

must be marked in letters and numbers at least 100 millimeters (4 inches) high and in a color contrasting to that of the liferaft. The number of persons for which the liferaft is equipped must not exceed the number of persons shown on its nameplate.

[CGD 84-69, 61 FR 52313, May 20, 1996, as amended at 63 FR 52819, Oct. 1, 1998]

**§ 199.178 Marking of stowage locations.**

(a) Containers, brackets, racks, and other similar stowage locations for lifesaving equipment must be marked with symbols in accordance with IMO Resolution A.760(18) indicating the device stowed in that location.

(b) If more than one device is stowed in a location, the number of devices stowed must be indicated.

(c) Survival craft should be numbered consecutively starting from the vessel's bow. Survival craft on the starboard side should be numbered with odd numerals and survival craft on the port side should be numbered with even numerals.

(d) Each liferaft stowage location should be marked with the capacity of the liferaft stowed there.

**§ 199.180 Training and drills.**

(a) *Training materials.* Training material must be on board each vessel and must consist of a manual of one or more volumes written in easily understood terms and illustrated wherever possible, or of audiovisual training aids, or of both as follows:

(1) If a training manual is used, a copy must be in each crew messroom and recreation room or in each crew cabin. If audiovisual training aids are used, they must be incorporated into the onboard training sessions described in paragraph (g) of this section.

(2) The training material must explain in detail—

(i) The procedure for donning lifejackets, immersion suits, and anti-exposure suits carried on board;

(ii) The procedure for mustering at the assigned stations;

(iii) The procedure for boarding, launching, and clearing the survival craft and rescue boats;

(iv) The method of launching from within the survival craft;

(v) The procedure for releasing survival craft from launching appliances;

(vi) The method and use of water spray systems in launching areas when such systems are required for the protection of aluminum survival craft or launching appliances;

(vii) The illumination in the launching areas;

(viii) The use of all survival equipment;

(ix) The use of all detection equipment for the location of survivors or survival craft;

(x) With the assistance of illustrations, the use of radio lifesaving appliances;

(xi) The use of sea anchors;

(xii) The use of the survival craft engine and accessories;

(xiii) The recovery of survival craft and rescue boats, including stowage and securing;

(xiv) The hazards of exposure and the need for warm clothing;

(xv) The best use of the survival craft for survival;

(xvi) The methods of retrieval, including the use of helicopter rescue gear such as slings, baskets, and stretchers; the use of breeches-buoy and shore lifesaving apparatus; and the use of the vessel's line-throwing apparatus;

(xvii) All other functions contained in the muster list and emergency instructions; and

(xviii) The instructions for emergency repair of the lifesaving appliances.

(b) *Familiarity with emergency procedures.* (1) Every crewmember with emergency duties assigned on the muster list must be familiar with their assigned duties before the voyage begins.

(2) On a vessel engaged on voyage when the passengers or special personnel are scheduled to be on board for more than 24 hours, musters of the passengers and special personnel must take place within 24 hours after their embarkation. Passengers and special personnel must be instructed in the use of the lifejackets and the action to take in an emergency.

(3) Whenever new passengers or special personnel embark, a safety briefing must be given immediately before sailing or immediately after sailing.

## § 199.180

The briefing must include the instructions required by § 199.80 and must be made by means of an announcement in one or more languages likely to be understood by the passengers and special personnel. The announcement must be made on the vessel's public address system or by other equivalent means likely to be heard by the passengers and special personnel who have not yet heard it during the voyage. The briefing may be included in the muster required by paragraph (b)(2) of this section if the muster is held immediately upon departure. Information cards or posters, or video programs displayed on the vessel video displays, may be used to supplement the briefing, but may not be used to replace the announcement.

(c) *Drills—general.* (1) Drills must, as far as practicable, be conducted as if there were an actual emergency.

(2) Every crewmember must participate in at least one abandon-ship drill and one fire drill every month. The drills of the crew must take place within 24 hours of the vessel leaving a port if more than 25 percent of the crew have not participated in abandon-ship and fire drills on board that particular vessel in the previous month.

(3) Drills must be held before sailing when a vessel enters service for the first time, after modification of a major character, or when a new crew is engaged.

(4) The OCMI may accept other equivalent drill arrangements for those classes of vessels for which compliance with this paragraph is impracticable.

