



Australian Government

MARO009 Maintain a safe navigational watch

Release: 2

MARO009 Maintain a safe navigational watch

Modification History

Release 2. This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor wording changes to Performance Evidence.

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 apply the accepted principles and procedures to maintain a safe navigational watch according to bridge resource management principles, to ensure a safe navigational watch on a vessel, deal with maritime emergencies, incidents and to a distress signal at sea.

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

- Master Unlimited
- Master up to 100 metres Near Coastal
- Master up to 500 gross tonnages (GT)
- Watchkeeper Deck.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

- 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.

Near Coastal Qualifications:

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master up to 100 metres Near Coastal as specified in Marine Order 505.

Blue Waters Qualifications:

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master of a commercial vessel up to 500 gross tonnage (GT), Master Unlimited or Watchkeeper Deck. 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).

Training providers seeking to offer this unit of competency must gain AMSA approval before the

unit is offered.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not applicable.

Competency Field

O – Watchkeeping

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Maintain watch on the bridge

PERFORMANCE CRITERIA

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

- 1.1** Own responsibility for the safety of navigation is clearly defined at all times, including periods when the Master is on the bridge and while under pilotage
- 1.2** Proper lookout is maintained at all times according to organisational procedures and regulatory requirements
- 1.3** Lights, shapes and sound signals are correctly recognised and acted upon
- 1.4** Frequency and extent of monitoring traffic, vessel and environment are scheduled to conform with organisational procedures and regulatory requirements
- 1.5** Bridge communication is maintained with other team members on matters relevant to the safety and integrity of the vessel
- 1.6** Clear and unambiguous bridge communications are maintained, and clarification is sought from or given to other team members when watch information or instructions are not clearly understood

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| | 1.7 | Internal and external communications systems are used according to organisational procedures and regulatory requirements. |
| | 1.8 | Conduct, handover and relief of the watch is completed according to organisational procedures and regulatory requirements |
| 2 Maintain watch when anchored | 2.1 | Organisational procedures and regulatory requirements are complied with through frequency, timing and coverage of scheduled checks and inspections |
| | 2.2 | Appropriate action is taken in the event of irregularities or abnormal conditions to maximise the safety and integrity of the vessel |
| | 2.3 | Restrictions on access to the vessel by non-authorised persons are followed according to organisational procedures and regulatory requirements |
| | 2.4 | Internal and external communications systems are used according to organisational procedures and regulatory requirements |
| 3 Respond to potential collision and emergency situations | 3.1 | Potential collision situations are analysed and appropriate actions are taken in ample time according to regulatory requirements |
| | 3.2 | Correct responses are made to emergencies and situations that pose a danger to the vessel and personnel onboard |
| | 3.3 | Distress signals are recognised and appropriate actions are taken to initiate search and rescue (SAR) operations |
| | 3.4 | Master is called in the event of a navigational incident which falls outside own responsibility |
| 4 Respond to onboard emergency situations | 4.1 | Initial actions in the event of an emergency are undertaken according to contingency plans and are appropriate to urgency of situation and nature of emergency |
| | 4.2 | Urgency of situation and nature of emergency is identified promptly |
| | 4.3 | Relevant alarms are activated |
| | 4.4 | Distress signals are used to indicate need for assistance, |

- as required
- 4.5** Crew, personnel and passengers are given information and instructions clearly and accurately
 - 4.6** Procedures are implemented to combat emergency and to protect crew, personnel and passengers
 - 4.7** Communications are established with others to facilitate emergency response process
- 5 Resource the bridge according to bridge resource management principles**
- 5.1** Bridge resource management principles are interpreted to establish the functions and responsibilities of the watchkeeping team onboard a vessel
 - 5.2** Resources are allocated and assigned as needed in correct priority to perform necessary tasks to obtain and maintain situational awareness
 - 5.3** Watchkeeping schedule is developed with due consideration to team experience
 - 5.4** Instructions on watchkeeping and lookout requirements are clearly and unambiguously given in relation to monitoring traffic, vessel and environment
 - 5.5** Clear and unambiguous roles and responsibilities of watchkeeping team are determined and allocated
 - 5.6** Effective communication is maintained with team on matters relevant to safety and integrity of vessel
 - 5.7** Questionable decisions and/or actions are dealt with using an appropriate challenge and response
- 6 Maintain navigation records**
- 6.1** Proper records of the movements and activities related to the navigation of the vessel are maintained
 - 6.2** Records are filed and stored 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 MARO002 Maintain a safe navigational watch.

