

# ISM Technical Notice

## NO 29/2020

Dated: 11.11.2020

### SUBJECT:

# Emergency Training and Drills

It is a **legal requirement** that **every crew member** who is assigned to emergency duties is familiar with those duties **before the ship sails**. This requirement may also be found in the STCW Convention and in the requirements of the ISM code.

In **passenger ships**, whenever **passengers** are to be on board **for 24 hours or longer**, there must be a **muster of passengers** within 24 hours of their joining at which time they are to be **instructed** in the use of lifejackets and the actions to be taken in any emergency. In general this muster should take place, whenever possible, before the ship sails.

Whenever a new passenger or passengers join there shall be a **passenger briefing** before the ship sails made through the public address system or a similar effective system and supplemented if appropriate by video display facilities and similar. The briefing should cover the items required in the emergency instructions for passengers and be in English and also in any other language likely to be used by a majority of the passengers.

In **all ships**, emergency **drills** shall be conducted, so far as is practicable as if there was an **actual emergency situation** and those responsible for planning drills should endeavour to ensure that the types of problems likely to occur in any real emergency are simulated as far as possible to maintain an atmosphere of realism. Missing crew members including key personnel, injured crew members and inaccessible routes can all, for example, be easily simulated and pre-planned into the drill so that emergency teams become familiar with dealing effectively with unexpected problems.

#### Every crew member must take part in at least:

- One **abandon ship drill every month**. And
- one **fire drill every month**.

In **passenger ships** there must be an abandon ship drill and a fire drill **every week** but it is permissible for these drills not to include all the crew as long as the requirement for participation by each crew member **at least once per month** is met. However, it is recommended that so far as is possible the whole crew are involved on each occasion as a unified team.

Whenever **25% or more of the crew** have not taken part in a drill in that ship in the preceding month, as a consequence of just joining the ship or for some other reason, there must be an emergency drill within 24 hours of sailing.

In the case of Ro-Ro passenger ships on short voyages the requirement for drills within 24 hours of 25% or more of the crew changing could permit the ship to make several voyages with passengers before all the crew have taken part in a drill.

Therefore, in these ships it is required that all members of the crew are made familiar with the emergency procedures and arrangements before the ship sails.

## CONDUCT OF FIRE AND EMERGENCY DRILLS

Fire drills and other emergency drills should be planned in such a way that the ship's teams obtain regular practice in dealing with all types of foreseeable emergencies in different areas of the ship. The drills should be as complete as possible and reflect the likely progress of a real emergency. Whenever practicable the types of unexpected difficulties that a real emergency might bring should be simulated – lack of visibility, restricted access, missing crew members, failed equipment, failed communications etc.

A fire drill is required to include **at least**;

- **reporting** to stations and **preparing** for emergency response in accordance with the **muster list** and emergency instructions;
- the operation of **fire pumps** and the demonstration of at least **two jets of water** through fire hoses;
- the actual use and checking of **fireman's outfits** and other personal rescue equipment;
- tests and checks on on-board **communications** equipment;
- testing and examination of **watertight doors, fire doors** and other arrangements for closing openings including fire dampers in the drill area;
- tests of the **arrangements for abandoning** ship in the event that the fire development necessitates this.

On completion of a drill the equipment should be returned to full operational condition and any faults rectified.

Crew members assigned to fire parties or other emergency parties need not wear their lifejackets, and indeed should not do so in many cases as these can seriously hamper their effectiveness. However, there needs to be procedures in place to ensure that, if it subsequently becomes necessary, these crew members can retrieve their lifejackets and use them should it become necessary to prepare to abandon the ship.

It is recommended that, following any fire drill or other emergency drill, the ship's staff hold a **de-briefing meeting to critically evaluate the results** of the drill and develop improved procedures and arrangements so that the effectiveness of the ship's emergency teams and their preparedness for dealing with the full range of possible scenarios is continually improved.

In ships with sprinkler systems a weekly test, which can be incorporated with a fire drill should establish that the sprinkler pump cuts in automatically in response to a pressure drop in the tank (ensuring that the tank is refilled if any fresh water is lost during the test), and that automatic alarms function correctly by operating the test valve at each section control station and any local switches.

## ABANDON SHIP DRILLS

An abandon ship drill should normally be the logical follow up to any fire drill. Certain elements must be included in any abandon ship drill including;

- **summoning** of crew and passengers to their muster positions and assembly stations and use of the **general Alarm** signal and preparation for the assigned **duties in the muster list**;
- checks that personnel are correctly **dressed**;
- **lowering of at least one lifeboat** with different boats being used at successive drills. Boats need not be launched if this is impracticable but they must be prepared for final launching. In the case of free fall boats crews should be exercised in boarding and taking their places ready for an actual launch
- **starting** boat engines;
- operating **liferaft davits** if fitted;
- a test of **emergency lighting** at launching and embarkation areas;
- in passenger ships a simulated search for missing passengers;
- instructions in the use of **radio lifesaving appliances** - SARTs, EPIRBs, and hand held radios.

**Lifeboats** should be actually **launched** with their assigned crews and manoeuvred in the water during an abandon ship drill at intervals of no longer than **3 months** although free fall boats may be lowered to the water using the recovery system when free fall launching is hazardous as long as a free fall launch is undertaken at least every 6 months.

In ships on dedicated short trades where dedicated berthing arrangements do not allow the launching of the boats on one side, those boats may be part lowered at 3 month intervals and actually launched at 12 month intervals.

