

**Guidance to HK Ships Preparing for the Concentrated Inspection Campaign
on Emergency Systems and Procedures
(Period from 1 September to 30 November 2019)**

Introduction

1. Unlike other means of transportation such as aircraft or automobiles, ships operate in isolation, engaged in long sea voyages where there is often no outside help available for on-board emergencies.
2. The preparation of emergency equipment, such as emergency power sources and fire pumps of ships, and the ability of the crew in response to emergency situations, are critical factors in saving human lives and minimizing damage to ships.
3. The emergency equipment of ships should be regularly maintained to ensure immediate use in emergency and hazardous situations, and their performance should always be guaranteed. Familiarization of seafarers with the emergency systems and procedures is also essential.
4. However, according to the statistics of the Asia-Pacific (Tokyo MoU) and European-North Atlantic Basin (Paris MoU) on Port State Control in the last three years (2015~2017), among the 19 areas of deficiency types, the equipment of emergency systems had been identified for about 6 % of the total deficiencies. The number of deficiencies related to the emergency generators in 2017 has increased approximately 30% from the number in 2015 in the Tokyo MoU. At the same period, the number of detentions related to the emergency systems also increased more than twice in the Paris MoU.
5. In turn, a need to conduct the Concentrated Inspection Campaign on the emergency systems and procedures had been identified at the 28th meeting of Port State Control Committee of the Tokyo MoU, which was held in Vladivostok, the Russian Federation in September 2017. Given that there has been no Concentrated Inspection Campaign on Emergency systems in the Tokyo and Paris MOU, it was unanimously agreed to select the Emergency Systems under the theme of the CIC, which would be jointly conducted with the Paris MOU in 2019.

Purpose

The purpose of this CIC is to ensure that:

- 1) ships are capable of responding appropriately and promptly to emergency situations in order to preserve human lives, protect the marine environment and minimize damages to ships;
- 2) necessary measures are taken by responsible stakeholders, such as shipping companies and ship managers having a direct influence on the safety of ships and by raising their awareness of the importance of ship emergency systems;
- 3) emergency systems installed on board can be properly operated and effectively managed in any emergency situations; and
- 4) master and crew of the ship understand their assigned roles and duties in case of emergency and enhance their familiarity with the situations so that they can act immediately when circumstances arise.

Questionnaire Guidance

(Non-compliance with the requirements in questions marked with asterisk (*) may be considered as a ground for detention.)

Q1. Is the damage control plan readily available on board?

1. The Master should check that:

- Damage control plans and booklets are available onboard.
- Plans and booklets should be in one of the official languages of the SOLAS Convention (Arabic, Chinese, English, French, Russian and Spanish).

2. Requirements:

- Updated plans & procedures should be available onboard.

< Requirements for Damage control plans and booklets (TABLE 1) >

Application	Reference
· Passenger ship, which constructed before 25/5/1980, and on or after 25/5/1980 before 1/1/2009, the plan permanently exhibited and Booklet shall be made available to the officers of the ship.	SOLAS 1960/Chapter II/Reg. 20, SOLAS 1974 Convention/ Chapter II-1/Reg. 20, SOLAS 1981 Amend/ Chapter II-1/Reg. 23 ^A
· Dry cargo ship, which constructed on or after 1/2/1992 Before 1/1/2009, the plan permanently exhibited and Booklet shall be made available to the officers of the ship.	SOLAS 1989/1990 Amend/ Chapter II-1/Reg. 23-1 ^A
· Every ship ^B , which constructed on after 1/1/2009, the plan shall be permanently exhibited or readily available on the navigation bridge and Booklet shall be made available to the officers of the ship.	SOLAS 2006 Amend/ Chapter II-1/Reg. 19 ^A

^A According to MSC/Circ.919 & MSC.1/Circ.1245, if the languages used in the preparation of the plan and booklet are not one of the official languages of the SOLAS Convention, a translation into one of the official languages should be included. Requirements of official languages can be found in SOLAS 1988 Amend / 1988 Protocol Articles / Article IX.

