

Report of the 2019 Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures



February, 2021

Executive Summary

The Memorandum of Understanding on Port State Control in the Asia-Pacific Region (Tokyo MOU) carried out a Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures jointly with the Paris MoU between 1st September 2019 and 30th November 2019. During the campaign Tokyo MoU and Paris MoU member Authorities focused their efforts on assessing shipboard compliance in accordance with Emergency systems and procedures. This report documents the Tokyo MoU results for the campaign.

During the CIC, a total of 8,243 inspections were carried out involving 7,680 individual vessels, with a total of 7,174 inspections performed with a CIC questionnaire. In total 216 (2.62%) ships were detained during the campaign. The CIC-topic detention rate was 0.77% (55 ships were detained). 25.46% of the detentions were related to the CIC topic. The number of ships with CIC-topic deficiencies totalled 1,416 vessels, or 19.74% per CIC inspection.

In analyzing the CIC Questionnaire data, the most satisfactory results were for Q10, 2 and 4, which queried whether the relevant crews are familiar with the operation of emergency equipment, the public address system capable of broadcasting emergency announcements and the steering gear system and its related emergency alarms— only (Q10) 1.04% (Q2) 1.60% (Q3) 1.91% responded “No”. The least favorable results were reported for Q5, which asked the muster list details in accordance with SOLAS requirements: 178 “No” answers (2.48%) were recorded.

The highest number of CIC inspections relating to ship type were conducted on bulk carriers (2,773 vessels, or 38.65%), followed by container ships (1,276 vessels, or 17.79%) and general cargo/multipurpose vessels (1,234 vessels, or 17.20%).

Ships from 77 flag States were inspected during the CIC. The greatest number of inspections were carried out on ships flying the flags of Panama (1,942 vessels, or 27.07%), the Marshall Islands (729 vessels, or 10.16%) and Liberia (720 vessels, or 10.03%). The flag State with the most CIC-topic related detentions was Panama (20 of 1,942 inspections, or 1.03%), followed by Liberia (5 of 720 inspections, or 0.69%), Marshall Islands (4 of 729 inspections, or 0.55%) and Vietnam (3 of 145 inspections, or 2.07%).

Of Tokyo MoU member Authorities, China and Japan conducted the most CIC inspections at 1,784 and 1,390 respectively, constituting 44.24% of total CIC inspections. China had the highest number of CIC-topic related detentions (33 vessels, or 60%).

The statistics of CIC Questionnaire show that implementation of the specific provisions of Emergency systems and procedures is satisfactory, but the number of CIC-topic related detentions is higher than other CIC items: 36 ships in 2017, 4 ships in 2018 and 55 ships in 2019.

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1 Introduction

1.1 Purpose of this Report

The purpose of this report is to present the results of the Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures that was conducted by member states to the Tokyo Memorandum of Understanding (TMOU) on port State control (PSC) between 1 September 2019 and 30 November 2019.

1.2 Objective of the CIC

This CIC shall assure that:

1. Ships are capable of responding appropriately and promptly to emergency situations towards preventing casualties and ship damage from marine accidents on the oceans, and maintains a clean marine environment;
2. The necessary precautions are taken by responsible entities such as shipping companies and ship managers who have a direct influence on the safety of ships and by reminding them of the importance of ship emergency systems, on which a solid foundation is laid for ship emergency management systems;
3. The emergency systems installed on board are operated properly and managed efficiently in any emergency situation;
4. The master and all seafarers of the ship understand their assigned roles and duties in case of emergency and raise their familiarity with the situations so they can act immediately when circumstances demand.

1.3 Scope of the CIC

The scope of the CIC includes all ships targeted for PSC inspection within Tokyo MOU Region between 1st September 2019 and 30th November 2019.

1.4 General Remarks

1.4.1 For the purpose of this report, a detention is an inspection containing at least one deficiency that is considered grounds for detention.

1.4.2 The tables do not take into account inspections where the CIC questionnaire was not recorded, with the exception of Table 2.

2 Summary, Conclusions and Recommendations

2.1 Summary

2.1.1 The questionnaire for the CIC contains 11 questions covering 10 aspects including documentation, emergency system operation and crew familiarization. The number of “No” responses per question ranges from 17 to 178, accounting for 0.02% to 2.48% of total CIC inspections respectively.

