



Australian Government

**MARH3002A Manage and maintain a
navigational watch on board vessels up to
80 metres**

Release 1

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Modification History

Release 1

This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to apply the recommended principles to be observed in managing and maintaining a navigational watch on board vessels up to 80 metres.

Application of the Unit

This unit applies to those working in the capacity of Master on a range of vessels up to 80 metres.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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| 1 Maintain watch on bridge when berthed or anchored | <p>1.1 Checks and inspections are <i>scheduled</i> to comply with organisational procedures and regulatory requirements</p> <p>1.2 Appropriate action is taken in the event of <i>irregularities or abnormal conditions</i> to maximise the safety and integrity of vessel</p> <p>1.3 Restrictions on access to vessel by non-authorised persons are followed according to organisational procedures and regulatory requirements</p> <p>1.4 Internal and external communications systems are used according to organisational procedures</p> |
| 2 Maintain watch on bridge when at sea | <p>2.1 Proper watch is maintained at all times according to organisational procedures and regulatory requirements</p> <p>2.2 <i>Lights, shapes and sound signals</i> are correctly recognised and acted upon</p> <p>2.3 Frequency and extent of monitoring traffic, vessel and environment are scheduled to conform with organisational procedures and regulatory requirements</p> <p>2.4 <i>Wheelhouse communication</i> is maintained with other crew members on matters relevant to safety and integrity of vessel</p> <p>2.5 Clear and concise wheelhouse communications are maintained and clarification is sought from or given to other crew members when watch information or instructions are not clearly understood</p> <p>2.6 <i>Internal and external communications systems</i> are used according to organisational procedures</p> <p>2.7 Log and record books are maintained according to regulatory requirements and organisational procedures</p> |
| 3 Respond to potential emergency situations | <p>3.1 <i>Watchkeeping problems</i> and <i>emergency situations</i> are promptly reported to crew according to organisational procedures</p> <p>3.2 Distress signals are recognised and acted upon</p> <p>3.3 Appropriate action is taken to handle watchkeeping problems and emergency situations according to organisational procedures and regulatory requirements</p> |

4 Manage crew performing watchkeeping and lookout duties

- 4.1 Watchkeeping schedule is developed with due regard to crew qualifications, experience and organisational procedures
- 4.2 Instructions are provided on watchkeeping and lookout requirements in relation to monitoring traffic, vessel and environment
- 4.3 Clear and concise roles and responsibilities of watchkeeping team are established
- 4.4 Effective communication is maintained with crew on matters relevant to safety and integrity of vessel
- 4.5 *Fatigue management strategies* are correctly applied in allocating watchkeeping and lookout duties

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required Skills:

- Communicate effectively with others about watchkeeping issues, arrangements and requirements
- Identify and solve problems that may arise during watchkeeping duties
- Interpret and implement procedures relevant to the role and responsibilities of watchkeeper
- Monitor and anticipate hazards and risks that may arise during watchkeeping duties and take appropriate action
- Select and use appropriate internal and external communications equipment during watchkeeping duties

Required Knowledge:

- Application and intent of the International Ship and Port Facility Security (ISPS) Code as it applies to Australian coastal vessels and ports
- Bridge instrumentation, controls and alarms relevant to the function of watchkeeper
- Content, application and intent of the International Regulations for the Prevention of Collisions at Sea
- Fatigue management principles and techniques
- Functions and responsibilities of the wheelhouse team on board a vessel
- IALA buoyage system A
- International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)
- International Code of Signals
- Maritime communication techniques on board a vessel
- Navigational hazards and implications for watchkeeping
- Procedures for the relief, maintenance and handover of a watch
- Procedures for the use of internal communications and alarm systems
- Relevant sections of state and territory marine regulations, NSCV and USL Code
- Typical watchkeeping problems and emergency situations, and appropriate actions and solutions
- Wheelhouse procedures on board a vessel
- Work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, the required skills and knowledge, the range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the Elements, Performance Criteria, Required Skills, Required Knowledge and include:

- using bridge equipment in normal and emergency situations on vessels up to 80 metres
- ensuring currency of relevant legislative and regulatory knowledge.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include access to:

- appropriate vessel or simulator to demonstrate watchkeeping procedures and use of bridge equipment in normal and emergency situations on vessels up to 80 metres
- tools, equipment and personal protective equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on work activities
- range of relevant exercises, case studies and/or other simulated practical and knowledge assessments
- appropriate range of relevant operational situations in the workplace.

In both real and simulated environments, access is required to:

- relevant and appropriate materials and equipment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Method of assessment

Practical assessment must occur in an:

- appropriately simulated workplace environment and/or
- appropriate range of situations in the workplace.

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate to this unit:

- direct observation of the candidate managing and maintaining a navigational watch on board vessels up to 80 metres
- direct observation of the candidate applying relevant

WHS/OHS requirements and work practices.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

In all cases where practical assessment is used it should be combined with targeted questioning to assess Required Knowledge.

Assessment processes and techniques must be appropriate to the language and literacy requirements of the work being performed and the capacity of the candidate.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below.

Scheduled may include:

- Coverage
- Frequency
- Timing

Irregularities or abnormal conditions may include:

- Fog and restricted visibility
- Heavy weather, including cyclones

Lights, shapes and sound signals must include:

- Alternative power source for lights
- Day time shapes for a vessel
- Emergency lights
- Means of making sound signals for a vessel up to 80 metres
- Navigation lights

Wheelhouse communication may include:

- Verbal instruction relating to watchkeeping duties
- Written Master instructions

Internal and external communications systems may include:

- GMDSS equipment
- Handheld radios
- International single letter code flags
- MF and HF radios
- VHF radios

Watchkeeping problems may include:

- Dragging of anchor
- Failure of bridge equipment, steering equipment, navigational lights
- Loss of main engines or propulsion controls
- Loss of mooring lines or winches when berthing
- Machinery and bilge alarms

Emergency situations may include:

- Cargo shift
- Collision
- Fire
- Fouled hawse
- Grounding
- Injured crew or passenger
- Loss of watertight integrity
- Missing crew or passenger
- Person overboard
- Reception of a distress signal
- Retrieval of survivors from the water

Fatigue management strategies must include:

- Synchronous rolling
- Maintaining personal fitness and health and appropriate dietary habits
- Observing appropriate hours of duty in a 24 hour period
- Observing policy concerning alcohol/drug use prior to watchkeeping duties
- Recognising symptoms of fatigue

Unit Sector(s)

Not applicable.

Competency Field

Navigation