(d) *Abandon-ship drills.* (1) Abandon-ship drills must include—

(i) Summoning persons on board to muster stations with the general alarm followed by drill announcements on the public address or other communication system and ensuring that the persons on board are made aware of the order to abandon ship;

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

(iii) Checking that persons on board are suitably dressed;

(iv) Checking that lifejackets or immersion suits are correctly donned;

## 46 CFR Ch. I (10-1-13 Edition)

(v) Lowering of at least one lifeboat after any necessary preparation for launching;

(vi) Starting and operating the lifeboat engine; and

(vii) Operating davits used for launching the liferafts.

(2) Abandon-ship drills should also include conducting a mock search and rescue of passengers or special personnel trapped in their staterooms, and giving instructions in the use of radio lifesaving appliances.

(3) Different lifeboats must, as far as practicable, be lowered to comply with the requirements of paragraph (d)(1)(v) of this section at successive drills.

(4) Except as provided in paragraphs (d)(5) and (d)(6) of this section, each lifeboat must be launched with its assigned operating crew aboard and maneuvered in the water at least once every 3 months during an abandon-ship drill.

(5) Lowering into the water, rather than launching of a lifeboat arranged for free-fall launching, is acceptable when free-fall launching is impracticable, provided that the lifeboat is free-fall launched with its assigned operating crew aboard and is maneuvered in the water at least once every 6 months. However, when compliance with the 6-month requirement is impracticable, the OCMI may extend this period to 12 months, provided that arrangements are made for simulated launching at intervals of not more than 6 months.

(6) The OCMI may exempt a vessel operating on short international voyages from the requirement to launch the lifeboats on both sides of the vessel if berthing arrangements in port and operations do not permit launching of lifeboats on one side. However, all lifeboats on the vessel must be lowered at least once every 3 months and launched at least annually.

(7) As far as is reasonable and practicable, rescue boats, other than lifeboats which are also rescue boats, must be launched with their assigned crew aboard and maneuvered in the water each month. Such launching and maneuvering must occur at least once every 3 months.

(8) If lifeboat and rescue boat launching drills are carried out with the vessel making headway, such drills must, because of the dangers involved, be practiced in sheltered waters only and be under the supervision of an officer experienced in such drills.

(9) If a vessel is fitted with marine evacuation systems, drills must include an exercising of the procedures required for the deployment of such a system up to the point immediately preceding actual deployment of the system. This aspect of drills should be augmented by regular instruction using the on board training aids. Additionally, every crewmember assigned to duties involving the marine evacuation system must, as far as practicable, participate in a full deployment of a similar system into water, either on board a vessel or ashore, every 2 years but not longer than every 3 years. This training may be associated with the deployments required by § 199.190(k).

(10) Emergency lighting for mustering and abandonment must be tested at each abandon-ship drill.

(11) If a vessel carries immersion suits or anti-exposure suits, the suits must be worn by crewmembers in at least one abandon ship drill in any three-month period. If wearing the suits is impracticable due to warm weather, the crewmembers must be instructed on their donning and use.

(12) If a vessel carries immersion suits for persons other than the crew, the abandon-ship drill must include instruction to these persons on the stowage, donning, and use of the suits.

(e) *Line-throwing appliance.* A drill must be conducted on the use of the line-throwing appliance at least once every 3 months. The actual firing of the appliance is at the discretion of the master.

(f) *Fire drills.* (1) Fire drills must, as far as practicable, be planned with due consideration given to the various emergencies that may occur for that type of vessel and its cargo.

(2) Each fire drill must include—

(i) Reporting to stations and preparing for the duties described in the muster list for the particular fire emergency being simulated;

(ii) Starting of fire pumps and the use of two jets of water to determine that the system is in proper working order;

(iii) Checking the firemen's outfits and other personal rescue equipment;

(iv) Checking the relevant communications equipment;

(v) Checking the operation of watertight doors, fire doors, and fire dampers and main inlets and outlets of ventilation systems in the drill area; and

(vi) Checking the necessary arrangements for subsequent abandonment of the vessel.

(3) The equipment used during drills must immediately be brought back to its fully operational condition. Any faults and defects discovered during the drills must be remedied as soon as possible.