2.1.2 The most satisfactory results were for Q10, 2 and 4, which queried whether the relevant crews were familiar with operation of the emergency equipment, the public address system capable of broadcasting emergency announcements and the steering gear system and its related emergency alarms, respectively, where “No” answers accounted for only 1.04% 1.60% 1.91%, respectively.

2.1.3 The least favorable results were reported for Q5, which asked whether the muster list details were in accordance with SOLAS requirements: 178 “No” answers (2.58%) were recorded.

2.1.4 The results for Question 6, which asked whether the emergency source of electrical power was able to supply its power correctly to essential equipment in an emergency in the interest of safety, comprised the second highest number of unsatisfactory responses, also arousing concern. Unfavorable results were recorded in 151 inspections, which represents 2.10% of CIC inspections.

2.2 Conclusions

2.2.1 The CIC Questionnaire statistics show that implementation of the specific provisions of Emergency systems and procedures is satisfactory across the industry. However, the related detention rate was relatively high.

2.2.2 Number of detentions (per year): 36 ships in 2017), 4 ships in 2018 and 55 ships in 2019. This CIC was conducted to assess seafarer emergency response and emergency system operations. The average for the Q2~Q8 in the system operation questionnaire was 126 “No” responses (except for Q3 and Q7b), while for Q9 and Q10 in the crew response questionnaire, an average of 74 “No” responses were given. Emergency response and emergency system operations are more at risk than crew emergency response.

2.2.3 As indicated in the inspection results, the majority of ships were in compliance with Convention requirements at the time of the CIC

2.3 Recommendations

It is recommended that Port State Control Authorities pay attention to the emergency fire pump and emergency generator condition because these two CIC items make up 58% of the total detentions.

3 CIC Questionnaire Results

3.1 Analysis

3.1.1 Responses to CIC Questionnaire

Table 1 Responses to CIC Questionnaire

		YES		NO		N/A		<u>Detained*</u>	
		#	% ¹	#	% ¹	#	% ²	#	%
Q1	Is the damage control plan readily available on board?	6518	97.94	137	2.06	519	7.23	N/A	-
Q2*	Is the public address system capable of broadcasting emergency announcements?	7005	98.43	112	1.57	57	0.79	N/A	-
Q3*	For ships with water level detectors installed, are the system and alarm arrangements operational?	4225	98.81	51	1.19	2898	40.40	2	3.92
Q4*	Is the steering gear system and its related emergency alarms operational?	6994	98.22	127	1.78	53	0.74	11	8.66
Q5	Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37?	6909	97.49	178	2.51	87	1.21	N/A	-
Q6	Does the emergency source for electrical power supply its power correctly to essential safety equipment in an emergency?	6856	97.85	151	2.15	167	2.33	2	1.32
Q7a	Where the emergency source for electrical power is a generator, is it in correct operational condition?	6619	98.39	108	1.61	447	6.23	17	15.74
Q7b	Where the emergency source for electrical power is an accumulator battery, are the batteries and its switchboard in good condition?	2734	99.38	17	0.62	4423	61.65	0	-
Q8	Is the emergency fire pump in full operational condition?	6984	98.81	84	1.19	106	1.48	15	17.86
Q9	Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory?	2024	96.47	74	3.53	5076	70.76	7	9.46
Q10	For the above checked emergency equipment, are the relevant crews familiar with operation?	7100	98.97	74	1.03	N/A	-	1	1.35
Q11	Has the ship been detained as a result of the inspection campaign?	55	0.77	7119	99.23	N/A	-	55	0.77

* If the answer to this question is 'NO' the ship may be considered for detention. The details of any detention shall be appropriately entered on the PSC report B.

(1) Percentages are calculated using the total number of inspections where the answer was "YES" or "NO" only.

(2) Percentages are calculated using the total number of inspections.

3.1.2 Analysis of answers to CIC Questionnaire in relation to detention

3.1.2.1 In the questionnaire seven detention items were recorded as a result of the CIC (0.77%). Seven questions for which the questionnaire stated that a 'NO' answer would mean that the ship may be considered for detention. The CIC question that saw the highest number of detentions was 'Where the emergency source for electrical power is a generator, is it in correct operational condition?' (Q7a), which accounted for 17 of 55 detentions (31%).

