



2019 PSC CIC

Emergency systems and Procedure

August 2019
KR Survey Team

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I

CIC Questionnaire

PSC CIC on Emergency Systems and Procedures



I. CIC Questionnaire

No.	Question	Yes	No	N/A
1	Is the damage control plan readily available on board ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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, is 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 of electrical power supply its power correctly to essential equipment for safety in an emergency ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7a*	Where the emergency source of 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 of 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"/>
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 the 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"/>	

If "No" is selected, for question marked an "*", the ship may be considered for detention.

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

- **SOLAS 1981/II-1/R.23 (for passenger ships constructed on or after 1984.9.1 before 2009.1.1)** : Damage control plan shall be permanently exhibited. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.
- **SOLAS 1989/1990/II-1/R.23-1 (for dry cargo ships constructed on or after 1992.2.1 before 2009.1.1)** : Damage control plan shall be permanently exhibited. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.
- **SOLAS 2006/II-1/R.19.1 (for all ships constructed on or after 2009.1.1 Before 2020.7.1)** : Damage control plan shall permanently exhibited, or readily available on the navigation bridge. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.

2. Is the public address system capable of broadcasting emergency announcements ? (If "No", the ship may be considered for detention)

- **LSA 1996/2006/VII/R.7.2.1** : The general emergency alarm system shall be capable of sounding the general emergency alarm signal consisting of seven or more short blasts followed by one long blast on the ship's whistle or siren and additionally on an electrically operated bell or klaxon or other equivalent warning system.
- **LSA 1996/2006/VII/R.7.2.2** : The public address system shall be a loudspeaker installation enabling the broadcast of messages into all spaces where crew members of passengers, or both, are normally present, and to muster stations.
- **SOLAS 2006/III/R.6.4** : A general emergency alarm system complying with the requirements of paragraph 7.2.1 of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list. The system shall be supplemented by either a public address system complying with the requirements of paragraph 7.2.2 of the Code or other suitable means of communication.

3. For ships with water level detectors installed, is the system and alarm arrangements operational ? (If "No", the ship may be considered for detention)

- **SOLAS 2006/XII/R.12 (For bulk carriers constructed on or after 2008.7.1-Retroactive)** : Bulk carriers shall be fitted with water level detectors in each cargo hold, giving audible and visual alarms. In any ballast tank forward of the collision bulkhead required by regulation II-1/R.12, giving an audible and visual alarm. In any dry or void space other than a chain cable locker, any part of which extends forward of the foremost cargo hold, giving an audible and visual alarm at a water level of 0.1m above the deck.
- **SOLAS 2006/II-1/R.25 (For on single hold cargo ships other than bulk carriers 2007.1.1 – Retroactive)** : The water level detectors required by paragraph 2 shall give an audible and visual alarm at the navigation bridge when the water level above the inner bottom in the cargo hold reaches a height of not less than 0.3 m, and another when such level reaches not more than 15% of the mean depth of the cargo hold.

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

(If "No", the ship may be considered for detention)

- **SOLAS 1981/2014/II-1/R.29 (For ships constructed on or after 1984.9.1) :**
Main and auxiliary steering gear power units shall be arranged to restart automatically when power is restored after a power failure. In the event of a power failure to any one of the steering gear power units, an audible and visual alarm shall be given on the navigating bridge. Any main and auxiliary steering gear control system operable from the navigating bridge shall comply with, in the event of a failure of electrical power supply to the control system, an audible and visual alarm shall be given on the navigating bridge. Hydraulic power-operated steering gear shall be provided with a low level alarm for each hydraulic fluid reservoir to give the earliest practicable indication of hydraulic fluid leakage. Audible and visual alarms shall be given on the navigating bridge and in the machinery space where they can be readily observed.

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

- **SOLAS 1996-1998/III/R.37 (for ships constructed on or after 1998.7.1 before 2020.1.1 - Retroactive)** : The muster list shall specify details of the general emergency alarm and public address system prescribed by section 7.2 of the code and also action to be taken by crew and passengers when this alarm is sounded. The muster list shall also specify how the order to abandon ship will be given. The muster list shall show the duties assigned to the different members of the crew including ;
 1. closing of the watertight doors, fire doors, valves, scuppers, sidescuttle, skylights, portholes and other similar openings in the ship,
 2. equipping of the survival craft and other life-saving appliances,
 3. preparation and launching of survival craft,
 4. general preparations of other life-saving appliances,
 5. muster of passengers,
 6. use of communication equipment,
 7. manning of fire parties assigned to deal with fires,
 8. special duties assigned in respect of the use of fire-fighting equipment

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

and installations.