^B According to SOLAS 2006 Amend / Chapter II-1 / Reg. 4.1, the damage stability requirements in parts B-1 through B-4 shall apply to cargo ships of 80 m in length (L) and upwards and to all passenger ships regardless of length but shall exclude those cargo ships which are shown to comply with subdivision and damage stability regulations in other instruments. Cargo ships shown to comply with e.g. MARPOL Annex I, IBC, IGC, SPSC regulations may be excluded from the application of part B-1.

3. Convention reference:

- Refer to < TABLE 1 >

Q2*. Is the public address system capable of broadcasting emergency announcements?

For cargo ships,

As this is not the mandatory requirement,

1. The Master should check that:

- If the public address system is not installed, other suitable means of communication are available onboard to supplement general emergency alarm system.
- If the public address system is installed, it shall comply with the requirements of paragraph 7.2.2 of LSA Code.

For passenger ships,

As this is the mandatory requirement,

1. The Master should check that:

- The public address system provides a loudspeaker installation enabling the broadcast of messages into accommodation spaces and muster stations.

2. Requirements:

- The public address system shall allow for the broadcast of messages from the navigation bridge and such other places on board the ship as the Administration deems necessary.
- It shall be installed in accordance with acoustically marginal condition and not require any action from the addressee.
- It shall be protected against unauthorized use.
- For a passenger ship, the public address system is connected to the emergency source of electrical power required by SOLAS (as amended) Chapter II-1 Regulation 42.2.3 and operated properly.
- The point and purpose of this question is not assessing the General Alarm System, but to make sure that emergency messages are heard in the residence area and assembly stations.

3. Convention reference:

- SOLAS (as amended)/Chapter III/Reg. 6.4.2 (cargo ships and passenger ships constructed on or after 1/7/1986)
- SOLAS 1996-1998 Amend/Chapter III/Reg. 6.5 (all passenger ships)
- LSA 1996(as amended)/CHAPTER VII/7.2.2 (ships constructed on or after 1/7/1998)

4. Note:

- Ship may be considered for detention if the public address system is not properly functioning for passenger ships.

Q3*. For ships with water level detectors installed, is the system and alarm arrangements operational?

1. The Master should check that:

- The sensors and the alarm system for the water level detector are installed and activated properly.

2. Requirements:

- A water level detector means a system comprising sensors and indication devices that detect and warn a water ingress in cargo holds and other spaces. In addition, the name of 'water level detector' could be used as 'water ingress system' in several vessels.
- The visual and audible alarms on the navigation bridge are activated when the level of water at the sensor reaches the pre- or main alarm level, indicating an increasing water level in cargo hold.
- The system may be provided with a capability of overriding indication and alarms for the detection systems, which are installed only in tanks, and holds that have been designed for carriage of water ballast.
- Water level detectors are installed on single hold cargo ships other than bulk carriers subject to 'SOLAS 2006 Amendments Chapter II-1 Regulation 25' or bulk carriers subject to 'SOLAS 2006 Amendments Chapter XII Regulation 12'.

3. Convention reference:

- SOLAS 2006 Amend/Chapter II-1/Reg. 25
- SOLAS 2006 Amend/Chapter XII/Reg. 12

4. Note:

- Ship may be considered for detention if the water level detector is not properly functioning.

Q4*. Is the steering gear system and its related emergency alarms operational?

1. The Master should check that:

- Power units of main and auxiliary steering gears are arranged to restart automatically when the power is restored after a power failure.
- In the event of a failure of main and auxiliary steering gears or a low level of each hydraulic fluid reservoir, as applicable, an audible and visual alarm is given.

2. Requirements:

- When determining if the ship, constructed on or after 1/9/1984^c, complies with SOLAS (1981 Amendment, Chapter II-1, Regulation 29), the Master may verify whether:

a) If applicable, an alternative power supply for steering gear is provided as the requirement of SOLAS (as amended) Chapter II-1 Regulation 29.14. The Master should check whether any one of the steering gear powers are connected to emergency source of electrical power (Emergency Switch Board) or an independent source of power located in the steering gear compartment during the inspection,

b) The main and auxiliary steering gear power units, as defined by SOLAS (as amended) Chapter II-1 Regulation 3.3, restart automatically when power is restored after the power supply is cut off. In event of a power failure to any one of the steering power units, an audible and visual alarm is given on the navigation bridge,

c) Hydraulic power-operated steering gear is provided with audible and visual alarms on the navigation bridge and in the machinery space in case of a low level of each hydraulic fluid reservoir. The Master could require the crew to verify proper operation of sensors (e.g. a float switch) for a low-level alarm.

