Guidelines for Port State Control Officers
(Concentrated Inspection Campaign on Fire Safety)

Purpose

This document provides guidance to Port State Control Officers (PSCOs) as they answer questions related to the Concentrated Inspection Campaign (CIC) on Fire Safety. The questions are additional to the current PSC inspection procedures and are designed to specifically address areas where there are reoccurring deficiencies with respect to fire safety. The questions will support PSCOs to determine if ships meet the mandatory requirements for fire safety prescribed in the International Convention for the Safety of Life at Sea (SOLAS) and the International Code for Fire Safety Systems (FSS Code). This guidance document aims to ensure consistent and harmonized inspection and implementation of the requirements by all PSCOs.

Introduction

Fire is one of the most dangerous emergencies on board a ship. Between 30 to 50% of all fires on merchant ships originate in the engine room and 70% of those fires are caused by oil leaks from pressurized systems[1]. Other causes include boiler incidents, electrical failures, or accidents during hot work operations. Lack of proper maintenance and poor watch keeping contribute to the risk. Some fires are caused by accidents in crew accommodations, and others may occur in cargo spaces, either because of factors cited above, or by the cargoes themselves. For example, flammable goods may be carried in containers and if damaged, the contents could leak and/or ignite. In other cases, some cargoes such as bulk mining concentrates, and organic material such as grain can generate enough heat under certain conditions to catch fire.

While crew deaths are the primary concern, there are significant risks of serious environmental damage. In June 2021, a fire onboard a cargo ship off Colombo Harbour, Sri Lanka burned for 13 days before authorities could extinguish it. The ship sank, lost tonnes of nitric acid and plastics cargo into the environment and caused an oil spill as fuel oil leaked into the sensitive Sri Lankan marine environment.

Number of deficiencies related to fire safety remain high. In the Paris MoU PSC statistics collected from 2016 to 2018, the deficiencies on fire safety represent 15.58% of the detainable deficiencies recorded in the Paris MoU region. In the Tokyo MoU PSC statistics collected from 2015 to 2017, fire safety deficiencies represent 21.37% of major detainable deficiencies in the Tokyo MoU region. As a result, this additional guidance has been developed as part of the Concentrated Inspection Campaign to improve fire safety performance.

[1] UK P&I Club Publication – Risk Focus _ Engine Room https://www.ukpandi.com/news-and-resources/bulletins/2016/risk-focus-engine-room-fires/

General Guidance to Answer Questions of CIC:

The inspection must be performed in accordance with the relevant established MoUs procedures for Chapter II-2 of SOLAS and the Fire Safety Systems Code. The Concentrated Inspection Campaign does not affect the type of inspection to be conducted in accordance with the procedures. Rather, it consists of a series of questions to be answered in addition to the inspection. These questions offer additional focus on areas where number of detainable deficiencies remain high. The CIC does not limit the PSCO during the regular inspection to check further compliance with all the relevant IMO Instruments regarding safety in general. When necessary, the PSCO may consult the following guidance with respect to how they will answer the CIC questions related to fire safety.

In arriving at a "YES" or "NO" answer to each of the questions of the questionnaire, the following should be considered:

- Should a question be answered "NO", a deficiency using the appropriate deficiency code listed in the guidance to the question must be used on the report of inspection Form "B".
- A "NO" answer in the questionnaire should not automatically lead to detention of the ship. In this case, the PSCO should use his/her professional judgement to determine whether the ship should be considered for detention.
- The column "N/A" is to be used only if the question is not applicable to the ship and consequently the question cannot be answered.

NOTE: In the guidance, regarding Convention references for each of the questions, the list is not exhaustive. It is recommended that when choosing the correct Convention reference, PSCOs consult RuleCheck to verify the applicable requirements while taking into account the ship's type and date of construction.

Questionnaire Guidance

Q1* – Are the emergency escape routes maintained in a safe condition?

1. The PSCO should check:

- That escape routes are clear of obstacles and accessible.
- If applicable, securing devices of emergency exit hatches to open deck, are operational and of a type to be opened from both sides.
- That main and emergency lighting is operational.
- In case of passenger ships, that means of escape are marked by lighting or photoluminescent strip indicators, as appropriate.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult RuleCheck.