**Rescue boats** should be **launched** with their assigned crews and manoeuvred so far as **possible every month** but in any case at intervals **not longer than 3 months**.

**Rescue boat launchings** should incorporate a simulated **recovery operation** with a suitable floating object or dummy used as a simulated man overboard.

### Davit launched Liferrafts

Ships fitted with these rafts are required to include **crew training** in their use at intervals of not more than **4 months** and the training has to include, whenever practicable, the actual inflation and lowering of a raft. To fulfil this requirement a special "training raft" (conspicuously marked - "Training Only") may be carried additional to the ship's normal raft complement or alternatively the training exercises can be done with a suitable weight as a simulated raft which can be attached and swung overside to the point where a real raft would be inflated. Demonstration of the use of the release hook can be achieved by swinging the weight back inboard over the deck and operating the hook at that position. If the latter approach is adopted, it will still be necessary to substitute a real raft from time to time and conduct training including a full lowering. Where it is impracticable to do this at the specified 4 month intervals it should be done at least once per year.

## TRAINING AND INSTRUCTIONS

It is a requirement that all ships have arrangements in place for **training on board in the use of life-saving appliances, survival craft equipment and the use of fire extinguishing appliances**. Such training must be provided for each new crew member as soon as possible after joining and not later than **2 weeks after joining**.

Each drill is also required to include an element of instruction and training and ships should arrange a **program of training** so that every crew member **covers all the ship's life-saving equipment and fire extinguishing equipment as appropriate over each 2 month period**. The training instruction is required to cover at least;

- operation of inflatable rafts
- hypothermia, its risks and first aid treatment;
- special requirements if necessary for the use of life-saving appliances in severe weather and sea conditions;
- operation of fire extinguishing appliances

Much of the material to be covered in training will be found contained in the ship's **Training Manual** which may be referred to as a source of reference. Regular reference to this document will, in any case, allow the manual to be kept up to date and revised as necessary in the light of experience.

## RECORD KEEPING

In addition to the SMS requirements for drills and training records, recording of every drill in the Official Log Book should be carried out.



**INSB Class Auditors, during the performance of various ISM audits to consult the circular in order to ensure that all applicable drill and training requirements are taking into account and implemented by the company's and vessel SMS.**

## ON-BOARD TRAINING, DRILLS AND INSPECTIONS OF FIRE APPLIANCES & LIFE-SAVING APPLIANCES

Requirement	SOLAS Regulations	Service company	Crew	Ship' s log	Intervals								
					Weekly	Monthly	3-Monthly	4-Monthly	6-Monthly	Annually	2-Yearly	5-Yearly	
Watertight door drills	II-1/21 (II-1/23)		X	X	X2								
Damage control drill – passenger ships (applicable from January 2020)	II-1/19-1		X	X			X			X8			
Abandon ship drill and fire drill - cargo ships	III/19.3		X	X		X							
Abandon ship drill and fire drill - passenger ships	III/19.3, III/30		X	X	X								
Abandon ship drill - lowering lifeboats	III/19.3.4.1, MSC/Circ.1578		X	X	X2	X3							
Abandon ship drill - launching lifeboats & rescue boats	III/19.3.4.3 & 19.3.4.6, MSC.1/Circ.1578		X	X		X1	X						
Abandon ship drill - free-fall lifeboat drill	III/19.3.4.4, MSC/Circ.1578		X	X			X						
Abandon ship drill - launch (or simulated launch) free-fall lifeboats	III/19.3.4.4, MSC/Circ.1578		X	X					X				
Abandon ship drill - MES drill	III/19.3.4.8		X	X	X2	X3							
Abandon ship drill - MES training	III/19.3.4.8		X	X							X		
Abandon ship drill - testing of emergency lighting	III/19.3.4.9		X	X	X2	X3							
Enclosed Space Entry and Rescue Drills	III/19.3.3 & 19.3.6		X	X			X7						
LSA & fire on-board training	III/19.4.1 & .2		X	X	X2	X3							
Davit-launched liferaft training	III/19.4.3		X	X			X						
Launching appliances - inspect wire ropes	III/20.4 & MSC.402(96)	X	X							X			
Launching appliances - wire ropes renewed	III/20.4 & MSC.402(96)	X	X										X4
Survival craft, rescue boats and launching appliances (visual inspection)	III/20.6.1 & MSC.402(96)		X	X	X								
Test run of lifeboat and rescue boat engines	III/20.6.2 & MSC.402(96)		X	X	X5								
Davit launched lifeboats - Moved from stowed position	III/20.6.3		X	X	X3								
Testing of public address and general alarm system	III/20.6.4		X	X	X								
Davit launched lifeboats - Turned out from stowed position	III/20.7.1		X			X							
Inspection of LSA including lifeboat equipment	III/20.7.2 & III/36.1		X			X							
Steering gear tests	V/26.1 & .2		X	X	X6								
Emergency steering drill	V/26.4		X	X			X						

1 Dedicated rescue boats launched monthly, if possible.

2 Passenger ships.

3 Cargo ships

4 When necessary due to deterioration of the falls or at intervals of not more than 5 years.

5 In special cases the Flag may waive this requirement for ships constructed before 1 July 1986.

6 Within 12 hours before departure or weekly for ships which regularly engage on voyages of short duration.

7 Every two months.

8 Passenger ships: activation of the shore-based support, if provided, to conduct stability assessments for the simulated damage conditions