



Maritime and Coastguard Agency

Musters, drills, on-board training and instructions, and Decision Support Systems

Notice to Owners, Masters, Officers and Ratings

This Note Replaces Marine Guidance Note MGN 17 (M) and should be read in association with MGN 5 and MGN 6.

Summary

This note and annex provides guidance to the relevant requirements in the Regulations listed in paragraph 1 in respect of:

1. muster lists, the holding of musters and drills and the provision of on-board training and instruction in the use of fire and life-saving appliances, and the provision of a Decision Support System to Masters of certain passenger ships;
2. the provision of training manuals, and for the manning of survival craft and handling of launching arrangements; and
3. the closing of openings in the hull and in watertight bulkheads.

1. The statutory requirements primarily associated with the recommendations and guidance in the Annex to this Notice are prescribed in the following Regulations:

(a) The Merchant Shipping (Musters Training and Decision Support Systems) Regulations 1999 (SI.1999 No.2722) which contains requirements in respect of muster lists, the holding of musters and drills and the provision of on-board training and instruction in the use of fire and lifesaving appliances, and the provision of a Decision Support System to Masters of certain passenger ships;

(b) The Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 (SI.1999 No.2721), and the Merchant Shipping (Life-saving Appliances for Passenger Ships of Classes III to VI(A))

Regulations 1999 (SI.1999 No.2723), which contain requirements in respect of the provision of training manuals, and for the manning of survival craft and handling of launching arrangements; and

(c) The Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 (SI.1998 No.2514) which contain requirements in respect of the closing of openings in the hull and in watertight bulkheads.

2. The Regulations referred to in subparagraphs 1(a) and (b) above implement the 1983 and 1988 and 1996 Amendments to Chapter III of the International Convention for the Safety of Life at Sea 1974. One of the principal objectives of the 1983 Amendments to the Convention was to prescribe minimum standards of training and instruction, in particular on-board training in the use of ship's fire appliances, ship's life-saving

appliances including launching and embarkation equipment, in methods of survival and in the use of personal protective equipment. An essential part of such training and instruction involves participation in periodic practice musters and drills. The 1996 Amendment introduced the requirement for Decision Support Systems for Masters of certain passenger ships.

3. The purpose of this Note and its Annex is to draw attention to relevant requirements in the Regulations listed in paragraph 1 and to specify how such requirements should be met.

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ANNEX

Section CONTENTS

1	Application
2	Muster Lists
3	Emergency Instructions
4	Emergency Signals
5	Musters and Drills - General
6	Abandon Ship Drills
7	Fire and other Emergency Drills
8	Drills in Closing of Doors, Side Scuttles and Other Openings
9	Survival Craft Muster and Drill
10	Survival Craft Drills held in Port
11	Rescue Boat and Emergency Boat Drills
12	Davit-Launched Liferaft On-Board Training
13	On-Board Instruction, Training and Training Manuals
14	Weekly and Monthly Inspection of LSA
15	Decision Support Systems
16	Records

1 Application

1.1 Except where otherwise specified the contents of this Annex are addressed to ships of Classes I, II, II(A), III, VII, VII(A), VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX and to ships of Class XI engaged on international voyages.

2 Muster Lists

2.1 The requirements relating to muster lists apply to ships engaged on international voyages and to passenger ships of Classes II(A) and III. The Master is responsible for compiling the muster list, keeping it up to date and ensuring that copies are exhibited in conspicuous places

throughout the ship, including the navigating bridge, engine room and crew accommodation. The format of muster lists for ships of Classes I, II, II(A) and III must be approved by the Maritime and Coastguard Agency (MCA).

2.2 In ships with significant numbers of non-English speaking crew members, the muster list should include translations into the appropriate language or languages.

2.3 The muster list must contain details of the general emergency alarm and other emergency signals and the action to be taken by the crew and passengers in respect of the former, and by the crew in respect of the latter. Where appropriate, communication equipment, channels and reporting chain to be used during an abandonment or other emergency should be specified. The means by which the order to abandon ship is to be given must also be included.

2.4 The muster list must show the duties to be carried out by each member of the ship's complement in an emergency. Such duties include the preparation, swinging out or deploying of survival craft and other life-saving appliances, the closing of watertight and fire doors, and all other openings such as skylights, portholes and side scuttles and any openings in the hull. Duties in connection with fire-fighting, the use of communication equipment and the equipping of survival craft must also be shown.

2.5 Where passengers are carried duties include warning and assembling passengers, controlling their movement, seeing that they are suitably clad and wearing their lifejackets correctly or, where appropriate, distributing and assisting with the donning of lifejackets, and, where carried, taking a supply of blankets to the survival craft.