- Escape routes shall be maintained in a safe condition, clear of obstacles so that persons onboard can safely and swiftly escape to the lifeboat and life raft embarkation deck.
- Refer to the Unified Interpretation in section 6 of MSC.1/Circ.1456 approved at the MSC (92) in 2013:
    - To facilitate a swift and safe means of escape to the lifeboat and life raft embarkation deck, the following provisions should apply to overhead hatches fitted along the escape routes addressed by SOLAS Regulation II-2/13:
    - the securing devices should be of a type which can be opened from both sides;
    - the maximum force needed to open the hatch cover should not exceed 150 N; and
    - the use of a spring equalizing, counterbalance, or other suitable device on the hinge side to reduce the force needed for opening is acceptable.
- Emergency lighting for Cargo Ships:

As per SOLAS Regulation II-1/43, for a period of 18 hours, emergency lighting shall be supplied in all service and accommodation alleyways, stairways and exits, personnel lift cars, and personnel lift trunks.

- Emergency lighting and marking of escape routes for Passenger Ships:

As per SOLAS Regulation II-2/13.3.2.5, in addition to the emergency lighting required by regulations II-1/42 and III/11.5, the means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck at all points of the escape route including angles and intersections.

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg 14.2.1.1.3 (Retroactive requirement for existing ships):

The Means of escape systems and appliances shall be kept in good order to ensure their required performance if a fire occurs.

3. **Convention Reference**:

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. **Deficiency Code:**

- 07120: Means of escape
- 04103: Emergency lighting, batteries, and switches

5. **Nature of Defect:**

- For code 07120: Not Marked, not properly maintained, blocked, unsafe, not as required
- For code 04103: Damaged, dirty, inadequate, insufficient, missing, not as required, not properly maintained, inoperative

6. **Suggested Action Taken:**

- Code 17
- Grounds for Detention (tick box)

Q2* – Are fire doors maintained in good working condition?

1. **The PSCO should**:

- Consult the Fire Control Plan to identify which of the doors on board are fire doors and their characteristics (e.g., fire resistance and the provision of self-closing arrangements).
- Verify that all fire door control panel indicators, if provided on the continuously manned central control station, are functional.
- Test a sample of fire doors for local operation.
- Test a sample of remotely controlled fire doors for proper release (**Note**: Ensure that announcement is made on ship's PA system before the test to inform the ship crew and passengers to stand clear of fire doors).
- Check if self-closing fire doors are not improperly lashed in open position by means of wedges, ropes, or hold-back hooks (especially fire doors in the stairwells or engine room and on the escape trunks, and passenger ships' galley and main vertical zone (MVZ) bulkheads).
- Check to make sure doors close and latch properly (sometimes latch may not engage properly due to crew tuning the closing piston to prevent slamming of the doors).
- Check that the doors fitted in boundary bulkheads of machinery spaces of category A are reasonably gastight and self-closing.
- Check that the modification and/or repair of fire doors, if any, has been accepted by ship's Administration in accordance with SOLAS 1988 Amend / Chapter I / Reg. 11b.
- Check, as far as practicable, that fire doors have the appropriate fire resistance for the bulkhead in which they are fitted – Class A or B.

Note: Fire door which is not required to be self-closing by any requirement in SOLAS can be fitted with hold-back hook, even if such door has self-closing device.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult RuleCheck.

- Fire doors must be operational at all times to assist in containment of a fire.
- The fire resistance of doors shall be equivalent to that of the division in which they are fitted
- The fire doors should have equivalent fire resistance to the bulkheads in which they are fitted.

Release mechanism for Passenger Ships:

- As per SOLAS Regulation II-2/9.4.1.1.5, fire doors in main vertical zone bulkheads, galley boundaries and stairway enclosures other than power-operated watertight doors and those which are normally locked, shall be self-closing and be capable of release locally from both side as well as remotely from the continuous manned central control station. Fire doors closed position indication to be provided at the central control station. For more details, please refer to SOLAS Regulations II-2/9.4.1.1.5.

