



Australian Government

MARM4006A Survey lifesaving appliances, fire and other safety systems

Release 1

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Modification History

Release 1

This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to assess operational condition of lifesaving appliances, fire and other safety systems, including verifying the monitoring of systems and their components to ensure they function.

Application of the Unit

This unit applies to people working in the maritime industry as a marine surveyor assistant and forms part of requirements for the Certificate IV in Domestic Commercial Vessel Survey.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

- 1 **Identify requirements for lifesaving appliances, fire and other safety systems**
 - 1.1 Types of *lifesaving appliances, fire* and other safety *systems* relevant to type of vessel under survey are identified and incorporated into survey plan
 - 1.2 Maintenance requirements for lifesaving appliances, fire and other safety systems are identified and incorporated into survey plan according to *regulatory requirements*
 - 1.3 Correct type and scale of safety equipment is identified according to size, type and operational area of vessel being surveyed
 - 1.4 Documentation requirements for safety systems for vessel size and nature are identified, accessed and confirmed against survey plan
- 2 **Assess operational condition of lifesaving appliances, fire and other safety systems**
 - 2.1 Powers and responsibility for inspecting and reporting operational condition of lifesaving appliances, fire and other safety systems are identified, reviewed and applied to survey tasks
 - 2.2 Inspection and assessment of condition of lifesaving appliances, fire and other safety systems and *consumables* is carried out according to regulatory and organisational requirements
 - 2.3 Inspection and assessment of *maintenance procedures* for lifesaving appliances, fire and other safety systems and consumables on board a commercial vessel are carried out according to regulatory and organisational requirements
- 3 **Review and report on documentation for lifesaving appliances, fire and other safety systems**
 - 3.1 *Records and certificates* related to routine monitoring and maintenance of condition of lifesaving appliances, fire and other safety systems and equipment is reviewed
 - 3.2 Actions to be taken to maintain, repair or replace lifesaving appliances, fire and other safety systems are communicated to appropriate personnel according to organisational and/or regulatory requirements
 - 3.3 Recordkeeping and reporting requirements related to condition of lifesaving appliances, fire and other safety systems are carried out according to regulatory and organisational requirements

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required Skills:

- Communicate effectively verbally and in writing
- Identify variations in equipment and systems between different vessels, and when equipment and systems are changed on a vessel
- Read and interpret technical specifications and other graphical information related to lifesaving appliances, fire and other safety systems and consumables
- Receive and interpret oral and written orders and instructions related to maintaining operational condition of lifesaving appliances, fire and other safety systems
- Recognise faults and defects in lifesaving appliances, fire and other safety systems, and take appropriate action to report non-compliance or maintenance requirements
- Work under supervision of a marine surveyor

Required Knowledge:

- Applicable sections of the Marine Safety (Domestic Commercial Vessel) National Law
- Importance of maintaining lifesaving appliances, fire and other safety systems and equipment, and potential consequences if systems and/or equipment are not operational during an emergency
- Safety management system (SMS) plans, procedures, checklists and instructions (where applicable) as they relate to lifesaving appliances, fire and other safety systems and equipment
- Lifesaving appliances and fire systems:
 - installation
 - maintenance
 - use
- Relevant legislation, regulations, codes of practice, policies and procedures related to maintaining lifesaving appliances, fire and other safety systems and equipment
- Relevant state and territory maritime regulations
- Statutory and organisational requirements for documenting condition and maintenance procedures and outcomes for lifesaving appliances, fire and other safety systems and equipment used on board vessels
- Work health and safety (WHS)/occupational health and safety (OHS) legislation, regulations and codes of practice

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, the required skills and knowledge, the range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the Elements, Performance Criteria, Required Skills, Required Knowledge and include:

- developing effective planning documents
- providing high quality reports.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include access to:

- industry-approved marine operations site where surveying lifesaving appliances, fire and other safety systems can be conducted
- tools, equipment and personal protective equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on work activities
- range of relevant exercises, case studies and/or other simulated practical and knowledge assessments
- appropriate range of relevant operational situations in the workplace.

In both real and simulated environments, access is required to:

- relevant and appropriate materials and equipment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Method of assessment

Practical assessment must occur in an:

- appropriately simulated workplace environment and/or
- appropriate range of situations in the workplace.

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate to this unit:

- direct observation of the candidate surveying lifesaving appliances, fire and other safety systems
- direct observation of the candidate applying relevant WHS/OHS requirements and work practices.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

In all cases where practical assessment is used it should be combined with targeted questioning to assess Required Knowledge.

Assessment processes and techniques must be appropriate to the language and literacy requirements of the work being performed and the capacity of the candidate.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below.

- Lifesaving appliances may include:
- Emergency position indicating radio beacons (EPIRBs)
 - First aid
 - Life:
 - buoys
 - jackets
 - Pyrotechnics
 - Search and rescue transponders (SARTs)
 - Self-contained breathing apparatus (SCBA)
 - Survival craft
- Fire systems may include:
- Air flaps
 - CO2
 - Dry chemical and wet foam
 - Fan shut-offs
 - Fire detection alarms
 - Foam
 - Portable fire extinguishers
 - Water
- Regulatory requirements must include:
- National Standard for Commercial Vessels (NSCV)
 - Marine Safety (Domestic Commercial Vessel) National Law
 - WHS/OHS legislation, regulations and codes of practice
- Consumables may include:
- Batteries for detectors, radios, beacons, etc.
 - Dry and wet chemicals used in fire extinguishers
 - First aid
 - Flares
 - Survival rations
- Maintenance procedures must include:
- Identifying faults in and damage to lifesaving appliances, fire and other safety systems and equipment
 - Routine checks for operational serviceability of lifesaving appliances, fire and other safety systems and equipment
- Records and certificates may include:
- Licensed contractor certificates of inspection
 - Lifesaving appliances, fire and other safety systems and equipment operational and maintenance instructions and recommended procedures
 - NSCV and applicable Australian and international regulatory requirements
 - Relevant maritime authority instructions for the maintenance and serviceability of shipboard lifesaving appliances, fire and other

- safety systems and equipment
- SMS plans, procedures, checklists and instructions
- Vessel log books

Unit Sector(s)

Not applicable.

Competency Field

Marine Surveying