^c Every tanker, chemical tanker or gas carrier constructed before 1/9/1984 refer to the retroactive requirements of paragraphs 4.2, 19 and 20 in SOLAS 2014 Amendment Chapter II-1, Regulation 29

3. Convention reference:

- SOLAS 1981 Amend/Chapter II-1/Reg. 29(ships constructed on or after 1/9/1984 before 1/1/2016)
- SOLAS 2014 Amend/Chapter II-1/Reg. 29(ships constructed on or after 1/1/2016)

4. Note:

- Ship may be considered for detention if the steering gear system or its related emergency alarms is not properly functioning.

Q5. Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37?

1. The Master should check that:

- The muster lists are kept up to date in accordance with the requirements of SOLAS 1996-1998 Amendments Chapter III Regulation 37.
- The muster lists complying with the requirements of regulation 37 are exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation areas.

2. Requirements:

- When determining if the muster list is in accordance with SOLAS 1996-1998 Amendments Chapter III, Regulation 37, the Master may verify whether:

a) the muster list specifies including:

- details of the general emergency alarm and public address system and action to be taken by crew and passengers when alarm is sounded,
- how the order to abandon ship will be given,
- which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use,
- substitutes for key persons who may become disabled, taking into account that different emergencies may call for different action.

b) the muster list shows the duties assigned to the different members of crew prescribed by SOLAS 1996-1998 Amendments Chapter III Reg. 37.3,

c) the muster list is prepared before the ship proceeds to sea and updated if any change takes place in the crew which necessitates an alteration in the muster list,

d) the format of the muster list on passenger ships is approved and the muster list shows the duties assigned to members of crew in relation to passengers in case of emergency prescribed by SOLAS 1996-1998 Amendments Chapter III Reg. 37.6,

e) each passenger ship shall have procedures in place for locating and rescuing passenger trapped in their staterooms.

3. Convention reference:

- SOLAS 1996-1998 Amend/Chapter III/Reg. 37

Q6*. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency?

1. The Master should check that:

- The emergency lighting is properly installed and in working order.
- The the emergency source of electrical power supplies its power properly to essential equipment, as required by the convention.

2. Requirements:

- The emergency source of electrical power supplies its power properly to essential equipment as below (TABLE 2).
- The Master could check the emergency source of electric power available to supply for public address system of passenger ship, Steering gear and Emergency fire pump as stated in other questionnaire (Q2, Q4, and Q8).

< Essential equipment for safety in an emergency (TABLE 2) >

Type of Ship	Application	Reference
	<p>For constructed before 1/9/1984, 5,000 GT and upwards :</p> <ul style="list-style-type: none"> · The general alarm · Navigation lights if solely electric, and the daylight signaling lamp if operated the main source of electrical power 	<p>SOLAS 1960/ Chapter II/Reg.26, SOLAS 1974 Convention/ Chapter II-1/Reg.26</p>
Cargo ships	<p>For constructed on or after 1/9/1984</p> <ul style="list-style-type: none"> · Navigation lights and other lights · <u>All internal communication equipment</u> · Shipborne navigational equipment as required by regulation V/19 · Fire detection and fire alarm system · Daylight signaling lamp, ship's whistle, manually operated call points, and all internal signals · <u>One of the fire pumps required by regulation II-2/4.3.1 and 4.3.3 if dependent upon the emergency generator for its source of power</u> · <u>Steering gear where it is required to be so supplied by regulation II-1/29.14</u> 	<p>SOLAS(as amended)/ Chapter II-1/ R43.2</p>