3.1.2.2 In analyzing Q7a detention data, it was found that 6 items were related to failure to connect to the emergency switchboard and 5 items to a failure to start the emergency generator. The remaining 6 detentions were for other equipment issues, such as a failure to start the air compressor and frequency problem.

3.1.3 Analysis of CIC-topic related deficiencies

3.1.3.1 As indicated in Table 3, Q5 'Muster list' comprised the highest number of reported deficiencies for a single deficiency code (178 deficiencies or 15.9% of all deficiencies). However, this deficiency code does not account for the highest CIC-topic related detention issue as the suggested action taken was limited to Code 17. Q5 deficiencies were composed of two major issues: 'Muster list not updated' and 'The substitutes for key persons not indicated'.

3.1.3.2 Q6, 'Does the emergency source for electrical power supply its power correctly to essential equipment in an emergency for the sake of safety?' comprised the second highest reported deficiencies (151 deficiencies or 13.6% of all deficiencies). Most deficiencies for Q6 related to problems with emergency lighting on deck and in accommodation areas.

3.1.4 Number of inspections and number of ships in CIC

Table 2- Number of inspections and number of ships in CIC

	INSPECTIONS PERFORMED WITH A CIC QUESTIONNAIRE	INSPECTIONS WITHOUT A CIC QUESTIONNAIRE
Total	7,174	1,069
Detentions	168	48
Detentions with CIC-topic related deficiencies	55	

3.1.5 Specification of CIC-related deficiencies

Table 3- Specification of CIC-topic related deficiencies

	INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED TO RO RESPONSIBILITY
<i>CIC-topic</i> related deficiency (Q1 ~ 10)	(# of inspections with this deficiency) One inspection can have multiple deficiencies	(Number of inspections with this deficiency recorded as grounds for detention)	(Number of inspections with this deficiency recorded as grounds for detention and RO related)
Q.1 Is the damage control plan readily available on board?	137	0	0
Q.2 Is the public address system capable of broadcasting emergency announcements?	112	0	0
Q.3 For ships with water level detectors installed, are the system and alarm arrangements operational?	51	2	0
Q.4 Is the steering gear system and its related emergency alarms operational?	127	11	0
Q.5 Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37?	178	0	0
Q.6 Does the emergency source for electrical power supply its power correctly to essential safety equipment in an emergency?	151	2	0
Q.7a Where the emergency source of electrical power is a generator, is it in correct operational condition?	108	17	1
Q.7b Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition?	17	0	0
Q.8 Is the emergency fire pump in full operational condition?	84	15	0
Q.9 Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory?	74	7	0
Q.10 For the above checked emergency equipment, are the relevant crews familiar with operation?	74	1	0
TOTAL	1,113	55	0

3.1.6 Number of inspected ships per Ship Risk Profile

Table 4- Number of inspected ships per Ship Risk Profile

SHIP RISK PROFILE	INSPECTIONS	DETENTIONS	DETENTION AS % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS % OF INSPECTIONS
HIGH RISK SHIP (HRS)	2,332	94	4.03	36	1.54
STANDARD RISK SHIP (SRS)	2,969	56	1.89	15	0.51
LOW RISK SHIP (LRS)	1,873	18	0.96	4	0.21
TOTAL	7,174	168	2.34	55	0.77

3.1.7 Number of inspected ships and detentions per ship type

Table 5- Number of inspected ships and detentions per ship type

SHIP TYPE	INSPECTIONS	DETENTIONS	DETENTIONS AS % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS % OF INSPECTIONS
Bulk carrier	2773	76	2.74	22	0.79
Chemical tanker	501	12	2.40	2	0.40
Combination carrier	5	0	0	0	0
Container ship	1276	17	1.33	5	0.39
Fish factory ship	2	0	0	0	0
Gas carrier	200	5	2.50	3	1.50
General cargo/multi-purpose ship	1234	43	3.48	19	1.54
Heavy load carrier	31	0	0	0	0
High speed cargo craft	0	0	0	0	0
High speed passenger craft	2	0	0	0	0
Livestock carrier	13	0	0	0	0
MODU or FPSO	0	0	0	0	0
NLS tanker	14	1	7.14	0	0
Offshore service vessel	24	0	0	0	0
Oil tanker	516	5	0.97	2	0.39
Passenger ship	56	1	1.79	0	0
Refrigerated cargo vessel	133	2	1.50	1	0.75
RO-RO cargo ship	16	0	0	0	0
RO-RO passenger ship	18	0	0	0	0
Special purpose ship	14	0	0	0	0
Tugboat	31	0	0	0	0
Vehicle carrier	187	2	1.07	0	0
Wood-chip carrier	74	1	1.35	0	0
Other types of ship	54	3	5.56	1	1.85
Total	7174	168	2.34	55	0.77

