CONTENTS

SAFETY TRAINING AND DRILLS 2

1. DRILLS 2
2. EMERGENCY DRILL AND TRAINING PLANNER 3
3. ABANDON SHIP DRILLS 4
4. LIFEBOAT LAUNCHING HAZARDS 5
5. FREE FALL LIFEBOAT DRILLS 5
6. GUIDELINES FOR SIMULATED LAUNCHING OF FREE FALL LIFEBOATS DURING DRILLS 6
7. RESCUE BOAT DRILLS 7
8. LAUNCHING SURVIVAL CRAFT WHILE VESSEL MAKING HEADWAY 8
9. FIRE DRILLS 8
10. OIL SPILL / PETROLEUM SPILL DRILLS 8
11. SECURITY DRILLS 9
12. TRAINING FOR NEXT LEVEL 10
13. ON-BOARD TRAINING AND INSTRUCTION 10
14. ENCLOSED SPACE ENTRY AND RESCUE DRILL 11
15. RECORDS 11
16. REFERENCES 12

SAFETY TRAINING AND DRILLS

It is essential that seafarers are familiar with the LSA/FFA on board their ships and that they have confidence that the appliances provided for their safety will work and will be effective in an emergency. Frequent periodic shipboard drills are necessary to achieve this.

Crew training is an important component of drills. Onboard drills and training will familiarize crew members with the ships' appliances and the associated procedures. The objective of drill and training is to develop appropriate crew competencies, enabling effective and safe utilization of the equipment required by the SOLAS Convention.

Every crew member with assigned emergency duties shall be familiar with these duties before the voyage begins (before proceeding to sea).

1. DRILLS

1.1. Drills shall, as far as practicable, be conducted as if there were an actual emergency. The initial action as required by the appropriate Company Contingency Plan (see Contingency Plan Manual should be followed.

1.2. Drills should be conducted with an emphasis on learning and be viewed as a learning experience, not just as a task to meet a regulatory requirement to conduct drills.

1.3. During drills, care should be taken to ensure that persons on board familiarize themselves with their duties. If necessary, pauses should be made during the drills to explain especially difficult elements. The experience of the crew is an important factor in determining how fast a drill or certain drill elements should be carried out.

1.4. Drills shall be conducted in a safe manner.

1.5. In preparing for a drill, those responsible should review the manufacturer's instruction manual to ensure that a planned drill is conducted properly. Those responsible for the drill should ensure that the crew is familiar with the guidance provided in the life-saving appliances instruction manuals.

1.6. SOLAS Chapter III, Regulation 19 requires every crewmember to participate in at least one abandon ship drill and one fire drill every month. (NOTE: some Flag Administrations require more frequent drills).

1.7. Unannounced drills should be held from time to time at the Masters discretion.

1.8. If it is not possible to hold a scheduled emergency drill due to unfavourable weather conditions, port regulations, berth restrictions, etc., a record must be made in the deck and official log book stating the reasons and if practicable the drill should be rescheduled. (Refer section 16. Records)

1.9. If more than 25% of the crew have not participated in abandon ship and fire drills on board within the previous month, the drills shall take place within 24 hours of the ship leaving port.

1.10. When a ship enters service for the first time, or when a new crew is engaged, the abandon ship and fire drills should be held before sailing.

1.11. On completion of a drill, opportunity should be taken to provide on board training in the proper use of various lifesaving and firefighting equipment.

1.12. A de-brief must be held after each drill to identify problems that may have arisen, possible improvements that can be introduced and an exchange of ideas.

1.13. Lessons learned in the course of a drill should be documented and made a part of the follow-up shipboard training discussions and the planning of the next drill session.

1.14. Equipment used during drills must immediately be brought back to its fully operational condition and any faults and defects discovered during the drill must be remedied as soon as possible.

1.15. Should the Master need to conduct drills out of business hours, testing the 24-hour response number before conducting the drill will give the duty manager warning of the impending drill and allow time to get access to email / internet so as to be able to respond in the correct manner.

Note: There is no requirement to inform or warn the Company of impending tests or drills when conducting these tests or drills during normal working hours of the office where your Ship Manager is based.