The muster list shall specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.

The muster list shall specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.

The muster list shall show the duties assigned to members of the crew in relation to passengers in case of emergency. These duties shall include ;

1. warning the passengers,
2. seeing that they are suitably clad and have donned their lifejackets correctly,
3. assembling passengers at muster stations,
4. keeping order in the passageways and on the stairways and generally controlling the movements of the passengers,
5. ensuring that a supply of blankets is taken to the survival craft.

6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

- **SOLAS 1999/2000/II-1/R.43 (for cargo ships)** : For a period of 3h, emergency lighting at every muster and embarkation station and over the sides as required by regulation III/11.4 and III/16.7. For a period of 18h, emergency lighting ;
 1. In all service and accommodation alleyways, stairways and exits, personnel lift cars and personnel lift trunks,
 2. In the machinery spaces and main generating stations including their control positions,
 3. In all control stations, machinery control rooms, and at each main and emergency switchboard,
 4. At all stowage positions for firemen's outfits,
 5. At the steering gear,
 6. At the fire pump referred to in paragraph 2.5, at the sprinkler pump, if any, and at the emergency bilge pump, if any, and at the starting positions of their motors,
 7. In all cargo pump-rooms of tankers constructed on or after 1 July 2002.
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6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

For a period of 18h;

1. The navigation lights and other lights required by the international regulations for preventing collisions at sea in force,
2. On ships constructed on or after 1 February 1995 the VHF radio installation required by regulation IV/7.1.1 and IV/7.1.2,
 - 1) the MF radio installation required by regulations IV/9.1.1, IV/9.1.2, IV/10.1.2 and IV/10.1.3,
 - 2) the ship earth station required by regulation IV/10.1.1,
 - 3) the MF/HF radio installation required by regulations IV/10.2.1, IV/10.2.2 and IV/11.1,

For a period of 18h;

1. All internal communication equipment as required in an emergency,
2. The shipborne navigational equipment as required by regulation V/12, where such provision is unreasonable or impracticable the Administration may waive this requirement for ships of less than 5,000 tons gross tonnage,

(Continued next page)

6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

3. The fire detection and fire alarm system,

4. Intermittent operation of the daylight signaling lamp, the ship's whistle, the manually operated call points and all internal signals that are required in an emergency.

- **SOLAS 2006/II-1/R.42 (For passenger ships)** : For a period of 36h, emergency lighting ;

1. At every muster and embarkation station and over the sides as required by regulations III/11.4 and III/16.7,

2. In alleyways, stairways and exits giving access to the muster and embarkation stations, as required by regulation III/11.5,

3. In all service and accommodation alleyways, stairways and exits, personnel lift cars,

4. In the machinery spaces and main generating stations including their control positions,

(Continued next page)

6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

5. In all control stations, machinery control rooms, and at each main and emergency switchboard,

6. At all stowage positions for firemen's outfits,

7. At the steering gear,

8. At the fire pump, the sprinkler pump and the emergency bilge pump referred to in paragraph 2.4 and at the starting position of their motors.

For a period of 36h ;

1. The navigation lights and other lights required by the international regulations for preventing collisions at sea in force,

2. On ships constructed on or after 1 February 1995, the VHF radio installation required by regulation IV/7.1.1 and IV/7.1.2, and if applicable;

1) the MF radio installation required by regulations IV/9.1.1, IV/9.1.2, IV/10.1.2 and IV/10.1.3,

2) the ship earth station required by regulation IV/10.1.1,

3) the MF/HF radio installation required by regulations IV/10.2.1, IV/10.2.2 and IV/11.1,

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6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

For a period of 36h;

1. All internal communication equipment required in an emergency,
2. The shipborne navigational equipment as required by regulation V/12, where such provision is unreasonable or impracticable the administration may waive this requirement for ships of less than 5,000 tons gross tonnage,
3. The fire detection and fire alarm system, and the fire door holding and release system,
4. For intermittent operation of the daylight signaling lamp, the ship's whistle, the manually operated call points, and all internal signals that are required in an emergency.

