



Australian Government

**Assessment Requirements for MARH012
Manage the navigation of a vessel 500 gross
tonnage or more**

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package Release 3.0.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices
- assessing accuracy of fix properly
- calculating positions, courses, distances and time correctly, within accepted accuracy standards for navigational equipment
- calculating tidal conditions to determine under keel clearances and air drafts
- choosing the most appropriate primary method for fixing vessel position given the prevailing circumstances and conditions
- conducting performance checks of navigation position fixing instruments and systems
- determining and allowing for errors of magnetic and gyro-compass
- determining position in all conditions by celestial observations and terrestrial observations, and using modern navigational aids within accepted accuracy levels
- ensuring currency of relevant legislative and regulatory knowledge
- ensuring currency of relevant reference material
- enumerating the equipment, charts and nautical publications required for the voyage and appropriate to the safe conduct of the voyage
- establishing and maintaining watchkeeping arrangements in compliance with international regulations and guidelines so as to ensure the safety of navigation, protection of the marine environment, and the safety of the vessel and persons on board
- identifying all potential navigational hazards accurately
- planning and navigating a voyage for all conditions including restricted waters, meteorological conditions, ice, restricted visibility, traffic separation schemes, vessel traffic service (VTS) areas and areas of extensive tidal effects
- recognising faulty equipment and readings, and taking appropriate action
- recognising problems that may be experienced when planning and navigating a passage, and taking appropriate action
- reporting according to General Principles for Ship Reporting Systems and VTS procedures
- supporting reasons for planned route using facts and statistical data obtained from relevant sources and publications

- undertaking routing according to the General Provisions on Ships' Routing
- using chart catalogues, charts, nautical publications and vessel particulars to plan and navigate a passage.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- Australian Maritime Safety Authority (AMSA) Watchkeeping Standards (including the Manila Amendments)
- content, application and intent of bridge resource management principles to be observed in keeping a navigational watch
- content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended
- General Principles for Ship Reporting Systems
- General Provisions on Ships' Routing
- method and frequency of checks for errors of magnetic and gyro-compasses to ensure accuracy of information
- methods for fixing position of a vessel
- modern electronic navigational aids, their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing
- operation and care of the main types of gyro-compass
- principles of magnetic and gyro-compasses
- problems experienced when fixing vessel position and appropriate action and solutions
- procedures for filing and maintaining navigational charts, nautical publications and related documentation in serviceable condition
- procedures for swinging a vessel to determine deviation
- relevant AMSA Marine Orders
- requirements for effective passage planning including contingency planning
- systems under control of the master gyro
- vessel reporting systems and their use in planning and conducting a voyage
- voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks
- VTS procedures
- WHS/OHS requirements and work practices.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

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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.

Assessment must occur in workplace operational situations or where this is not available, in simulated workplace operational situations or an industry-approved marine operations site that replicate workplace conditions.

Resources for assessment include access to:

- navigational charts, nautical publications, AMSA Marine Orders and related documentation including workplace procedures, regulations, codes of practice and operation manuals
- tools, equipment, materials and personal protective equipment currently used in industry.

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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>