2.6 In assigning crew members to assist passengers in emergency situations on ships of Classes I, II, II(A) and III masters should ensure that all such personnel have received instruction in crowd management.

2.7 As far as practicable each individual should only be allocated one duty, or series of duties related to one emergency party. On passenger ships key persons who would be last to abandon ship should not be allocated to those survival craft which are expected to be the first to be launched.

2.8 When the muster list is compiled consideration should be given to the eventuality of key persons being unable to carry out their emergency duties through injury or for some other reason, and provision made for substitutes. This provision must be shown on the muster list and may be a detailed list or in the form of a general statement such as "Should key persons become disabled, those next in line, as appropriate, should take their place". When allocating substitutes care should be exercised to ensure that emergency parties are not left without a leader or seriously undermanned.

2.9 The survival craft or launching station to which each crew member is assigned should be shown on the muster list.

2.10 In assigning crew members to man survival craft and handle launching appliances on ships engaged on international voyages and on passenger ships of Classes II(A) and III, the Master should take account of Merchant Shipping Notice MSN 1682 (M).

2.11 A deck officer or certificated person must be placed in charge of each survival craft to be used and a deck officer or certificated person must be assigned as second-in-command of a lifeboat. In ships of Classes II, II(A) and III a person practiced in the handling and operation of liferafts may be placed in charge of a liferaft in lieu of a deck officer or certificated person. The person in charge of the survival craft shall have a list of the survival craft crew and shall see that the crew under his command are acquainted with their duties. In lifeboats the second-in-command shall also have a list of the lifeboat crew.

2.12 A motor lifeboat must have a person assigned to it who is capable of operating the engine and carrying out minor adjustments. This person may be the coxswain if it is possible to operate the engine and steer the lifeboat from one position. A lifeboat with a radio installation and each survival craft in which are placed emergency position-indicating radio beacons (EPIRBs), radar transponders (SARTs), or two-way radio-telephone sets is required to have a person assigned to it who is capable of operating such equipment.

2.13 The muster list must show the name or rank of the officers whose duty is to ensure that the life-saving and fire-fighting appliances are maintained in such condition as to be always ready for use.

2.14 In passenger ships, the location of the passenger assembly or muster station (as appropriate) must be indicated in the muster list. As far as practicable, public rooms will be allocated as assembly or muster station (as appropriate) in order that passengers are protected from the elements prior to their departure for the survival craft if the ship has to be abandoned.

2.15 The master shall ensure the equitable distribution of persons referred to in paragraph 2.6, 2.10 and 2.11 among the ship's survival craft.

3 Emergency Instructions

3.1 In ships engaged on international voyages and in passenger ships of Classes II(A) and III, each crew member must be provided with clear instructions to be followed in the event of an emergency, eg in the form of a card showing the assembly or muster station (as appropriate) station, emergency duty and the lifeboat or liferaft to which he is allocated. In ships with significant numbers of non-English speaking crew members emergency instructions should be provided in the appropriate language or languages. The card or other means should describe the general emergency alarm signal and any other signals to be used in an emergency and the action, if any, to be taken on hearing such signals. The means by which the order to abandon ship is to be given should also be included.

3.2 Emergency instructions, illustrated where possible, must be displayed in each passenger cabin, in passenger assembly or muster station (as appropriate) stations and in other passenger spaces. Such instructions, in English and in any other language appropriate to the principal nationalities carried on the route on which the ship is operating, are to inform passengers of their assembly or muster station (as appropriate) stations, essential actions they should take on hearing the general emergency alarm signal and any other signal requiring action on their part, and the method of donning lifejackets. The location of lifejackets should be included in these instructions. Safety information to be provided to passengers is detailed in Merchant Shipping Notices M.1386 (to be replaced by MGN 73) and M.1409 (to be replaced by MGN 74).

4 Emergency Signals

4.1 The general emergency alarm signal is the signal for summoning the crew and

passengers, if any, to their assembly or muster station (as appropriate) stations and for initiating the actions shown in the muster list. This signal consists of seven or more short blasts followed by one long blast sounded on the ship's whistle or siren and on a bell, klaxon or similar warning system on ships required to be provided with such systems.

4.2 On a cargo ship with a fire alarm system which can be manually activated from locations within the accommodation or where a system such as a fire or smoke detection system automatically activates alarms throughout the ship, the signal made by such means may be used to summon the crew to their muster stations. Such alarm signal should be accompanied by the general emergency alarm signal sounded on the whistle or siren.

4.3 Signals for incidents not requiring a muster of the passengers or of the whole crew, or for dealing with a minor incident, are at the Master's discretion.

