. Mapping information has been corrected.

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to manoeuvre a vessel up to 12 metres in length. This includes the ability to berth, moor, anchor and manoeuvre a vessel during emergencies.

This unit applies to people working as Coxswain Grade 1 Near Coastal and Coxswain Grade 2 Near Coastal on a range of vessels up to 12 metres.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

K – Manoeuvring Vessels

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 Handle vessel in normal conditions

- 1.1 Features of vessel that relate to its handling characteristics are recognised
- 1.2 Details of manoeuvres are communicated to relevant personnel clearly and concisely using standard maritime vocabulary
- 1.3 Situational awareness is maintained to ensure safety of manoeuvres
- 1.4 Manoeuvres are completed to meet passage requirements

- 1.5 Propulsion equipment is used and monitored to assist in completing manoeuvres safely
 - 1.6 Safe operating limits of propulsion and steering equipment are not exceeded
- 2 Handle vessel in adverse weather conditions**
 - 2.1 Nature of adverse weather conditions is identified and potential impact on the manoeuvrability of the vessel is determined
 - 2.2 Appropriate action is determined to ensure the safety of the vessel
 - 2.3 Correct use of propulsion equipment is established to assist in completing manoeuvres safely
 - 2.4 Safe operating limits of propulsion and steering equipment are not exceeded
 - 2.5 Situational awareness is maintained at all times to review actions and ensure the safety of the vessel
- 3 Handle vessel in emergencies**
 - 3.1 Nature of emergency is established and required action is determined
 - 3.2 Risks to vessel and safety of persons on board are assessed and safety of required action is confirmed
 - 3.3 Details of action are communicated to relevant personnel clearly and concisely using standard maritime vocabulary
 - 3.4 Appropriate manoeuvres are made during the emergency to maintain the safety of the vessel and those on board, and any other vessels or persons involved
 - 3.5 Propulsion equipment is used and monitored to assist in completing manoeuvres safely
 - 3.6 Safe operating limits of propulsion and steering equipment are not exceeded
- 4 Tow and be towed**
 - 4.1 Preparations for towing are made safely according to established nautical practice
 - 4.2 Correct towing procedures and precautions are applied when towing and being towed

Foundation Skills

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.

Features of vessel include one or more of the following:

- displacement and planing hulls
- outboard and inboard propulsion units
- rudders and propellers
- stability
- trim and displacement

Manoeuvres include one or more of the following:

- astern movements
- berthing and leaving a berth
- berthing and unberthing in a pen
- coming to and leaving mooring
- retrieval of person overboard
- turning a vessel across tide and wind
- turning short around in a limited space

Propulsion equipment must include:

- inboard engine
- outboard engine

Adverse weather conditions include one or more of the following:

- fog and restricted visibility
- tropical revolving storm activity in the area
- wind and sea conditions that may affect the safety of the vessel

Appropriate action includes one or more of the following:

- altering course to minimise the effect of wind and sea
- deploying a sea anchor to keep vessel head to sea
- heading to wind and sea to ride out the adverse weather
- reduction of speed
- seeking shelter

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| Nature of emergency includes one or more of the following: | <ul style="list-style-type: none">• beaching• collision• disabled or partially disabled vessel• grounding• person overboard |
| Preparations for towing must include: | <ul style="list-style-type: none">• communication with towed vessel• means of transferring towing line to or from the towed vessel• preparation of towing lines appropriate for the tow |
| Correct towing procedures must include: | <ul style="list-style-type: none">• if the tow is manned, means of communication must be available• methods of securing the tow line must be capable of being slipped• towing lines and associated equipment must be of sufficient strength to ensure the tow can be safely conducted |

Unit Mapping Information

This unit replaces and is equivalent to MARK2001A Handle a vessel up to 12 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 MARK001 Handle a vessel up to 12 metres

Modification History

Release 2. Additional information on adverse weather conditions included in Knowledge Evidence (KE). Clarification of guidance information in Performance Evidence, KE 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:

- anchoring a vessel
- handling a disabled or partially disabled vessel
- manoeuvring a vessel in:
 - vicinity of large vessels
- manoeuvring a vessel through:
 - berthing and leaving a berth in various wind and tidal conditions
 - berthing and unberthing in a pen
 - coming to and leaving a mooring
 - person overboard
 - steering astern through an 's' configuration
 - towing and being towed in varying weather conditions
 - turning short around in a limited space
 - turning a vessel across the tide across the wind
- manoeuvring to beach and refloat the vessel
- maintaining situational awareness
- using appropriate communication.

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:

- adverse weather conditions including:
 - fog and restricted visibility
 - tropical revolving storm activity in the area
 - wind and sea conditions that may affect the safety of the vessel.
- avoidance of tropical revolving storm activity
- effects of:
 - displacement and planing hulls
 - jet units
 - outboard and inboard propulsion units
 - rudders and propellers
- features of a vessel that relate to its handling characteristics
- manoeuvring characteristics of small power-driven vessels (heavily laden and lightly laden)
- manoeuvring a vessel in bad weather
- maritime publications and procedures relating to emergency response
- procedures for towing and being towed
- stability of a small vessel and stability terms
- techniques for crossing a coastal bar with and against the sea
- techniques for handling a vessel in heavy swell and surf
- trim and displacement
- use of a sea anchor
- 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 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.

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