3.1.8 Inspections and detentions per Flag State

(see Annex 1.4)

3.1.8.1 Ships from 77 flag States were inspected during the CIC. The greatest number of inspections were carried out on ships flying the flags of Panama (1,942, or 27.07%), the Marshall Islands (729, or 10.16%) and Liberia (720, or 10.03%). The flag State with the most CIC-topic related detentions was Panama (20 of 1,942 inspections, or 1.03%), followed by Liberia (5 of 720 inspections, or 0.69%), the Marshall Islands (4 of 729 inspections, or 0.55%) and Vietnam (3 of 145 inspections, or 2.07%).

3.1.8.2 Of Tokyo MOU member Authorities, China and Japan conducted the most CIC inspections, at 1,784 and 1,390 respectively, constituting 44.24% of all CIC inspections. China had the highest number of CIC-topic related detentions at 33 vessels (60%).

3.1.9 Ship age overview

Table 6 Ship age overview

SHIP AGE (YEARS)	# OF INSPECTIONS	DETENTIONS	DETENTION AS A % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS A % OF INSPECTIONS
0-5	890	6	0.67	1	0.11
6-10	1935	28	1.45	6	0.31
11-15	1975	46	2.33	12	0.61
16-20	1200	42	3.50	13	1.08
21-25	671	21	3.13	10	1.49
26-30	317	17	5.36	7	2.21
31-35	124	7	5.65	5	4.03
36+	62	1	1.61	1	1.61
Total	7174	168	2.34	55	0.77

Annex 1 CIC Questionnaire

Annex 1.1 Inspection form for the CIC

MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL
IN THE ASIA-PACIFIC REGION



CONCENTRATED INSPECTION CAMPAIGN
ON EMERGENCY SYSTEMS AND PROCEDURES
01/09/2019 to 30/11/2019

CIC on Emergency Systems and Procedures				
Inspection Authority				
Ship Name		IMO Number		
Date of Inspection		Inspection Port		
QUESTIONS 1 TO 10 ANSWERED WITH A "NO" MUST BE ACCOMPANIED BY A RELEVANT DEFICIENCY ON THE REPORT OF INSPECTION.				
No.	Question	Yes	No	N/A
Documentation				
1	Is the damage control plan readily available on board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating of Emergency system				
2*	Is the public address system capable of broadcasting emergency announcements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3*	For ships with water level detectors installed, are the system and alarm arrangements operational?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4*	Is the steering gear system and its related emergency alarms operational?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6*	Does the emergency source for electrical power supply its power correctly to essential safety equipment in an emergency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7a*	Where the emergency source for electrical power is a generator, is it in correct operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7b*	Where the emergency source for electrical power is an accumulator battery, are the batteries and its switchboard in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8*	Is the emergency fire pump in full operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crew familiarization with emergency systems				
9*	Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10*	For the above checked emergency equipment, are the relevant crews familiar with operation?	<input type="checkbox"/>	<input type="checkbox"/>	
11	Has the ship been detained as a result of the Inspection Campaign?	<input type="checkbox"/>	<input type="checkbox"/>	

NOTE

1. If "NO" is selected, for any question marked with "*", the ship may be considered for detention.
2. Where there is no box in the N/A column, then "Yes" or "No" must be selected as appropriate.

