



Australian Government

MARA015 Contribute to safe anchor handling and towing operations

Release: 1

MARA015 Contribute to safe anchor handling and towing operations

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 undertake a range of offshore anchor handling and towing activities on board an Anchor Handling Tug Supply (AHTS) vessel within the limits of responsibility of an Integrated Rating and under the direction of the officer in charge or Master.

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

- Integrated Rating working offshore, assigned to specific anchor handling and towing duties and responsibilities.

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 Integrated Ratings working offshore 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).
- Those regulatory requirements include STCW International Maritime Organization (IMO) model course competencies and areas of knowledge, understanding and proficiency, together with the estimated total hours required for lectures and practical exercises. Teaching staff should note that timings are suggestions only and should be adapted to suit individual groups of trainees depending on their experience, ability, equipment and staff available for training.

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 Recognise types of anchor handling and towing equipment, vessels and towed objects | 1.1 Required safety precautions, including fatigue management, are identified

1.2 Features of various AHTS are outlined

1.3 Types of anchor handling and towing operations are identified

1.4 Properties of towed objects are identified and their impact on safety, the environment and vessel operations is recognised

1.5 Properties of anchor handling and towing equipment and tools are identified and their impact on safety and vessel operations is recognised

1.6 Hazards associated with anchor handling and towing are identified

1.7 Hazard controls associated with anchor handling and towing are employed according to organisational procedures |
| 2 Prepare anchor handling and towing deck equipment, tools and machinery for use | 2.1 Appropriate personal protective equipment (PPE) and machinery are selected, used and stored according to work health and safety (WHS)/occupational health and safety (OHS) requirements

2.2 Routine pre-operational checks are carried out on anchor handling and towing deck equipment, tools and machinery according to manufacturer specifications, regulatory and organisational requirements

2.3 Deviations from normal operations are promptly identified and rectified |

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| | 2.4 | Adjustments are made to achieve a safe and efficient operation |
| | 2.5 | Inability to start machinery is reported promptly and accurately to appropriate personnel |
| 3 | Operate anchor handling and towing deck tools and equipment | |
| | 3.1 | Deck equipment, tools and machinery are operated in a safe and controlled manner within defined operating limits when running to achieve optimum safety and efficiency |
| | 3.2 | Deviations from normal operations are promptly identified |
| | 3.3 | Action is taken to rectify basic operational faults to maintain optimum safety and efficiency |
| | 3.4 | Appropriate action is taken in a malfunction or emergency |
| 4 | Check and complete anchor handling and towing deck equipment, tools and machinery operations | |
| | 4.1 | Equipment and machinery shutdown procedures are carried out according to manufacturer specifications and organisational procedures |
| | 4.2 | Equipment and machinery damage, malfunctions or irregular performance are recorded and reported according to organisational procedures |

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 MARA008 Contribute to safe anchor handling and towing operations

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 MARAO15 Contribute to safe anchor handling and towing operations

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:

- following manufacturer recommendations, regulations and vessel operating procedures
- identifying and taking appropriate action to rectify an operational fault
- implementing and working in a safe and controlled manner
- maintaining safe workloads within ships specifications
- selecting and using appropriate machinery and equipment
- undertaking pre-operational checks
- using anchor handling, towing and deck equipment
- using deck machinery
- using deck tools
- using operational techniques for specific location, operation and weather conditions
- using verbal and non-verbal means of communication in a clear and appropriate manner to effectively communicate with other crew members.

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 handling and towing equipment, including:
 - capstan winches
 - towing pins
 - towing winches
 - tugger winches
 - wire stoppers/shark jaws
 - working winches
- anchor handling and towing tools, including:
 - anchors
 - buoys (surface and subsea)
 - capstan winches and wires
 - capstans
 - chains
 - connecting links (kenter, baldt, hinge and pear)
 - fibre rope
 - gob arrangements
 - grapnels
 - J hooks
 - oil rig cranes
 - shackles
 - swivels
 - towed barges
 - towed rigs
 - towing pins
 - tugger winches and wires
 - wire stoppers/shark jaws
 - wires (towing and work)
- legislation and guidance affecting anchor handling and towing operations
- operational faults, including:
 - breakage of wire
 - failure of deck tools and equipment
 - machinery breakdowns
- pre-operational checks, including:
 - deck equipment
 - equipment operational readiness
 - inspecting safety guards
 - pre-start and safety checks, including:

- emergency stops
 - oils, greases and lubricants
- safe and controlled manner, including:
 - maintaining safe workloads within ships specifications, including:
 - safe working load (SWL)
 - working load limit (WLL)
 - selecting and using appropriate machinery and equipment
 - using operational techniques for specific location, operation and weather conditions
- safe working procedures
- terminology and abbreviations used in the maritime industry specific to anchor handling and towing operations
- work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

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.

Practical assessment must occur onboard an Anchor Handling Tug Supply (AHTS) vessel using workplace operational situations, 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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