

USCG Traveling Inspection, Training Support and NCOE Staff (CG-5P-TI) Mission Management System (MMS) Work Instruction (WI)



Category	Vessel Examinations
Title	Guide for Conducting Periodic Certificate of Compliance Examinations
Serial	5PTI-WI-CSNCOE-005(00) Orig. Date 10Jul2024 Rev. Date -
References:	(a) IMO Assembly Resolution A.1155(32), Procedures for Port State Control(b) COMDTINST 16000.73, Marine Safety: Port State Control(c) 46 USC §35
Change Summary	 The following is a list of major changes found in applicable revision. Modified to match Annual COC WI format, drill structure, 5PTI naming Ensured consistency in scope to match intent of Periodic COC

- **A. Objective.** This document provides guidance for Foreign Passenger Vessel Examiners (FPVEs) in the preparation and execution of Periodic Certificate of Compliance (PCOC) examinations. This guidance does not limit FPVEs from expanding or modifying the examination scope provided there are reasonable grounds that do not deviate from USCG or IMO requirements.
- **B. Background.** FPVEs are responsible for conducting Port State Control examinations in accordance with references (a) and (b), in addition to enforcing statutory requirements listed in reference (c). The PCOC exam focus is on crew proficiency in addition to evaluating operational procedures and emergency preparedness. PCOC exam procedures were previously outlined in the FPVE Tactics, Techniques, and Procedures (TTP) 3-72.10A. This document supersedes CGTTP 3-72.10A.
- C. Discussion. PCOC exams are conducted in a holistic manner, observing the human element of the safety systems and processes. Although operational tests of equipment are not prescribed in this guide, PSCOs may direct such tests when clear grounds are established during the exam. The size and complexity of modern cruise ships make the holistic approach a necessity to cover all areas of the ship to verify substantial compliance with the statutory requirements. The PCOC exam should take approximately five to eight hours depending on the ship size and number of PSCOs available, provided there are no major deficiencies or issues.

D. Scheduling and Pre-exam Communications.

- 1. The National COC Exam calendar on the <u>CSNCOE CGPortal Online</u> site shows projected COC exam dates to be requested by the ship operators or agents. The CSNCOE COC Forecast is a tool for OCMIs to forecast the potential COC workload and does not alleviate the owner or operator from scheduling the exam with the OCMI at least 30 days prior to the desired date of the exam. PCOCs should be completed as close to the periodic exam due date listed on the COC. In situations where the exam cannot be completed, or the exam date is scheduled much earlier or later than the date listed on the COC, the OCMI should contact the CSNCOE.
- 2. The lead FPVE communicates with the vessel master prior to the exam to set up logistics and organization for the exam. The lead examiner should email the master, 2 weeks prior to the exam, and utilize the email notification template on the CSNCOE CGPortal Online site, to discuss exam scope and request needed information in preparation for the exam.
 - a. Explain the scope of the exam.

- b. Request a copy of the vessel's Passenger Ship Safety Certificate (PSSC) to include the Record of Equipment for the PSSC (Form P), and Continuous Synopsis Record (CSR).
- c. Request a description of any modifications to the vessel since the last completed Plan Review letter.
- d. Identify resources and testing equipment to be provided by the ship during the exam.
- e. Request all ship's procedures and plans are available during the exam.
- f. Request ship's schedule while in port (i.e., other inspections, bunkering, dive operations, maintenance, & surveys).
- g. Request copies of any outstanding conditions of class or authority.

E. Preparation for PCOC Exam.

- 1. Prepare the following documentation to bring aboard the vessel:
 - a. Copy of the Certificate of Compliance (COC) that is uploaded in MISLE,
 - b. Copy of Certificate(s) of Compliance for tenders used in U.S. waters,
 - c. Updated Vessel Critical Profile,
 - d. Relevant regulations, guidance documents, and the <u>FPVE Periodic Certificate of Compliance Exam Process Guide</u>, and
 - e. Copy of the email notification sent to the vessel master and the master's reply along with any follow-on discussions.
- 2. The lead FPVE is responsible for assigning examiners into Team 1, Team 2, Team 3, & Team 4.
- 3. After having been tested at the unit, the team should bring the Scorecard tablet and associated equipment such as power charger, external encrypted hard drive, and mouse.
- 4. The lead FPVE will hold a pre-examination planning meeting to discuss the following:
 - a. Discuss the scope of the exam.
 - b. Ensure all team members wear coveralls during the examination.
 - c. Identifying a waste stream not examined during the previous exam and discuss which team members will conduct the verification.
 - d. Review and discuss the following topics:
 - i. History of vessel, special notes, and statutory documents (if provided),
 - ii. Modifications made to the vessel, and last plan review (reviewed by Flag/RO/Marine Safety Center (MSC), and
 - iii. Determine most effective way for team members to communicate throughout the examination.
 - e. Conduct a safety brief and remind team members to speak up on any safety issue in order to mitigate risks, including the following:
 - i. Simultaneous operations such as bunkering, divers in the water, other agencies onboard conducting verifications, and other operations or activities,
 - ii. Stevedore activity, loading and traffic during hull walk,
 - iii. Dangers of watertight doors and consideration of crew safety,

- iv. Machinery space hazards (slips, trips, and falls),
- v. Electrical hazards,
- vi. Crew and exam team safety during the drills. Highlight need for situational awareness during fire drills, particularly walking through areas where smoke machines are used, and safety during liferaft and lifeboat launching, and
- vii. Team member Personal Protective Equipment (PPE).

