



Australian Government

MARB046 Plan and supervise routine maintenance on a vessel up to 80 metres

Release: 1

MARB046 Plan and supervise routine maintenance on a vessel up to 80 metres

Modification History

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

Application

This unit involves the skills and knowledge required to implement a maintenance program for a vessel less than 80 metres.

This unit applies to people working in the maritime industry in the capacity of:

- Master of commercial vessels less than 35 metres in length within the exclusive economic zone (EEZ)
- Master of vessels less than 80 metres in length in inshore waters
- Chief Mate or Deck Watchkeeper on vessels less than 80 metres in length within the EEZ.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master less than 35 metres Near Coastal and Mate less than 80 metres Near Coastal, as defined in the National Standard for Commercial Vessels (NSCV) Part D.

Pre-requisite Unit

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Develop maintenance program

- 1.1** Planned maintenance system is accessed to establish maintenance requirements for vessel
- 1.2** Maintenance program for vessel is developed to meet requirements of planned maintenance system
- 1.3** Maintenance schedules and budgets are identified
- 1.4** Suggestions that support effective implementation of maintenance program are offered according to organisational procedures
- 1.5** Strategies to minimise impact of maintenance activities on vessel operations are identified

2 Implement maintenance program

- 2.1** Routine maintenance activities are proposed and prioritised in conjunction with others involved in or affected by maintenance work
- 2.2** Routine maintenance activities are allocated within scheduled timeframes and budgets according to organisational procedures
- 2.3** Vessel operations are maintained, where possible, without interruption
- 2.4** Safety of crew is maintained at all times according to relevant legislation and organisational procedures
- 2.5** Requests for assistance from crew to complete maintenance activities are responded to promptly

3 Identify failed or unsafe machinery and equipment

- 3.1** Faulty machinery and equipment are identified and clear and noticeable warning signs are erected according to organisational procedures
- 3.2** Failed or unsafe machinery and equipment are assessed according to organisational procedures
- 3.3** Repairs are allocated to appropriate crew members according to organisational procedures
- 3.4** Unsafe machinery and equipment which cannot be repaired are promptly tagged and isolated according to organisational procedures
- 3.5** Unsafe machinery and equipment are promptly reported according to organisational procedures

- | | | |
|---------------------------|------------|--|
| | 3.6 | Reports on all repair work undertaken are completed according to organisational procedures |
| 4 Monitor supplies | 4.1 | Supply and stock levels are maintained to ensure ongoing availability |
| | 4.2 | Management of supplies is undertaken according to organisational procedures |
| | 4.3 | Supply and stock levels are reconciled and any discrepancies are rectified or reported |
| | 4.4 | Supply records are maintained according to organisational procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This unit replaces and is equivalent to MARB010 Plan and supervise routine maintenance on a vessel up to 80 metres.

Links

Companion Volume implementation guide can be found in VetNet -

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

Assessment Requirements for MARB046 Plan and supervise routine maintenance on a vessel up to 80 metres

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:

- actioning planned maintenance system, including:
 - liaising with internal and external suppliers, authorities and agencies
 - preparing reports on outcomes of inspection and maintenance activities
 - taking appropriate precautions to prevent pollution of the marine environment
 - using and interpreting vessel, equipment and machinery specifications, drawings, operational manuals and diagrams
- developing a maintenance program having regard to:
 - owner's requirements
 - periodic survey requirements
 - programmed maintenance requirements of hull and machinery
 - relevant safety data sheets (SDS)/material safety data sheets (MSDS)
 - routine maintenance as contained in manufacturer instruction manuals and drawings
 - safety and environmental policy and requirements
- initiating timely action in response to defects or damage.

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:

- elements of ship structure crucial to the safety of the ship
- fundamental principles of vessel construction
- maintenance records that must be maintained on vessel to meet organisational and regulatory requirements
- managing maintenance of the vessel
- means for control of corrosion of marine surfaces and structures
- monitoring, selection and use of supplies involved in maintenance of vessel
- planned maintenance system, including:
 - continuous improvement and review procedures

- document control procedures
- provision of safe practices in vessel operation and a safe working environment
- reference to applicable codes, guidelines and standards
- systems for recording completed maintenance schedules, including identification of defective equipment and rectification of defects
- principal structural components
- procedures for initiation and coordination of repair and/or replacement procedures onboard vessel
- relevant laws and regulations, including work health and safety (WHS)/occupational health and safety (OHS) and pollution control legislation
- routine maintenance activities
- slipping and docking procedures suitable for various types of hull forms
- typical problems related to maintenance of vessels and appropriate actions and solutions.

Assessment Conditions

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

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in 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:

- a commercial vessel greater than or equal to 12 metres in length
- applicable documentation, such as legislation, regulations, codes of practice, safety management system (SMS), workplace procedures and operational manuals.

Links

Companion Volume implementation guide can be found in VetNet -

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