	<p>For constructed on or after 1/2/1995</p> <ul style="list-style-type: none"> · The VHF radio installation; and, if applicable : MF/HF radio installation, ship earth station <p>(Additional requirement)</p>	SOLAS 1988 Amend/ Chapter II-1/ R43.2.3
Passenger ship	<p>For constructed before 1/9/1984</p> <ul style="list-style-type: none"> · Sprinkler pump · Navigation lights and the daylight signaling lamp if operated the main source of electrical power 	SOLAS 1960/ Chapter II/Reg.25, SOLAS 1974 Convention/ Chapter II-1/Reg.25
	<p>For constructed on or after 1/9/1984</p> <ul style="list-style-type: none"> · Navigation lights and other lights · <u>All internal communication equipment</u> · The navigational aids as required by Regulation V/12 · Fire detection and fire alarm system · Daylight signaling lamp, ship's whistle, manually operated call points, and all internal signals · <u>One of the fire pumps required by regulation II-2/4.3.1 and 4.3.3</u> · The automatic sprinkler pump, if any · The emergency bilge pump and all the equipment essential for the operation of electrically powered remote controlled bilge valves · <u>The steering gear of required to be so supplied by Regulation 29.14</u> · Any watertight doors to be power-operated together with their indicator and warning signal · Emergency arrangements to bring the lift cars to deck level for the escape of person 	SOLAS(as amended)/ Chapter II-1/ R42.2

< Installation locations of Emergency lighting (TABLE 3) >

Type of Ship	Application	Reference
Cargo ships	<p>For constructed before 1/9/1984, 5,000 GT and upwards :</p> <ul style="list-style-type: none"> · <u>At every boat station on deck and oversides</u> · In all alleyways, stairways and exits · In the main machinery space and main generating set space · On the navigation bridge and in the chartroom <p>Less than 5,000 GT :</p> <ul style="list-style-type: none"> · <u>At launching stations and stowage positions of survival craft</u> 	<p>SOLAS 1960/ Chapter II/Reg.26,</p> <p>SOLAS 1974 Convention/ Chapter II-1/Reg.26</p>
Cargo ships	<p>For constructed on or after 1/9/1984</p> <ul style="list-style-type: none"> · <u>At every embarkation station and over the sides</u> · In all service and accommodation alleyways, stair ways and exits, personnel lift cars and trunks · In the machinery spaces and main generating stations including their control position · In all control stations, machinery control rooms, and at each main and emergency switchboard · At all stowage positions for firemen's outfits · At the steering gear · At the fire pump, at the sprinkler pump, at the emergency bilge pump, at the starting positions of their motors 	<p>SOLAS(as amended)/ Chapter II-1/ R43.2.1 - 2.2</p>
Cargo ships	<p>For constructed on or after 1/7/1986</p> <ul style="list-style-type: none"> · At every muster station (Additional requirement) 	<p>SOLAS 1983 Amend/ Chapter II-1/ R43.2.1 - 2.2</p>
Cargo ships	<p>For constructed on or after 1/7/2002</p> <ul style="list-style-type: none"> · In all cargo pump-rooms of tankers (Additional requirement) 	<p>SOLAS 1999/2000 Amend/Chapter II-1/ R43.2.1 - 2.2</p>
Passenger ship	<p>For constructed before 1/9/1984,</p> <ul style="list-style-type: none"> · <u>At every boat station on deck and oversides</u> · In all alleyways, stairways and exits · In the main machinery space and in the control stations as defined in paragraph (f) of Regulation 35 	<p>SOLAS 1960/ Chapter II/Reg.25, SOLAS 1974 Convention/ Chapter II-1/Reg.25</p>

	<p>For constructed on or after 1/9/1984</p> <ul style="list-style-type: none"> · <u>At every embarkation station and over the sides</u> · In all service and accommodation alleyways, stair ways and exits, personnel lift cars and trunks · In the machinery spaces and main generating stations including their control position · In all control stations, machinery control rooms, and at each main and emergency switchboard · At all stowage positions for firemen's outfits · At the steering gear · At the fire pump, at the sprinkler pump, at the emergency bilge pump, at the starting positions of their motors 	<p>SOLAS(as amended)/ Chapter II-1/ R42.2.1</p>
	<p>For constructed on or after 1/7/1986</p> <ul style="list-style-type: none"> · At every muster station (Additional requirement) · In alleyways, stairways, and exits giving access to the muster and embarkation stations (Additional requirement) 	<p>SOLAS 1983 Amend/ Chapter II-1/R42.2.1</p>
	<p>For constructed on or after 22/10/1989</p> <ul style="list-style-type: none"> · Supplementary emergency lighting for ro-ro passenger ships required by regulation 42-1 (Additional requirement) 	<p>SOLAS 1988 Amend/ Chapter II-1/R42-1</p>