F. Opening Meeting.

- 1. During the meeting, using the Process Guide as an aid, the lead examiner ensures understanding of all exam sequences and discusses the following points.
 - a. Introduce the examiner teams with areas each member is responsible for examining.
 - b. Confirm times for drills and set expectations for a USCG team discussion and a de-brief with vessel staff.
 - c. If at an embarkation port, the lead examiner should discuss evaluation of the vessel's passenger muster and agree on the most effective way to complete this verification.
 - d. Identify crew members needed to walk the spaces with the examination teams and the equipment they all should have available (i.e., master keys).
 - e. Discuss any concurrent operations affecting the exam (i.e., bunkering, ship repairs or maintenance, diving operations).
 - f. Determine how much crew turnover is occurring on the day of the exam.
 - g. Determine whether any modifications were made to the vessel since the last USCG completed Plan Review letter including:
 - i. Modifications reviewed by the recognized organization (RO) or USCG Marine Safety Center (MSC) that must be verified by the USCG exam team, or
 - ii. Modifications the vessel has carried out without RO or USCG knowledge.
 - h. Determine whether there are any outstanding conditions of class or conditions of statutory authority.
 - i. Determine whether any U.S. government agency, or other inspections are expected which could affect the exam (i.e., CBP or USPH).
- 2. The lead examiner should explain he or she will be the principal contact of communications with the exam team.
- 3. Be sure to instruct the crew to energize low location lighting and the emergency lighting circuit for the duration of the exam.
- 4. Explain expectations for not testing smoke detectors, heat detectors, flame detectors, manually operated call points, and all related alarms unless PSCOs have cause/reasoning. Ensure testing equipment is available for the duration of the exam.

G. Team 1 Procedures.

- 1. <u>Hull Walk</u> (SOLAS II-1/5, II-1/18, XI-1/3; ICLL Reg. 5, 6, 7, 8)
 - a. Verify draft marks at the bow and stern.
 - b. Verify permanent marking of ship's identification number.

- c. Verify position of subdivision/load line markings, including:
 - i. P1 (ship's keel laid on or after January 1, 2009) Principal Passenger Condition (C1 ships prior to January 1, 2009).
 - ii. P2 (ship's keel laid on or after January 1, 2009) roll-on/roll-off (vessel) (RO-RO) Passenger/Cargo loading (C2 ships prior to January 1, 2009).
 - iii. Deck line above the load line mark.
 - iv. Proper class society markings.
 - v. Subdivision mark is not submerged in salt water.
 - vi. Markings are permanent and in contrasting colors.

2. Ship Certificates

- a. Review the PSSC with Form P, and any documented alternative design and arrangements, equivalencies, or exemptions.
- b. Verify other certificates are onboard, valid, and have endorsements, as necessary.
 - i. Certificate of Registry
 - ii. Classification Document
 - iii. Continuous Synopsis Record
 - iv. International Tonnage Certificate (ITC)
 - v. International Load Line Certificate
 - vi. ISM Document of Compliance
 - vii. ISM Safety Management Certificate (SMC)
 - viii. International Ship Security Certificate (ISSC)
 - ix. Lifeboat/Tender Safety Equipment Certificate, as appropriate
 - x. Minimum Safe Manning Certificate
 - xi. International Oil Pollution Prevention Certificate (IOPP)
 - xii. International Air Pollution Prevention Certificate (IAPP)
 - xiii. Engine IAPP (EIAPP) (for each engine) and EIAPP Supplements
 - xiv. International Energy Efficiency Certificate (IEE)
 - xv. International Anti-Fouling System Certificate

3. Crew Training and Certification (STCW Ch. I – VI)

- a. Examine crew licenses and corresponding Flag endorsements. Spot-check a variety of credentialed mariners.
 - i. Verify that the number of licensed officers meets the Minimum Safe Manning Certificate.
 - ii. Ensure license certificate numbers are found on flag state endorsement.
 - iii. Verify documents are not expired.

- iv. Verify the level of competency in the document matches or exceed the requirements for the duties performed by the individual.
- b. Verify compliance with required crew training for passenger ships.
 - i. Verify completion of Crowd Management Training for personnel designated on the muster list to assist passengers in emergency situations.
 - ii. Verify completion of Crisis Management & Human Behavior Training for masters, chief engineer officers, chief mates, second engineer officers, and any person having responsibility for the safety of passengers in an emergency.
- c. Verify completion of Fast Rescue Boat Training for crew in charge of fast rescue boats (if equipped) in emergency situations.
- d. Examine certificate of proficiency for the designated ship security officer.

4. Logs, Records, and Manuals

- a. Review any exemptions, equivalents, or alternative arrangements approved by the Flag State in accordance with SOLAS II-1/55, II-2/17, III/38, or V/3. Share any operational procedures referenced in the approvals with the relevant COC team(s) for further examination.
- b. Review Declaration of Security (DOS) and Declaration of Inspection (DOI) for current facility interfaces.
- c. Verify the following damage control and stability plans are onboard:
 - i. stability booklet,
 - ii. damage control plans, and
 - iii. approved onboard computer program or arrangement for shore-based support.
- d. Review the training and drill logs for completion of the following required drills:
 - i. damage control drill,
- iv. fire drill, and

ii. security drill,

v. emergency steering drill

- iii. abandon ship drill,
- e. If the ship is equipped with a Marine Evacuation System (MES), verify every MES party member, as far as practicable, has been trained by participation in a full deployment of a similar system into water, either on board or ashore, at 2-year intervals, but in no case longer than 3 years.
- f. Review the following operational maintenance records:
 - i. Liferaft and MES, if applicable, servicing and/or inspection reports,
 - ii. Lifesaving equipment maintenance records,
 - iii. Firefighting system servicing reports, and
 - iv. Firefighting equipment maintenance records.
- g. Verify ship has a plan for cooperation with appropriate search and rescue services in the event of an emergency in accordance with SOLAS V/7.3.
- h. Review the ship's logbook for completion of emergency steering drill in accordance with 33 CFR 164. Review COTP waiver(s), if applicable.