Release mechanism for Cargo Ships:

- As per SOLAS Regulation II-2/9.4.2.2, doors required to be self-closing shall not be fitted with hold- back hooks. However, hold-back arrangements fitted with remote release devices of the fail-safe type may be utilized.

3. Convention Reference:

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. Deficiency Code:

- 07105: Fire doors/openings in fire resisting divisions

5. Nature of Defect:

- Malfunctioning, unsafe, missing, not as required, inoperative

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)

Q3* - Has the fixed fire detection and fire alarm systems, been periodically tested in accordance with the requirements of the Administration?

1. The PSCO's should:

- Check that the following components of fixed fire detection and alarm systems, including those covering cargo and machinery spaces, have been periodically tested in accordance with the requirements of the Administration:
- Fixed detection and fire alarm control panel indicators
- Detectors and manual call points
- Emergency power supply switchover
- Check for faults and/or alarms of general fire detection and fire alarm panel and repeaters.
- Check detectors and manual call points for damage, obstructions or being painted over.
- Verify test records for the Fire Detection and Alarm Systems.

Note: If a system is also found not operationally ready, then this should be recorded as a deficiency but outside of the CIC.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult RuleCheck.

- *Ships constructed on or after 1/9/1984 -before 1/07/2002: SOLAS 1981/1983/1991/1992 Amend /Chapter II-2 / Reg. 13.1.13*[2]*:*

  The function of the detection system shall be periodically tested to the satisfaction of the Administration by means of equipment producing hot air at the appropriate temperature, or smoke or aerosol particles having the appropriate range of density or particle size, or other phenomena associated with incipient fires to which the detector is designed to respond. All detectors shall be of a type such that they can be tested for correct operation and restored to normal surveillance without the renewal of any component.

- As per SOLAS 1999/2000 Amend/Chapter II-2/Reg 7.3 (for ships constructed on or after 01/07/2002), the function of fixed fire detection and fire alarm systems shall be periodically tested to the satisfaction of the Administration by means of:
  - equipment producing hot air at the appropriate temperature,
  - smoke or aerosol particles having the appropriate range of density or particle size, or
  - other phenomena associated with incipient fires to which the detector is designed to respond.

[2] Applicable SOLAS amendment to be verified by RuleCheck.

As per SOLAS Amend 99/00 Regulation II-2/14.2.2.1 (retroactive for existing ships), maintenance, testing and inspections shall be carried out based on the guidelines developed by the Organization and in a manner having due regard to ensuring the reliability of fire-fighting systems and appliances (refer to the Revised Guidelines for the maintenance and inspection of fire protection systems and appliances (MSC.1/Circ.1432, as amended by MSC.1/Circ.1516)).

3. Convention References:

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. Deficiency code:

- 07106: Fire Detection and alarm system

5. Nature of defect:

- Not as required

6. Suggested Action Taken Codes:

- Code 17
- Grounds for Detention (tick box)

Q4*. Are ventilation closing appliances capable of being closed?

Note: For the purpose of this question, ventilation closing appliances are the means of closing fitted at the inlet or outlet of a ventilation system such as fire flaps, louvers, etc

1. The PSCO should:

- Test a sample of ventilation closing appliances to ensure that they are capable of being closed.
- Check the proper operation of ventilation closing appliances, and that there is no presence of holes or severe deterioration.
- Check if the operation of ventilation closing appliances is not obstructed by equipment, stores or cargo.
- Check if ventilation closing appliances are permanently marked and indicate whether the shutoff is open or closed.
- If applicable, check that battery room ventilators are fitted with a functional means of closing and provided with an appropriate warning notice at the closing device.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult RuleCheck.

- As per SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 5.2.1.1, the main inlets and outlets of all ventilation systems shall be capable of being closed from outside the spaces being ventilated.

The means of closing shall be easily accessible as well as prominently and permanently marked and shall indicate whether the shutoff is open or closed.