For a period of 36h;

1. One of the fire pumps required by regulation II-2/4.3.1 and 4.3.3,
2. The automatic sprinkler pup, if any,
3. The emergency bilge pump and all the equipment essential for the operation of electrically powered remote controlled bilge valves.

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6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

For a period of half an hour;

1. Any watertight doors required by regulation 13 to be power-operated together with their indicators and warning signal,
2. The emergency arrangements to bring the lift cars to deck level for the escape of persons. The passenger lift cars may be brought to deck level sequentially in an emergency.

- **SOLAS 1988/II-1/R.42-1 (for ro-ro passenger ships)** : In addition to the emergency lighting required by regulation 42.2, on every passenger ship with ro-ro cargo spaces or special category spaces as defined in regulation II-2/3;
 1. All passenger public spaces and alleyways shall be provided with supplementary electric lighting that can operate for at least three hours when all other sources of electric power have failed and under any condition of heel. The source of power for the supplementary lighting shall consist of accumulator batteries located within the lighting units that are continuously charged, where practicable, from the emergency switchboard.

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6. Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency ? (If "No", the ship may be considered for detention)

2. A portable rechargeable battery operated lamp shall be provided in every crew space alleyway, recreational space and every working space which is normally occupied unless supplementary emergency lighting, as required by subparagraph 1, is provided.

7a. Where the emergency source of electrical power is a generator, is it in correct operational condition ? (If "No", the ship may be considered for detention)

- SOLAS 1999/2000/II-1/R.43 **(for cargo ships)** & SOLAS 1999/2000/II-1/R.42 **(for passenger ships)** : The emergency source of electrical power, emergency switchboard and emergency lighting switchboard shall be located above the uppermost continuous deck and shall be readily accessible from the open deck. They shall not be located forward of the collision bulkhead. The emergency source of electrical power may be either a generator or an accumulator battery. Where the emergency source of electrical power is a generator, it shall be ;
 1. Driven by a suitable prime mover with an independent supply of fuel having a flashpoint of not less than 43°C,
 2. Started automatically upon failure of the electrical supply from the main source of electrical power and shall be automatically connected to the emergency switchboard subject to a maximum of 45s,

7b. Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition ? (If "No", the ship may be considered for detention)

- SOLAS 1999/2000/II-1/R.43 (for cargo ships) & SOLAS 1999/2000/II-1/R.42 (for passenger ships) : The emergency source of electrical power, emergency switchboard and emergency lighting switchboard shall be located above the uppermost continuous deck and shall be readily accessible from the open deck. They shall not be located forward of the collision bulkhead. The emergency source of electrical power may be either a generator or an accumulator battery. Where the emergency source of electrical power is an accumulator battery, it shall be capable of ;
 1. Carrying the emergency electrical load without recharging while maintaining the voltage of the battery throughout the discharge period within 12% above or below its nominal voltage,
 2. Automatically connecting to the emergency switchboard in the event of failure of the main source of electrical power,
 3. Immediately supplying at least those services specified in paragraph 4.Provision shall be made for the periodic testing of the complete emergency system and shall include the testing of automatic starting arrangement.

8. Is the emergency fire pump in full operational condition ? (If "No", the ship may be considered for detention)

- **FSS 2012/XII/R.2** : The emergency fire pump shall be of a fixed independently driven power-operated pump. When the pump is delivering the quantity of water required by paragraph 2.2.1.1, the pressure at any hydrants shall be not less than the minimum pressure required by chapter II-2 of the Convention. The total suction head and the net positive suction head of the pump shall be determined having due regard to the requirements of the convention and this chapter on the pump capacity and on the hydrant pressure under all conditions of list, trim, roll and pitch likely to be encountered in service. The ballast condition of a ship on entering or leaving a dry dock need not be considered a service condition. Any service fuel tank shall contain sufficient fuel to enable the pump to run on full load for at least three hours and sufficient reserves of fuel shall be available outside the machinery space of category A to enable the pump to be run on full load for an additional 15h.
- **POLAR code 2015/Part I-A/R.7.3** (for ships constructed on or after 2017.1.1) :
In order to comply with the requirement of paragraph 7.2.1.2, Fire pumps
(Continued next page)

8. Is the emergency fire pump in full operational condition ? (If "No", the ship may be considered for detention)

Including emergency fire pumps, water mist and water spray pumps shall be located in compartments maintained above freezing.