· The Master should check emergency lighting at every embarkation station and over the sides are in good order among the emergency lighting (TABLE 3).

3. Convention reference:

- Refer to < TABLE 2, 3 >

4. Note:

· Ship may be considered for detention if the emergency source of electrical power cannot supply its power correctly to essential equipment for safety in an emergency.

Q7a*. Where the emergency source of electrical power is a generator, is it in correct operational condition?

1. The Master should check that:

- All means of starting for the emergency generator are operated properly.
- The emergency generating system is in good condition of operation.
- If a separate device is installed to test the automatic starting, it is working normally.

2. Requirements:

- The emergency generator, where applicable, should be able to supply power to the emergency switchboard within 45 seconds, and a battery capable of starting at least three consecutive times should be installed. To this end, electric, hydraulic, spring start and compressed air starters can be installed, and the Master can test the operation.
- If the automatic startup is not required or the operation is poor, the operation should be confirmed by manual starting. If the transitional source of emergency electrical power is installed, it is not required to supply power to the emergency switchboard within 45 seconds. The Master can check if enough fuel is stored to satisfy the emergency equipment operation time (36 hours for passenger ships, 18 hours for cargo ships).
- When an emergency generator in operation, the Master can check the indicated normal operation status of the device such as lubricant oil pressure, cooling water temperature, and RPM. In addition, the state of frequency, voltage and insulation resistance on the emergency switchboard need to be confirmed. It may also require a demonstration of safety devices for the protection of the prime mover during operation.
- The crew can use the test equipment when a separate device is installed to test the automatic starting system for a regular inspection. The test equipment will trigger an artificial blackout signal that will trigger the automatic operation of the emergency generator. If the automatic starting system test fails, the actual blackout test can confirm whether the emergency power supply is available or not within 45 seconds.

< Emergency source of electrical power for emergency generator (TABLE 4) >

Type of Ship	Application	Reference
Cargo ships	For constructed before 1/9/1984, 5,000 GT and upwards : <ul style="list-style-type: none">· Driven by a suitable prime-mover with an independent fuel supply and with approved starting arrangements	SOLAS 1960/ Chapter II/Reg.26, SOLAS 1974 Convention/ Chapter II-1/Reg.26

	<p>For constructed on or after 1/9/1984 Where the emergency source of electrical power is a generator, it shall be:</p> <ul style="list-style-type: none"> · Started and put on load automatically, as quickly as is safe and practically subject to a maximum of 45s, upon failure of the main source of electrical power supply unless a transitional source of power is provided. (Additional requirement) · In auto start mode a single source of stored energy use to start must be protected to preclude its complete depletion, otherwise a second independent means of starting is to be provided. (Additional requirement) 	<p>SOLAS(as amended) /Chapter II-1/ R43.3.1</p>
Passenger ship	<p>For constructed before 1/9/1984</p> <ul style="list-style-type: none"> · Driven by a suitable prime-mover with an independent fuel supply and with approved starting arrangements 	<p>SOLAS 1960/ Chapter II/Reg.25, SOLAS 1974 Convention/ Chapter II-1/Reg.25</p>
	<p>For constructed on or after 1/9/1984</p> <ul style="list-style-type: none"> · Started and put on load automatically, as quickly as is safe and practically subject to a maximum of 45s, upon failure of the main source of electrical power supply. (Additional requirement) · Transitional source of emergency electrical power shall be provided. (Additional requirement) 	<p>SOLAS(as amended) /Chapter II-1/ R42.3.1</p>