Annex 1.2 Additional Instructions

Guidelines for Port State Control Officers

(Concentrated Inspection Campaign on Emergency Systems and Procedures)

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 Concentrated Inspection Campaign in on emergency systems ensures:

- 1) that ships are capable of responding appropriately and promptly to emergency situations so that it prevents casualties and ship damage that are caused by marine accidents in the oceans, and maintains a clean marine environment.
- 2) the necessary precautions are taken by responsible individuals such as shipping companies and ship managers who have a direct influence on the safety of ships and by reminding them of the importance of ship emergency systems, a solid foundation on which the emergency management systems of ships are maintained would be laid.
- 3) that the emergency systems installed on board to be operated properly and managed efficiently in any emergency situations.
- 4) the masters and all seafarers of the ship understand their assigned roles and duties in case of emergency and raise their familiarity with the situations so that they can act immediately when circumstances arise.

References

The guideline provides aid to CIC for SOLAS Chapter II-1, besides, PSCOs shall refer to the following files:

- SOLAS 74 (as amended) Chapter II-2, III and IX (Management for the Safe operation of Ships, ISM Code)
- Res.A.1119(30) – Procedures for Port State Control, Adopted on 6 December 2017
- * Refer to the appendix (LIST OF INSTRUMENTS RELEVANT TO CIC QUESTIONNAIRE ON EMERGENCY SYSTEM) for Resolutions and Circular

Inspection

1. The questions in the Concentrated Inspection table were selected in order of the number of deficiencies (%) and the number of detainable deficiencies (Code 30) in the last three years by analyzing the number of deficiencies related to the emergency system areas (ratios) during the Asia- Pacific and European-North Atlantic ports.
2. During the Concentrated Inspection, it is required to verify normal operation of the emergency equipment, such as emergency fire pumps, emergency generators, and steering gear and whether these systems are maintained and operated at proper intervals. Furthermore, the familiarity of the ship's officer and crew with the equipment operation and emergency systems must be evaluated.
3. The questions selected for the efficiency of the inspection were classified into three parts: Documentation, Operation of Emergency System, and Familiarization, and starting from document inspection, the inspection of items was organized from the Bridge, Deck, Engine Room and so on, taking into account the ordinary inspection movement of the Port State Control Officer (PSCO).
4. The Concentrated Inspection Campaign should be carried out in addition to the Port State Control Inspection, and Port State Control Officers (PSCOs) are encouraged to fully understand the information and materials on the guidelines in advance and engage in the inspection.
5. The Guidelines are not mandatory checklists, and they should be provided as an aid to the acquisition and familiarization of convention information, which is pertinent to the Concentrated Inspection Campaign, so that Port State Control Officer (PSCO) can identify the results of the questionnaire with their expert knowledge.
6. When either "Yes" or "No" is selected in each question, the following should be considered:
 - 6.1 If "No" is selected, the deficiency code and content in the relevant Questionnaire Guidance should be completed using the form 'B' of the inspection report.
 - 6.2 Although "No" is selected as a response to a question, it should not lead to unconditional detention of the ship, and the detention of the ship should be determined by the professional judgement of the Port State Control Officer (PSCO).
 - 6.3 'N/A' applies only if the content of a question is not applicable to the inspected ship, or a functional test is not conducted for operational or safety reasons and thus the PSCO cannot answer the question. Questions No.10 and 11 only admit "Yes" or "No" as a valid answer

Annex 1.3 Explanatory notes to the questions

Questionnaire Guidance

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

1. The PSCO should check:
 - That damage control plans and booklets are available onboard.
2. Requirements:
 - The PSCO should check the general availability of updated plans & procedures.

< 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.

^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.

- If the above requirements is not applicable to the ship, the answer to this question is “N/A”.

3. Convention reference

- Refer to < TABLE 1 >

4. Deficiency Code

- 02102 – Damage Control Plan

5. Nature of Defect

- Missing, Incomplete, Not updated, Not readable, Wrong information

6. Suggested Action Taken

- Code 17, 16

Q2*. Is the public address system capable of broadcasting emergency announcements?**1. The PSCO should spot 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, which is not required for cargo ships constructed before 1/7/1986, 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 PSCO could check that 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.
- If the cargo ship constructed before 1/7/1986, and the ship does not have a public address system, the answer to this question is "N/A".