(g) *Onboard training and instruction.* (1) Onboard training in the use of the vessel's lifesaving appliances, including survival craft equipment, and in the use of the vessel's fire-extinguishing appliances must be given as soon as possible but not later than 2 weeks after a crewmember joins the vessel.

(2) If the crewmember is on a regularly scheduled rotating assignment to the vessel, the training required in paragraph (g)(1) of this section need be given only within 2 weeks of the time the crewmember first joins the vessel.

(3) The crew must be instructed in the use of the vessel's fire-extinguishing and lifesaving appliances and in survival at sea at the same interval as the drills. Individual units of instruction may cover different parts of the vessel's lifesaving and fire-extinguishing appliances, but all the vessel's lifesaving and fire-extinguishing appliances must be covered within any period of 2 months.

(4) Every crewmember must be given instructions that include, but are not limited to—

(i) The operation and use of the vessel's inflatable liferafts;

(ii) The problems of hypothermia, first aid treatment for hypothermia, and other appropriate first aid procedures;

(iii) Any special instructions necessary for use of the vessel's lifesaving

## § 199.190

appliances in severe weather and severe sea conditions; and

(iv) The operation and use of fire-extinguishing appliances.

(5) Onboard training in the use of davit-launched liferafts must take place at intervals of not more than 4 months on each vessel with davit-launched liferafts. Whenever practicable, this training must include the inflation and lowering of a liferaft. If this liferaft is a special liferaft intended for training purposes only and is not part of the vessel's lifesaving equipment, this liferaft must be conspicuously marked.

(h) *Records.* (1) When musters are held, details of abandon-ship drills, fire drills, drills of other lifesaving appliances, and onboard training must be recorded in the vessel's official logbook. Logbook entries must include—

(i) The date and time of the drill, muster, or training session;

(ii) The survival craft and fire-extinguishing equipment used in the drills;

(iii) Identification of inoperative or malfunctioning equipment and the corrective action taken;

(iv) Identification of crewmembers participating in drills or training sessions; and

(v) The subject of the onboard training session.

(2) If a full muster, drill, or training session is not held at the appointed time, an entry must be made in the logbook stating the circumstances and the extent of the muster, drill, or training session held.

[CGD 84-69, 61 FR 25313, May 20, 1996, as amended at 63 FR 52819, Oct. 1, 1998]

## § 199.190 Operational readiness, maintenance, and inspection of life-saving equipment.

(a) *Operational readiness.* Before the vessel leaves port and at all times during the voyage, each lifesaving appliance must be in working order and ready for immediate use.

(b) *Maintenance.* (1) The manufacturer's instructions for onboard maintenance of lifesaving appliances must be on board the vessel. The following must be provided for each appliance.

(i) Checklists for use when carrying out the inspections required under paragraph (e) of this section.

## 46 CFR Ch. I (10-1-13 Edition)

(ii) Maintenance and repair instructions.

(iii) A schedule of periodic maintenance.

(iv) A diagram of lubrication points with the recommended lubricants.

(v) A list of replaceable parts.

(vi) A list of sources of spare parts.

(vii) A log for records of inspections and maintenance.

(2) In lieu of compliance with paragraph (b)(1) of this section, the OCMI may accept a shipboard planned maintenance program that includes the items listed in that paragraph.

(c) *Spare parts and repair equipment.* Spare parts and repair equipment must be provided for each lifesaving appliance and component that is subject to excessive wear or consumption and that needs to be replaced regularly.

(d) *Weekly inspections and tests.* (1) Each survival craft, rescue boat, and launching appliance must be visually inspected to ensure its readiness for use.

(2) Each lifeboat engine and rescue boat engine must be run ahead and astern for a total of not less than 3 minutes unless the ambient temperature is below the minimum temperature required for starting the engine. During this time, demonstrations should indicate that the gear box and gear box train are engaging satisfactorily. If the special characteristics of an outboard motor fitted to a rescue boat would not allow the outboard motor to be run other than with its propeller submerged for a period of 3 minutes, the outboard motor should be run for such period as prescribed in the manufacturer's handbook.

(3) The general alarm system must be tested.

(e) *Monthly inspections.* (1) Each life-saving appliance, including lifeboat equipment, must be inspected monthly using the checklists required under paragraph (b)(1)(i) of this section to make sure the appliance and the equipment are complete and in good working order. A report of the inspection, including a statement as to the condition of the equipment, must be recorded in the vessel's official logbook.