- **SOLAS 1999/2000/II-2/R.10** : No direct access shall be permitted between the machinery space and the space containing the emergency fire pump and its source of power. When this is impracticable, the Administration may accept an arrangement where the access is by means of an airlock with the door of the machinery space being of A-60 class standard, and the other door being at least steel, both reasonably gastight, self-closing and without an hold back arrangements. Alternatively, the access may be through a watertight door capable of being operated from a space remote from machinery space and the space containing the emergency fire pump and unlikely to be cut off in the event of fire in those spaces. In such cases, a second means of access to the space containing the emergency fire pump and its source of power shall be provided. Ventilation arrangements to the space containing the independent source of power for the emergency fire pump shall be such as to preclude,

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8. Is the emergency fire pump in full operational condition ? (If "No", the ship may be considered for detention)

as far as practicable, the possibility of smoke from a machinery space fire entering or being drawn into that space.

- **SOLAS 1991/1992/II-2/R.4** : With the two pumps simultaneously delivering through nozzles specified in paragraph 8 the quantity of water specified in paragraph 4.1, through any adjacent hydrants, the following minimum pressures shall be maintained at all hydrants ;
 1. Passenger ships ;
 - 1) $4,000 \text{ GT} \leq \text{Vessel}$: 0.31 N/mm²
 - 2) $1,000 \text{ GT} \leq \text{Vessel} < 4,000 \text{ GT}$: 0.27 N/mm²
 - 3) $\text{Vessel} < 1,000 \text{ GT}$: To the satisfaction of the Administration
 2. Cargo ships ;
 - 1) $6,000 \text{ GT} \leq \text{Vessel}$: 0.27 N/mm²
 - 2) $1,000 \text{ GT} \leq \text{Vessel} < 6,000 \text{ GT}$: 0.25 N/mm²
 - 3) $\text{Vessel} < 1,000 \text{ GT}$: To the satisfaction of the Administration

Isolating valves to separate the section of the fire main within the machinery
(Continued next page)

8. Is the emergency fire pump in full operational condition ? (If "No", the ship may be considered for detention)

Space containing the main fire pump or pumps from the rest of the fire main shall be fitted in an easily accessible and tenable position outside the machinery spaces. The fire main shall be so arranged that when the isolating valves are shut all the hydrants on the ship, except those in the machinery space referred to above, can be supplied with water by a fire pump not located in this machinery space through pipes which do not enter this space. Exceptionally, the Administration may permit short lengths of the emergency fire pump suction and discharge piping to penetrate the machinery space if it is impracticable to route it externally provided that the integrity of the fire main is maintained by the enclosure of the piping in a substantial casing.

9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

- **SOLAS 2013/III/R.19** : Every crew member with assigned emergency duties shall be familiar with these duties before the voyage begins. Every crew member shall participate in at least one abandon ship drill and one fire drill every month. The drills of the crew shall take place within 24h of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month. Each abandon ship drill shall include ;
 1. summoning of passengers and crew to muster stations with the alarm required by regulation 6.4.2 followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship,
 2. reporting to stations and preparing for the duties described in the muster list,
 3. checking that passengers and crew are suitably dressed,
 4. checking that lifejackets are correctly donned,
 5. lowering of at least one lifeboat after an necessary preparation for
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9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

launching,

6. starting and operating the lifeboat engine,
7. operation of davit used for launching liferafts,
8. a mock search and rescue of passengers trapped in their staterooms,
9. instruction in the use of radio life-saving appliances.

Except as provided in paragraphs 3.4.4 and 3.4.5, each lifeboat shall be launched, and manoeuvred in the water by its assigned operating crew, at least once every three months during an abandon ship drill. In the case of lifeboat arranged for free-fall launching, at least once every three months during an abandon ship drill the crew shall board the lifeboat, properly secure themselves in their seats and commence launch procedures up to but not including the actual release of the lifeboat (i.e., the release hook shall not be released). The lifeboat shall then either be free-fall launched with only the required operating crew on board, or lowered into the water by means of the secondary means of launching with or without the operating crew on board. In both cases the lifeboat shall thereafter be maneuvered in the water by the operating crew. At intervals of not more than six (Continued next page)

9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

months, the lifeboat shall either be launched by free-fall with only the operating crew on board, or simulated launching shall be carried out in accordance with the guidelines developed by the Organization. The date when musters are held, details of abandon ship drills and fire drills, enclosed space entry and rescue drills, drills of other life-saving appliances and on board training shall be recorded in such log-book as may be prescribed by the Administration. If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the log-book stating the circumstances and the extent of the muster, drill or training session held.

