



Australian Government

MARC058 Perform rigging on board a vessel

Release: 1

MARC058 Perform rigging on board 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 basic rigging operations and to use associated equipment in the maritime industry.

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

- Able Seafarer – Deck or Integrated Rating who apply safe work practices when undertaking basic rigging on a range of vessels.

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 an Able Seafarer- Deck or Integrated Rating and to meet regulatory requirements this unit must be delivered consistent with Marine Orders and with the relevant sections of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

Pre-requisite Unit

Not applicable.

Competency Field

C – Equipment Operations

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 Rig and maintain personnel and pilot access ways | 1.1 Personnel access equipment is checked and correctly rigged according to workplace procedures and applicable standards |
| | 1.2 Requirements and recommendations for safe access by alternative means are identified and organised according to workplace procedures and recognised standards |
| 2 Perform tasks aloft and over vessel's side | 2.1 Site and equipment for working aloft and over the side are prepared according to workplace procedures and recognised standards |
| | 2.2 Required precautions are taken when working aloft or over the side |
| | 2.3 Chairs, stages, safety harnesses and appropriate safety equipment are used according to workplace procedures and applicable standards |
| | 2.4 Portable ladders are correctly used and maintained |
| | 2.5 Equipment used when working aloft and over the side is correctly maintained and stored |
| 3 Lash and secure cargo | 3.1 Lashing equipment is inspected and maintained according to workplace procedures and applicable standards |
| | 3.2 Faulty lashing equipment is identified and isolated, reported and maintained according to workplace procedures and applicable standards |
| | 3.3 Cargo is lashed and secured according to workplace procedures and applicable standards |
| | 3.4 Appropriate consideration is given to effects of vessel's motion on stowed cargo when lashing cargo |
| | 3.5 Lashing equipment is correctly stored after use |
| | 3.6 Loads are correctly rigged using appropriate ropes and rigging gear according to workplace procedures and safety requirements |
| | 3.7 Effective communication is maintained with crew to ensure the safety and integrity of the vessel and crew |

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 MARC029 Perform rigging on board 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 MARC058 Perform rigging on board 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:

- adapting to differences in vessels, equipment and standard operating procedures (SOPs)
- applying rigging operations and using associated equipment in accordance with safe working practices, including:
 - checking and using rigging gear when rigging loads
 - lashing cargo in a range of situations
 - rigging a sea anchor to control a specified rate and direction of drift and/or angle to sea
 - rigging accommodation ladders, gangways and man baskets
 - rigging and unrigging pilot ladders and hoists
 - splicing natural fibre and synthetic ropes
 - using and maintaining ropes, wires and chains
- applying rigging operations under normal and adverse conditions of sea and weather, including:
 - during berthing and unberthing operations
 - when berthed, anchored or moored
 - while anchoring or mooring
 - while underway
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices
- communicating with other personnel using effective:
 - listening techniques
 - questioning to confirm understanding
 - verbal and non-verbal language
- completing work systematically with required attention to detail
- complying with relevant maritime regulations
- following required work schedule in accordance with company requirements
- reading and applying instructions, safety and SOPs and precautions, including:
 - housekeeping processes
 - International Safety Management (ISM) Code and safety management system (SMS)

- procedures
 - manufacturer guidelines
 - shipboard rigging procedures
 - WHS/OHS regulations and hazard prevention policies and procedures
- recognising routine problems during rigging operations on a vessel
- selecting and using rigging and lifting slings and equipment according to operating instructions
- taking actions to promptly report and/or rectify accidents, safety incidents and operational problems according to regulations and procedures
- tying required knots and demonstrating rope handling skills, including:
 - back splice
 - becket/buntline hitch
 - bowline
 - clove hitch
 - common seizing
 - common whipping
 - double sheet bend
 - eye splice
 - figure of eight
 - marlin spike hitch
 - racking seizing
 - reef knot
 - rolling hitch
 - sail maker's whipping
 - sheep shank
 - sheet bend
 - short splice
 - timber hitch
 - truckie hitch
 - west country whipping
- working safely and collaboratively with others during rigging operations on a vessel.

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:

- applicable sections of relevant maritime regulations
- appropriate use and selection of personal protective equipment (PPE)
- breaking strain and safe working load for slings and equipment
- cargo to be lashed, including:

- containers
- general cargo
- roll-on and roll-off (ro-ro) vehicles
- timber deck cargo
- legal requirements for constructing a pilot ladder
- maintenance and storage procedures for equipment used when working aloft or over the side
- maritime communication techniques
- personnel access equipment, including:
 - accommodation ladders
 - brows
 - combined pilot accommodation ladders and pilot hoists
 - gangways
 - personnel baskets
 - pilot ladders
- precautions and procedures for working aloft and over the side
- principles and procedures for lashing and securing cargo, including inspection and maintenance requirements for lashing equipment
- principles of rigging equipment, deterioration and care, and maintenance requirements for different types of rope and wire
- procedures for rigging and preparing personnel access ways
- procedures for rigging and unrigging pilot ladders, hoists, rat-guards and gangways
- procedures for splicing natural fibre and synthetic ropes
- relevant WHS/OHS requirements and work practices
- type and function of rigging, safety and associated equipment, and their limitations
- types of knots, bends and hitches in common use, their characteristics, applications and limitations, and methods of tying them using synthetic and fibre rope of varying construction and size.

Assessment Conditions

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within 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:

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

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