



Australian Government

Assessment Requirements for MARB045 Perform routine maintenance and repairs on a vessel

Release: 1

Assessment Requirements for MARB045 Perform routine maintenance and repairs on a vessel

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 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 required records when performing routine remedial, preventative and survey deck maintenance on a vessel
- following required work and maintenance schedules according to workplace 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 (SDS)/material safety data sheets (MSDS)
- recognising routine problems when performing routine remedial, preventative and survey deck maintenance on a vessel
- selecting and using relevant tools, equipment and materials
- selecting, using and maintaining suitable lifting gear
- undertaking regular testing with repairs
- using fall arrest and restraint devices, as required.
- using paint, lubrication and cleaning materials and equipment correctly.

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:

- application, use, type and maintenance of lifting gear used on a vessel
- appropriate selection and use of personal protective equipment (PPE)
- 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 (JSA)/safe work method statements (SWMS), including safety and toolbox meetings
- maintenance and repair activities, including:
 - fire and bilge pumps - greasing and oiling
 - lifebuoys and lifejackets, regular inspection and maintenance of lifeboats, life rafts and equipment, including:
 - expired food
 - general cleaning and painting
 - replacing lashings
 - wires
- 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, including prevention
- 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
 - inspecting ropes and wires for damage
 - repairing damaged areas (splicing) and replacing where necessary:
 - cargo wires
 - lashings
 - lifeboat falls
 - mooring lines
 - 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 the International Convention for the Prevention of Pollution from Ships (MARPOL)

- safety management system (SMS) as it relates to planned vessel maintenance systems
- storage requirements for equipment, paints, chemicals and cleaning agents used in planned maintenance operations
- suitable equipment cleaning and preservation techniques used onboard a vessel
- surface preparation techniques, including:
 - abrasive blast 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 of vessels.

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.

Practical assessment must occur in a workplace or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

Links

Companion Volume implementation guide can be found in VetNet -

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