4.4 On a cargo ship a signal may be allocated to summon the crew to survival craft embarkation stations only, for the purpose of a drill or mustering the crew at the survival craft embarkation stations during an emergency.

4.5 The means by which the order to abandon ship is given is at the Master's discretion and may be by a signal or by word of mouth, but arrangements should be such that everyone on board including those in emergency parties in remote locations will receive it.

4.6 All signals must be described in the muster list, in the crew emergency instructions and, as appropriate, in the emergency instructions for passengers.

4.7 The relevant signals referred to in this section should be used when musters and drills are to be conducted. All persons on board should be notified beforehand that a practice muster or drill is about to be held.

5 Musters and Drills - General

5.1 An abandon ship drill consists of a muster of the crew (and of passengers, if appropriate) at the stations referred to in the muster list, and a muster and drill at survival craft stations. Where practicable, passengers on Class I passenger ships should be strongly

encouraged to attend abandon ship drills. It is recommended that a fire drill be held simultaneously with the first stage of the abandon ship drill. Drills for emergencies other than fire, eg collision, damage control, grounding, cargo or bunker spillage, rescue of personnel from dangerous spaces, or medical treatment, may be conducted in lieu of or in addition to a fire drill, provided each crew member participates in at least one fire drill each month. Whether a fire or other emergency drill is to be conducted, it may be found useful on occasions to discuss beforehand, with those taking a direct part in the drill, the object and execution of the drill in order that those taking part can derive the maximum benefit from the drill. When planning procedures and associated drills dealing with rescue of personnel from dangerous spaces, account should be taken of Chapters 16 and 17 of the Code of Safe Working Practices for Merchant Seamen, 1998 Edition.

5.2 Each crew member must participate in at least one abandon ship drill and one fire drill every month. These drills must be held within 24 hours of leaving port if more than 25% of the crew have not taken part in drills on board the ship in the previous month. If circumstances are such that it is not practical to hold full drills within the 24 hours then musters should be held within this period and instructions given to crew members on their emergency duties and on abandon ship procedures, but in the case of Ro-Ro passenger ferries these instructions should be given before any passenger carrying voyage is commenced. Full drills should be held as soon as circumstances permit. In addition, in ships of Classes I, II, II(A) and III, an abandon ship drill and a fire drill must be held weekly and as many of the crew as practicable should take part in these drills which should be so arranged that each crew member participates in at least one abandon ship drill and one fire drill every month.

5.3 On any ship carrying passengers where the passengers are scheduled to be on board for more than 24 hours, a muster of the passengers must take place within 24 hours of their embarkation. Passengers must be given instruction in how to don their lifejackets and the action to take on hearing the general emergency alarm signal. If only a small number of passengers embark after the muster has been held, it will be sufficient, instead of holding another, to draw the attention of these passengers to the emergency instructions referred to in paragraph 3.2. Similarly, on ships of Classes other than the above

carrying passengers, if a muster of the passengers is not held on departure, their attention must be drawn to the emergency instructions referred to in paragraph 3.2. This can be done by means of a broadcast on the ship's public address system or by direct oral announcement.

5.4 It should be drawn to the attention of the passengers that the general emergency alarm signal is for the purpose of summoning them to their assembly or muster station (as appropriate) stations and is not a signal to abandon ship. The means by which the order to abandon ship will be given should be explained. The importance of being properly clad, of proceeding to their assembly or muster station (as appropriate) station in an orderly fashion, and of following instructions at all times should be emphasised. Where appropriate they should be advised to which type of survival craft they have been allocated, and how they will be embarked. They should be advised that only as a last resort will it be necessary to jump into the water. They should be informed of the dangers of jumping overboard, particularly from heights in excess of 6 metres and advised that if it should be necessary to jump into the water, the lifejacket must be held down with one hand and the nose protected with the other hand.

5.5 Lifejackets should be worn by passengers and crew when attending musters and drills. Crew members taking part in fire and other emergency drills may remove their lifejackets if these would be a hindrance in the execution of their duties. Where lifejackets are removed, a member of the emergency party concerned should be appointed to be responsible for these lifejackets and to ensure that they will be available for return to the members of an emergency party on completion of their relevant tasks. Where inherently buoyant lifejackets unduly hinder crew members in the execution of their duties, consideration should be given to the provision of inflatable lifejackets, although such lifejackets are not always suitable for use by members of fire hose parties due to the possibility of inadvertent activation of the automatic inflation system. Lifejackets should always be worn by members of survival craft preparation parties and at survival craft musters and drills.

5.6 On passenger ships consideration should be given to the identification of crew members, particularly those whose duties are concerned

with passenger control. This can be achieved in a variety of ways, eg by the use of headgear, distinctive marking on lifejackets, loose covers worn over lifejackets, armbands, etc.

