

PIRFO Draft Competency Standards

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| NEW PIRFO 3 – 1.02 | Take emergency action on board a vessel |
| <p>Co/Prerequisites: None</p> <p>Descriptor:</p> <p>This unit involves responding to operational emergencies on board a vessel, including fire and vessel abandonment.</p> <p>The role of a Fisheries Observer in such situations is markedly different from that of a crewmember who is required to respond as part of a team. Response for a Fisheries Observer would normally be under direct supervision of a trained crew (skipper or officer).</p> <p>Certification comparable to the International Maritime Organisation (IMO) model courses STCW95 Fire Prevention and Fire Fighting and STCW95 Personal Survival Techniques is accepted as equivalent.</p> <p>Similarly, certification comparable to the Regional Maritime Program model courses SPC 001 Survival Techniques and SPC 002 Fire Prevention and Control is also accepted as equivalent.</p> <p>Please refer to the syllabus of the identified equivalent training programs for the detailed evidence guides associated with each assessment criteria.</p> | |
| Learning Outcome | Assessment Criteria |
| <p>1. Outline emergency procedures, escape routes, and the requirements for on board training and drills.</p> | <p>1.1 The incidents that may result in an emergency are listed.</p> <p>1.2 Typical emergency response on fishing vessels is described.</p> <p>1.3 The information available on a vessel muster list is stated.</p> <p>1.4 The emergency muster and abandon ship signals are stated and the actions to be taken explained</p> <p>1.5 The value of regular and meaningful on board emergency training is discussed.</p> <p>1.6 The meaning of basic IMO safety symbols is stated.</p> <p>1.7 The initial safety actions that should be taken on joining a new vessel are listed</p> |
| <p>2. Carry out basic emergency actions on board a vessel</p> | <p>2.1 Able to explain and describe (with diagrams if applicable) or practically demonstrate a knowledge of the procedures to be followed by the crew of a vessel in a man overboard situation</p> <p>2.2 List or describe eight safety items or equipment that should be carried on small boats at all times</p> <p>2.3 Able to explain and describe and/or practically demonstrate a knowledge of</p> <p style="padding-left: 20px;">The characteristics of a life jacket</p> <p style="padding-left: 20px;">Correct stowage of a lifejacket</p> <p style="padding-left: 20px;">The correct method of putting on a life jacket and how to enter the water wearing a life jacket</p> <p>2.4 Able to explain and describe and/or practically demonstrate a knowledge of:</p> <p style="padding-left: 20px;">The characteristics of a life buoy</p> <p style="padding-left: 20px;">Correct stowage of a life buoy</p> <p style="padding-left: 20px;">Buoyant line and self igniting light that can be attached to a life buoy</p> <p style="padding-left: 20px;">The correct use of a life buoy in an emergency</p> |

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| <p>3. Demonstrate knowledge of abandon ship procedures and sea survival techniques</p> | <p>Able to explain and describe and/or practically demonstrate a knowledge of</p> <ul style="list-style-type: none"> • The important parts of a life raft • Correct stowage of a life raft • The workings of a hydrostatic release unit <p>Able to explain and describe and/or practically demonstrate a knowledge of</p> <ul style="list-style-type: none"> • Crew preparations to abandon the boat • The procedures to launch a life raft • The procedures to board a life raft • The procedures to right a life raft <p>Able to explain and describe and/or practically demonstrate a knowledge of the procedures that should be adopted in</p> <ul style="list-style-type: none"> • Rescuing someone with the use of the rescue quito • First entering the life raft • Enhancing survival in the life raft <p>Able to explain and describe and/or practically demonstrate a knowledge of</p> <ul style="list-style-type: none"> • What hypothermia is and its symptoms • How to protect against hypothermia • How to treat hypothermia • Minimising loss of body heat in the water <p>Explain and describe and/or demonstrate how to</p> <ul style="list-style-type: none"> • Correct use of 3 common pyrotechnics • Identify the correct pyrotechnic for use according to the situation described <p>Able to explain and describe eight internationally recognised distress signals (to include at least one from each group – sight, sound, pyrotechnics, radio)</p> |
| <p>4. Use EPIRBs in an emergency</p> | <p>Able to explain and describe basic principles of 121.5 and 406 EPIRBs</p> <p>Practically demonstrate how to correctly operate 121.5 and 406 EPIRBs</p> <p>Identify the actions required when an EPIRB is activated accidentally</p> |
| <p>5. Demonstrate knowledge of fire prevention and control</p> | <p>Explain and describe the three components that make up the fire triangle and the principles followed in extinguishing a fire</p> <p>List 5 common causes of fires on vessels and ways to prevent them</p> <p>Describe the dangers of electricity in and around fires</p> <p>Describe the types of fire fighting equipment found on a vessel and explain their use</p> <p>Identify which extinguishing agent is dangerous with electrical fires</p> <p>Describe the actions to when discovering a fire</p> <p>Identify the precautions to follow when fighting a fire and after the fire is extinguished</p> <p>Explain the precautions needed in the use and storage of LPG</p> |