- i. Examine environmental plans and associated documents.
 - i. Verify Garbage Management Plan is onboard. Spot-check completion of garbage record book entries.
 - ii. Verify Shipboard Oil Pollution Emergency Plan (SOPEP) is approved and onboard. Spot-check completion of oil record book entries.
 - iii. Verify Non-tank vessel response plan (NTVRP) approval letter is valid.
 - iv. Verify Ballast Water Management plan is approved and onboard. Spot-check completion of ballast water records.
 - v. Verify Shipboard Energy Efficiency Management Plan (SEEMP) is onboard.
 - vi. For ships operating in applicable Alaskan waters, spot-check completion of Sewage and Graywater Discharge Record Book entries in accordance with 33CFR159.315.
- j. Verify compliance with passenger vessel security and safety requirements in accordance with 46 USC §3507 and §3508, for ships authorized to carry 250 or more passengers.
 - i. Verify completion of log entries for all complaints of crimes.
 - ii. Verify completion of crime scene preservation training for designated crewmember(s).
- 5. <u>Bridge Communications Arrangements</u> (SOLAS IV/6, IV/7, IV/13, IV/15, IV/17)
 - a. Verify presence of distress panel at conning position containing either one single button that initiates a distress alert using all radio communications installations, or one button for each radio installation. Verify indication showing whether distress button(s) has been pressed. Verify installation of a visual and audible alarm distress alarm panel that provides visual and aural indication of distress alert or alerts received on board.
 - b. Verify installation of Global Maritime Distress and Safety System (GMDSS).
 - i. Verify certificate is valid and system is compliant for sea area(s) of ship operations.
 - ii. Verify MMSI display on Digital Selective Calling (DSC) radios matches ship's documents.
 - iii. Verify completion of radio log entries.
 - c. Verify installation of the following communications equipment:
 - i. VHF radio with DSC,
 - ii. SAR locating devices (SART),
 - iii. NAVTEX receiver,
 - iv. EPIRB, including annual test within 3 months before PSSC expiry, and
 - v. Two-way SAR radiocommunications using aeronautical frequencies 121.5 MHz and 123.1 MHz
 - d. Verify presence of reserve source of energy for radio installations.
 - i. Verify proper ventilation and temperature control for accumulator batteries.
 - ii. Verify operation of battery charging or UPS arrangements.
 - iii. Verify battery capacity checked every 12 months.

H. Team 2 Procedures.

- 1. <u>Hull Walk</u> (SOLAS III/15, III/16)
 - a. Direct the crew to energize emergency lighting and verify illumination of over the side lighting in areas of survival craft launching arrangements.
 - b. Verify the side shell does not have any openings below the Marine Evacuation System embarkation station. Windows and side scuttles of the non-opening type may be allowed.

2. Crew Proficiency – (STCW A-I/14, A-II/5, A-VI/4, SOLAS II-2/15)

- a. Verify crew members can make a knowledgeable and informed contribution to the safe operation of the ship (i.e., crew working in restaurants, bars, galleys, entertainment venues, youth clubs, spas, housekeeping).
 - i. Verify familiarity with ship safety procedures (i.e., communications, protection against potential hazards aboard ship, accident prevention, operation of watertight doors).
 - ii. Verify familiarity with ship environmental protection procedures (i.e., pollutant discharge prohibitions, collection, storage, processing, and disposal of garbage).
 - iii. Verify familiarity with ship security procedures (i.e., reporting a security incident, procedures to follow when they recognize a security threat, security related communications, crew access to passenger cabins).
 - iv. Verify familiarity with ship emergency response procedures (i.e., actions to take upon encountering an accident or other medical emergency, man overboard, escape, muster & embarkation, detection of fire or smoke).
- b. Verify crew members are familiar with the arrangements of the ship as well as the location and operation of any fire-fighting systems and appliances they may be called upon to use (i.e., manually operated call points, fire doors, fire dampers).
- c. Verify security personnel proficiency in the following competencies:
 - i. Maintain conditions set out in the ship security plan;
 - ii. Recognition of security risks and threats;
 - iii. Undertake regular security inspections; and
 - iv. Proper usage of security equipment and systems.
- d. Verify able seafarer proficiency in the following competencies:
 - i. Safe operation of deck equipment and machinery (i.e., winches, hoists, watertight doors, anchoring equipment);
 - ii. Occupational health and safety precautions (i.e., working in enclosed spaces/aloft, over the side, electrical safety, mechanical safety, chemical safety); and
 - iii. Precautions to prevent pollution to the marine environment (i.e., anti-pollution equipment, approved methods of disposal of marine pollutants).
- 3. Accommodations Walkthrough (SOLAS II-2/4, II-2/5, II-2/7, MARPOL V, 46 USC 3507)
 - a. Verify condition of fire prevention, detection, and suppression arrangements in addition to the protection of passengers on upper accommodation decks of the ship. Pay special attention to unique risk areas such as spas, salons, fitness centers, youth clubs, VIP

- lounges, and galleys. Spot check passenger cabin decks to ensure a good sample of the ship, while maintaining a focus on the condition of stairways and corridors.
- b. Verify waste receptacles are constructed of non-combustible materials with no opening in the sides or bottom. Combustible waste receptacles are permitted in galleys, pantries, bars, garbage handling/storage spaces, and incinerator rooms provided they are intended purely for the carriage of wet waste, glass bottles, and metal cans, and are suitably marked.
- c. Verify stairway enclosures, passenger corridors, and crew corridors do not contain furniture, other than fixed seating limited to six seats on each deck in each stairway enclosure. Drinking fountains, decorative plant arrangements, statues, and other objects such as paintings and tapestries are permitted in corridors and stairways, so long as they are fixed and do not restrict the width of escape routes.
- d. Verify furniture and furnishings on cabin balconies are constructed of non-combustible materials unless such balconies are protected by a fixed pressure water-spraying and fixed fire detection and alarm systems.
- e. Verify fire detectors are not near beams, structures, and ventilation ducts where patterns of air flow could adversely affect performance.
- f. Verify manually operated call points are readily accessible and no more than 20 meters from any part of the corridor.
- g. Verify MARPOL placards are posted in prominent places where passengers are accommodated and congregate (i.e., cabins and all deck areas for recreational purposes open to passengers).
- h. Verify compliance with passenger vessel security and safety requirements in accordance with 46 USC §3507, for ships authorized to carry 250 or more passengers.
 - i. Verify ship rails are not less than 42 inches above the deck. This pertains to deckedge rails around all open-air decks at the deck edge overboard that are available for passenger use such as public decks and passenger cabin balconies.
 - ii. Verify passenger and crew cabin doors are fitted with peep holes or other means of visual identification.
 - iii. Verify passenger and crew cabin doors are equipped with security latches, and timesensitive key technology, for ships with keel laid date after 27 July 2010.
 - iv. Verify the security guide is available to passengers, which may be in the form of electronic or print media. Verify embassy and consulate information for each country the vessel will visit is available in each passenger cabin.

