



**Australian Government**

# **MARC014 Operate deck machinery and steering gear on a vessel up to 80 metres**

**Release: 1**

# MARC014 Operate deck machinery and steering gear on a vessel up to 80 metres

## Modification History

Release 1. New unit of competency.

## Application

This unit involves the skills and knowledge required to operate steering gear and deck machinery on a vessel up to 80 metres.

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

C – Equipment Operations

## 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 for operation**

- 1.1 Routine pre-operational checks of steering gear or deck machinery are completed prior to use according to manufacturer specifications and organisational procedures
- 1.2 Equipment is set up
- 1.3 Tools and equipment appropriate to work requirements are selected, checked for safety and set up for operation
- 1.4 Equipment faults or malfunctions are identified and reported according to organisational procedures
- 1.5 Work health and safety (WHS)/occupational health and safety (OHS) hazards in the work area are identified, and

- risks are assessed and reported according to organisational procedures
- 2 Operate steering gear and deck machinery**
- 2.1 Suitable personal protective equipment is selected and used according to organisational procedures
  - 2.2 Steering gear and deck machinery are operated in a safe and controlled manner
  - 2.3 Performance and efficiency of steering gear and deck machinery operations is monitored
  - 2.4 Safe operational practices are used to anticipate and control hazards
  - 2.5 Adverse sea and weather conditions which may impact on the operation of steering gear and deck machinery are identified and operational practices are adjusted to maintain safety of vessel and personnel
- 3 Complete operations**
- 3.1 Shut-down procedures are conducted according to manufacturer instructions and organisational procedures
  - 3.2 Malfunctions, faults, irregular performance or damage to steering gear and deck machinery are reported according to organisational procedures
  - 3.3 Steering gear and deck machinery is cleaned and secured according to organisational procedures
  - 3.4 Operational records are completed according to organisational procedures

## 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.

- Steering gear or deck machinery includes one or more of the following:
- basic hydraulic systems
  - cranes
  - emergency steering gear
  - fishing gear
  - steering gear
  - winches and capstans
  - windlass

## Unit Mapping Information

This is a new unit. This unit is equivalent to MARC4004A Operate deck machinery and steering gear on 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 MARC014 Operate deck machinery and steering gear on 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:

- communicating effectively with others
- completing required records relating to the operation of steering gear and deck machinery
- following work schedules laid down in organisational instructions and safety management systems
- initiating and operating emergency steering systems
- reading, interpreting and applying instructions on the operation of steering gear and deck machinery
- recognising faulty equipment and taking appropriate action
- recognising routine hazards and problems while operating steering gear and deck machinery
- selecting and using relevant tools and equipment
- working safely and collaboratively with others when operating and maintaining deck machinery and steering gear.

## 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:

- basic principles of hydraulics
- communication techniques and signals needed during the operation of steering gear and deck machinery on vessels up to 80 metres
- principal features and operating characteristics of steering gear and deck machinery used on vessels up to 80 metres
- problems related to the operation of steering gear and deck machinery and appropriate actions and solutions
- procedures for checking and inspecting steering gear and deck machinery used on vessels up to 80 metres
- procedures for the safe operation of steering gear and deck machinery
- procedures for, and operation of, emergency steering systems
- records that must be maintained on a vessel up to 80 metres

- relevant state and territory maritime work health and safety (WHS)/occupational health and safety (OHS) and pollution control regulations and policies
- safety, environmental and hazard control precautions and procedures relevant to the operation of steering gear and deck machinery.

## 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 currently used in industry including:
  - greasing and lubrication tools
  - hand and power tools, including screwdrivers, drills, grinders, spanners, wrenches, wire cutters.
  - protective clothing and equipment
- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant exercises, case studies and/or simulations.

## Links

Companion Volume implementation guides are found in VETNet -

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