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. Deficiency code:

- 04101 - Public address system

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5. Nature of defect:

- Missing, Not as required, Inoperative, Damaged

6. Suggested action taken:

Code 17, Code 30 (Detention) may be considered 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 PSCO should spot 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'. Prior to requesting a physical alarm test, it may be considered that it is difficult while cargo is being loaded.
- If water level detectors are not required to be installed on the ship or a functional test is not conducted for operational reasons, the answer to this question is "N/A".

3. Convention reference:

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

4. Deficiency code:

- 02132 - Water level detectors on single hold cargo ships
- 04113 - Water level indicator

5. Nature of defect:

- Not as required, Damaged, Inoperative, Missing, Broken

6. Suggested action taken:

- Code 17
- Code 30 (Detention)

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

1. The PSCO 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 PSCO 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 PSCO 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. PSCO 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

· If the above requirements is not applicable to the ship and the ship does not provide with alarm system, the answer to this question is "N/A".

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. Deficiency code:

- 02105 - Steering gear

5. Nature of defect:

- Not as required, Not properly maintained, Damaged, Inoperative

6. Suggested action taken:

-
- Code 17
 - Code 30(Detention)

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

1. The PSCO should check:

- That the muster lists are kept up to date by the ship's Master in accordance with the requirements of SOLAS 1996-1998 Amendments Chapter III Regulation 37.
- That 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 PSCO 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 an 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.

- If the above requirements is not applicable to the ship, such as a ship below convention size, and the ship does not have muster list, the answer to this question is "N/A".

3. Convention reference:

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

4. Deficiency code:

- 04108 - Muster list

5. Nature of defect:

- Missing, Incomplete, Not updated, Not readable, Not approved, Not posted

6. Suggested action taken:

- Code 17

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

1. The PSCO should spot check:

- That the emergency lighting is properly installed and in working order.
- That 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).
- PSCO 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).

However, the PSCO should not request black out test, which in the judgment of the master could jeopardize the safety of the ship, crew, passengers or cargo.

- If black out test is conducted, PSCO should proceed with sufficient time and consultation considering various matters, including cargo operations, prevention of damage to electric equipment and recovery to normal conditions.

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

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"> · 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>
	<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 (Additional requirement) 	<p>SOLAS 1988 Amend/ Chapter II-1/ R43.2.3</p>
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 	<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"> · 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 	<p>SOLAS(as amended)/ Chapter II-1/ R42.2</p>

< 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, 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 	SOLAS(as amended)/ Chapter II-1/ R43.2.1 - 2.2
	<p>For constructed on or after 1/7/1986</p> <ul style="list-style-type: none"> · At every muster station (Additional requirement) 	SOLAS 1983 Amend/ Chapter II-1/ R43.2.1 - 2.2
	<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) 	SOLAS 1999/2000 Amend/Chapter II-1/ R43.2.1 - 2.2
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 	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"> · <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 	SOLAS(as amended)/ Chapter II-1/ R42.2.1
	<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) 	SOLAS 1983 Amend/ Chapter II-1/R42.2.1

	<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>
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- PSCO should check emergency lighting at every embarkation station and over the sides are in good order among the emergency lighting (TABLE 3).

- If the above requirements are not applicable to the ship, such as a ship below convention size, and the ship does not have above equipment, or when for operational reasons it is unsafe, the answer to this question is “N/A”.

1. Convention reference:

- Refer to < TABLE 2, 3 >

2. Deficiency code:

- 04103 - Emergency, lighting, batteries and switches

3. Nature of defect:

- Missing, dirty, inoperative, inadequate, insufficient, not properly maintained, damaged, not as required

4. Suggested action taken:

- Code 17
- Code 30(Detention)

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

1. The PSCO should check:

- 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 PSCO 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. PSCO 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, PSCO 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	<p>For constructed before 1/9/1984, 5,000 GT and upwards :</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.26, SOLAS 1974 Convention/ Chapter II-1/Reg.26</p>
	<p>For constructed on or after 1/9/1984</p> <p>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>
	<p>For constructed before 1/9/1984</p>	<p>SOLAS 1960/ Chapter II/Reg.25,</p>

Passenger ship	<ul style="list-style-type: none"> · Driven by a suitable prime-mover with an independent fuel supply and with approved starting arrangements 	SOLAS 1974 Convention/Chapter II-1/Reg.25
	<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) 	SOLAS(as amended) /Chapter II-1/ R42.3.1

