



Australian Government

MARF035 Contribute to fire prevention and firefighting (basic firefighting)

Release: 1

MARF035 Contribute to fire prevention and firefighting (basic firefighting)

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 prevent and control fires and to respond effectively to any fire emergency onboard a vessel.

It applies to deck and engine workers working in the maritime industry requiring a Certificate of Safety Training.

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

- Chief Integrated Rating
- Electro-Technical Officer (STCW Electro-Technical Officer Unlimited)
- Engineer Class 3 Near Coastal
- Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited)
- Integrated Rating
- Master of a commercial ship less than 80 metres in length within the exclusive economic zone (EEZ)
- Master of a commercial vessel less than 500 gross tonnage (GT)
- Master of a commercial vessel Unlimited
- Watchkeeper Deck.

Licensing/Regulatory Information

This unit is equivalent to and delivers the objectives of the following STCW provisions:

- STCW Reg VI/1 and Code Section A-VI/1 (2), Table A-VI/1-2.

Legislative and regulatory requirements are applicable to this unit.

- 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.

Near Coastal Qualifications:

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as an Engineer Class 3 Near Coastal or Master less than 80 metres Near Coastal

as defined in the Marine Order 505 (Certificates of competency - National Law) 2013.

Blue Waters Qualifications:

- This unit is one of the requirements to obtain AMSA certification as a Chief Integrated Rating, Electro-Technical Officer (STCW Electro-Technical Officer Unlimited), Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited), Integrated Rating, Master of a commercial vessel less than 500 gross tonnage (GT), Master Unlimited or Watchkeeper Deck 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).

Pre-requisite Unit

Not applicable.

Competency Field

F - Operational Quality and Safety

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Actively prevent fire

- 1.1** Fire hazards (pre-conditions for fire) onboard a vessel are identified and rectified according to workplace procedures
- 1.2** Onboard procedures for preventing fire are accessed and implemented

2 Prepare response to fire

- 2.1** Location and class of fire is identified
- 2.2** Alarm is raised
- 2.3** Condition of firefighting equipment and systems in work area is monitored according to planned maintenance schedules

- 2.4 Realistic drills and musters are practised to ensure pre-incident readiness of response personnel
 - 2.5 Appropriate protective equipment (PPE), including self-contained breathing apparatus (SCBA) is made ready
 - 2.6 All available means to limit the spread of fire and smoke are employed
 - 2.7 Appropriate pumps and ancillary equipment are readied to support firefighting operations
 - 2.8 Extinguishing media/agent is selected according to the class/classes of fire
- 3 Combat fire**
 - 3.1 Threats to life or health are identified within the emergency area
 - 3.2 Activities and tactics to combat the fire are selected so that the safety of the vessel and all onboard is not compromised
 - 3.3 Fire is located and access is gained in the safest and most timely manner
 - 3.4 Fire is attacked using the extinguishing media/agent and application techniques appropriate to the class and size of fire
 - 3.5 SCBA is donned and used correctly while undertaking fire extinguishment and rescue
 - 3.6 Effectiveness of combat activities and tactics is evaluated and altered, as required
 - 3.7 Communication is maintained to ensure safety and efficiency of firefighting operation
- 4 Complete post-fire activities**
 - 4.1 Fire watch is maintained to prevent further outbreak
 - 4.2 Fire scene is preserved prior to investigation, as appropriate
 - 4.3 Information relating to the incident is provided as part of fire debriefing session

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 MARF008 Prevent and fight fires on board a vessel.

Links

Companion Volume implementation guide can be found in VetNet -

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

Assessment Requirements for MARF035 Contribute to fire prevention and firefighting (basic firefighting)

Modification History

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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:

- applying extinguishing media to fire
- applying safe working practices at all times
- assisting in the setting up and use of foam making equipment
- correctly donning and using self-contained breathing apparatus (SCBA) while undertaking fire extinguishment and rescue in a heated smoke-filled compartment
- correctly donning and using SCBA while undertaking a drill in a smoke-filled compartment
- correctly using fireman's outfit
- entering and moving through a compartment filled with high expansion foam with the aid of a lifeline and without breathing apparatus
- extinguishing a fire with a fire blanket
- logging SCBA wearers correctly on a control board
- operating charged hose-lines and nozzles
- operating portable firefighting extinguishers
- performing after-use maintenance on SCBA
- working effectively with team members when responding to a fire.

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:

- actions to be taken:
 - in an emergency
 - onboard ship
- alarms and signals during onboard emergencies
- firefighting activities, including:
 - boundary control
 - containing the spread of fire
 - evacuation of casualties from heated smoke-filled environments
 - extinguishment

- overhaul/fire watch
- chemistry of fire, including the fire tetrahedron and its relationship to materials typically found on vessels
- classification of fire and applicable extinguishing agents
- correct use of lifesaving appliances and firefighting appliances
- different classes of fire, their characteristics and strategies and equipment needed for their extinguishment
- elements of fire and explosion (the fire triangle)
- extinguishing media, including firefighting foams
- fire and smoke detection and automatic alarm systems
- fire hazards types and sources of ignition
- firefighting tactics, techniques and procedures
- flammable materials, fire hazards and spread of fire
- hazards and threats to life or health during onboard firefighting operations
- lifeline signals
- location of firefighting appliances and emergency escape routes
- need for constant vigilance
- onboard Emergency Response Organisation and procedures
- portable fire-extinguishers
- precautions for and use of fixed installations
- principles and methods of fire extinguishment
- principles underlying the spread of fire
- purpose, function and location of fixed installations/systems
- role and responsibility of self and team members
- safe working practices
- shipboard firefighting organisation
- statutory requirements pertaining to lifesaving appliances and firefighting appliances
- types of fire detection, firefighting equipment and systems used on vessels, their features, principles of operation, procedures for their use and problems that can occur
- ventilation procedures
- vessel construction as it relates to fire prevention/protection
- work health and safety (WHS)/occupational health and safety (OHS) requirements and work practices.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

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.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

Links

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