10. For the above checked emergency equipment, are the relevant crews familiar with the operation ? (If "No", the ship may be considered for detention)

- **STCW 2010/Annex/Chap I/R.I-14** : Seafarers, on being assigned to any of its ships, are familiarized with their specific duties and with all ship arrangements, installations, equipment, procedures and ship characteristics that are relevant to their routine or emergency duties. The ship's complement can effectively coordinate their activities in an emergency situation and in performing functions vital to safety, security and to the prevention or mitigation of pollution.

11. Has the ship been detained, as a result of the inspection Campaign ?

N/A

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Detainable Deficiencies

II. Detainable deficiencies

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

- N/A

2. Is the public address system capable of broadcasting emergency announcements ? (If "No", the ship may be considered for detention)

- N/A

II. Detainable deficiencies

3. For ships with water level detectors installed, is the system and alarm arrangements operational ? (If "No", the ship may be considered for detention)

- 1) Water ingress alarm sensor inoperative. (2018.2.26, Guangzhou, China)
- 2) Water ingress system malfunction. (2015.1.5, Mumbai, India)
- 3) Malfunction of water ingress alarm. (2011.10.28, Hochiminh, Vietnam)

II. Detainable deficiencies

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

(If "No", the ship may be considered for detention)

- 1) Steering gear motor not functioning properly. (2018.5.8, Shanghai, China)
- 2) Crew not familiar with essential shipboard procedures relating to the safety of ship ; emergency steering gear & VHF DSC calling test. (2017.1.16, Masan, Korea)
- 3) Found several hyd. Oil spills in forecastle area and steering gear room.
(2016.8.24, Bremerhaven, Germany)
- 4) No.1 solenoid valve of steering gear was broken & crew couldn't operate emergency steering. (2016.8.4, Kinuura, Japan)
- 5) Excessive oil leaks on steering gear, Pre-arrival steering test not conducted.
(2016.7.21, San Diego, USA)
- 6) Hydraulic for steering gear was not de-aired but repaired during inspection.
(2015.12.3, Hamburg, Germany)

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II. Detainable deficiencies

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

(If "No", the ship may be considered for detention)

- 7) Excessive oil accumulated in steering gear room. (2015.11.29, Newcastle, Australia)
- 8) Seafarers not familiar with Em'cy steering system. (2011.3.2, Shenzhen, China)

II. Detainable deficiencies

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

- 1) Muster list not updated to reflect current personnel on board. (2016.5.23, Port Walcott, Australia)
- 2) Found emergency duties divided into 44 parts in muster list, but actually 43 on board from crew list. (2014.12.2, Weihai, China)

II. Detainable deficiencies

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

(If "No", the ship may be considered for detention)

- 1) Emergency lights not working properly. (2019.7.27, Aspropirgos, Greece)
- 2) Following emergency light found out of order ; portside funnel, embarkation stb'dside, forward liferaft. Aft mast head(lower) and stern (upper and lower) navigation lights found inoperatives. (2018.4.19, Taranto, Italy)
- 3) Found several lights and emergency lights on deck(including embarkation lights), on vehicle deck, mooring station and in working spaces not working. Complete areas without light(fwd staircase, A deck stb'd forward quarter only emergency lights). (2016.8.24, Bremerhaven, Germany)
- 4) Insulation 220V alarm of emergency light displayed on ESB. (2016.6.18, Kavkaz, Russia)

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II. Detainable deficiencies

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

(If "No", the ship may be considered for detention)

5) Emergency light near life boat damaged(not working). (2015.12.1, Novorossiysk, Russia)

II. Detainable deficiencies

7a. Where the emergency source of electrical power is a generator, is it in correct operational condition ? (If "No", the ship may be considered for detention)

- 1) Emergency generator defective. (2019.5.28, Port hedland, Australia)
- 2) Emergency generator failed to start and load automatically. Key engineer not familiar with testing emergency generator. (2019.5.7, Shanghai, China)
- 3) The emergency generator has broken amp and hertz gauge. (2015.9.6, Apra Harbor, Guam)
- 4) 220V panel in emergency generator flat indicating low electrical insulation. (2015.1.28, Bunbury, Australia)

II. Detainable deficiencies

7b. Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition ?