1.16. The Company emergency response should be tested monthly and normally during the SMPEP/SOPEP drill. If not practicable then the communications should be tested during any other drill. This is done by sending an Initial Incident Report message to the Company, followed by a telephone call to the Company 24-hour emergency call out number. The Company should acknowledge receipt of the message. Drills requiring more than a verbal acknowledgement from the Company are so far as possible to be conducted during Ship Manager office hours to best ensure receipt of the emailed initial report and the Company's response.

1.17. In the event of no reply on the 24-hour emergency number, contact the vessels Ship Manager. If again no response, contact the DPA and or the Marine Manager

2. EMERGENCY DRILL AND TRAINING PLANNER

2.1. The Company has prepared an "Emergency Drill and training Planner" in CFM[1] that provides a schedule of statutory and non-statutory drills and training that must be conducted on board.

2.2. Company muster list template Form 3.5.7 is to be used for Abandon ship & MOB, Fire and Oil Pollution duties. Templates are to be made ship specific. Master may assign a duty to a different rank if the particular rank is most suited for the duty depending upon the complement on board.[2]

3. ABANDON SHIP DRILLS

3.1. The guidelines in the COSWP "Emergency drills and procedures" and SOLAS Chapter III, Regulation 19 should be observed.

3.2. Before conducting drills, it should be checked that the lifeboat and its equipment have been maintained in accordance with the ship's maintenance manuals and any associated technical documentation, as well as noting all the precautionary measures necessary. Abnormal conditions of wear and tear or corrosion should be reported to the responsible officer immediately.

3.3. Each Abandon Ship drill shall include:

i) Summoning of passengers and crew to muster stations with the alarm signal followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship.

ii) Reporting to the muster stations and preparing for the duties described in the muster list.

iii) Checking that passengers and crew are suitably dressed.

iv) Checking that lifejackets are correctly donned.

v) As far as practicable at least one lifeboat should be lowered.

vi) Starting and operating the lifeboat engine.

vii) Operation of davits used for launching life rafts.

viii) Mock search for passengers or crew trapped in their cabins.

ix) Instruction in the use of radio life-saving appliances.

3.4. Each lifeboat should be launched every three (3) months and manoeuvred in the water. As per company requirements, the operating crew shall not be on board during launching. The boat shall first be lowered to water level. Embarkation ladder shall be used and crew shall embark boat only through embarkation ladder.

[1] W 03 / 2024
[2] W 27 / 2019

3.5. Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

3.6. Ship staff should endeavour to lower and manoeuvre lifeboat every two (2) months considering the fact that some port authorities do not permit to lower and manoeuvre lifeboat in water.

4. LIFEBOAT LAUNCHING HAZARDS

4.1. Lifting hook disengaging gear fitted to lifeboats are known to release prematurely and have led to several deaths and injury. This sometimes follows a jerk on the lifeboat falls caused by faulty winch brakes, slack falls or non-release of one of the harbour pins.

4.2. Lifeboat disengaging gear should be thoroughly inspected at regular intervals and maintained in good working order.

4.3. Davit falls should be kept tight and correctly adjusted.

4.4. Davit winch brakes must be well maintained and correctly adjusted.

4.5. To prevent lashings or gripes from getting entangled, proper release should be checked before swinging out the davit.

4.6. The disengaging gear must be inspected to ensure it is good condition and properly engaged before launching the lifeboat. Boat shall be launched without the operating crew who shall then embark once the boat is waterborne through use of an embarkation ladder.

5. FREE FALL LIFEBOAT DRILLS

5.1. At least once every three (3) months during an abandon ship drill, the crew shall board the lifeboat, properly secure themselves in their seats and commence launch procedures up to but not including the actual release of the lifeboat (i.e. the release hook shall not be released).

5.2. The lifeboat shall then be lowered into the water ONLY by secondary means of launching (using davit) without the operating crew on board. As per company policy free fall launching is not permitted.

5.3. Rescue boat shall be lowered and used to embark the operating crew. If unable to lower the rescue boat due berth arrangement, then the operating crew may board the lifeboat by means of an embarkation ladder rigged from the transom.

