



Australian Government

Assessment Requirements for MARF052 Apply nautical knowledge

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.

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 occasion and include:

- applying fundamental principles of International Regulations for Preventing Collisions at Sea (COLREGS) within a Vessel Traffic Service (VTS) area (where applicable), including:
 - steering and sailing rules
 - conduct of vessel in specific conditions
- explaining the methodology used to find positions on the globe, chart projections and geodetic datums
- explaining the use of course, including course made good, course to make good, track and heading
- explaining true and magnetic courses, including:
 - laying of a true course
 - Dead Reckoning (DR) positions
 - compass and magnetic courses
- explaining the effect of tides, tidal streams and currents on vessel movements in the VTS area, including:
 - using tide and current tide tables
 - using tidal streams to calculate Estimated Position (EP)
- explaining a port operating environment including allied services, other relevant organisations and stakeholders
- explaining the fundamental principles of relevant sections of the COLREGS
- performing speed, distance and time calculations
- plotting positions on charts, including using chart symbols, basic plotting instruments and using various projections as appropriate.

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:

- chartwork, including:

- chart and publication correction
- use of electronic and paper navigational charts
- plotting positions of ships on charts
- speed, distance and time calculations
- theory and use of true and magnetic courses
- importance of passage planning, including contingency planning
- tides, tidal streams and currents on vessel movements
- collision regulations, including:
 - relevant sections of COLREGS and their application in a VTS, area, including:
 - overview of COLREGS (Part A, B, C, D, E, F)
 - Part A – General
 - international distress signals (annex IV to the COLREGS)
 - enforcement of COLREGS
 - Part B – Steering and sailing rules
 - conduct of vessel in specific conditions, including reduced visibility, narrow channels and traffic separation schemes
- navigation and aids to navigation, including:
 - basics of the International Maritime Buoyage System, including:
 - global navigation satellite system (GNSS) and differential GNSS (DGNSS)
 - radar beacons (RACONS/remarks)
 - regulations relevant to buoyage systems
 - theory and use of virtual aids to navigation
- navigation and navigational aids (shipborne), including:
 - theory of radar and use of radar on board ships
 - theory and use of gyro and magnetic compasses on board vessels
 - theory and use of other navigational aids
 - port operating environment, including allied services and other relevant organisations and stakeholders, including International Ship and Port Facility Security Code (ISPS) code in relation to ship and port security
- shipboard knowledge, including:
 - different types of vessels and cargo, including International Maritime Dangerous Goods (IMDG) Code
 - external forces on vessels
 - ship movement and ship stability, including list and ship stability
 - propulsion systems
 - ship handling
 - ship terminology (technical and nautical phrases)
 - theory and practice of ship handling
 - vessel bridge procedures.

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.

Assessment must occur in workplace operational situations, where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Resources for assessment must include access to:

- applicable documentation such as policies, workplace procedures, codes of practice, operation manuals, relevant sections of COLREGS, navigational charts (electronic and paper) and publications.

Links

Companion Volume Implementation Guides are found in VETNet -

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