- **Exception** (Passenger ship ≤36 passengers, cargo ships and tankers)**:** Divisions between control stations (emergency generators) and open decks may have air intake openings without means for closure, unless a fixed gas fire-fighting system is fitted. (SOLAS II-2/9.2.2.4 (passenger); 9.2.3.3 (Cargo ships); 9.2.4.2(Tankers)).
- As per the Unified Interpretation contained in MSC.1/Circ.1434: Battery room ventilators are to be fitted with a means of closing whenever:
  - The battery room does not open directly onto an exposed deck;
  - The ventilation opening for the battery room is required to be fitted with a closing device according to the Load Line Convention (i.e., the height of the opening does not extend to more than 4.5 m (14.8 feet) above the deck for position 1 or to more than 2.3 m (7.5 feet) above the deck in position 2); or
  - The battery room is fitted with a fixed gas fire-extinguishing system.
- Where a battery room ventilator is fitted with a closing device, then a warning notice stating, for example “This closing device is to be kept open and only closed in the event of fire or other emergency – Explosive gas”, is to be provided at the closing device to mitigate the possibility of inadvertent closing.
- As per SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 14.2.1.1, the structural fire protection including fire resisting divisions, and protection of openings and penetrations in these divisions shall be kept in good order so as to ensure their required performance if a fire occurs.

3. **Convention Reference:**

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship’s type and date of construction.

4. Deficiency Code:

- 07116: Ventilation

5. Nature of Defect:

- Not as required, Inoperative, Missing

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)

Q5*. Are the means of control for power ventilation of machinery spaces operable from two grouped positions?

1. **The PSCO should:**

   - Check that means of control for power ventilation is provided for stopping ventilating fans.
   - If applicable, check that power ventilation of machinery spaces is operable from two grouped positions, one of which shall be outside of such spaces.
   - If applicable, check that the means provided for stopping the power ventilation of the machinery spaces are entirely separate from ventilation of other spaces.

2. **Requirements:**

   The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult Rule Check.

   - SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 5.2.2.2 (for ships constructed on or after 01/07/2002):

   Means of control shall be provided for stopping ventilating fans. Controls provided for the power ventilation serving machinery spaces shall be grouped so as to be operable from two positions, one of which shall be outside such spaces. The means provided for stopping the power ventilation of the machinery spaces shall be entirely separate from the means provided for stopping ventilation of other spaces.

   - For ships constructed before 01/07/2002 should refer to SOLAS 1983 Amendment/Chapter II-2/Reg. 11.4

3. **Convention Reference:**

   Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. **Deficiency Code:**

   - 07116: Ventilation

5. **Nature of Defect:**

   - Not as required, Inoperative, Missing, Insufficient

6. **Suggested Action Taken:**

   - Code 16
   - Code 17- Grounds for Detention (tick box)

Q6*. Can each fire pump deliver at least the two required jets of water?

1. The PSCO should:

- Check that each fire pump delivers at least the two required jets of water at adequate pressure.
- Check that the capacity of the required designated fire pumps has not been degraded over time. This can be done by checking the pressure produced at the pump under working conditions.

Note: PSCO should use professional judgment prior to requesting a function test of the fire pumps during sub-zero temperature. If the function test is not witnessed by the PSCO, taking into consideration the safety of the ship, crew, passengers and possible interference with ship's normal operation, such as cargo operation, ballasting, etc., the question should be checked as ''N/A''.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult Rule Check.

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 14.2.1.2, Fire-fighting systems and appliances shall be kept in good working order and readily available for immediate use.
- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg 10.2.2.4.2:
- Each of the required fire pumps (other than any emergency pump required in paragraph 2.2.3.1.2 for cargo ships) shall have a capacity not less than 80% of the total required capacity divided by the minimum number of required fire pumps but in any case, not less than 25 m3/h and each such pump shall in any event be capable of delivering at least the two required jets of water. These fire pumps shall be capable of supplying the fire main system under the required conditions. Where more pumps than the minimum of required pumps are installed, such additional pumps shall have a capacity of at least 25 m3/h and shall be capable of delivering at least the two jets of water required in paragraph 2.1.5.1.

