



Australian Government

Assessment Requirements for MARH004 Plan and navigate a passage for a vessel up to 80 metres

Release: 2

Assessment Requirements for MARH004 Plan and navigate a passage for a vessel up to 80 metres

Modification History

Release 1. New unit of competency.

Release 2. Additional information re procedures to determine compass accuracy included in Knowledge Evidence.

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
- applying variation and deviation to compass courses
- completing required records relevant to planning and navigating a passage
- developing effective planning documents
- determining dipping and rising distances of lights
- estimating position using dead reckoning
- interpreting and applying tidal stream data
- lay off a safe course on a chart
- maintaining situational awareness
- observing and interpreting weather and oceanographic conditions
- producing accurate and reliable documentation
- reading and interpreting:
 - charts and other published information relevant to planning and navigating a passage
 - instrument and equipment readings relevant to planning and navigating a passage
 - weather information and oceanographic reports
- reading aneroid barometer and interpreting information obtained
- recognising and correctly responding to cross-track error resulting from effects of tide and wind
- recognising faulty equipment and taking appropriate action according to operating instructions
- recognising problems that may be experienced when planning and navigating a passage
- selecting and using relevant equipment required for planning and navigating a passage
- using parallel indexing to maintain a required distance of a point of land
- using meteorological information available.
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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 or local tide tables and sailing directions
- basic meteorological terms
- characteristics of various weather systems affecting Australian coast
- charted information including that in the title block, Zone Of Confidence diagrams and datums
- procedures to determine compass accuracy:
 - from transit bearings or by bearings taken from a known position
 - by azimuth, amplitude or other method appropriate to the standards of watchkeeping practice when beyond sight of land
- determining times and heights of:
 - high and low water from Australian or local tide tables for any port and the relevance of chart datum
 - tides at standard and secondary ports for any state of tide
- rhumb lines, plane and great circle sailings
- effects of current and of leeway on course and speed of vessel (without calculations) and recognising the presence of either or both factors
- finding variation from chart
- fixing vessel position by:
 - simultaneous bearings, transits of coastal features, and by running fix
 - radar ranges and bearings
- information given on a chart or plan, particularly buoyage, hazards to navigation, depth and nature of bottom, lights, tides and tidal streams
- interpreting set and drift of current from information available on chart
- measuring distance on a chart
- meteorological instruments and their use
- obtaining bearings on small vessels
- recognition of coastal features
- relating coastal features to a chart
- relationship between:
 - latitude and longitude
 - compass, magnetic, true and gyro courses and bearings
- relative bearings
- selection of suitable:
 - anchorage or shelter
 - points for bearings
- sound signals such as:
 - appropriate signals for alteration of course to port or starboard
 - danger warnings
 - moving astern
- sources of weather forecasts and interpretation of that information in simple terms
- traffic separation schemes

- tropical revolving storms and the weather associated with such storms
- use and application of ship routing services
- use and limitations on use of electronic position fixing equipment found on small vessels
- use of a deviation card without mathematical interpolation
- using a single position line
- using modern electronic navigational aids to determine vessel position
- using rhumb line navigation
- using soundings in determining position
- using terrestrial observations to determine vessel position individually or in combination with other methods
- weather conditions affecting Australian coast and liable to endanger vessel
- work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices.

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.
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Links

MAR Maritime Training Package Companion Volume Implementation Guide at: -
http://companion_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=22