< 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>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>SOLAS 1991/1992 Amend/Chapter II-1/ R44</p>
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1. Convention reference:

- Refer to < TABLE 4, 5 >

2. Deficiency code:

- 04103 - Emergency, lighting, batteries and switches
- 04114 - Emergency source of power - Emergency generator

3. Nature of defect:

- Not properly maintained, Damaged, Inoperative, Missing, Dirty, Inadequate, Insufficient, Not as required

4. Suggested action taken:

- Code 17, 16
- Code 30(Detention)

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

1. The PSCO should check:

- That emergency batteries and charge switches are properly installed.
- That 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.

- PSCO 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. Deficiency code:

- 04103 - Emergency, lighting, batteries and switches

5. Nature of defect:

- Missing, dirty, inoperative, inadequate, insufficient, not properly maintained, damaged, not as required

6. Suggested action taken:

- Code 17, 16
- Code 30(Detention)

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

1. The PSCO should check:

- That the fixed emergency fire pump is capable of producing at least two jets of water at or above the required pressure.
- That 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

· If the above requirements is not applicable to the ship and emergency fire pump is not fitted, the answer to this question is "N/A" (If a fire in any one compartment not put all the pumps out of action, the emergency fire pump will not be required).

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)
- 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. Deficiency code:

- 04102 - Emergency fire pump and its pipes

5. Nature of defect:

- Not as required, Not properly maintained, Damaged, Inoperative, Insufficient pressure

6. Suggested action taken:

- Code 17
- Code 30 (Detention)

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

1. The PSCO should check:

- 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 purpose of this question is to ensure that in the course of the CIC. The PSCO 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 should conduct a fire drill and abandon ship drill. However, the PSCO must not request drills, which in the judgment of the master could jeopardize the safety of the ship, crew, passengers or cargo

- When carrying out abandon ship drills and fire drills, the PSCO should ensure, as far as possible, no interference with normal shipboard operations, such as loading and unloading of cargo and ballasting, which is carried out under the responsibility of the master.

- Drills should be carried out at a safe speed. The PSCO witnessing a fire and abandon ship drill should ensure that the crewmembers are familiar with their duties and the proper use of the ships' installations and equipment.

- If the PSCO determines that the crew are unfamiliar with their duties or incapable of safely operating the lifesaving and firefighting equipment, the PSCO should halt the drill and notify the master that the drill was unsuccessful.

· 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 or not there is a serious risk to the safety of the crew, the ship and the marine environment and whether or not the deficiencies can or will be rectified before departure.

3. Convention reference:

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

4. Deficiency code:

- 04109 - Fire drills
- 04110 - Abandon ship drills

5. Nature of defect:

- Not as required, No recorded drills, Lack of training, Not conducted

6. Suggested action taken:

- Code 17
- Code 30 (Detention)

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

1. The PSCO should check:

· 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 PSCO 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 PSCO 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.

If responsible crew is not good at operation of emergency equipment and indicates a lack of effectiveness of the SMS as implemented, the answer to question 10 should be NO.

1. Convention reference:

- STCW 2010 Manila Amendments / Regulation I/14.1.5

2. Deficiency code:

-
- New code 04121 - Crew familiarization with emergency systems

3. Nature of defect:

- Not familiar

4. Suggested action taken:

- Code 30 (Detention)

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

- Regarding the questionnaire, if the box “NO” is ticked off for questions marked with an “ * ”, the ship may be considered for detention. PSCOs should take into consideration the seriousness of the deficiency when evaluating whether a detention is warranted, keeping in mind the purpose of a detention is to keep an unsafe ship from proceeding to sea.
- The detail of any deficiencies and deficiency code in the CIC questionnaire, if any, should be appropriately entered on the PSC Report Form B