Note: PSCOs should be aware that, sanitary, ballast, bilge or general service pumps may be accepted as fire pumps. PSCO's should consult the approved fire-fighting arrangements and/or ship's fire control plan to confirm those pumps that are accepted as fire pumps.

Note: PSCO should be aware that specific ships may be required more than two jets of water (e.g. Regulation II-2/10.7.3.2.3, Regulation II-2/19.3.1.2, FSS code Ch.14/2.1.3.).

3. Convention Reference:

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. Deficiency Code:

- 07113: Fire pumps and its pipes

5. Nature of Defect:

- Insufficient pressure, Not as required, Inoperative, Missing

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)

Q7*: Are the means of control provided in a position outside the machinery space for stopping ventilation and oil transfer equipment operational?

1. The PSCO should:

- Check that the means of controls are accessible, not blocked and are ready for use.
- Request the ship's crew to carry out a function test on a sample of the remote means of control for stopping ventilation and oil transfer equipment.
- Verify, while the crew is demonstrating the test, that the ventilation and oil transfer pumps are either stopped or their appropriate circuit breaker tripped.

Note: PSCOs should consider the possible consequences of performing this functional test without taking appropriate precautions by ship's crew. The test could, if not properly prepared for by ship's crew, result in a black-out or damage to machinery.

2. Requirements:

The below list includes some of the requirements relevant to the checks associated with this question. PSCOs should be aware that requirements may vary based on the type and date of construction of the ship. For detailed requirements based on the ship's type and date of construction, PSCOs should consult Rule Check.

- As per SOLAS 1999/2000 Amend / Chapter II-2/ Reg. 5.2.2.3 (for ships constructed on or after 01/07/2002) means of control shall be provided for stopping forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps, lubricating oil service pumps, thermal oil circulating pumps and oil separators (purifiers).
- As per SOLAS 1983 amendment Chapter II-2 / 11.4 (for ships constructed before 01/07/2002), means of control shall be provided for:

  .1 opening and closure of skylights, closure of openings in funnels which normally allow exhaust ventilation, and closure of ventilator dampers;

  .2 permitting the release of smoke;

  .3 closing power-operated doors or actuating release mechanism on doors other than power-operated watertight doors;

  .4 stopping ventilating fans; and

  .5 stopping forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps.

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 14.2.1.2, Fire-fighting systems and appliances shall be kept in good working order and readily available for immediate use.

3. Convention Reference:

Note: Consult RuleCheck to verify the applicable requirements taking into account the ship's type and date of construction.

4. Deficiency Code:

- 07114: Remote Means of control (opening, pumps, ventilation, etc.) Machinery spaces.

5. Nature of Defect:

- Not as required, Missing, Inoperative

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)

Q8*: Is the room for the fixed gas fire extinguishing medium used only for this purpose?

Note: *For ships constructed before 01/07/2002 the answer to this question should be N/A. However, in case a ship constructed before 01/07/2002 has the system installed, it should comply with the same requirements.*

1. The PSCO should:

Verify that the fixed gas fire extinguishing medium storage room is used for no other purposes.

(**Exception:** Sample extraction smoke detection system control panel can be located in the storage room if the system uses CO2 discharge pipes)

2. Requirements:

For all ships constructed on or after 01/07/2002:

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 10.4.3, when the fire-extinguishing medium is stored outside a protected space, it shall be stored in a room which is located behind the forward collision bulkhead and is used for no other purposes.
- In accordance with MSC/Circ.1120 (Unified interpretations of SOLAS Chapter II-2, the FSS code, the FTP code and related fire test procedures), the storage room of fire-extinguishing media of fixed gas fire-extinguishing systems should be used for no other purposes
- Circular MSC.1/Circ.1487 - Unified interpretation on Sample Extraction Smoke Detection System:
    - If the CO2 system discharge pipes are used for the sample extraction smoke detection system, the control panel can be located in the CO2 room provided that an indicating unit is located on the navigation bridge.

3. Convention Reference:

- SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 10.4.3 (Apply to all ships constructed on or after 01/07/2002).

