



Australian Government

**Assessment Requirements for MARB017
Perform routine maintenance and repairs
on a vessel**

Release: 1

Assessment Requirements for MARB017 Perform routine maintenance and repairs on a vessel

Modification History

Release 1. New unit of competency.

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 corrosion control and preventive measures/maintenance
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices
- applying safe and environmentally responsible work practices when performing routine remedial, preventative and survey deck maintenance on a vessel
- applying surface preparation techniques
- communicating with other personnel using effective:
 - listening techniques
 - questioning to confirm understanding
 - verbal and non-verbal language
- completing any required records when performing routine remedial, preventative and survey deck maintenance on a vessel
- correctly using paint, lubrication and cleaning materials and equipment
- following required work schedule according to organisational requirements
- reading and interpreting instructions for performing routine remedial, preventative and survey deck maintenance on a vessel
- reading and interpreting manufacturer specifications and safety data sheets (SDSs)/material safety data sheets (MSDSs)
- recognising routine problems when performing routine remedial, preventative and survey deck maintenance on a vessel
- selecting, using and maintaining suitable lifting gear
- selecting and using relevant tools, equipment and materials
- undertaking regular testing with repairs, as required
- using fall arrest and restraint devices, as required.

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:

- application, use, type and maintenance of lifting gear used on a vessel
- component parts, operation and routine maintenance requirements of vessel machinery
- corrosion control and preventive measures/maintenance, paint systems and surface preparation techniques
- job safety analyses (JSAs)/safe work method statements (SWMSs)
- maintenance records for a vessel
- manufacturer safety guidelines and shipboard instruction
- nature and causes of corrosion of marine surfaces and structures, and available methods of control
- organisational procedures for cleaning and maintenance
- paint types suitable for interior and exterior application on a vessel
- planned maintenance systems
- principal parts of a vessel and basic design methods
- principles and procedures of machinery lubrication as they relate to vessel machinery
- procedures for:
 - checking deck areas, machinery and fittings of a vessel as part of the planned routine maintenance on a vessel
 - using hand tools for routine maintenance operations
- relevant WHS/OHS requirements, work practices and pollution control regulations and policies
- safe disposal of waste materials according to with the International Convention for the Prevention of Pollution from Ships (MARPOL Convention)
- safety management system as it relates to planned vessel maintenance systems
- storage requirements for paints, chemicals and cleaning agents used in planned maintenance operations
- suitable equipment cleaning and preservation techniques used on board a vessel
- surface preparation techniques, including:
 - abrasive blast cleaning
 - flame cleaning
 - hand and power tool cleaning
- type, characteristics and functions of:
 - equipment/tools used in cleaning and maintenance
 - vessel machinery and equipment
- use of various vessel construction material and regulations governing structure.

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 in a range of locations including:

- battery room
- exposed deck area
- firefighting equipment spaces
- store room
- wheelhouse and accommodation area.

Where this is not available, in simulated workplace operational situations that replicate workplace conditions.

Resources for assessment include access to:

- relevant documentation including workplace procedures, regulations, codes of practice and operation manuals
- tools, equipment, materials and fittings that replicate and are currently used in industry including:
 - cleaning chemicals, agents and equipment
 - fall arrest and restraint devices
 - fuel, fresh and ballast water, bilge and firefighting pumps
 - hand tools
 - lifting equipment
 - navigation lights and shapes
 - paint residues
 - power tools
 - rags
 - spent oil
 - steering gear
 - windlass and capstan
- personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

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