5.4. The lifeboat shall thereafter be manoeuvred in the water by the operating crew.

5.5. The recovery or restraining slings or chains (securing the lifting strops or rings to the davit falls or the boat to the davit structure) are to be disconnected from the life boat under normal conditions. The recovery or restraining slings or chains must however be connected to the life boat when :

- Maintenance is being carried out on or in the life boat; and
- During boat drills which include embarkation into the life boat.
- Ship's crew are entering the boat for regular inspection/checks
- Ship's crew are working on the launching appliance
- On completion of the maintenance or drills the responsible person must ensure that the slings or chains have been disconnected from the lifeboat

6. GUIDELINES FOR SIMULATED LAUNCHING OF FREE FALL LIFEBOATS DURING DRILLS

The purpose of these Guidelines are to provide a basic outline of essential steps to safely carry out simulated launching. These Guidelines are general; the lifeboat manufacturer's instruction manual should always be consulted before conducting simulated launching. All persons involved should be familiar with the manufacturers' instructions and the activation of the release mechanism. Manuals, posters and signs may be used to assist familiarization and the conduct of drills. Simulated launching should be carried out under the supervision of a responsible person who should be an officer experienced in such procedures and be conducted without the physical activation of the free-fall release system.

Testing of release systems should be separate to and not carried out during simulated launching drills.

6.1. Simulated launching carried out during drills, in accordance with SOLAS regulation III/19, is a means of training the crew in the free-fall release procedure of free-fall lifeboats without the physical activation of the release mechanism.

6.2. Simulated launching shall be carried out in accordance with the guidelines developed by the Organisation. (Company recommends every three (3) months and preferably during the same day when free fall lifeboat is lowered. However ship staff shall note that FREEFALL lifeboat launching using davit shall be separate and simulated launching shall be conducted separately).

6.3. Simulated launching shall be carried if:

- The lifeboat has been designed for a simulated launch;
- The launch is in accordance with the manufacturer's instructions; and
- The launch is in accordance with the guidelines as provided by the Organisation

6.4. The introduction of free-fall simulation does not eliminate the requirement to physically launch the lifeboat and manoeuvre it in the water at least every three months.

6.5. Typical simulated launching sequence (SOLAS regulation III/19)

a. Check equipment and documentation to ensure that all components of the lifeboat and launching appliance are in good operational condition.

b. Ensure that all personnel involved in the drill are familiar with the operating manuals, posters and signs.

c. Ensure that the restraining device(s) provided by the manufacturer for simulated launching are installed and secure and that the free-fall release mechanism is fully and correctly engaged.

d. Establish and maintain good communication between the assigned operating crew and the responsible person.

e. Disengage lashings, gripes, etc. installed to secure the lifeboat for sea or for maintenance, except those required for simulated free-fall.

f. Participating crew board the lifeboat and fasten their seatbelts under the supervision of the responsible person.

g. All crew disembark the lifeboat.

h. Return the lifeboat to the condition it was in prior to step provided in paragraph e. Ensure that the lifeboat is returned to its normal stowed condition. Remove any restraining and/or recovery devices used only for the simulated launch procedure.

7. RESCUE BOAT DRILLS

7.1. Rescue boats should be launched each month and manoeuvred in the water. In all cases this requirement shall be complied with at least once every three (3) months.

7.2. Rescue boat shall be launched without the operating crew who shall then embark once the boat is waterborne through embarkation ladder.

However, ships with hull curvature in way of rescue boat location where ladder may not rest against the ship side, crew may board the boat at stowed position. However, before placing persons on board a rescue boat, the boat first be lowered and recovered without persons on board to ascertain that the arrangement functions correctly. The boat should then be lowered into the water with only the number of persons on board necessary to operate the rescue boat.[3]

[3] W 42 / 2018 (Moved from Section 3.4)

8. LAUNCHING SURVIVAL CRAFT WHILE VESSEL MAKING HEADWAY

8.1. The launching of survival craft while the vessel is making way through the water is a high-risk operation and is not permitted.

8.2. Boats shall be lowered and manoeuvred in water only when vessel is alongside port, at anchorage, when drifting inside port limits or within 6 miles outside port limits.

