



Australian Government

MARN019 Command and manage a voyage on a vessel up to 45 metres (Near coastal)

Release: 1

MARN019 Command and manage a voyage on a vessel up to 45 metres (Near coastal)

Modification History

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

Application

This unit involves the skills and knowledge required to command and manage a near coastal voyage on a vessel up to 45 metres.

This unit applies to people working in the maritime industry in the capacity of Master up to 45 metres Near Coastal.

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 Master up to 45 metres Near Coastal as specified in the Marine Order 505.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not applicable.

Competency Field

N – Seamanship

Unit Sector

Near Coastal

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Manage vessel passage planning

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Navigational charting systems, nautical publications and related documentation are accessed and checked for

currency

- 1.2** Navigational hazards relevant to proposed voyage are identified in accordance with workplace procedures
 - 1.3** Route for voyage is determined and critical points along proposed route of voyage are identified and plotted
 - 1.4** Potential navigational contingencies and problems along planned route are identified and appropriate strategies for dealing with them are developed and recorded
 - 1.5** Weather forecasts are obtained and interpreted, and weather and sea condition hazards relevant to proposed voyage are identified prior to departure
 - 1.6** Safe havens are identified and plotted relevant to proposed voyage
 - 1.7** Planned route for voyage and strategies for dealing with critical situations and contingencies along route are recorded
- 2 Command a watch on a vessel whilst undertaking a voyage**
- 2.1** Operational performance and accuracy of wheelhouse equipment is managed, confirmed and appropriate actions are taken in accordance with workplace procedures
 - 2.2** Vessel checks and inspections are managed in accordance with workplace procedures and regulatory requirements
 - 2.3** Appropriate actions are taken in the event of irregularities or abnormal conditions to maximise the safety and integrity of the vessel
 - 2.4** Proper watch is managed at all times in accordance with workplace procedures and regulatory requirements when at sea
 - 2.5** Frequency and extent of monitoring traffic, vessel and environment are managed in accordance with workplace procedures and regulatory requirements
 - 2.6** Clear and concise roles and responsibilities of watchkeeping team are established and communicated when at sea

- 2.7** Bridge communications systems are used in accordance with workplace procedures and regulatory requirements
 - 2.8** Log and record books are managed in accordance with workplace procedures and regulatory requirements
 - 2.9** Instructions are provided to watchkeepers and lookouts on requirements in relation to monitoring traffic, vessel safety and environment
- 3 Manage responses to potential emergency situations**
 - 3.1** Potential watchkeeping problems and abnormal situations are communicated to crew in accordance with workplace procedures
 - 3.2** Emergencies and distress signals are recognised, communicated and acted upon in accordance with workplace procedures and regulatory requirements
 - 3.3** Potential collision situations are analysed, and safe actions taken to avoid collision in accordance with workplace procedures and regulatory requirements
 - 3.4** Standard watchkeeping principles are implemented and managed, when taking over bridge watch from officer of the watch, in accordance with workplace procedures
- 4 Explain collision regulations and role of aids to navigation**
 - 4.1** Convention on the International Regulations for Preventing Collisions at Sea application and intent are described
 - 4.2** Bridge navigational aids and equipment to assist in the safe navigation of vessel and/or vessel traffic are described
- 5 Manage and operate the use of radar to navigate safely**
 - 5.1** Radar is operated according to manufacturer instructions to produce data on position and speed of vessel, other vessels and fixed objects
 - 5.2** Radar plot is constructed on a radar plotting sheet and automatic plotting devices
 - 5.3** Systematic radar observations of vessels in the vicinity are made where there is a risk of collision
 - 5.4** Radar data is used to obtain a position fix for vessel using electronic bearing lines and variable range markers
 - 5.5** Radar bearings are corrected for vessel heading and

compass error as appropriate

- 5.6** Radar plotting data is analysed to anticipate potential collisions
 - 5.7** Analysis is used to make informed command decisions on action needed to avoid collisions
- 6 Manage wheelhouse navigation equipment in conducting a voyage**
- 6.1** Wheelhouse navigation equipment is safely and efficiently used to conduct navigation of the vessel
 - 6.2** Position of vessel is monitored using wheelhouse navigation equipment during voyage to ensure planned passage is followed
 - 6.3** Movement and position of vessels in the vicinity are monitored using wheelhouse navigation equipment to ensure collision situations do not occur
 - 6.4** Wheelhouse navigation equipment is checked in accordance with manufacturer requirements and workplace procedures and regulatory requirements

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.

Non-essential conditions may be found in the Maritime Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. No equivalent unit.

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 MARN019 Command and manage a voyage on a vessel up to 45 metres (Near coastal)

Modification History

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

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:

- applying hazard avoidance techniques in passage planning
- communicating effectively with others about watchkeeping issues, arrangements and requirements
- completing and maintaining required records relevant to planning and navigating a passage
- managing a vessel pre-departure checks of navigation equipment
- determining and communicating required actions for a range of abnormal and emergency situations in accordance with workplace procedures (and safety management systems (SMS))
- developing and implementing a passage plan taking into account:
 - anticipated weather conditions
 - courses to steer
 - depths of water throughout passage
 - estimated time of arrival (ETA) at destination
 - knowledge of navigation markers during passage
 - tidal information
- ensuring lights, shapes and sound signals are correctly recognised and acted upon when conducting a voyage
- issuing helm and engine orders
- maintaining and reporting on vessel and external changes for situational awareness when conducting a voyage
- manoeuvring a vessel in normal and emergency situations
- monitoring and anticipating hazards and risks that may arise during watchkeeping duties and taking appropriate actions
- selecting and using relevant navigational equipment required for planning and navigating a vessel passage
- managing crew fatigue in accordance with workplace procedures (and safety management systems (SMS))
- managing navigation watch on an appropriately equipped vessel greater than or equal to 12 metres in length on at least two separate occasions including:
 - automatic identification system (AIS)
 - barometer

- compass
- complying with regulations for preventing collisions at sea
- day/night watch
- depth sounders
- electronic charts
- in port watch
- marine radio
- radar
- radar plotting aid
- safe navigation of the 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:

- automatic radar plotting aid (ARPA)
- bridge instrumentation, controls and alarms relevant to the function of watchkeeper
- Convention on the International Regulations for Preventing Collisions at Sea (COLREG - Preventing collisions at sea)
- effects of deadweight, draught, trim, speed, under keel clearance, tide and current on vessel's stopping distance and rate of turn
- factors to be considered when conducting a passage, including:
 - buoyage
 - navigational hazards
 - overall passage plan requirements
 - prevailing weather and sea conditions
 - proximity and course of other vessels
- functions and responsibilities of the wheelhouse team on board a vessel
- identification and appropriate actions in the event of abnormal situations that may arise during watchkeeping
- implement safety management system requirements
- interaction with passing vessels, squat, shallow water and banks effect
- manoeuvres assisting a vessel or aircraft in distress
- navigational charting systems including paper and/or electronic systems
- navigational hazards and implications for watchkeeping
- radio communication system
- relevant sections of state and territory marine regulations and marine orders
- situational awareness including:
 - factors to be considered in maintaining situational awareness
 - predicting how this will affect the vessel
 - determination of relevant passage

- tools for determining passage-risk collision
- passage patterns
- provision of navigational support
- watchkeeping standards including watchkeeping duties arrangements and principles.

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.

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 workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate normal range of vessel 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
- an appropriately equipped commercial vessel greater than or equal to 12 metres in length
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

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