< Starting arrangements for emergency generating sets (TABLE 5) >

Type of Ship	Application	Reference
<p align="center">Cargo ships & Passenger ships</p>	<p>For constructed on or after 1/9/1984,</p> <ul style="list-style-type: none"> · Emergency generator must be capable to start at 0°C. If lower Temp° is to be encountered, heating arrangements to be fitted to ensure ready starting. · In Auto start mode the emergency generator must be fitted with starting devices with a stored energy capability of at least three consecutive starts. A second source of energy shall be provided for an additional three starts within 30 minutes unless manual starting can be demonstrated. · The stored energy shall be maintained at all times, as follows: <ul style="list-style-type: none"> - Electrical and hydraulic starting systems shall be maintained from the emergency switchboard. - Compressed air maintained by main or auxiliary compressed air receivers or by emergency air compressor. - If the emergency air compressor is electrically driven it must be supplied from the emergency switchboard. - All starting, charging and storing devices are to be located in emergency generator space. · If the auto start is not required then manual start is permissible, such as manual cranking, inertia starters, manually charged hydraulic accumulators, or powder charge cartridges. · When manual starting is not practicable, the requirements of regulation 44.2 and 44.3 shall be complied with except that starting may be manually initiated. 	<p align="center">SOLAS 1981 Amend/ Chapter II-1/Reg. 44</p>
<p align="center">Cargo ships & Passenger ships (Additional requirement)</p>	<p>For constructed on or after 1/10/1994</p> <ul style="list-style-type: none"> · In auto start mode the source of stored energy must be protected to preclude critical depletion by the automatic starting system, unless a second independent means of starting is provided. · In addition, a second source of energy shall be provided for an additional three starts within 30 minutes unless manual starting can be demonstrated. 	<p align="center">SOLAS 1991/1992 Amend/Chapter II-1/ R44</p>

3. Convention reference:

- Refer to < TABLE 4, 5 >

4. Note:

- Ship may be considered for detention if the emergency generator is not properly functioning.

Q7b*. Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition?

1. The Master should check that:

- Emergency batteries and charge switches are properly installed.
- The charging for accumulator batteries and the indicators are installed on the emergency switchboard in good order.

2. Requirements:

- Accumulator batteries and charge panels shall be installed on the uppermost continuous deck and the emergency switchboard shall be installed as near as the emergency source of power. Accumulator batteries shall be suitably housed, and compartments used primarily for their accommodation shall be properly constructed and efficiently ventilated.
- Accumulator batteries should be managed regularly according to the ship maintenance system.
- The Master should check the cable connection status of the battery connection part and any leakage of electrolyte, and check the charging status of the battery if the battery is equipped with a charging status indicator.
- It is possible to confirm the normal operation of the emergency battery by checking the occurrence of an alarm such as power source failure, voltage defect, over-current and insulation failure on the emergency charge panel.
- If the operation of emergency power source equipment is suspicious through inspection, PSCO may conduct black-out test considering the safety of vessels, crew or cargo.

3. Convention reference:

- SOLAS 1960/Chapter II//Reg. 25, 26 (ships constructed before 25/5/1980)
- SOLAS 1974 Convention/Chapter II-1//Reg. 25, 26 (ships constructed on or after 25/5/1980 before 1/9/1984)
- SOLAS (as amended)/Chapter II-1/Reg. 42.3.2, 43.3.2 (ships constructed on or after 1/9/1984)

4. Note:

- Ship may be considered for detention if the accumulator batteries or its switchboard are not properly functioning.

Q8*. Is the emergency fire pump in full operational condition?

1. The Master should check that:

- The fixed emergency fire pump is capable of producing at least two jets of water at or above the required pressure.
- Power source of an emergency fire pump is supplied from outside the machinery space.

2. Requirements:

- If a fire in any one compartment could put all the pumps out of action, the fixed emergency fire pump shall be fitted on below ships.

< Installation requirements of fixed emergency fire pump (Table 6) >

Date of constructed	Cargo ship	Passenger ship
~25/5/1980, 25/5/1980~31/6/2002	GT 2,000 and upwards ^F	-
1/7/2002~	All cargo ship	Less than GT 1,000

- The fixed emergency fire pump is independently driven power-operated pump by diesel engine^D or electric motor^E by electric power and shall produce two jets of water at any hydrants.