4. Fire Boundaries – (SOLAS II-2/9)

- a. Verify the appropriate fire integrity of boundaries depending on the use and categorization of the space. Ensure no storage of combustibles in category 10 spaces such as HVAC spaces and electrical lockers. Ensure no storage of flammable liquids in categories 6/7 accommodation spaces or 13 storage lockers or storerooms.
- b. Verify bulkhead and deck penetrations are approved in accordance with the FTP Code or suitably insulated to the same level of the division.
- c. Verify sauna operating temperature range to determine if fire integrity standards apply. Saunas are hot rooms with temperatures normally varying between $80^{\circ}\text{C} 120^{\circ}\text{C}$ (176°F 248°F). Traditional wooden bulkhead/ceiling linings and benches are permitted

in the sauna. Verify the 30 mm air gap between the oven and the non-combustible plate above the oven. Verify the 500 mm air gap between the oven and combustible linings, or a 30 mm air gap if the combustible material is protected by a non-combustible plate. Verify sauna doors open outwards by pushing open. Examine the timer installation for electrically heated ovens. If the dry pipe water-mist or sprinkler system required by FSS Code Ch. 8, contains a nozzle with a glass bulb, verify the operating temperature of the head is no more than 140°C, which typically contains a blue colored liquid. Mauve (purple) or black colored liquid would not be compliant.

- d. Verify partial bulkheads separating adjacent cabin balconies are capable of being opened by the crew from each side for the purpose of firefighting, for ships constructed on or after 1 July 2008.
- e. Verify fire doors provide resistance to fire as well as to the passage of smoke and flame equivalent to that of the bulkheads in which they are situated. A-class integrity is not required for exterior doors to open deck spaces that are not embarkation, assembly, and escape routes. Doors approved without the sill being part of the frame, installed after 1 July 2010, may have a gap under the door up to 12 mm. Verify a non-combustible sill is installed under the door such that floor coverings do not extend beneath the closed door.
- f. Verify no hold-back arrangements are installed on doors subject to central control station release.

5. <u>Ventilation Systems</u> – (SOLAS II-2/9)

- a. Verify dampers placed behind ceilings or linings are provided with an inspection hatch.
- b. Verify dampers are capable of being closed from outside the spaces being ventilated, and easily accessible as well as prominently and permanently marked to indicate the operating position of the damper.
- c. Verify galley ventilation systems are fitted with a readily removable grease trap for cleaning or an alternative approved grease removal system. Verify the installation of fixed fire extinguishing system within the ventilation ducts. Verify the following controls are at a position outside the galley close to the entrance to the galley:
 - i. Ventilation fan shutdowns,
 - ii. Fire damper controls, and
 - iii. Fire-extinguishing system controls.
- d. Verify laundry ventilation systems are fitted with readily removable filters for cleaning purposes. Verify remote controls for fire dampers and ventilation fan shutdowns.

6. Fire Fighting Systems – (SOLAS II-2/10, II-2/14, FSS Code Ch. 5, Ch. 7, Ch. 8)

- a. Verify fire hydrants are fitted with an isolating valve, and fire hoses together with nozzles (i.e., spray/jet type) and tools (i.e., spanner wrench). Verify fire hoses are connected to hydrants in interior locations of the ship.
- b. Verify portable fire extinguishers are in good working order and readily available for immediate use. Verify accommodation spaces, service spaces, and control stations are provided with fire extinguishers, one of which is stowed near the entrance to the space.
- c. Verify components at CO₂ storage location and control station are in good working order and readily available for immediate use (i.e., piping, hoses, bottles). Verify clear

instructions relating to the operation of the system having regard to the safety of personnel. Verify the two separate controls are located inside a release box clearly identified for the particular space, and if the box is locked, verify the key is in an adjacent break-glass type enclosure.

d. Verify water-mist control stations and nozzles are in good working order and readily available for immediate use (i.e., section valves accessible and glass bulbs full of liquid). Verify means to prevent operation of valves by an unauthorized person (i.e., alarm or locked door). Verify list or plan showing the spaces covered at each section. Verify system is charged at the necessary pressure by checking gauges at section valves.

7. General Emergency Alarm & Public Address Systems – (SOLAS II-2/12, III/6, LSA Code 7.2)

- a. Verify operation of general emergency alarm (GA) and public address system (PA) to ensure notification to crew and passengers for safe evacuation.
- b. Verify GA is audible throughout all accommodation, normal crew working spaces, and open decks.
- c. Verify PA is clearly audible above ambient noise in all spaces where crewmembers or passengers are normally present, and at all muster stations.