Context and method of assessment

Assessment may be conducted in the classroom, fire training ground, practical training facilities or on an appropriate vessel.

The ability to respond to emergencies will normally be demonstrated during onboard drills covering all components of reaction to emergencies involving:

- fire
- grounding
- flooding
- person over board
- rescue and evacuation of personnel
- major mechanical damage
- by demonstrating ability to:
 - respond to emergency signals
 - prepare for abandoning ship
 - comply with instructions
 - abandon ship
 - practice survival procedures after abandonment
 - select suitable clothing
 - apply appropriate fire fighting, and control techniques that limit the spread and duration of fire
 - use communication procedures.

The following assessment methods are suggested:

- written or oral short answer testing
- practical exercises
- project work
- observation of practical demonstration.
- assignment

Resources required for assessment

Resources may include:

- operational vessel in survey with all required fire fighting and survival equipment
- realistic emergency response simulator allowing the use of all equipment and procedures mentioned above.
- Pyrotechnics
- Epirbs
- Liferaft
- Lifejackets
- Lifebuoys
- Fire extinguishers
- Fire hoses and pumps
- Audio visual aids
- Videos and DVDs

Underpinning knowledge

The underpinning knowledge identified for this unit goes into more depth due its likely inclusion in a group of units that may be used as the basis for the issue of licenses by regulatory bodies. The essential knowledge and understanding a person needs to perform work to the required standard includes:

- procedures for:
 - mustering and reporting
 - emergency shut down and isolation of plant, equipment and areas of responsibility
 - isolating fire areas
 - activating alarm signals
 - protecting survivors in survival craft
 - preserving body fluids
 - search and rescue
 - launching and inflating life rafts
 - survival management
- location of:
 - alarm points
 - first aid emergency equipment
 - all fire fighting equipment and the location and method of operating fixed system controls
 - personal survival aids and extra survival equipment and their use
- hazards associated with:
 - different types of fire and by products of combustion (including flares)
 - choosing an incorrect extinguishing method different methods of fire fighting
 - extremes of heat and humidity
 - immersion
 - exposure to sea or weather
 - heat or cold
 - lack of nourishment
- different types of alarm signal
- type of information to be provided and to whom
- basic principles of survival
- equipment available in inflatable life rafts
- additional equipment that may be used in a life raft
- importance of regular training drills and the actions to take on discovering an emergency
- effective communication techniques
- techniques for maximising morale and the will to live.

Practical skills

The essential skills a person needs to perform work to the required standard include:

- using a range of fire extinguishers
- joining a life raft dry or wet
- righting an up turned life raft
- heat escape lessening positions.
- activating / receiving alarm signals
- donning a lifejacket

Literacy skills used for:

- reading the survival at sea manual
- reading life raft launching instructions.

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Critical aspects of evidence

Assessment must confirm the ability to deal with a range of emergencies encountered on board a fishing vessel, and the means to maximise survival during abandonment.

Ability to:

- Respond to a range of emergencies in various circumstances which are likely to be encountered on a small vessel, including deployment of life raft
- Comply with procedures and contingency plans when:
 - discovering an emergency
 - being informed of an emergency
- Take action to:
 - comply with muster procedures
 - rectify the situation within responsibility
 - raise the alarm
 - respond to emergency signals
 - minimise the chance of or deal with explosion.

Knowledge of:

- Actions that may harm other personnel.