



Australian Government

MARG003 Manage an engine room and small engineering team

Release: 1

MARG003 Manage an engine room and small engineering team

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to lead and develop a small engineering team.

This unit applies to engine workers in the maritime industry working as a Marine Engine Driver Grade 1 Near Coastal on vessels up to 1500 kW.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

G – Teamwork

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Organise engine room for departure

- 1.1 Fuels, lubricating oil, liquefied petroleum gas (LPG) and refrigeration gas required for proposed voyage are obtained
- 1.2 Flammable and explosive materials are stowed and managed according to regulatory and organisational requirements
- 1.3 Planned maintenance tasks to be completed during proposed voyage are verified
- 1.4 Spares and consumables required for proposed voyage are acquired
- 1.5 Work health and safety (WHS)/occupational health and safety (OHS) hazards in engine room are identified, risks are assessed and corrective actions are taken and recorded

- according to organisational practices
- 2 Manage daily engine room routine**
- 2.1 Engine room routine is organised and duties for engineering team are defined
 - 2.2 WHS/OHS roles and responsibilities of engineering team are defined
 - 2.3 WHS/OHS procedures are communicated to engine room crew
 - 2.4 WHS/OHS issues raised are acknowledged and resolved promptly
 - 2.5 Permits for hot work, confined space entry and other high risk activities are completed according to organisational and regulatory requirements
 - 2.6 Engineering team members are allocated daily maintenance tasks according to planned maintenance system or breakdown maintenance
 - 2.7 Procedures for collecting and sorting engine room waste from cleaning and maintenance tasks are defined and communicated to engineering team
- 3 Manage engineering team**
- 3.1 Performance expectations are communicated clearly to engineering team
 - 3.2 Performance expectations are assessed objectively against workloads and engineering team capabilities to ensure satisfactory completion of assigned tasks
 - 3.3 Potential and current issues and problems arising within crew and/or individuals are identified and acted on according to organisational and legislative requirements
 - 3.4 Effective communication is developed and maintained with team and management
- 4 Manage engineering procedures in port**
- 4.1 Planned and breakdown maintenance activities to be conducted in port are arranged to facilitate operational efficiency of vessel
 - 4.2 Permits for hot work, confined space entry and other high risk activities are completed according to organisational and regulatory requirements
 - 4.3 Sound business relationships with contractors are established and maintained to ensure effective communication and early

- identification of potential service delivery problems
- 4.4 Contractual disputes with contractors that arise are managed according to contractual requirements, using established mediation mechanisms
- 4.5 Removal of sludge, sewage and engine room waste is arranged
- 4.6 Procedures for removal of sludge, sewage and engine room waste are followed according to regulatory requirements and organisational procedures
- 5 Manage engineering emergencies**
 - 5.1 Information is received regarding scope and severity of emergency
 - 5.2 Information is analysed to determine appropriate response
 - 5.3 WHS/OHS risks are identified and action is taken according to organisational procedures
 - 5.4 Actions are taken to reduce effect of incident according to organisational procedures
 - 5.5 Incident is monitored for any changes and appropriate responses are taken according to organisational procedures
 - 5.6 Communications are established with support services and relevant stakeholders, where appropriate
 - 5.7 Reports and debriefings are completed according to organisational procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential

operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

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

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|---|--|
| Flammable and explosive materials include one or more of the following: | <ul style="list-style-type: none">• fuels• LPG• lubricating oils• refrigeration gas |
| Engine room routine include one or more of the following: | <ul style="list-style-type: none">• completing log book entries• monitoring of equipment in engine room• regular inspection of engine room• responding to alarms• watchkeeping arrangements |
| Performance expectations include one or more of the following: | <ul style="list-style-type: none">• compliance with duty statements• personal appraisal reports |
| Potential and current issues and problems include one or more of the following: | <ul style="list-style-type: none">• bullying• discrimination and harassment• disputes between individuals or parties• grievances• injury rehabilitation• perceived or actual issues and problems relating to:<ul style="list-style-type: none">• work roles, job design and allocation of duties• work performance of self and others• prejudice or racial vilification• stress or personal problems |
| Emergencies include one or more of the following: | <ul style="list-style-type: none">• accidental release of refrigeration gas in confined space• explosion• fire• flooding• loss of electrical supply• major failure of propulsion engine |

Unit Mapping Information

This is a new unit. This unit is equivalent to MARG4002A Manage an engine room and small engineering team.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MARG003 Manage an engine room and small engineering team

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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:

- communicating effectively with people from a range of social, cultural and ethnic backgrounds
- counselling team members and providing feedback
- developing effective planning documents
- displaying sound personnel management
- leading team members
- monitoring and reviewing activity
- negotiating effectively
- planning and organising activity
- providing high quality reports
- reading and interpreting maritime regulations, rules and instructions
- reading, interpreting and applying manufacturer instructions including all work health and safety (WHS)/occupational health and safety (OHS) requirements and safety data sheets (SDS)/material safety data sheets (MSDS)
- resolving conflict
- writing reports.

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:

- consultation and communication techniques and strategies
- hazards associated with flammable/explosive materials
- hazards of refrigeration gases including accidental release in a confined space
- key result areas of the crew and the organisation
- organisational policies and procedures
- principles and techniques involved in:
 - performance management systems
 - leadership and mentoring
- processes for monitoring crew and own performance

- relevant legislation especially in regard to WHS/OHS, environmental issues, equal opportunity, industrial relations, unfair dismissal and anti-discrimination
- regulations for stowing and managing flammable/explosive materials including:
 - diesel
 - petrol
 - liquefied petroleum gas (LPG)
 - refrigerant gases
 - lubricants
- requirements for confined space entry and hot work permits
- safety management systems
- testing of LPG detectors.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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.

Resources for assessment must include access to:

- tools, equipment, machinery, materials and personal protective equipment currently used in industry
- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant exercises, case studies and/or simulations.

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