8.3. Weather and sea conditions are to be favourable while launching survival crafts.

8.4. Special care is to be taken to ensure that the engine is not overheated through lack of cooling water. Damage can occur very rapidly.

9. FIRE DRILLS

Each Fire Drill shall include:

a. Reporting to stations and preparing for the duties described in the muster list.

b. Starting of a fire pump, using at least two jets of water to show that the system is in proper working order.

c. Donning and checking of fireman's outfit and self-contained breathing apparatus sets and other personal rescue equipment.

d. Use and checking of relevant communication equipment.

e. Checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area.

f. Checking the necessary arrangements for subsequent abandoning of the ship.

g. On occasion during an engine room fire drill, engine room staff should practise emergency escape by donning EEBD.

h. Each of the various parties i.e. Emergency Party or Ventilation Party etc. should practice to function as a team. Coordination and cooperation are important for team success. Training, practice and drills are essential because without them little coordination or cooperation is achieved. In addition, substitute leader training must be conducted at regular intervals to ensure all are capable of carrying out their tasks effectively.

10. OIL SPILL / PETROLEUM SPILL DRILLS

Each Oil Spill/Petroleum Cargo Spill Drill shall include:

a. Raising of the emergency alarm

b. Reporting to stations and preparing for duties described in the muster list.

c. The shutdown of operations e.g. cargo / bunkering operations, or if this is not practical, the simulated shutdown of operations.

d. Deployment of oil spill containment equipment.

e. Transfer or simulated transfer of spilled oil to slop tanks or other tanks.

f. Deployment of spill clean-up equipment.

g. Use of appropriate personal protective gear.

h. Reference must be made to the procedures contained in the SMPEP/SOPEP Manual and relevant Company contingency plans.

i. The requirements to report oil spills should be checked including contact details. The various reports required by the authorities should be prepared.

j. Sea water can be used when practicable to simulate an oil spill.

k. Instruction should be given to the crew on the serious negative impact that an oil spill can have on the Company, including the threat of penalties and prosecution of individuals. It should include the need for rapid response to prevent or minimise pollution and the correct use of oil spill containment and clean up equipment and materials.

11. SECURITY DRILLS

Reference should be made to Section 13.5 (Drills and Exercises) of Part B of the ISPS Code and Ship's Security plans.

Security drills should be :

a. Conducted at least once every three months; In addition, in cases where more than 25 percent of the ship's personnel has been changed, at any one time, with personnel that has not previously participated in any drill on that ship, within the last 3 months, a drill should be conducted within one week of the change.

b. "Live" and test individual elements of the ship security plan such as those security threats listed in paragraph 8.9 of Part B of the code.

c. Table top exercises do not qualify as drills and do not satisfy these drill requirements.

d. Security exercises which may include participation of company security officers, port facility security officers, relevant authorities of Contracting Governments as well as ship security officers should be carried out at least once each calendar year but with no more than 18 months between the exercises. These exercises should test communications, coordination, resource availability, and response. These exercises may be

- Full-scale or live;
- Table top simulation or seminar; or
- Combined with other exercises held such as search and rescue or emergency response exercises.

e. Three monthly shipboard exercises conducted in accordance with the company's emergency drill year planner must therefore be live drills and not simulated or table top exercises or discussions.

f. Security drill reports must clearly note the type of security drill conducted e.g. stowaways, sabotage, hijacking, vandalism, attack at sea etc. The ship will then be able to offer objective evidence of having complied with the appropriate regulatory requirements.

12. TRAINING FOR NEXT LEVEL

12.1. Should the Master be injured and incapacitated so that he is unable to take command in an emergency situation, the Chief Officer must be capable of immediately assuming command.

12.2. It is important therefore that the Chief Officer gains experience of command during emergency drills. The Master should at his discretion make arrangement for this during regular emergency drills.

12.3. This also gives the Master freedom to observe the drill more closely and to evaluate its effectiveness.

12.4. Similarly, the Second Engineer Officer should be given opportunity to assume control of the engine room department during an emergency drill.