(If "No", the ship may be considered for detention)

- N/A

II. Detainable deficiencies

8. Is the emergency fire pump in full operational condition ?

(If "No", the ship may be considered for detention)

- 1) Emergency fire pump not working. (2019.7.9, Chennai, India)
 - 2) Emergency fire pump cannot be started during inspection(Crew unfamiliarity).
(2019.4.1, Dalian, China)
 - 3) Emergency fire pump not ready for use. (2018.9.12, Tanjung Priok, Indonesia)
 - 4) Suction pipe line for emergency fire pump in E/R has flange connection
except for the flanged connection to the sea inlet valve. (2018.6.1, Osaka, Japan)
 - 5) Sea suction valve of emergency fire pump not remotely controlled. (2017.11.7,
Hongkong, China)
 - 6) Emergency fire pump defective(insufficient pressure). (2017.4.28, Ulsan, Korea)
 - 7) Emergency fire pump not readily available for immediate use ; blow-out valve
- (Continued next page)

II. Detainable deficiencies

8. Is the emergency fire pump in full operational condition ?

(If "No", the ship may be considered for detention)

in engine room left in open position, disabling air pressure to emergency fire pump suction valve preventing discharge. (2016.11.28, Tacoma, USA)

8) Emergency fire pump unable to pressurize to fire main line(unexpected substances inside the pump). (2016.5.26, Mizushima, Japan)

9) Emergency fire pump exhaust has leaking(in emergency fire pump room). (2015.11.26, Mokpo, Korea)

10) Emergency fire pump found inoperative during test(electric pump run but no pressure in fire line). (2014.2.1, Venezia, Italy)

II. Detainable deficiencies

9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

- 1) Crew not familiar with fire drill, Fire drill and abandon ship drill details records and checklist not available on board. (2019.5.30, Shanghai, China)
- 2) Lifeboat engine and em'cy light not tested during abandon ship drill at PSC inspection. (2019.3.5, Tangshan, China)
- 3) During the performance of fire drill only one firemen dressed for fight the fire onboard. Missing simulation of shut-off of ventilation and cooling of bulkhead in fire area. During abandon ship drill crew member unable to lower lifeboat stb'dside and fail to bring EPIRB and nautical chart from bridge. Furthermore, crew member fail to bring personal life saving appliance during meeting at master station on poop deck. (2018.4.19, Taranto, Italy)

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II. Detainable deficiencies

9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

4) Crew not familiar with essential shipboard procedures relating to the safety of ships ; unsatisfactory fire drill performed. (2016.12.22, Shanghai, China)

5) No records of lifeboat & rescue boat waterborne drill within the last 3 months. (2016.7.25, Pyeongtaek, Korea)

6) The crew were unable to perform a satisfactory fire drill ; Crew failed two attempts to perform the fire drill as evident by unfamiliarity with procedure to attack a fire, donning of fire fighter clothes and operation of the breathing apparatus. (2017.4.10, Himegi, Japan)

7) Frequency of fire drills have not been carried out in accordance with the requirements. Entries in official log book pertaining to abandon ship drills, fire
(Continued next page)

II. Detainable deficiencies

9. Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory ? (If "No", the ship may be considered for detention)

Drills and enclosed space entry drills and for last three months do not reflect actual drills executed. (2016.5.23, Port Walcott, Australia)

8) Ship key persons don't know their duties and personal effects for abandon ship and other drills. (2015.9.22, Ulsan, Korea)

II. Detainable deficiencies

10. For the above checked emergency equipment, are the relevant crews familiar with the operation ? (If "No", the ship may be considered for detention)

- N/A

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

- N/A

Preparation for PSC inspection

1. BEFORE ENTERING TO PORTS

- Practical inspection with relevant checklists
- Proper and correct records
- Cleanliness of steering gear room
- Reporting to a port Authority when any serious defects are identified

2. JUST AFTER BERTHING

- Thorough gangway watch
- Cleanliness of steering gear room : CHECK AGAIN !!

PREVENTIVE
MEASUREURES

3. WHEN A PSCO COMES ON BOARD

- Master and senior officers need to stay on board as far as possible
- Amicable attitudes toward PSCOs
- Immediate actions on identified deficiencies
- Request for helps to KR(Headquarters or a branch)

4. AFTER PSC COMPLETION

- Rectification on identified deficiencies
- Establishment of preventive measures



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