5.7 On passenger ships as many key persons as possible should carry two-way portable radios during musters and drills and such radios and any fixed two-way communication systems should be used for communications between the bridge, emergency control stations, assembly or muster station (as appropriate) and embarkation stations, especially internal Marine Evacuation System (MES) embarkation stations. Where key persons do not have a two-way portable radio on permanent issue there should be arrangements whereby radios can be readily obtained at the outset of a drill or actual emergency. Where portable loud hailers are carried these should be used where appropriate for communicating or for simulating communicating with passengers at assembly or muster station (as appropriate) and embarkation stations. The arrangements for communication should be as recorded in muster lists and, where applicable, training manuals.

6 Abandon Ship Drills

6.1 The commencement of an abandon ship drill is announced by the general emergency alarm signal. Crew and passengers, if any, should proceed to their assembly or muster station (as appropriate) stations. Crew members allocated to the handling of passengers should as appropriate clear or simulate the clearing of accommodation not used for the mustering of passengers, marshal passengers taking part in the drill and control the flow of passengers on the stairways, in passages and doorways and guide them towards their assembly or muster station (as appropriate) stations. At the assembly or muster station (as appropriate) stations they should ensure that passengers have donned their lifejackets correctly, or give instruction in donning as appropriate, and that child lifejackets are allocated to persons of less than 32 Kg. Passengers should be advised on the matters referred to in paragraph 5.4. Where a proportion of the survival craft consists of throwover liferafts boarded by means of ship's side ladders provision should be made for allocating only able bodied passengers to these liferafts. It should also be determined that crew members know how the order to abandon ship will be announced, that they are suitably dressed and that their lifejackets have been donned correctly.

7 Fire and other Emergency Drills

7.1 A fire or other emergency drill shall as far as practicable be conducted as if it were an actual emergency.

7.2 A fire or other emergency drill should be held simultaneously with the first stage of the abandon ship drill.

7.3 For the purpose of a fire drill an outbreak of fire should be assumed to have occurred in some part of the ship and fire control measures simulated as appropriate. The complete co-operation of the personnel of all departments is essential in fire fighting. The type and position of the supposed fire should be varied from time to time and can include:

- (1) Cargo fires in holds or other spaces;
- (2) Fires involving oil, gas or chemical cargoes as appropriate;
- (3) Fires in engine, pump or boiler rooms;
- (4) Fires in crew or passenger accommodation; and
- (5) Fires in galleys due to burning oil or cooking fats.

7.4 The engine room staff should ensure that the fire pumps in the machinery spaces are prepared for operation, started, and that full water pressure is on the fire mains. Where there is an emergency fire pump situated outside the machinery space, this pump should be started up as indicated below. The fire party or parties at the scene of the assumed fire should lay out hoses and where practicable water should be played through them, the water being supplied first from the machinery space pump and then from the emergency pump only, with the machinery space isolating valve closed. A number of portable fire extinguishers should be available and members of the fire party should be instructed in the use of the type of fire extinguisher for a particular type of fire.

7.5 The crew should be exercised as appropriate in the closing of openings, ie side scuttles, deadlights, doors, ventilating shafts, fire doors, the annular space around the funnel, etc both to reduce the supply of air to a fire and

isolate it from other parts of the ship, especially stairways and lift shafts. As many of the crew as possible and particularly the officers should be made familiar with the position of remote controls for ventilation fans, oil fuel pumps and oil tank valves and be instructed in the method of operation thereof.

7.6 Fixed installations for extinguishing fire, such as Halon, CO₂, foam, or water spray in the machinery spaces, CO₂, inert gas, steam or drencher systems in the cargo spaces, and sprinkler systems in passenger accommodation together with fire alarm and detection systems should be tested with as much realism as practicable. The fire party should also be exercised in the use of the breathing apparatus and protective clothing and such emergency appliances as axes and safety lamps, which should be brought out, checked and deployed by appointed members of the party at all fire drills. Where the number of sets of breathing apparatus permits, it is recommended that persons using them should practice in pairs.

7.7 It is important that members of the crew who are not allocated to fire parties are familiar with the use of and can identify the types of fire extinguisher they will encounter in the accommodation and in their work areas. Such crew members should be instructed in the use of the type of extinguisher appropriate to the kind of fire, eg those discharging water, foam, dry powder, CO₂, etc.

7.8 At each fire drill at least one extinguisher should be discharged by a different crew member in order that both crew members in fire parties and other crew members gain experience in using fire extinguishers. Crew members should also be familiar with the location and means of activating the fire alarms in the accommodation and in their working areas. It is also important that all crew members and particularly those whose place of work is in a machinery space are familiar with the escape routes from any part of the ship they are likely to be in when on or off duty. Such familiarity should enable escape to be made in darkness or through smoke and should include familiarity with the location and the means of opening any emergency escape windows or hatches.