8. Means of Escape – (SOLAS II-2/13, FSS Code Ch. 11, Ch. 13)

- a. Verify safe escape routes are provided from each space or group of spaces and maintained in a safe condition clear of obstacles. There may be arrangements where safe escape routes are not provided from a restricted space (i.e., workshop within a galley or office within a gym), and the Flag Administration has approved an equivalent level of safety such as an audible alarm to alert the crew normally occupying the restricted space. If this arrangement exists, observe a test of the alarm notification arrangements.
- b. Verify spaces above the bulkhead deck have at least two means of escape from each MVZ or similarly restricted space (i.e., a restaurant or theater) or group of spaces (i.e., shops in an atrium or treatment rooms in a spa), at least one of which shall give access to a stairway.
- c. Verify stairways have direct access from corridors and are clear of furniture or equipment. Recall paragraph H.3.c for fire load limitations in stairways. Verify stairways are fitted with handrails on each side and are not less than 900 mm in clear width.
- d. Verify escape route corridors are free from obstructions and are not less than 900 mm in clear width. Verify dead-end corridors are not in place, including a lobby or part of a corridor from which there is only one means of escape.
- e. Verify doors fitted in escape routes open in way of the direction of escape, and review Flag documentation in cases where this requirement is not met. Verify that no door along any designated escape route require keys to unlock them when moving in the direction of escape.
- f. Verify normally closed escape doors from public spaces (i.e., halls, dining rooms, lounges) are fitted with a means of quick release upon the application of force in the direction of escape flow. Quick release mechanisms include:
 - i. Bars or panels extending across the width of the door,
 - ii. Cause the latch to release when a force is applied, and
 - iii. No locking device, set screw, or other arrangement that prevents latch release.

Review Flag documentation in cases where this requirement is not met. Refer to <u>CSNCOE</u> <u>RP-04</u>.

g. Verify all alleyways (corridors), stairways, and exits giving access to muster (assembly) stations and embarkation stations are illuminated by the emergency lighting circuit, in accordance with SOLAS III/11.5. Emergency lighting fixtures are typically marked by a red dot, but this is not required.

Verify escape routes are marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck. Verify low location lighting is functional and strip indicators are not blocked to preserve marking at all points of the escape route. Verify escape route signs readily identify the escape exits from control stations, accommodation spaces, and service spaces. Escape signage may be lighted or photoluminescent, and at least one sign should be visible from all areas within the space enabling passengers and/or crew to identify routes of escape.

I. Team 3 Procedures.

- 1. Hull Walk (SOLAS XI-2/4, ISPS Code A/7)
 - a. Verify access control for persons and their effects.
 - b. Verify security monitoring and communication processes.
- 2. Crew Proficiency (STCW A-I/14, A-II/5, A-VI/4, SOLAS II-2/15)
 - a. Verify crew members can make a knowledgeable and informed contribution to the safe operation of the ship (i.e., crew working in restaurants, bars, galleys, entertainment venues, youth clubs, spas, housekeeping).
 - i. Verify familiarity with ship safety procedures (i.e., communications, protection against potential hazards aboard ship, accident prevention, operation of watertight doors).
 - ii. Verify familiarity with ship environmental protection procedures (i.e., pollutant discharge prohibitions, collection, storage, processing, and disposal of garbage).
 - iii. Verify familiarity with ship security procedures (i.e., reporting a security incident, procedures to follow when they recognize a security threat, security related communications, crew access to passenger cabins).
 - iv. Verify familiarity with ship emergency response procedures (i.e., actions to take upon encountering an accident or other medical emergency, man overboard, escape, muster & embarkation, detection of fire or smoke).
 - b. Verify crew members are familiar with the arrangements of the ship as well as the location and operation of any fire-fighting systems and appliances they may be called upon to use (i.e., manually operated call points, fire doors, fire dampers).
 - c. Verify security personnel proficiency in the following competencies:
 - i. Maintain conditions set out in the ship security plan;
 - ii. Recognition of security risks and threats;
 - iii. Undertake regular security inspections; and
 - iv. Proper usage of security equipment and systems.

- d. Verify able seafarer proficiency in the following competencies:
 - i. Safe operation of deck equipment and machinery (i.e., winches, hoists, watertight doors, anchoring equipment);
 - ii. Occupational health and safety precautions (i.e., working in enclosed spaces/aloft, over the side, electrical safety, mechanical safety, chemical safety); and
 - iii. Precautions to prevent pollution to the marine environment (i.e., anti-pollution equipment, approved methods of disposal of marine pollutants).

3. Accommodations Walkthrough – (SOLAS II-2/4, II-2/5, MARPOL V, 46 USC 3507)

- a. Verify condition of fire prevention, detection, and suppression arrangements in addition to the protection of passengers and crewmembers on lower accommodation and service decks of the ship. Pay special attention to unique risk areas such as shops, entertainment venues, restaurants, galleys.
- b. Verify waste receptacles are constructed of non-combustible materials with no opening in the sides or bottom. Combustible waste receptacles are permitted in galleys, pantries, bars, garbage handling/storage spaces, and incinerator rooms provided they are intended purely for the carriage of wet waste, glass bottles, and metal cans, and are suitably marked.
- c. Verify stairway enclosures, passenger corridors, and crew corridors do not contain furniture, other than fixed seating limited to six seats on each deck in each stairway enclosure. Drinking fountains, decorative plant arrangements, statues, and other objects such as paintings and tapestries are permitted in corridors and stairways, so long as they are fixed and do not restrict the width of escape routes.
- d. Verify furniture and furnishings on cabin balconies are constructed of non-combustible materials unless such balconies are protected by a fixed pressure water-spraying and fixed fire detection and alarm systems.
- e. Verify fire detectors are not near beams, structures, and ventilation ducts where patterns of air flow could adversely affect performance.
- f. Verify manually operated call points are readily accessible and no more than 20 meters from any part of the corridor.
- g. Verify MARPOL placards are posted in prominent places where passengers are accommodated and congregate (i.e., cabins and all deck areas for recreational purposes open to passengers).
- h. Verify compliance with passenger vessel security and safety requirements in accordance with 46 USC §3507, for ships authorized to carry 250 or more passengers.
 - i. Verify ship rails are not less than 42 inches above the deck. This pertains to deckedge rails around all open-air decks at the deck edge overboard that are available for passenger use such as public decks and passenger cabin balconies.
 - ii. Verify passenger and crew cabin doors are fitted with peep holes or other means of visual identification.
 - iii. Verify passenger and crew cabin doors are equipped with security latches, and timesensitive key technology, for ships with keel laid date after 27 July 2010.

iv. Verify the security guide is available to passengers, which may be in the form of electronic or printed media. Verify embassy and consulate information for each country the vessel will visit is available in each passenger cabin.