13. ON-BOARD TRAINING AND INSTRUCTION

13.1. New personnel joining the ship should as soon as possible after joining be given on-board training in the use of lifesaving appliances and firefighting equipment that they may be called on to use. Company's ship specific familiarization form shall be completed and filed.

13.2. Training given on board is primarily concerned with the particular life-saving or firefighting equipment carried on board and is supplementary to shore based training such as basic firefighting or sea survival courses.

13.3. Frequent short periods of instruction dealing with a limited number of items are more effective than long sessions dealing with a considerable amount of subject matter and held say at monthly intervals.

13.4. Emergency team members should be trained in the use of and donning of fire suits and chemical suits. This also confirms that the suits are of the correct size to fit the team members, if they do not then team members should be changed or suits replaced.

13.5. Where thermal protective aids are carried every member of the ships company should be trained in donning the aid while wearing a lifejacket. Members who have been allocated an

immersion suit should be trained in the donning of the suit and given opportunity to familiarise themselves with the wearing of the suit.

13.6. Crewmembers allocated specific tasks for the preparation, launching and handling of lifeboats, rescue boats and life rafts should be trained in these specific tasks. Such training should also be given to a sufficient number of the ship's company to provide substitutes.

13.7. Instructions are required to be given in survival techniques including the causes of and first aid treatment for hypothermia, and first aid measures likely to be practised in a survival craft.

13.8. Instructors should make use of the "SOLAS Training Manual" and "Fire Training Manual" when providing on-board training. The training manuals can also be used as a source of reference and information for every member of the crew.

13.9. The Company has prepared an "Emergency Drill and Training Planner" in CFM[4] that provides a schedule of training that must be conducted on board.

14. ENCLOSED SPACE ENTRY AND RESCUE DRILL

The enclosed space entry and rescue drill shall be conducted at least once every two (2) months in accordance with Emergency Drill planner. No entry shall be made into an enclosed space without first complying with the requirements of an Enclosed Space Entry Permit.

The enclosed space entry and rescue drill shall include following:

- checking and use of personal protective equipment required for entry;
- checking and use of communication equipment and procedures;
- checking and use of instruments for measuring the atmosphere in enclosed spaces;
- checking and use of rescue equipment and procedures; and
- instructions in first aid and resuscitation techniques.

Laminated copy of Company contingency plan – Rescue from enclosed space shall be used while conducting the drill.

15. RECORDS

The date when musters are held, details of abandon ship drills and fire drills, enclosed space entry and rescue drills, drills of other life-saving appliances and on-board training shall be recorded in the deck and official log books.

[4] W 03 / 2024

If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the deck and official log book stating the circumstances and the extent of the muster, drill or training session held.

If port authorities deny permission to lower or manoeuvre lifeboat/rescue boat in water, same shall be recorded in the deck and official log book.

All drills and training conducted must be recorded in Form 3.2.3 (emergency drill and training report)[5]

All events with timings shall be recorded in sequential order for each drill[6]

Summary of events must include times of alarm sounded, parties mustered, essential action taken, etc and document uploaded in the Training & Drill module of CFM[7] using Attach and Send button. Participants name to be correctly added and ticked in CFM[8]. Separate reports have to be made for Enclosed space entry drill and Enclosed space rescue drill. Ship staff shall pay attention to detail when reviewing or entering data.[9]

The debriefing section shall also be completed properly after each drill such as Evaluation/Feedback/Suggestions for improvement/Identification of training needs Crews comments, etc.[10]

16. REFERENCES

- MSC.1/Circ.1205 - GUIDELINES FOR DEVELOPING OPERATION AND MAINTENANCE MANUALS FOR LIFEBOAT SYSTEMS
- MSC.1/Circ.1206 - MEASURES TO PREVENT ACCIDENTS WITH LIFEBOATS
- MSC.1/Circ.1578 - GUIDELINES ON SAFETY DURING ABANDON SHIP DRILLS USING LIFEBOATS
- SOLAS III, REGULATION 19

[5] W 27 / 2019
[6] W 27 / 2019
[7] W 03 / 2024
[8] W 03 / 2024
[9] W 27 / 2019
[10] W 27 / 2019