



Australian Government

MARC047 Manage a propulsion unit using appropriate engine systems and support services

Release: 2

MARC047 Manage a propulsion unit using appropriate engine systems and support services

Modification History

Release 2. This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor MO505 statement changes in Knowledge Evidence
- Minor statement changes in Assessment Conditions.

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 operate a propulsion unit using appropriate engine systems and support services according to technical specifications and safe operating limits.

It includes preparing for operation; operating propulsion unit, engine systems and support services; completing operations and checking propulsion unit, engine systems and support services.

This unit applies to people working in the maritime industry in the capacity of Master up to 45 metres Near Coastal.

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 of a commercial vessel up to 45 metres Near Coastal and Mate up to 100 metres Near Coastal as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not applicable.

Competency Field

C – Equipment Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare for operation

- 1.1** Routine pre-operational checks of propulsion unit, engine systems and support services are completed prior to use according to manufacturer specifications and organisational procedures
- 1.2** Propulsion unit, engine systems and support services are calibrated or set up correctly
- 1.3** Faults or malfunctions are identified and reported according to organisational procedures
- 1.4** Work health and safety (WHS)/occupational health and safety (OHS) hazards in the work area are identified and risk is assessed and reported according to organisational procedures

2 Operate propulsion unit, engine systems and support services

- 2.1** Risks to self, others and the environment are identified according to organisational procedures
- 2.2** Suitable personal protective equipment (PPE) is selected and used according to organisational procedures
- 2.3** Controls of propulsion unit, engine systems and support services are operated in a safe and controlled manner
- 2.4** Performance and efficiency of propulsion unit, engine systems and support services operations are monitored
- 2.5** Safe operational practices are used to anticipate and control hazards
- 2.6** Adverse sea and weather conditions that may impact on operation of propulsion unit, engine systems and support services are identified and operational practices are adjusted to maintain safety of vessel and personnel

	2.7	Procedures to be undertaken in the event of emergencies are recognised and implemented
3 Complete operations and check propulsion unit, engine systems and support services	3.1	Shutdown procedures are conducted according to manufacturer instructions and organisational procedures
	3.2	Malfunctions, faults, irregular performance or damage to propulsion unit, engine systems and support services are reported according to organisational procedures
	3.3	Propulsion unit, engine systems and support services are cleaned and secured according to organisational procedures
	3.4	Operational records are completed 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 MARC011 Manage a propulsion unit using appropriate engine systems and support services.

Links

Companion Volume Implementation Guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>