4. <u>Fire Boundaries</u> – (SOLAS II-2/9)

- a. Verify the appropriate fire integrity of boundaries depending on the use and categorization of the space. Ensure no storage of combustibles in category 10 spaces such as HVAC spaces and electrical lockers. Ensure no storage of flammable liquids in categories 6/7 accommodation spaces or 13 storage lockers or storerooms.
- b. Verify bulkhead and deck penetrations are approved in accordance with the FTP Code or suitably insulated to the same level of the division.
- c. Verify sauna operating temperature range to determine if fire integrity standards apply. Saunas are hot rooms with temperatures normally varying between 80°C 120°C (176°F 248°F). Traditional wooden bulkhead/ceiling linings and benches are permitted in the sauna. Verify the 30 mm air gap between the oven and the non-combustible plate above the oven. Verify the 500 mm air gap between the oven and combustible linings, or a 30 mm air gap if the combustible material is protected by a non-combustible plate. Verify sauna doors open outwards by pushing open. Examine the timer installation for electrically heated ovens. If the dry pipe water-mist or sprinkler system required by FSS Code Ch. 8, contains a nozzle with a glass bulb, verify the operating temperature of the head is no more than 140°C, which typically contains a blue colored liquid. Mauve (purple) or black colored liquid would not be compliant.
- d. Verify partial bulkheads separating adjacent cabin balconies are capable of being opened by the crew from each side for the purpose of firefighting, for ships constructed on or after 1 July 2008.
- e. Verify fire doors provide resistance to fire as well as to the passage of smoke and flame equivalent to that of the bulkheads in which they are situated. A-class integrity is not required for exterior doors to open deck spaces that are not embarkation, assembly, and escape routes. Doors approved without the sill being part of the frame, installed after 1 July 2010, may have a gap under the door up to 12 mm. Verify a non-combustible sill is installed under the door such that floor coverings do not extend beneath the closed door.
- f. Verify no hold-back arrangements are installed on doors subject to central control station release.

5. Ventilation Systems – (SOLAS II-2/9)

- a. Verify dampers placed behind ceilings or linings are provided with an inspection hatch.
- b. Verify dampers are capable of being closed from outside the spaces being ventilated, and easily accessible as well as prominently and permanently marked to indicate the operating position of the damper.
- c. Verify galley ventilation systems are fitted with readily removable grease trap for cleaning or an alternative approved grease removal system. Verify the installation of fixed fire extinguishing system within the ventilation ducts. Verify the following controls are at a position outside the galley close to the entrance to the galley:
 - i. Ventilation fan shutdowns,
 - ii. Fire damper controls, and

- iii. Fire-extinguishing system controls.
- d. Verify laundry ventilation systems are fitted with readily removable filters for cleaning purposes. Verify remote controls for fire dampers and ventilation fan shutdowns.

6. Fire Fighting Systems – (SOLAS II-2/10, II-2/14, FSS Code Ch. 5, Ch. 7, Ch. 8)

- a. Verify fire hydrants are fitted with an isolating valve, and fire hoses together with nozzles (i.e., spray/jet type) and tools (i.e., spanner wrench). Verify fire hoses are connected to hydrants in interior locations of the ship. Verify drencher firefighting system at mooring deck locations are fitted with an isolation valve that is readily available for immediate use and nozzles are clear of obstructions.
- b. Verify portable fire extinguishers are in good working order and readily available for immediate use. Verify accommodation spaces, service spaces, and control stations are provided with fire extinguishers, one of which is stowed near the entrance to the space.
- c. Verify components at CO₂ storage location and control station are in good working order and readily available for immediate use (i.e., piping, hoses, bottles). Verify clear instructions relating to the operation of the system having regard to the safety of personnel. Verify the two separate controls are located inside a release box clearly identified for the particular space, and if the box is locked, verify the key is in an adjacent break-glass type enclosure.
- d. Verify water-mist control stations and nozzles are in good working order and readily available for immediate use (i.e., section valves accessible and glass bulb full of liquid). Verify means to prevent operation of valves by an unauthorized person (i.e., alarm or locked door). Verify list or plan showing the spaces covered at each section. Verify system is charged at the necessary pressure by checking gauges at section valves.

7. General Emergency Alarm & Public Address Systems – (SOLAS II-2/12, III/6, LSA Code 7.2)

- a. Verify operation of general emergency alarm (GA) and public address system (PA) to ensure notification to crew and passengers for safe evacuation.
- b. Verify GA is audible throughout all accommodation, normal crew working spaces, and open decks.
- c. Verify PA is clearly audible above ambient noise in all spaces where crewmembers or passengers are normally present, and at all muster stations.

8. Means of Escape – (SOLAS II-2/13, FSS Code Ch. 11, Ch. 13)

- a. Verify safe escape routes are provided from each space or group of spaces and maintained in a safe condition clear of obstacles. There may be arrangements where safe escape routes are not provided from a restricted space (i.e., workshop within a galley or office within a gym), and the Flag Administration has approved an equivalent level of safety such as an audible alarm to alert the crew normally occupying the restricted space. If this arrangement exists, observe a test of the alarm notification arrangements.
- b. Verify spaces above the bulkhead deck have at least two means of escape from each MVZ or similarly restricted space (i.e., a restaurant or theater) or group of spaces (i.e., shops in an atrium or treatment rooms in a spa), at least one of which shall give access to a stairway.
- c. Verify spaces below the bulkhead deck have at least two means of escape, one of which is independent of watertight doors.

