

CHAPTER 19

EMERGENCY SIGNALS

19.1 General

Regulation 5 of the Merchant Shipping (Musters, Training and Decision Support System) Regulations 1999 requires arrangements to be made in all ships for warning the passengers and crew when the ship is about to be abandoned. Such arrangements may consist of a combination of verbal orders, signals made on whistle or siren, electrically operated signals and a signal on engine room telegraph. Regulation 5 of the Merchant Shipping (Musters, Training and Decision Support System) Regulations 1999 also requires that the action to be taken on hearing the general emergency alarm should be specified. Guidelines for alarms and indicator systems can be found in the IMO Code on Alarms and Indicators - 1992, adopted on 6 November 1991 by Resolution A.686(17).

19.2 Ships of Classes I, II, and II(A) and Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI of over 45.7 m

Schedule 11 of MSN 1676(M) as appropriate also requires the provision of electrically operated signals controlled from the navigating bridge, and also from other strategic points (reference should be made to MSC/Circ. 887 - interpretation of the term "other strategic points" in SOLAS Regulation 111/50 and LSA Code Section VII/7.2), for summoning the passengers and crew to muster, and emergency, stations. In these ships, except for ships of Class XI, in addition to the general emergency alarm, an emergency means of two way communication must be provided to enable communication between emergency control stations, muster and embarkation stations and strategic positions on board. The equipment may be fixed or portable.

19.3 Ships of Classes III, to and VI(A)

In the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999 these ships require the signal to be sounded on the ships whistle or siren. The system should also be capable of operation from the navigating bridge and, except for the ship's whistle, also from other strategic points, for summoning the passengers and crew to muster, and emergency stations. For which purpose owners should fit an electrical system of bells, klaxons or gongs, but on ships of less than 45.7 metres in length these items need not be fitted provided the surveyor is satisfied that the whistle or siren is audible in all passenger and crewspaces.

19.4 Ships other than those referred to in paragraphs 19.2 and 19.3

19.4.1 In ships of less than 45.7 m in length of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI the requirements of Schedule 11 of MSN 1676(M) may be met by means of signals given on the ship's whistle, but when this is proposed regard should be had to the type of whistle fitted, and also to the type and extent of passenger and crew accommodation. Tests have shown that whilst whistles may comply with the requirements of the Collision Regulations, there is a marked difference in their effectiveness as a means of providing a signal audible in all parts of the ship to which passengers and crew have access at sea.

19.4.2 When considering the application of Schedule 11 of MSN 1676(M) as appropriate surveyors should be guided by the following:-

19.4.2.1 In cargo ships of less than 45.7 m in length the whistle is acceptable for the purpose of Schedule 11 of MSN 1676(M).

19.4.2.2 In cargo ships of 45.7 m in length and over, the whistle is acceptable if the surveyor is satisfied that it can be heard in all parts of the ship; otherwise the owners should fit an electrically operated system of bells, klaxons or other equivalent warning system.

19.5 Area of audibility

The foregoing electrically operated signals, and means of warning, should have sufficient distributing points so that they are distinctly audible in all parts of the ship to which passengers and crew have access whilst the ship is at sea.

19.6 Public address system

19.6.1 A public address system or other suitable means of communication is required by the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 in ships of Classes I, II, and II(A) and Classes VII, VII(T), VIII, VIII(T), VIII(A)(T) and IX over 500 tons. The system should comply with the requirements of Schedule 11, Part 2 of MSN 1676(M).

19.6.2 A public address system is also required by the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999 in ships of Classes III, IV, V, VI and VI(A).

19.6.3 However in every ship of Classes IV, V, VI, or VI(A) which is certified to carry not more than 50 passengers and in which the passengers have access to only one passenger compartment or space a portable loud hailer may be carried in lieu of providing a public address system.

19.6.4 A public address system is also required by regulation 11(7) of the Merchant Shipping (Fire Protection: Large Ships) Regulations 1998.

19.6.5 The loudspeaker arrangements should be such that all public spaces including open decks, public rooms, control stations, alleyways and stairways will be served by more than one circuit. The circuits should be as widely separated as practicable and automatic change-over upon fault to a reserve amplifier should be provided. Where cable runs pass through a fire zone, but are not serving that zone, they should be provided with suitable protection against fire. Such cables should preferably be routed outside the zone i.e. above deck, but protection should still be provided.

19.6.6 If oscillators or similar electronic means are used to generate emergency warnings and signals at least two oscillators with associated control devices should be provided.

19.6.7 In any system used for emergency signals the oscillator or microphone originating the signal should have facilities to override all other inputs to the system and to override the user volume controls provided. In such systems the circuits to the alarm devices (e.g. bells, loudspeakers, etc.) should be protected by fuses or other appropriate means so that damage to one circuit will not prevent operation of the remainder of the system.

19.7 Emergency means of two way communication

In ships of Classes I, II, II(A), VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX and in ships of Classes III, IV, V, VI, and VI(A) the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 and the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999 require that an emergency means of two way communication should be provided, this may be either fixed or portable equipment.

19.8 Source of electric power

In ships of Classes I, and II(A) and Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of over 45.7 m Schedule 11 of MSN 1676(M) requires that the source power for the electrically operated signal must be from the ships' main supply and the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1998 as applicable.

19.9 Symbols relating to life-saving appliances and arrangements

Regulations 34, 49 and 70 of the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 and Regulation 12 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999 require ships which carry survival craft to be provided with posters or signs on or in the vicinity of the survival craft and their launching controls. Such posters and signs are required to illustrate the purpose of the controls and the procedures for operating the appliance, and to give relevant instructions or

warnings. They must be capable of being seen under emergency lighting conditions where that is provided and where applicable must use symbols which are to the satisfaction of the Secretary of State and are specified in Appendix N - 'Symbols relating to Life-Saving Appliances and arrangements'.