7.9 All fire protection systems and appliances should at all times be in good order and available for immediate use during the voyage and in port. Compressed air bottles of breathing apparatus

and fire extinguishers should be refilled after any drill. Where refilling facilities are not available on board additional equipment may be carried to facilitate training. Discharged equipment should be clearly marked and stored for refilling when in port. Equipment dedicated for training purposes should be marked 'for training purposes only'.

7.10 Participation in fire drills may not necessarily imply direct involvement with fighting a fire and may include back-up to fire parties, being a member of the first aid party or controlling passengers at their assembly or muster station (as appropriate) stations while the fire fighting part of the drill is being undertaken. On the other hand, on cargo ships with small crews it will usually be necessary for every member of the crew to be familiar with all aspects of fire-fighting and the use of all the fire-fighting equipment provided on board the ship.

7.11 Instruction should cover fire prevention, particularly in galleys, machinery spaces, cargo compartments, pumprooms and accommodation spaces. On-board instruction in fire-fighting is supplementary to training available at firefighting courses ashore and is primarily concerned with the particular equipment available on board and the nature of on-board fire hazards.

7.12 To ensure the ready availability of fire protection systems and appliances periodic checks should be performed. The following checklist may be used as guidance for this purpose.

7.12.1 Monthly testing and inspection should be carried out to ensure that:

- (1) all firemans outfits, fire extinguishers, fire hydrants, hose and nozzles are in place and in serviceable condition;
- (2) all escape routes including stairways and corridors are free of obstructions and properly maintained;
- (3) public address system and ship's alarms are serviceable;
- (4) all fixed fire fighting installation valves are set in the correct operational position;
- (5) dry pipe sprinkler systems are pressurised, where appropriate, and gauges indicate correctly;

(6) sprinkler system pressure tank water levels are correct as indicated by glass gauges;

(7) all sprinkler system pumps operate automatically on pressure loss in the systems;

(8) all fire pumps are operational; and

(9) all fixed gas fire extinguishing installations are free from leakage.

7.12.2 Quarterly testing and inspection should be carried out to ensure that:

(1) all fire extinguishers are at correct pressure and are not due for servicing;

(2) all automatic alarms for sprinkler systems activate using the section test valves;

(3) the international shore connection is serviceable;

(4) fire fighting equipment lockers contain their full inventory and the equipment they contain is in serviceable condition; and

(5) all fire doors, fire dampers and closing devices can be operated locally.

7.12.3 Annual testing and inspection should be carried out to ensure that:

(1) all fire doors, and ventilation dampers where appropriate, operate remotely;

(2) where practicable all aqueous foam and water spray fixed fire fighting installations operate correctly;

(3) all accessible components of fixed fire fighting systems, typically nozzles, are free from damage or obstruction on visual inspection;

(4) all fire pumps, including sprinkler system pumps, develop correct pressures and flow rates;

(5) all hydrants operate;

(6) all antifreeze solutions are correctly maintained and cross connection between

fire main and sprinkler system operates correctly; and

(7) fixed fire detection systems operate correctly, according to manufacturers test instructions.

7.13 Fire or other emergency drills should be followed by the second stage of the abandon ship drill ie the muster and drill at the survival craft stations. This stage of the abandon ship drill should be announced by the abandon ship signal or by the particular means by which abandon ship is announced, or by a signal used for the purpose of summoning crew members to their survival craft stations.

8 Drills in Closing of Doors, Side Scuttles and Other Openings

8.1 In passenger ships, drills for practicing the closing of watertight doors, deadlights, scuppers, ash-shutes, rubbish-shutes and other similar devices are required to be carried out to comply with the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II, and II(A)) Regulations 1998, or the Merchant Shipping (Passenger Ship Construction: Ships of Classes III to VI(A)) Regulations 1998. These Regulations also require inspections, at intervals of not more than 7 days, of watertight doors and mechanisms, indicators and warning devices connected with such doors, valves, the closing of which is necessary to make watertight any compartment below the margin line, and valves, the operation of which is necessary for the efficient operation of damage-control cross-connections.

8.2 In all seagoing ships, with certain exceptions, the Merchant Shipping (Musters Training and Decision Support Systems) Regulations 1999 require practice fire drills to include checking of the operation of watertight doors, in the drill area.

8.3 Masters should familiarise themselves with the Regulations referred to in paragraphs 8.1 and 8.2, particularly in regard to the instruction of crew members in the safe operation of watertight doors and to those watertight doors, side scuttles, deadlights and other devices required to be securely closed before the ship proceeds to sea and to be kept securely closed while the ship is at sea.