- d. Verify stairways have direct access from corridors and are clear of furniture or equipment. Recall paragraph I.3.c for fire load limitations in stairways. Verify stairways are fitted with handrails on each side and are not less than 900 mm in clear width above the bulkhead deck, and 800 mm in clear width below the bulkhead deck.
- e. Verify escape route corridors are free from obstructions and are not less than 900 mm in clear width above the bulkhead deck, and 800 mm in clear width below the bulkhead deck. Verify dead-end corridors are not in place, including a lobby or part of a corridor from which there is only one means of escape.
- f. Verify fire doors fitted in escape routes open in way of the direction of escape, and review Flag documentation in cases where this requirement is not met. Verify no doors along any designated escape route require keys to unlock them when moving in the direction of escape.
- g. Verify normally closed escape doors from public spaces (i.e., halls, dining rooms, lounges) are fitted with a means of quick release upon the application of force in the direction of escape flow. Quick release mechanisms include:
 - i. Bars or panels extending across the width of the door,
 - ii. Cause the latch to release when a force is applied, and
 - iii. No locking device, set screw, or other arrangement that prevents latch release.

Review Flag documentation in cases where this requirement is not met. Refer to <u>CSNCOE</u> RP-04.

- h. Verify lighting of escape routes to ensure all alleyways (corridors), stairways, and exits giving access to muster (assembly) stations and embarkation stations are illuminated by the emergency lighting circuit, in accordance with SOLAS III/11.5. Emergency lighting fixtures are typically marked by a red dot, but this is not required.
- i. Verify escape routes are marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck. Verify that low location lighting is functional and strip indicators are not blocked to preserve marking at all points of the escape route. Verify escape route signs readily identify the escape exits from control stations, accommodation spaces, and service spaces. Escape signage may be lighted or photoluminescent, and at least one sign should be visible from all areas within the space that enable passengers and/or crew to identify the routes of escape.

J. Team 4 Procedures.

- 1. Hull Walk (SOLAS II-1/3-1)
 - a. Examine the condition of shell plating and overboard discharge fittings for fractures, corrosion, wastage, pitting, or other damage that affects seaworthiness.
- 2. Crew Proficiency (STCW A-I/14, A-III/1, A-III/4, SOLAS II-2/15)
 - a. Verify crew members can make a knowledgeable and informed contribution to the safe operation of the ship (i.e., crew working in garbage room, bunker station, galleys, laundries, workshops, other service spaces)
 - i. Verify familiarity with ship safety procedures (i.e., communications, protection against potential hazards aboard ship, accident prevention, operation of watertight doors).

- ii. Verify familiarity with ship environmental protection procedures (i.e., pollutant discharge prohibitions, collection, storage, processing, and disposal of garbage).
- iii. Verify familiarity with ship security procedures (i.e., reporting a security incident, procedures to follow when they recognize a security threat, security related communications, crew access to passenger cabins).
- iv. Verify familiarity with ship emergency response procedures (i.e., actions to take upon encountering an accident or other medical emergency, man overboard, escape, muster & embarkation, detection of fire or smoke).
- b. Verify crew members are familiar with the arrangements of the ship as well as the location and operation of any fire-fighting systems and appliances they may be called upon to use (i.e., manually operated call points, fire doors, fire dampers).
- c. Verify medical personnel, designated to provide medical first aid, proficiency to apply immediate first aid in the event of accident or illness on board (i.e., cardiac arrest, drowning, asphyxia, fractures, spinal injuries).
- d. Verify engineering watch officer proficiency in the following competencies:
 - i. Safety & emergency procedures; change-over of remote/automatic to local control of all systems;
 - ii. Maintenance & repair of shipboard machinery and equipment;
 - iii. Compliance with pollution prevention requirements;
 - iv. Maintain seaworthiness of the ship; and
 - v. Prevent, control and fight fires on board.
- e. Verify engineering rating proficiency in the following competencies:
 - i. Safe working practices related to engine-room operations;
 - ii. Basic environmental protection procedures;
 - iii. Engine room communication and alarm systems; and
 - iv. Operate emergency equipment and apply emergency procedures.
- 3. Engineering Spaces Walkthrough (SOLAS II-1/13, II-2/9, II-2/10, II-2/13, FSS Code Ch. 3, MARPOL I Reg. 14, 33 CFR 159)
 - a. Verify condition of watertight boundaries, including watertight doors and other boundary penetrations.
 - b. Verify condition of fire boundaries, including fire doors, dampers, and other boundary penetrations.
 - c. Verify condition of fire safety systems including portable fire fighting equipment, detection systems, and fire suppression systems.
 - d. Verify safe means of escape, including escape trunks and easily visible emergency escape breathing devices (EEBDs).
 - e. Verify approval and condition of pollution prevention equipment, including Oily Water Separator (OWS) and sewage treatment system.

4. Accommodations Walkthrough – (SOLAS II-2/4, II-2/5, MARPOL V, 46 USC 3507)

- a. Verify condition of fire prevention, detection, and suppression arrangements in addition to the protection of passengers and crewmembers on service decks of the ship. Pay special attention to unique risk areas such as galleys, laundries, workshops, and service areas along the I-95 deck such as bunker stations, garbage handling rooms, and medical center. Spot check crew cabin decks below the bulkhead deck.
- b. Verify waste receptacles are constructed of non-combustible materials with no opening in the sides or bottom. Combustible waste receptacles are permitted in galleys, pantries, bars, garbage handling/storage spaces, and incinerator rooms provided they are intended purely for the carriage of wet waste, glass bottles, and metal cans, and are suitably marked.
- c. Verify stairway enclosures, passenger corridors, and crew corridors do not contain furniture, other than fixed seating limited to six seats on each deck in each stairway enclosure. Drinking fountains, decorative plant arrangements, statues, and other objects such as paintings and tapestries are permitted in corridors and stairways, so long as they are fixed and do not restrict the width of escape routes.
- d. Verify MARPOL placards are posted in prominent places where passengers are accommodated and congregate (i.e., cabins and all deck areas for recreational purposes open to passengers).
- e. Verify compliance with passenger vessel security and safety requirements in accordance with 46 USC §3507, for ships authorized to carry 250 or more passengers.
 - i. Verify ship rails are not less than 42 inches above the deck. This pertains to deckedge rails around all open-air decks at the deck edge overboard that are available for passenger use such as public decks and passenger cabin balconies.
 - ii. Verify passenger and crew cabin doors are fitted with peep holes or other means of visual identification.
 - iii. Verify passenger and crew cabin doors are equipped with security latches, and timesensitive key technology, for ships with keel laid date after 27 July 2010.
 - iv. Verify the security guide is available to passengers, which may be in the form of electronic or printed media. Verify embassy and consulate information for each country the vessel will visit is available in each passenger cabin.