4. Deficiency Code:

- 07109: Fixed fire extinguishing installation

5. Nature of Defect:

- Not as required

6. Suggested Action Taken:

- Code 17
- Grounds for Detention

Q9* – Are the valves used in the fire main line operational?

1. The PSCO should:

- Verify, by a sample functional test, that the isolating valve(s) installed to separate the section of the fire main within the machinery space (containing the main fire pump or pumps) from the rest of the fire main, are in good working condition.
- For Tankers, verify by a sample functional test, that the isolation valves fitted in the fire main at poop front and on the tank, deck are in good working condition.
- Verify, by a sample functional test, that hydrant valves are in good working condition. When the fire main line is pressurized, no leakage should be observed from the hydrant once the valve is completely shut.

2. Requirements:

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 14.2.1.2, Fire-fighting systems and appliances shall be kept in good working order and readily available for immediate use.

3. Convention Reference:

- SOLAS 1999/2000 Amend / Chapter II-2 /Reg. 14.2.1.2 (Retroactive Requirement for Existing Ships)

4. Deficiency Code:

- 07110: Firefighting equipment and appliances

5. Nature of Defect:

- Not as required, missing, inoperative, not properly maintained

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)

Q10* - Where a fire drill was witnessed, was it found to be satisfactory?

1. The PSCO should:

- Check where a fire drill witnessed that it was found to be satisfactory.
- Verify that the crew can respond in an event following an emergency.
- Verify that crew can communicate, receive, and carry out instructions efficiently.
- Ensure that the master is in control of the emergency and the information flow is from one central command location.

Note: If no drill is witnessed, the question should be answered with "N/A". Where a drill is witnessed and the question is answered as "No" then the PSCO should consider whether there is a serious risk to the safety of the crew, the ship and the marine environment and whether the deficiencies can or will be rectified before departure.

Note: For PSCOs of Paris MoU, refer to PSCC Instruction 52-2019-05 Guidance on Procedures for Operational Controls.

Note: For PSCOs of Tokyo MOU, refer to Tokyo MOU manual Section 2-1, Procedures for Port State Control, 2021 (IMO Res. A.1155 (32)), APPENDIX 7 GUIDELINES FOR CONTROL OF OPERATIONAL REQUIREMENTS.

2. Requirements:

- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 15.1, the purpose of this regulation is to mitigate the consequences of fire by means of proper instructions for training and drills of persons onboard in correct procedures under emergency conditions. For this purpose, the crew shall have the necessary knowledge and skills to handle fire emergency cases, including passenger care.
- As per SOLAS 1999/2000 Amend / Chapter II-2/Reg. 15.2:
    - crew members shall be trained to be familiar with the arrangements of the ship as well as the location and operation of any fire-fighting systems and appliances that they may be called upon to use.
    - Performance of crew members assigned fire-fighting duties shall be periodically evaluated by conducting onboard training and drills to identify areas in need of improvement, to ensure competency in fire-fighting skills is maintained, and to ensure the operational readiness of the fire-fighting organization.
- SOLAS 2013 Amend / Chapter III / Reg. 19.3.5:
    - Fire drills should be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of ships and the cargo.
    - Each fire drill shall include:
        - reporting to stations and preparing for the duties described in the muster list required by regulation 8;
        - starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;

- checking of fireman's outfit and other personal rescue equipment;
- checking of relevant communication equipment;
- checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
- checking the necessary arrangements for subsequent abandoning of the ship.

3. Convention References:

Retroactive requirement for existing ships:

- SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 15.1
- SOLAS 1999/2000 Amend / Chapter II-2 / Reg. 15.2
- SOLAS 2013 Amend / Chapter III / Reg. 19.3.5

4. Deficiency Code:

- 04109: Fire Drills
- 07125: Evaluation of crew performance (fire drills)

5. Nature of Defect:

- 04109: Lack of control, lack of communication, lack of training, lack of knowledge
- 07125: Lack of training, lack of familiarity, lack of information

6. Suggested Action Taken:

- Code 17
- Grounds for Detention (tick box)