



Australian Government

MARN001 Apply general purpose hand skills aboard a vessel

Release: 1

MARN001 Apply general purpose hand skills aboard a vessel

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to perform general purpose hand duties aboard a vessel.

This unit applies to general purpose hands 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

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 Use and maintain ropes

- 1.1 Rope types and common areas of use are correctly identified
- 1.2 Ropes are checked for wear and any damage is reported according to workplace procedures
- 1.3 Ropes are coiled and stowed correctly
- 1.4 Knots and hitches are tied neatly and securely, and are used according to their correct application
- 1.5 Ropes are spliced neatly and securely according to their correct application and rope ends are whipped where instructed, to maintain good condition

2 Operate deck

- 2.1 Prior to use, deck machinery is checked and prepared for

machinery and emergency stops	operation
	2.2 Operations are carried out safely according to instructions and standard operating procedures (SOPs) or organisational safety management system (SMS)
	2.3 Emergency stops on motor and machinery are operated in response to an emergency situation
3 Assist in securing vessel at anchor	3.1 Prior to letting go, anchor and equipment are prepared as instructed and organisational communications are followed
	3.2 Instructions provided are complied with in relation to quantity of anchor cable run out or recovered
	3.3 During operation, control of cable is maintained within safe operating limits
	3.4 On completion of anchoring operations, anchor and equipment are secured according to instructions
	3.5 Throughout all operations, anchoring area is kept free of loose ropes, wires and debris
4 Assist in securing and adjusting vessel position during mooring operations	4.1 At all times, mooring lines and associated equipment are handled safely
	4.2 Mooring plan and organisational communications are followed
	4.3 Throughout mooring operations, mooring area is kept free of loose ropes, wires and debris
	4.4 Tension on ropes is maintained at an appropriate level for the stage and nature of the operation
	4.5 Mooring lines are secured according to instructions provided
	4.6 Equipment malfunction or problems encountered during operations are promptly reported
5 Assist in securing vessel for sea	5.1 Cargo and cargo handling equipment are checked to ensure they are stowed securely
	5.2 Hatches and openings are checked to ensure they are secured as required
	5.3 Maintenance equipment is returned to storage location and secured

- 5.4 Assistance is provided in testing equipment as instructed
- 5.5 All mooring lines are stowed and secured
- 5.6 Assistance is provided in stowing the gangway
- 6 Perform tasks aloft and over vessel side**
 - 6.1 Area and equipment for working aloft or over the side are prepared as instructed
 - 6.2 Required precautions are taken when working aloft or over the side
 - 6.3 Chairs, safety harnesses and appropriate safety equipment are used according to workplace procedures
 - 6.4 Tasks are completed safely according to instructions and organisational SMS
 - 6.5 After use, equipment is maintained and stored
- 7 Assist with safe refuelling operations**
 - 7.1 All personal protective equipment is accessed and used
 - 7.2 Safety boundary for the refuelling process is established
 - 7.3 Instructions are followed to ensure spill prevention systems are correctly deployed
 - 7.4 Instructions are followed in completing tasks related to the refuelling or fuel transfer process

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.

Rope types include one or more of the following:

- braided
- Kevlar
- natural fibre
- polyester
- plaited
- wire core rope
- wire rope

Knots and hitches must include:

- bowline
- clove hitch
- eye splice
- reef knot
- round turn and two half hitches
- rolling hitch
- short splice

Deck machinery includes one or more of the following:

- capstans
- cranes
- derricks
- winches
- windlasses

Operations must include:

- anchoring in varying weather conditions
- berthing and unberthing
- loading or discharging

Mooring lines include one or more of the following:

- back springs
- bow and stern ropes
- breast lines
- fore and aft springs

Mooring operations include one or more of the following:

- adjustments from both fore and aft mooring positions
- making fast and letting go to a single-point mooring
- making fast and letting go fore and aft to a wharf
- rigging and recovering means of access to the vessel

Tasks include one or more
of the following:

- hull maintenance
- painting
- renewing wires and ropes

Unit Mapping Information

This is a new unit. This unit is equivalent to MARN1001A Apply general purpose hand skills aboard a vessel.

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 MARN001 Apply general purpose hand skills aboard a vessel

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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:

- anchoring in varying weather conditions
- assisting in different types of mooring operations
- handling ropes and wires
- implementing safe and environmentally responsible work practices
- lashing cargo
- performing an eye splice, back splice and a short splice
- performing common whipping on ropes
- securing equipment and objects for sea passage, transit in port or ready for use
- tying common knots, bends and hitches
- using capstans
- using cranes and derricks
- using different anchoring and mooring winches
- using synthetic rope and wire mooring lines.

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:

- anchor cable markings
- characteristics of different types of mooring ropes
- construction of different types of rope
- correct application of common knots, bends and hitches
- correct terminology
- different configurations of mooring lines for various parts of a vessel
- different types of anchor
- emergency stop procedures
- hazards that could occur if the operation is not properly controlled
- maintenance of different types of rope
- means of access
- organisational:

- safety management system (SMS)
- standard operating procedures (SOPs)
- procedures for working in confined spaces
- refuelling procedures
- requirements for access equipment
- 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.

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