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 MARO009 Maintain a safe navigational watch

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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:

- activating relevant alarms, including:
 - abandon ship signals
 - emergency broadcasts
 - fire and general muster alarms
- allocating and assigning resources as needed in correct priority to perform necessary tasks
- applying International Regulations for Preventing Collisions at Sea (COLREGs)
- applying principles of bridge and maritime resource management
- appropriately challenging and responding to questionable decisions and/or actions
- communicating an accurate understanding of current and predicted vessel state, navigation path and external environment with team members
- communicating effectively with others on watchkeeping issues, arrangements and requirements
- conforming to accepted principles and procedures in the conduct, handover and relief of the watch
- defining responsibility for the safety of navigation at all times clearly
- giving and receiving clear and unambiguous communications
- identifying and implementing effective leadership behaviours
- identifying and solving problems that may arise during watchkeeping duties, reporting problems and issues and taking appropriate actions based on available information
- identifying type and scale of emergency promptly
- implementing contingency plans and instructions in standing orders when responding to a distress signal at sea
- interpreting and implementing procedures relevant to the role and responsibilities of Watchkeeper
- maintaining a proper lookout at all times and in such a way as to conform to accepted

principles and procedures

- maintaining accurate and compliant records of the movements and activities relating to the navigation of the vessel
- manoeuvring vessel, according to contingency plans
- modifying activities dependent on differing vessel contingencies, risk situations and environments
- monitoring and anticipating hazards and risks that may arise during watchkeeping duties and taking appropriate actions
- monitoring traffic, the ship and the environment to conform to accepted principles and procedures
- providing sound signals correctly
- recognising a distress or emergency signal
- recognising lights, shapes and sound signals correctly
- reporting according to the General Principles for Ship Reporting Systems and Vessel Traffic Services (VTS) procedures
- responding to vessel emergencies
- selecting and using appropriate internal and external communications equipment during watchkeeping
- using bridge communication equipment
- using information from navigational equipment to maintain a safe navigational watch
- using routeing according to the General Provisions on Ships' Routeing
- working as part of a team.

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:

- Australian Maritime Safety Authority (AMSA) watchkeeping procedures contained in Marine Orders and Marine Notices
- blind pilotage techniques
- bridge instrumentation, controls and alarms relevant to the function of watchkeeping
- bridge procedures onboard a vessel
- bridge resource management principles, including allocation, assignment and prioritisation of resources; effective communication; assertiveness and leadership; obtaining and maintaining situational awareness; and consideration of team experience
- causes of groundings, collisions and casualties
- contingency plans with response to emergencies, including responding to distress signal at sea
- distress signals as listed in Annex IV of COLREGs
- fatigue management principles and techniques
- functions and responsibilities of the watchkeeping team onboard a vessel
- initial actions to be taken following a collision or grounding, including:
 - initial damage assessment and control

- manoeuvring vessel
- precautions when breaching a vessel
- International Association of Lighthouse Authorities (IALA) buoyage system A and B
- irregularities or abnormal conditions, including:
 - dragging anchor
 - fog and restricted visibility
 - heavy weather
- lights, shapes and sound signals as listed in COLREGs parts C
- manual and electronic navigational aids available to the bridge team and procedures for their operation and use during a watch
- maritime communication techniques onboard a vessel in accordance with the Standard Marine Communication Phrases
- nature of assistance, including:
 - assisting a ship in distress
 - rescuing persons from a vessel in distress and from a wreck
 - responding to emergencies occurring in port
- nature of emergencies
- navigational aids
- navigational hazards and implications for watchkeeping
- precautions for the protection and safety of crew and passengers
- precautions necessary when navigating in or near traffic separation schemes or other routeing measures
- principles and use of navigational recording devices for keeping records of the operation, behaviour and performance of the vessel and navigation equipment
- principles for the use of vessel routing and reporting systems for safe navigation, including weather routing
- principles to be observed in keeping a safe navigational watch
- principles to be observed in keeping a watch in port, including when carrying hazardous cargo
- procedures for rescuing a person at sea, assisting a vessel in distress and responding to emergencies that arise in port
- procedures for the conduct, handover and relief of a watch
- procedures for the use of internal communications and alarm systems
- range of lifesaving appliances
- search and rescue using International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual
- signs of personnel fatigue and hours of rest requirements
- typical bridge instrumentation, controls and alarms and their functions
- typical watchkeeping problems and emergency situations, and appropriate actions and solutions
- 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.

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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