Account should also be taken of the contents of Merchant Shipping Notice M.1326 (to be replaced

by MGN 35 (M)) on the dangers associated with power operated watertight doors, and of the Instructions for the Guidance of Surveyors (Passenger Ship Construction Classes I, II and II(A)) and (Passenger Ship Construction Classes III to VIA).

9 Survival Craft Muster and Drill

9.1 Crew members other than those who cannot be relieved from their normal duties should muster, wearing lifejackets, at their lifeboat and liferaft stations. The person in charge of each survival craft must have a list of its crew and ensure that they are fully acquainted with their duties. The second-in-command of a lifeboat must also have a list of the lifeboat crew.

9.1.1 On passenger ships, the lifeboats used in the drill should where practicable, include some from each side of the ship and should be distributed as to enable the crews of the other lifeboats to watch the operations. Different groups of lifeboats should be used at successive drills.

9.1.2 In cargo ships provided with totally enclosed lifeboats which are boarded and launched from the stowed position, drills should periodically include the boarding of a lifeboat in its stowed position in order that crew members can become practiced in boarding a boat rapidly, locating a seating position and using the seat belts.

9.1.3 In the case of other totally enclosed lifeboats equipped with seatbelts, crew members should be periodically drilled in using the seatbelts but such lifeboats should not be boarded at the stowed position by the full complement at any one time. When a drill is being carried out inside a totally enclosed lifeboat, crew members should also be made familiar with the launching procedures and made aware of what to expect when the engine and air support and water spray systems, where fitted, are in operation.

9.1.4 Arrangements should always be made to ensure that those crew members who cannot be relieved from their duties to attend a particular drill can be relieved to attend the next drill.

9.2 On passenger ships when the drill is held at sea, a number of lifeboats should, if weather and other circumstances permit and subject to overriding safety constraints, be cleared, swung out, and lowered to embarkation deck level in the case of lifeboats boarded at this position, and side ladders and embarkation arrangements prepared. On cargo ships at least one lifeboat should be lowered when weather and other circumstances permit.

9.3 Each lifeboat and rescue boat engine must be tested by being run ahead and astern for a total period of not less than 3 minutes provided that the engine can be safely run for this period when out of the water and the ambient temperature is above the minimum required for starting the engine. Where lifeboats are fitted with mechanical hand-propelling gear, this gear should be examined and tested ahead and astern.

9.4 Liferaft davits must be swung out and winches operated.

9.5 Emergency lighting for mustering and abandonment must be tested at each such drill.

9.6 In cargo ships provided with lifeboats and throwover liferafts some drills should include preparation for abandonment involving use of liferafts in conjunction with lifeboats. This may include mustering at locations other than those used for embarkation into lifeboats

10 Survival Craft Drills Held in Port

10.1 When a drill is held in port as many as possible of the lifeboats should be cleared, swung out and lowered. Each lifeboat must be launched with its assigned operating crew aboard and manoeuvred in the water once every 3 months during an abandon ship drill. In lifeboats not fitted with engines the crew should be exercised in rowing or in the use of the mechanical hand-propelling gear. Every opportunity should be taken to test the lifeboat disengaging gear where fitted.

10.2 If the berthing arrangements in port and the trading patterns of ships of Classes II, II(A), VIII or VIII(A) make the launching of lifeboats on one side impracticable then launching of lifeboats on that side at 3 monthly intervals need not be carried out. However all such lifeboats must be lowered at least once every 3 months and launched at least annually.

10.3 The launching of lifeboats and rescue boats should normally take place when the ship is alongside or at anchor with little or no tide or current, but if contemplated in circumstances where there is actual or effective headway, such launching must be carried out in accordance with the guidelines in the Annex to Merchant Shipping Notice M. 1218. (to be replaced by MSN 1722 (M + F).

10.4 A free-fall lifeboat may be lowered to the water if launching is impracticable, provided that free-fall launching with the assigned operating crew and manoeuvring in the water is carried out at least once every six months. If it is impracticable to launch within a period of six months, the Owners may apply to the MCA for an extension to twelve months.

11 Rescue Boat and Emergency Boat Drills

11.1 As far as is reasonable and practicable rescue boats where carried, other than those which are also lifeboats, must be launched each month with their rescue boat crews and manoeuvred in the water. The interval between such drills must not exceed 3 months. Where climatic conditions permit, the crew of a rescue boat should wear their immersion suits during such in-water drills. Where possible such drills should include the recovery of an object simulating a person in the water. Emergency boats carried on passenger ships which do not carry rescue boats should be launched at similar intervals and should carry out similar drill procedures.

