

Title	Fight fires to STCW–Basic requirements in enclosed spaces on a vessel		
Level	4	Credits	4

Purpose	<p>This unit standard is intended for people requiring training and assessment in fire-fighting techniques to International Maritime Organisation STCW-Basic requirements.</p> <p>People credited with this unit standard are able to: select, don, and operate protective clothing and life support equipment; identify and describe the operation of fixed fire systems; control and extinguish fires; extinguish fire in a heavily smoke-logged room wearing breathing apparatus; extinguish an oil fire; and effect a rescue from a smoke-filled compartment.</p>
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Classification	Maritime > Sea Survival and Sea Safety
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes:
Health and Safety at Work Act 2015.
Maritime Transport Act 1994 and subsequent amendments.
- 2 References
International Maritime Organization, *International Convention on Standards of Training, Certification and Watchkeeping (STCW) for Seafarers and STCW Code, including 2010 Manila Amendments: Part A, Chapter VI – Standards regarding emergency, occupational safety, security, medical care and survival functions, Table A-VI/1-2 Specification of minimum standard of competence in fire prevention and fire fighting* London 2011, IMO 938E, Print edition ISBN 978-92-801-1528-4.
Maritime NZ, *SeaCert Seafarer Certification and Operational Limits Framework*, Wellington 2014.
- 3 Definitions
Accepted industry practice refers to standardised practices and procedures accepted by the wider maritime industry as examples of best practice.
MTOP stands for Maritime Transport Operator Plan which refers to the documented operational plan required for all commercial vessels as a part of the Maritime Operator Safety System (MOSS), the operator certification system established under Part 19 of the Maritime Rules and administered by Maritime New Zealand.
Operating procedures refers to the safe operating procedures documented in the vessel's MTOP as well as any undocumented standard operating procedures for that vessel.

STCW refers to the International Maritime Organisation's convention on the Standards of Training, Certification and Watchkeeping for Seafarers. The convention establishes basic requirements on training, certification and watchkeeping for seafarers on an international level.

- 4 This unit standard in conjunction with Unit 12310, *Demonstrate knowledge of fire prevention and limitation, and extinguish small fires on board a vessel* covers all of the firefighting training requirements as detailed in the *STCW Code, including 2010 Manila Amendments: Part A, Chapter VI – Standards regarding emergency, occupational safety, security, medical care and survival functions*; Table A-VI/1-2 *Specification of minimum standard of competence in firefighting prevention and firefighting*.
- 5 Assessment information
- a Competency may be demonstrated using simulated scenarios.
 - b All activities and evidence must be in accordance with accepted industry practice, and vessel operating procedures.

Outcomes and performance criteria

Outcome 1

Select, don, and operate protective clothing and life support equipment.

Performance criteria

- 1.1 Protective clothing and life support equipment are selected and donned in accordance with manufacturer's instructions.
- Range life support equipment must include – compressed air breathing apparatus and lifelines; and may include – air lines, distress signal units (DSU), and closed-circuit breathing apparatus.
- 1.2 Protective clothing and life support equipment are tested prior to entry into fire and emergency situations in accordance with manufacturer's instructions.
- Range life support equipment must include – compressed air breathing apparatus and lifelines; and may include – air lines, distress signal units (DSU), and closed-circuit breathing apparatus.
- 1.3 Life support equipment is operated.
- Range life support equipment must include – compressed air breathing apparatus and lifelines; and may include – air lines, distress signal units (DSU), and closed-circuit breathing apparatus.
- 1.4 A lifeline is followed to enter and pass through a compartment into which high-expansion foam has been injected, without wearing a breathing apparatus.

Outcome 2

Identify and describe the operation of fixed fire systems.

Performance criteria

2.1 Components of fire detection systems are identified, and their operation is described.

Range flame detectors, smoke detectors, automatic alarm systems.

2.2 Components of fixed fire suppression systems are identified, and their operation is described.

Range fire pumps, hydrants, sprinkler systems, gas flooding systems.

Outcome 3

Control and extinguish fires.

Performance criteria

3.1 Equipment appropriate for the fire type is selected and operated.

Range water using jet or spray nozzles; foam, powder, or other chemical agent.

3.2 The fire is extinguished in a timely manner minimising damage to the vessel and injury to personnel.

3.3 Safety procedures applying to the use of the selected fire suppression techniques are adhered to.

3.4 Personal protection is maintained throughout the fire suppression operation.

3.5 Strategic and tactical guidelines regarding the quantity of extinguishing agents used are followed to ensure fast knockdown of the fire, protection of the vessel and its contents, and avoidance of chemical reactions.

Outcome 4

Extinguish fire in a heavily smoke-logged room wearing breathing apparatus.

Range water-fog or other suitable agent.
room – one of accommodation compartment or engine room.

Performance criteria

4.1 Entry control procedures and guidelines are followed.

4.2 Fire is located and extinguished.

- 4.3 Tactical guidelines regarding appropriate methods of attack are followed to ensure fast knockdown of the fire.

Outcome 5

Extinguish an oil fire.

Range one of – dry chemical powder, foam applicators, fog application and spray nozzles.

Performance criteria

- 5.1 Oil fire is extinguished using appropriate method and equipment.

Outcome 6

Effect a rescue from a smoke-filled compartment.

Performance criteria

- 6.2 Rescue is effected from a smoke-filled compartment while wearing breathing apparatus.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 October 2015	31 December 2022
Review	2	24 September 2020	N/A

Consent and Moderation Requirements (CMR) reference	0054
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.