



Australian Government

MARH007 Apply command navigation procedures on vessels limited by tonnage or near coastal operations

Release: 1

MARH007 Apply command navigation procedures on vessels limited by tonnage or near coastal operations

Modification History

Not applicable.

Application

This unit involves the skills and knowledge required to manage safe navigational watchkeeping on a commercial ocean-going vessel in compliance with Australian and international regulations and guidelines, protection of the marine environment and the safety of vessel and persons on board.

This unit applies to people who work in the maritime industry as Master or Chief Mate on a vessel of up to 500 gross tonnage (GT) or as a Watchkeeper on a vessel up to 3000 GT or as Master or Chief Mate on vessels up to 3000 GT operating in near coastal waters.

The unit is consistent with the relevant sections of STCW 95 and Marine Orders under the Australian Navigation Act 2012.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

H – Navigation

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Establish safe watchkeeping procedures on vessels, potentially with limited qualified personnel

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|-----|---|
| 1.1 | Set of Master standing orders is developed to supplement vessel safety management system (SMS) noting number of watchkeeping personnel |
| 1.2 | Accepted principles, vessel safety management procedures and Master standing orders are conformed with in conduct, handover and relief of watch |

- 1.3 Appropriate bridge team is established according to vessel SMS and bridge personnel are confirmed as fit for duty
 - 1.4 Duties are assigned to members of bridge team and their performance of those duties is monitored
 - 1.5 Members of bridge team are correctly briefed on their duties
 - 1.6 Action is taken to ensure vessel is navigated safely using appropriate position fixing techniques to check location the vessel and to maintain movement of vessel within planned limitations
 - 1.7 Action is taken to ensure progress of vessel with respect to passage plan is analysed and vessel navigation is managed appropriately to maintain a required estimated time of arrival at a point in the plan
 - 1.8 Accepted principles and procedures are conformed with in relation to frequency and extent of monitoring of traffic, vessel and environment
 - 1.9 Responsibility for safety of navigation is defined according to vessel SMS
 - 1.10 Safe navigational practice is achieved by implementing accepted bridge resource management principles and procedures
 - 1.11 Action is taken to ensure fatigue management strategies are correctly applied by bridge management team
- 2 Respond to potential collision and emergency situations**
- 2.1 Leadership of bridge team is taken when called to bridge in response to navigational situation
 - 2.2 Circumstances when assistance is required when Master is performing watchkeeping duties are identified
 - 2.3 Potential collision situations are analyse and appropriate action is taken to avoid collision in ample time and in compliance with international collision regulations, resulting in a safe passing distance and following practices of good seamanship
 - 2.4 SMS procedures and compliance with standard watchkeeping principles are correctly implemented when taking over bridge watch from officer of the watch
 - 2.5 Appropriate action is taken to initiate search and rescue

		procedures on receipt of a distress signal
	2.6	Appropriate advice is given to watchkeepers and correct actions are implemented regarding a response to navigational or operational emergency situations
3 Maintain watchkeeping records	3.1	Relevant information is documented in required records
	3.2	Action is taken to ensure deck log book and other required records are maintained in an appropriate manner
	3.3	Required records are filed and stored according to organisational procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

- Principles include one or more of the following:
- ensuring proper watch is maintained at all times, including correct response to avoiding collision and maintaining safe navigation of vessel passage
 - making appropriate assistance available to be summoned to bridge if required by change in vessel situation
 - taking all necessary precautions to avoid pollution of marine environment

- Responsibility for safety of navigation must
- periods under pilotage
 - periods when Master is on bridge

include:

- | | |
|---|--|
| Fatigue management strategies include one or more of the following: | <ul style="list-style-type: none">• arranging assistance for watchkeepers when symptoms of fatigue are identified• ensuring avoidance of excessive consumption of alcohol prior to watchkeeping duties• following appropriate dietary habits• maintaining personal fitness and health• planning appropriate actions when un-fatigued personnel are not available• recognising symptoms of fatigue |
| Emergency situations include one or more of the following: | <ul style="list-style-type: none">• cargo shift• distress signal• dragging anchor• entry into confined spaces• failure of bridge equipment, steering equipment, navigational lights• fire• fog and restricted visibility• fouled hawse• heavy weather• intoxicated persons on board vessel• loss of:<ul style="list-style-type: none">• main engines• mooring lines or winches when berthing• watertight integrity• person overboard• personnel working aloft or overside• possible collision• retrieval of survivors from water• stranding• sudden list or loll• synchronous rolling |

Unit Mapping Information

This is a new unit. This unit is equivalent to MARH5001A Apply command navigation procedures on vessels limited by tonnage or near coastal operations.

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 MARH007 Apply command navigation procedures on vessels limited by tonnage or near coastal operations

Modification History

Not applicable.

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:

- assessing:
 - circumstances requiring Master to call for assistance from a second qualified watchkeeper
 - necessary action when called to bridge by officer of watch
- briefing officers of watch on passage plan and their watchkeeping duties
- communicating effectively with other personnel when managing safe navigational watchkeeping activities
- complying with mandatory rules, regulations and International Maritime Organization (IMO) Conventions and Codes, including relevant sections of Australian Maritime Safety Authority (AMSA) Marine Orders and ensuring codes, guidelines and standards recommended by IMO, classification societies and maritime industry organisations are taken into account
- conducting emergency procedures
- determining:
 - actions to take with respect to executing passage plan
 - most important watchkeeping task at any given time
- ensuring established passage plan is correctly carried out
- exchanging information with pilot about pilotage plan and conduct of bridge team
- managing watchkeeping arrangements while underway, when berthed or moored, when slipped or in dry dock, during routine or unplanned events.
- performing pilotage duties, where permitted
- providing leadership to bridge team
- recognising and adapting appropriately to cultural differences in the workplace, including modes of behaviour, and interactions and communication with others
- recognising situations warranting alterations to bridge team, including situations where vessel is under pilotage
- solving problems that may arise when managing bridge team
- taking prompt action to report and/or rectify watchkeeping incidents according to established procedures
- using available technology when managing navigational watchkeeping activities.

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 legislation, regulations and codes of practice
- bridge watch handover procedures
- causes of groundings, collisions and casualties when on board vessel
- documentation and records, including:
 - operational orders
 - Master standing and night orders
 - established passage plan
 - navigational charts
 - relevant maritime regulations as they relate to watchkeeping functions and operations during a coastal voyage
 - vessel log
 - company safety management system (SMS)
 - instructions of relevant maritime authorities
- range of factors that can affect watchkeeping functions on vessels under 500 GT and their implications, including:
 - maintaining proper lookout by all available means at all times
 - need to adhere to established passage plan
 - never leaving the bridge unattended
 - weather and sea conditions, visibility and whether there is daylight or darkness
 - proximity of navigational hazards
 - use and operational condition of navigational aids
 - operational status of bridge instrumentation, controls and alarms
 - provision on bridge of unmanned machinery space (UMS) controls, alarms and indicators
 - unusual demands on navigational watch arising from operational conditions
 - traffic density and other activities occurring in area in which vessel is navigating
 - size of vessel and field of vision available from conning position
 - attention necessary when navigating in or near traffic separation schemes or other routing measures
 - rudder and propeller control and vessel manoeuvring characteristics
- fatigue management principles and techniques
- navigational aids including:
 - compass and azimuth mirror
 - electronic navigation systems
 - radar
 - electronic charts
- navigational hazards during voyage and implications for watchkeeping

- precautions necessary when navigating in or near traffic separation schemes or other routing measures
- principles for maintaining a safe navigational watch on vessels with potentially limited qualified personnel
- principles of bridge team management
- International Regulations for Preventing Collisions at Sea
- relevant work health and safety (WHS)/occupational health and safety (OHS) legislation and policies.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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.

Resources for assessment must include access to:

- tools, equipment, machinery, materials and personal protective equipment currently used in industry
- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant exercises, case studies and/or simulations.

Links

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