^D If diesel engine driven, (a) easily started in cold condition of zero degree by hand or by other means at least 6 times within a period of 30 minutes and at least twice within 1st 10 minutes (b) tank to have sufficient fuel for at least 3h, reserve fuel outside machinery space for an additional 15h.

^E If electric motor driven, power source of emergency fire pump shall be supplied from emergency generator.

- Under light ship condition, if fitted, the priming units (motor, V-belt, clutch, lever and etc.) shall be operated until the primed condition for emergency fire pump.

^F Cargo ship less than 2,000 tons gross tonnage, if a fire in any one compartment could put all the pumps out of action the alternative means of providing water for fire-fighting purposes are to the satisfaction of the Administration. Usually, the alternative mean is a portable emergency fire pump.

3. Convention reference:

- SOLAS 1960/Chapter II/Reg. 64, 65 (ships constructed before 25/5/1980)
- SOLAS 1974 Convention/Chapter II-2/Reg. 52 (ships constructed on or after 25/5/1980 before 1/9/1984)
- SOLAS 1981 Amend/Chapter II-2/Reg. 4 (ships constructed on or after 1/9/1984 before 1/7/1986)
- SOLAS 1991/1992 Amend/Chapter II-2/Reg. 4 (ships constructed on or after 1/7/1986 before 1/7/2002)

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- SOLAS 1999/2000 Amend/Chapter II-2/Reg. 10.2.2.3 (ships constructed on or after 1/7/2002)
- POLAR Code 2015/PART I-A/7.3 (ships constructed on or after 1/1/2017)
- FSS Code 2002/CHAPTER 12/2 (ships constructed on or after 1/7/2002 before 1/7/2014)
- FSS 12Amend/CHAPTER 12/2 (ships constructed on or after 1/7/2014)

4. Note:

- Ship may be considered for detention if the emergency fire pump is not properly functioning.

Q9*. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory?

1. The Master should check that:

- That the fire drill and abandon ship drill have been carried out as scheduled and recorded.
- That it was found to be satisfactory in case the fire drill or abandon ship drill was witnessed.

2. Requirements:

- The Master should check the detailed records of abandon ship drills and fire drills in such logbook as may be prescribed by the Administration. If a drill is not held at the appointed time, an entry shall be made in the logbook stating the circumstances and the extent of the drill held.
- Where inspection of logbook/records reveals that drills have not been carried out as required by SOLAS 1996/1998 Amendments Chapter III Regulation 30, SOLAS 2013 Amendments Chapter III Regulation 19, the PSCO may conduct a fire drill and abandon ship drill.

3. Convention reference:

- SOLAS 1996/1998 Amend/Chapter III/Reg. 30
- SOLAS 2013 Amend/Chapter III/Reg. 19

4. Note:

- Ship may be considered for detention if the fire drill and/or abandon ship drill is found to be unsatisfactory when witnessed by PSCO.

Q10*. For the above checked emergency equipment, are the relevant crews familiar with the operation?

1. The Master should check that:

- If the crew responsible for the handling of the emergency equipment is familiar with the proper operation.

2. Requirements:

- Exercises and drills for emergency situations, required by SMS, shall ensure the adequate handling of emergency equipment.
- The Master should inquire the identified responsible crew about the process of operating the equipment. Practical demonstrations by the responsible crew can be substituted by using the questionnaire above (Q2, Q3, Q4, Q6, Q7a, Q7b, and Q8).
- The Master should use his professional judgment when assessing the results of interviews with responsible crew and practical demonstrations to determine whether the crew is familiar with and capable of responding to emergency shipboard situations.

3. Convention reference:

- STCW 2010 Manila Amendments / Regulation I/14.1.5

4. Note:

- Ship may be considered for detention if relevant crews are not familiar with the operation.

Q11. Has the ship been detained as a result of the Inspection Campaign?

1. Note:

- Ship may be considered for detention depends on the seriousness of the deficiency.

The detail of any deficiencies and deficiency code in the CIC questionnaire, if any, will be appropriately entered on the PSC Report Form B.