



Australian Government

MARN010 Apply general purpose hand skills aboard a vessel

Release: 1

MARN010 Apply general purpose hand skills aboard a vessel

Modification History

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package.

Application

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

It includes using and maintaining ropes, operating deck machinery and emergency stops, assisting in securing vessel at anchor, assisting in securing and adjusting vessel position during mooring operations, assisting in securing vessel for sea, performing tasks aloft and over vessel side, and assisting with safe refuelling operations.

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

- assistant to the Master or Engineer of a vessel working under their direct supervision
- worker on deck or in the engine room of a vessel less than 80 metres in length within the exclusive economic zone (EEZ)
- worker in the engine room only for a vessel with propulsion power less than 3000 kW.

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 General Purpose Hand Near Coastal as defined in the National Standard for Commercial Vessels (NSCV) Part D.

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.

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| 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 machinery and emergency stops | 2.1 Deck machinery is checked, prior to use, and prepared for operation |
| | 2.2 Operations are carried out safely according to instructions and operating procedures 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 Control of anchor cable is maintained within safe operating limits during operation |
| | 3.4 Anchor and equipment are secured on completion of anchoring operations according to instructions |
| | 3.5 Anchoring area is kept free of loose ropes, wires and debris throughout all operations |
| 4 Assist in securing and adjusting vessel position | 4.1 Mooring lines and associated equipment are handled safely at all times |

during mooring operations

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| | 4.2 | Mooring plan and organisational communications are followed |
| | 4.3 | Mooring area is kept free of loose ropes, wires and debris throughout mooring operations |
| | 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 | Equipment is maintained and stored after use |
| 7 | Assist with safe refuelling operations | |
| | 7.1 | Personal protective equipment (PPE) 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

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 MARN001 Apply general purpose hand skills aboard a vessel.

Links

Companion Volume implementation guide can be found in VetNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARN010 Apply general purpose hand skills aboard a vessel

Modification History

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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:

- assisting in different types of mooring operations
- assisting in the performance of common operations, including:
 - berthing and unberthing
 - rigging and recovering means of access to the vessel
- assisting in preparation and anchoring the vessel
- following safe work practices during mooring operations
- handling ropes and wires
- performing an eye splice, back splice and a short splice
- performing common whipping on ropes
- tying common knots, bends and hitches, including:
 - bowline
 - clove hitch
 - reef knot
 - round turn and two half hitches
 - rolling hitch
- using different types of deck machinery
- using synthetic rope 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
- anchoring the vessel in varying weather conditions
- characteristics, care and maintenance of different types of ropes
- correct application of common knots, bends and hitches, including:
 - bowline
 - clove hitch

- eye splice
- reef knot
- round turn and two half hitches
- rolling hitch
- short splice
- correct nautical terminology
- different configurations of mooring lines for various parts of a vessel, including:
 - back springs
 - bow and stern ropes
 - breast lines
 - fore and aft springs
- different types of anchors
- hazards and procedures associated with refuelling
- hazards associated with confined spaces
- hazards that could occur if the operation is not properly controlled
- procedures for:
 - lashing cargo
 - loading or discharging
 - making adjustments from both fore and aft mooring positions
 - making fast and letting go fore and aft to a wharf
 - making fast and letting go to a single-point mooring
- requirements and means of access to the vessel
- safe and environmentally responsible work practices
- safety management system (SMS)
- securing equipment and objects for sea passage, transit in port or ready for use
- work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices.

Assessment Conditions

Assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse

weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- a commercial vessel
- applicable documentation, such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- tools, equipment, machinery, materials and personal protective equipment (PPE) currently used in industry.

Links

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