Annex 1.4 Inspections and detentions per Flag State

Table Annex 1.4

FLAG	INSPECTIONS	DETENTIONS	DETENTION AS A % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS A % OF INSPECTIONS	BGW LIST*
Algeria	1	1	100	0	0	Not listed
Antigua and Barbuda	48	2	4.17	0	0	White
Australia	1	0	0	0	0	Not listed
Bahamas	163	3	1.84	1	0.61	White
Bangladesh	23	0	0	0	0	White
Barbados	8	1	12.50	1	12.50	Black
Belgium	15	0	0	0	0	White
Belize	164	6	3.66	2	1.22	Grey
Bermuda (GB)	14	0	0	0	0	White
Brazil	3	0	0	0	0	Not listed
Brunei Darussalam	1	0	0	0	0	Not listed
Cayman Islands (GB)	30	0	0	0	0	White
Chile	1	0	0	0	0	White
China	168	0	0	0	0	White
Comoros	3	0	0	0	0	Grey
Cook Islands	3	0	0	0	0	Grey
Croatia	3	2	66.67	1	33.33	Grey
Curacao	2	0	0	0	0	Grey
Cyprus	131	4	3.05	1	0.76	White
Denmark	35	0	0	0	0	White
Dominica	6	0	0	0	0	Grey
Egypt	2	0	0	0	0	Not listed
Ethiopia	2	0	0	0	0	Not listed
Falkland Islands (UK) (Malvinas)	1	0	0	0	0	Not listed
France	13	0	0	0	0	White
Germany	18	0	0	0	0	White
Gibraltar (GB)	5	0	0	0	0	White
Greece	74	2	2.70	1	1.35	White
Hong Kong, China	705	2	0.28	0	0	White

FLAG	INSPECTIONS	DETENTIONS	DETENTION AS A % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS A % OF INSPECTIONS	BGW LIST*
India	21	0	0	0	0	Grey
Indonesia	35	1	2.86	0	0	Grey
Iran, Islamic Republic of	11	0	0	0	0	Grey
Isle of Man (GB)	57	3	5.26	1	1.75	White
Israel	1	0	0	0	0	Not listed
Italy	31	2	6.45	0	0	White
Jamaica	5	0	0	0	0	Grey
Japan	59	0	0	0	0	White
Kiribati	6	0	0	0	0	Grey
Korea, Democratic People's Republic of	10	0	0	0	0	Black
Korea, Republic of	281	2	0.71	0	0	White
Kuwait	3	0	0	0	0	Grey
Liberia	720	24	3.33	5	0.69	White
Luxembourg	5	0	0	0	0	Grey
Malaysia	47	0	0	0	0	White
Malta	291	6	2.06	2	0.69	White
Marshall Islands	729	16	2.19	4	0.55	White
Mongolia	7	0	0	0	0	Black
Myanmar	1	0	0	0	0	Not listed
Netherlands	24	0	0	0	0	White
Niue	2	0	0	0	0	Black
Norway	62	1	1.61	0	0	White
Pakistan	4	0	0	0	0	Grey
Palau	13	1	7	1	7.69	Black
Panama	1942	49	2.52	20	1.03	White
Philippines	43	2	4.65	0	0	White
Portugal	68	0	0	0	0	White
Qatar	5	0	0	0	0	Grey
Russian Federation	79	2	2.53	2	2.53	White
Saint Vincent and the Grenadines	14	0	0	0	0	Grey
Saudi Arabia	8	0	0	0	0	White

FLAG	INSPECTIONS	DETENTIONS	DETENTION AS A % OF INSPECTIONS	DETENTIONS CIC-TOPIC RELATED	DETENTIONS CIC-TOPIC RELATED AS A % OF INSPECTIONS	BGW LIST*
Sierra Leone	65	8	12.31	3	4.62	Black
Singapore	471	4	0.85	2	0.42	White
South Africa	1	1	100	1	100.00	Not listed
Spain	1	0	0	0	0	White
Sri Lanka	1	0	0	0	0	Grey
Sweden	2	0	0	0	0	White
Switzerland	3	0	0	0	0	Grey
Taiwan, Province of China	32	1	3.13	0	0	White
Thailand	61	2	3.28	1	1.64	White
Togo	65	10	15.38	3	4.62	Black
Turkey	6	0	0	0	0	Grey
Tuvalu	32	1	3.13	0	0	White
Ukraine	4	1	25.00	0	0	Not listed
United Kingdom	33	1	3.03	0	0	White
United States	9	0	0	0	0	White
Vanuatu	16	1	6.25	0	0	White
Vietnam	145	6	4.14	3	2.07	White
Total	7174	168	2.34	55	0.77	