



Australian Government

MARB042 Manage reported defects, damage, repairs and maintenance of a vessel

Release: 1

MARB042 Manage reported defects, damage, repairs and maintenance of a vessel

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 planned maintenance system to ensure effective maintenance of a vessel, including assessing reported defects, damages and repairs of a vessel to ensure its seaworthiness.

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

- Master of a commercial vessel Unlimited.

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 Unlimited and to meet regulatory requirements this unit must be delivered consistent with Marine Orders and with the relevant sections of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
- Those regulatory requirements include STCW International Maritime Organization (IMO) model course competencies and areas of knowledge, understanding and proficiency, together with the estimated total hours required for lectures and practical exercises. Teaching staff should note that timings are suggestions only and should be adapted to suit individual groups of trainees depending on their experience, ability, equipment and staff available for training.

Pre-requisite Unit

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Define maintenance targets

2 Optimise maintenance management

3 Organise support processes

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1 Compliance documentation relevant to maintaining the vessel is interpreted
- 1.2 Vessel planned maintenance system is interpreted to establish maintenance activities and priorities, according to regulatory and organisational requirements
- 1.3 Current maintenance practices are reviewed to evaluate efficiency, reliability and comparative cost-effectiveness
- 1.4 Maintenance targets are set to ensure compliance and cost-effectiveness
- 2.1 Objectives of maintenance are clearly defined and appropriate maintenance mechanisms are determined
- 2.2 Preventative maintenance activities are forecast, scheduled and matched to resources to ensure work is completed on time and within budget
- 2.3 Optimal cost balance between preventative and corrective maintenance activities is determined
- 2.4 Priority system for preventative and corrective maintenance is developed based on critical analysis to maximise quality outcomes
- 2.5 Maintenance plan is negotiated and agreed in consultation with relevant stakeholders
- 2.6 Monitoring and reporting arrangements for maintenance activities are established and documented according to organisational procedures
- 2.7 Risk management plan to identify, assess and control risks is incorporated into maintenance plan according to regulatory and organisational requirements
- 3.1 Resource requirements are determined and organised according to the maintenance plan
- 3.2 Targets and milestones are identified and linked to the achievement of outcomes according to the maintenance

- plan
- 3.3 Documentation and checklists associated with the implementation of the maintenance plan are prepared in established formats and distributed to relevant people
 - 3.4 Information related to the implementation of the maintenance plan is distributed according to organisational procedures
 - 3.5 Contingency arrangements for the implementation of the maintenance plan are identified
- 4 Monitor implementation of maintenance plan**
- 4.1 Progress is systematically monitored and variations to implementation of the maintenance plan are verified as required with relevant people
 - 4.2 Expenditure and resource usage are monitored and controlled to ensure objectives are achieved within specified parameters
 - 4.3 Coaching and mentoring assistance is provided to crew members as required to overcome difficulties in implementing the plan
 - 4.4 Systems, records and reporting procedures are maintained according to regulatory and organisational requirements
- 5 Evaluate implementation of maintenance plan**
- 5.1 Regular reports on progress and outcomes are provided orally or in writing to relevant stakeholders to ensure completion of activities is in line with maintenance plan
 - 5.2 Systematic review processes and established evaluation methods are used to evaluate implementation processes and outcomes
 - 5.3 Evaluation results are prepared in required format and presented to relevant people within agreed timeframes
 - 5.4 Recommendations for improving implementation processes are presented to relevant people according to organisational procedures
 - 5.5 Relevant documentation is completed and processed according to regulatory and organisational requirements

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 MARB020 Manage repairs and maintenance of a vessel 500 gross tonnage or more.

Links

Companion Volume implementation guide can be found in VetNet -

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