11.2 In ships of Class I the crews of rescue and emergency boats should be mustered on the first day of the voyage as soon as possible after sailing. The crews should be fully instructed and drilled in their duties and thereafter should be mustered and similarly drilled at intervals of not more than 7 days. Crews should be specifically instructed in the procedure of sending boats away promptly in an emergency and in recovering boats in a seaway, and should be familiar with the signal for mustering at the rescue or emergency boat station.

12 Davit-launched Liferaft On-Board Training

12.1 On-board training in the use of davit-launched liferafts must take place at intervals of not more than 4 months on every ship fitted with such liferafts. Whenever practicable this training

includes the inflation and lowering of a liferaft. This liferaft may be a special liferaft intended for training purposes only or an old liferaft retained for training and not part of the ship's life-saving equipment. A special liferaft intended for training purposes only is required to be conspicuously marked and, if intended to be used for boarding when swung out at the embarkation deck, should be serviced at the same intervals as the liferafts forming part of the ship's life-saving equipment.

12.2 In preparing an on-board training programme for davit-launched liferafts the procedures adopted should take full account of the structural arrangements in way of the launching positions. For example it may not be possible to recover an inflated liferaft from an overside position without subjecting it to the risk of damage. Where procedures described in paragraphs 12.3 and 12.5 cannot be safely followed, other arrangements should be made which will enable on-board training of an equivalent standard to be carried out.

12.3 In ships of Classes II and II(A) on regular voyages, the four monthly on-board training in the use of davit-launched liferafts should include an inflation of one of the ship's liferafts. These inflations should take place when in port and where practical the liferaft should be lowered unloaded onto the quay rather than into the water. Training in boarding and using the release hook can be carried out when the liferaft is suspended just clear of the quay. The liferaft should be landed on a tarpaulin or heavy Polythene sheet to prevent any damage to the bottom of the raft. If it is not practical to land the liferaft on the quay, the boarding and use of the release hook can be carried out with the liferaft suspended just clear of the embarkation deck following initial inflation in the overside position. In this case the liferaft need not be lowered over the side but a weight should be attached to the release hook and then lowered to exercise the winch and give crew members practice in the handling of the winch and fall.

12.4 After this training the liferaft used should be sent for servicing. It is recommended that different liferafts be used at successive drills in order to avoid wear on a small number of liferafts.

12.5 In cargo ships and in passenger ships on irregular voyages, eg Class I cruise ships, there should be an inflation of one of the ship's liferafts at one of the four monthly on-board training

sessions in the use of davit-launched liferafts. The training should be carried out as described in paragraph 12.3 and the liferaft serviced as soon as possible after use. On the other two occasions in the twelve month period when the four monthly on-board training is carried out, this can be done using, for example, a practice raft and practice container. If such training is carried out in port, then the procedure described in paragraph 12.3 should be followed. If such training is carried out at sea, means should be provided for suspending and lowering the raft over a deck to provide the opportunity for boarding and handling the release hook.

12.6 Alternatively the procedure for ships engaged on regular voyages can be followed if this is more convenient.

13 On-board Instruction, Training and Training Manuals

13.1 Before being assigned to shipboard duties, all persons employed or engaged on a seagoing ship other than passengers, shall receive appropriate familiarisation training in compliance with Reg VI/1 of the STCW95 Convention. This training is in addition to other shore based training required under the STCW95 Convention. Where thermal protective aids are carried every crew member should be trained in donning the aid while wearing a lifejacket. Crew members who have been allocated an immersion suit should be trained in the donning of the suit and given the opportunity to familiarise themselves with the wearing of the suit.

13.2 Crew members whose emergency duties include the guidance of passengers, and the searching and closing down of passenger spaces should be trained and instructed in these duties. Such training and instruction should cover the matters referred to in 6.1 above, in MGN 5, and should include the use of procedures for reducing or avoiding panic and the giving of clear reassuring orders. The training should be given prior to being assigned such duties on Ro-Ro passenger ships and other passenger ships.

13.3 Crew members allocated specific key tasks for the preparation, launching and handling of lifeboats, rescue boats, liferafts and marine evacuation systems should be trained in these specific tasks. Such training should also be given to a sufficient number of crew members to provide substitutes for the crew members allocated these key tasks in the muster list. The importance of

training, particularly in the handling of totally enclosed and partially enclosed motor propelled lifeboats fitted with onload release gear and in certain cases with self-contained air support and water spray systems, cannot be emphasised enough due to the complexity of such equipment. Training given on board is primarily concerned with the particular life-saving equipment carried and is supplementary to shore based training given on personal survival techniques, on proficiency in survival craft and rescue boat, and training-courses organised by individual owners. The training should include ship specific practices such as the normal sequence for preparing and safely deploying evacuation systems, launching lifeboats and liferafts, and all other factors which determine rate of evacuation, and may also cover alternatives to the normal sequence of deployment.

