



**Australian Government**

# **MARN009 Perform seamanship operations on board a vessel up to 24 metres**

**Release: 2**

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## Modification History

**Release 2.** This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor statement changes in Assessment Conditions.

**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 practical seamanship skills and techniques as part of operations on board a vessel up to 24 metres.

This unit applies to people working in the maritime industry in the capacity of:

- Master up to 24 metres Near Coastal
- Master Inland Waters.

## 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 Master Inland Waters and Master up to 24m Near Coastal as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

## Pre-requisite Unit

Not Applicable.

## Competency Field

N – Seamanship

## 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 Use and maintain ropes and wires

- 1.1 Knots, hitches and bends using rope are correctly made and used in the course of operations on board a vessel
- 1.2 Ropes are spliced neatly and securely according to their correct application and rope ends are whipped, where appropriate, to maintain good condition
- 1.3 Breaking strain and safe working loads of rope and wire are determined and applied as load limits in the course of operations on board a vessel
- 1.4 Wear and damage to rope and wire are recognised
- 1.5 Rope and wire are maintained and stored according to organisational procedures

#### 2 Operate lifting gear

- 2.1 Lifting gear is checked and prepared for operation prior to use
- 2.2 Defective lifting gear is isolated and reported according to organisational procedures
- 2.3 Loads are correctly attached using appropriate slings and rigging gear according to organisational procedures and safety requirements
- 2.4 Maximum and safe working load limits are determined and not exceeded
- 2.5 Lifting gear is safely operated to carry out operations

#### 3 Secure vessel at anchor

- 3.1 Prior to letting go, anchor and equipment are prepared and crew is briefed
- 3.2 Quantity of anchor cable run out or recovered is appropriate to depth of water, weather and sea conditions, and tidal range in area of operation
- 3.3 Control of cable is maintained within safe operating limits during anchoring operations
- 3.4 Degree to which anchor and equipment are secured on completion of anchoring operations is appropriate to

|                                               |     |                                                                                                                                                                                                       |
|-----------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               |     | forecast conditions                                                                                                                                                                                   |
|                                               | 3.5 | Anchoring area is kept free of loose ropes, wires and debris during all operations                                                                                                                    |
| 4 Secure vessel at a berth                    | 4.1 | Mooring lines and associated equipment are handled safely at all times                                                                                                                                |
|                                               | 4.2 | Mooring area is kept free of loose ropes, wires and debris throughout operations                                                                                                                      |
|                                               | 4.3 | Tension on ropes is maintained at an appropriate level for stage and nature of the operation                                                                                                          |
|                                               | 4.4 | Tension on shore-power leads and other umbilicals is monitored                                                                                                                                        |
| 5 Check condition and seaworthiness of vessel | 5.1 | Coverage and frequency of checks and inspections on vessel seaworthiness are undertaken according to organisational procedures                                                                        |
|                                               | 5.2 | Watertight integrity is checked and appropriate action is taken to prepare for prevailing and forecast weather and sea conditions according to vessel seaworthiness plans and regulatory requirements |
|                                               | 5.3 | Vessel is secured to degree which is appropriate to prevailing and forecast conditions                                                                                                                |
|                                               | 5.4 | Irregularities are identified and appropriate action is taken to rectify the situation                                                                                                                |
|                                               | 5.5 | Irregularities beyond ability to rectify are reported in time to enable remedial action to be taken                                                                                                   |
|                                               | 5.6 | Reports of vessel condition are completed according to organisational procedures                                                                                                                      |
| 6 Check stability of vessel                   | 6.1 | Information from vessel stability data book is used to determine loading limits and displacement from draft                                                                                           |
|                                               | 6.2 | Stability conditions for proposed nature of voyage and operations are confirmed and required stress and stability criteria are met                                                                    |
| 7 Perform tasks aloft and over vessel side    | 7.1 | Area and equipment for working aloft or over the side are prepared according to organisational procedures                                                                                             |
|                                               | 7.2 | Required precautions are taken when working aloft or over the side                                                                                                                                    |

- 7.3 Chairs, safety harnesses and appropriate safety equipment are used according to organisational procedures
  - 7.4 Portable ladders are used correctly to perform tasks
  - 7.5 Tasks are completed safely according to instructions
  - 7.6 Equipment is inspected, maintained and stored after use according to organisational procedures
- 8 Lash and secure stores, cargo and access ways**
  - 8.1 Lashing equipment is inspected, maintained and correctly stored after use according to organisational procedures
  - 8.2 Cargo is stowed according to recognised principles and organisational procedures relating to transport and handling of dangerous goods
  - 8.3 Cargo is lashed and secured according to recognised principles and organisational procedures
  - 8.4 Equipment and items on deck and in galley spaces are secured according to organisational procedures
  - 8.5 Personnel access ways are rigged and secured according to organisational procedures
  - 8.6 Accommodation spaces and personnel facilities on board vessel are checked and correctly secured for sea according to organisational procedures
- 9 Supervise refuelling operations**
  - 9.1 Personal protective equipment (PPE) is accessed and used
  - 9.2 Amount of fuel required is calculated
  - 9.3 Instructions are provided to ensure safety boundary for refuelling process is established
  - 9.4 Spill prevention systems are correctly deployed
  - 9.5 Instructions are provided to ensure refuelling operations are performed safely
  - 9.6 Notification of intention to refuel is made to authorities and other nearby operations

## 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 MARN003 Perform seamanship operations on board a vessel up to 24 metres.

## Links

Companion Volume Implementation Guides are found in VETNet -

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