



Australian Government

**Assessment Requirements for MARF011
Manage firefighting and fire prevention
activities on board a vessel**

Release: 1

Assessment Requirements for MARF011 Manage firefighting and fire prevention activities on board a vessel

Modification History

Release 1. New unit of competency.

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 crew and passengers during fire emergencies
- determining the type and extent of the fire and initiating appropriate, timely, actions
- ensuring order of priority, timing and sequence of actions are appropriate to the overall requirements of the incident and minimise damage and potential damage to the vessel, injuries to personnel, and impairment of the operational effectiveness of the vessel
- evaluating effectiveness of firefighting activities and tactics during fire emergencies
- initiating appropriate action and providing solutions to problems with firefighting equipment and operations during fire emergencies
- liaising with shore-based emergency organisations during fire emergencies
- managing fire prevention and suppression activities on a vessel
- managing on-board firefighting training for shipboard firefighting teams
- managing shipboard firefighting teams and their tactical activities during fire emergencies
- managing the maintenance of firefighting equipment and systems
- providing leadership to shipboard personnel and passengers during fire emergencies
- recognising and interpreting fire alarms and initiating appropriate response
- safeguarding personal safety during fire control activities at all times
- taking actions to control fires based on a full and accurate assessment of the incident, using all available sources of information
- transmitting information promptly, accurately, completely and clearly.

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:

- assessment of cause of incidents involving fire
- chemistry of fire and its relationship to combustible materials typically found on vessels
- communication and coordination during firefighting operations
- composition and allocation of personnel to fire parties
- control of fuel and electrical systems
- different classes of fire and the most appropriate extinguishing agents, application equipment and methods of extinguishment for each

- fire-detection systems: fixed fire-extinguishing systems; portable and mobile fire-extinguishing systems, including appliances, pumps and rescue, salvage, life-support, personal protective and communication equipment
- fire precautions and hazards associated with the storage and handling of materials (paints etc.)
- firefighting procedures at sea and in port, with particular emphasis on organisation, tactics and command
- firefighting process hazards (dry distillation, chemical reactions, boiler uptake fires etc.)
- firefighting involving dangerous goods
- implications of shipboard firefighting management in port and the procedures that must be followed to comply with port and state regulations
- importance of maintenance of fire detection and firefighting equipment on board vessels
- life and health risks associated with fires on vessels
- management and control of injured persons
- maritime communication techniques applicable to the management of fire prevention and firefighting activities on board a vessel
- methods for checking and replacing consumable materials in fire detection, fire-fighting equipment and systems on board vessels
- preparation of contingency plans
- principle of operation of fixed fire suppression systems
- principles underlying the spread of fire and its extinguishment
- problems likely to be encountered during the management of a shipboard fire and related tactics and solutions that can be applied
- procedure for safe activation of fixed firefighting systems
- procedures for coordination of shore-based firefighters
- relevant regulations, codes of practice, policies and procedures relating to the maintenance of fire detection, firefighting equipment and systems on board vessels
- requirements for on-board firefighting training
- requirements for statutory and classification surveys
- safety data sheets/material safety data sheets relevant to the various products and substances carried on vessels
- strategies and tactics for control of fires in various parts of the vessel
- strategies for rapid briefing of shore-based emergency organisations using the vessel fire control plan
- types of fire detection, firefighting equipment and systems used on vessels, their features, principles of operation, the procedures for their use and remediating problems that can occur during use
- typical actions of passengers in a shipboard fire
- use of water for fire extinguishing, the effect on ship stability, precautions and corrective procedures
- ventilation control, including smoke extraction
- work health and safety (WHS)/occupational health and safety (OHS) requirements and safe work practices.

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.

Links

Companion Volume implementation guides are found in VETNet -

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