13.4 Where on-board training cannot be given in the use of certain items of life-saving equipment because of practical considerations, on-board instructions in the use of such equipment is required to be given at the same intervals as the drills. Instructions are required to be given in survival procedures including the causes of and first aid treatment for hypothermia, and first aid measures likely to be practiced in a survival craft. Instructions include the operation and use of the ship's liferafts and embarkation arrangements and the use of survival craft and rescue boats in severe weather and sea conditions. Instructions may also include actions to be taken in the event of foreseeable equipment failures.

13.5 The basic information on which these instructions will be based will be found in the ship's life-saving appliances training manual which contains instructions and information on the life-saving appliances carried, personal protective equipment and its location, in addition to information and instructions on survival, hazards of exposure, methods of retrieval and emergency repair of life-saving appliances. Any part of the information to be included in the Training Manual may be provided in the form of audio-visual aids. Information provided in lifesaving appliances training manuals should be compatible with, and may reproduce, relevant shipboard safety emergency plans which are required to be provided in accordance with the International Safety Management Code (SOLAS 1974 Chapter IX; reference should also be made to MSC/Circ.760 "Guidelines for a Structure of an Integrated System of Contingency Planning for Shipboard Emergencies."). (See paragraph 15.6)

13.6 The training manual can be used by the officer or officers whose duty it is to give the relevant instructions and it can also be used as a source of reference and information for every member of the crew. A copy of the training manual should be accessible to every crew member and except in certain ships of less than 500 GRT, a copy must be provided in each messroom and recreation room, or in each cabin.

13.7 In ships with significant numbers of non-English speaking crew members, copies of the full training manual or relevant sections should be provided in the appropriate language or languages.

13.8 The programme of instructions must be so arranged that every subject to be covered, including all parts of the ship's life-saving systems can be treated within a two month period. In order to carry out this programme in cargo ships, the frequency of holding drills may have to be increased beyond that necessary to ensure that every crew member participates in an abandon ship and fire drill every month. Frequent short periods of instruction dealing with a limited number of items will be more effective than long sessions dealing with a considerable amount of subject matter and held say at monthly intervals.

14 Weekly and Monthly Inspection of LSA

14.1 Weekly and monthly inspections as described in paragraph 14.2 and 14.3 must be carried out on all ships to which 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, apply.

14.2 At weekly intervals survival craft, rescue boats and launching appliances must be inspected to ensure that they are ready for immediate use. Rescue boat and lifeboat engines must be run at weekly intervals. The general emergency alarm system must also be tested every week.

14.3 All lifesaving appliances including lifeboat and rescue boat equipment is required to be inspected at monthly intervals. For this purpose the checklist provided in the instructions for onboard maintenance is used. This inspection should include the examination and testing of any fixed radio installations and searchlight equipment, and ensuring that the batteries can be charged from the dynamo when the engine is running.

14.4 In lifeboats with water spray systems, each system should be tested at intervals of not more than 3 months in accordance with the manufacturer's instructions. The system should be flushed through with fresh water after testing with sea water.

Regulations 1999, is not held a record must be made of the relevant circumstances and the extent of any muster, drill or training session held.

15 Decision Support System

15.1 Passenger ships of Classes I, II and II(A) are required to have a decision support system for emergency management on the navigation bridge. It can be printed on paper, or computer based, and must identify all foreseeable emergency situations, establish emergency procedures for each situation, and provide decisive support to the Master.

15.2 Reference should be made to MSC/Circ.760 "Guidelines for a Structure of an Integrated System of Contingency Planning for Shipboard Emergencies".

15.3 The Guidelines noted above are intended to help integrate the various contingency Plans currently required by SOLAS and MARPOL, into a structured and consistent format. The Plans are required be in a uniform structure, be clear and easy to understand.

15.4 The Plans must be available in the working language of the Master, Officers and relevant crew members, and must be appropriately amended if the working language changes.

15.5 Training, drills, and records of such, of the Decision Support System, should be integrated into the overall training regime.

15.6 Copies of MSC/Circ.760 are available from the Marine Information Centre of the MCA:

Tel: 01703 329297

Fax: 01703 329298

16 Records

16.1 The date on which musters, drills and training sessions are held, the type of drill and training held, and the occasions on which lifeboats, rescue boats and davit-launched liferafts, as applicable, are lowered or launched must be entered in the official log book.

16.2 Where a full muster, drill or training session as required by the Merchant Shipping (Musters Training and Decision Support Systems)