5. Medical Center – (46 USC 3507, STCW A-VI/4)

- a. Verify sexual assault procedures with medical center team, and the use of adequate equipment and materials for medical examination, administration of anti-retroviral medications, and preservation of medical evidence. Verify the medical staff has the license and training required by §3507(d)(3).
- b. Verify presence of Automated External Defibrillator (AED) in medical center.

6. <u>Bunker Stations</u> – (MARPOL I Reg. 13, 33CFR155)

- a. Verify transfer procedures are permanently posted or available at a place where the procedures can be easily seen.
- b. Verify presence and condition of oil discharge containments, standard discharge connection, and transfer hoses.

- 7. Garbage Handling Rooms (MARPOL V Reg. 4, Reg. 10)
 - a. Verify display of MARPOL placard which notifies crew of the garbage discharge requirements.
 - b. Verify crewmembers are following ship's procedures for collecting, storing, processing, and disposing of garbage. Food waste may be discharged at sea, but discharge is prohibited for other garbage types such as plastics, cooking oil, lining/packing materials, paper, rags, glass, metal, bottles, crockery, and similar refuse.
 - c. If the ship's garbage management plan requires sorting and recycling, inquire about proper separation. The IMO recommended separation for recyclable material is as follows:

i. Cooking oil,

ii. Glass,

iii. Aluminum cans,

iv. Paper, cardboard, corrugated board,

v. Wood,

vi. Metal, and

vii. Plastics (including Styrofoam or other similar plastic material).

d. Verify proper separation and handling of hazardous garbage such as oily rags, light bulbs, acids, chemicals, and batteries.

K. Drills Evaluation.

1. <u>Drill Pre-Brief</u>

- a. If the ship's crew holds a pre-brief, participate as an observer to understand the expected procedures and crew actions during fire and abandon ship drills. The PSCO should not direct the master or crew on where or how to perform the drills. The lead PSCO should ensure the team members understand their assignments for observation and communications. The PSC team should not interact with the crew during the fire drill but should rather maintain an observer role and record observations.
- 2. <u>Fire Drill</u> (SOLAS II-2/15, III/19, III/29, FSS Code Ch. 3)
 - a. Verify the fire drill meets the functional requirements of SOLAS including:
 - i. Reporting to stations and preparing for the duties described in the muster list,
 - ii. Starting of a fire pump, using at least the two required jets of water to show that the system is in proper order,
 - iii. Checking of fireman's outfit and other personal rescue equipment,
 - iv. Checking of relevant communication equipment,
 - v. Checking the operation of watertight doors, fire doors, fire dampers and main inlets & outlets of ventilation systems in the drill area, and
 - vi. Checking the necessary arrangements for subsequent abandoning of the ship.
 - b. Verify the presence of a printed or computer-based decision support system on the navigation bridge which provides all the information contained in the emergency plan, procedures, checklists, etc. Verify the master and crew follow the recommended actions for the fire emergency. (Team 1)
 - c. Observe crew actions at the staging area. Verify communications with navigation bridge/safety center, fire teams, and any other response teams. Verify fire teams and response teams prepare for duties assigned on the muster list. (Team 2)

- d. Observe crew actions on-scene at the fire drill location. If the drill involves a fire team reporting to the scene of the fire, examine the fireman's outfits to ensure they consist of protective clothing, rubber/non-conductive boots, rigid helmet, flashlight, axe, and breathing apparatus. (Team 3)
- e. Observe crew actions in the ECR. Verify crew demonstrate knowledge in the operation of the firefighting systems, watertight doors, and ventilation systems. If the drill is in a space that is protected by CO₂, observe the assigned crewmember who reports to the CO₂ control station for verify familiarity with discharge procedures. (Team 4)

Teams 3 and 4 should report to the staging area upon completion of drill observations. It is not necessary to remain at the assigned drill location until the completion of the drill. Here, the teams can sync up to ensure all are ready to proceed with the evaluation of passenger evacuation procedures.

- 3. Passenger Evacuation (SOLAS III/6, III/11, III/19, III/25, STCW A-V/2)
 - a. Verify the summoning of passengers and crew to muster stations with the general emergency alarm or public address system. Review the ship's safety briefing announcement/script to verify in contains the required instructions, as outlined in section K.6.a below. (Team 1)
 - b. Verify crew assigned to passenger evacuation duties on the muster list report to their stations (i.e., stairways and corridors) and prepare for their duties Spot-check crew providing direct service to passengers ensure they are familiar with their duties and demonstrate the following crowd management knowledge (Teams 2 & 3):
 - i. Ability to give clear reassuring orders,
 - ii. Ability to manage passengers in corridors, staircases, and passageways,
 - iii. Understanding the importance of and having the ability to maintain escape routes clear of obstructions,
 - iv. Knowledge of methods available for evacuation of disabled persons and persons needing special assistance (i.e., passengers with medication needs or children), and
 - v. Knowledge of methods of searching passenger accommodation and public spaces.
 - c. Verify muster stations permit ready access to the embarkation stations and have ample room for marshalling and instruction of the passengers. Verify the alleyways, stairways, and exits to the muster stations and embarkation stations are provided with emergency lighting. Verify the following illustrations and instructions are posted at muster stations (Team 4):
 - i. Muster station identification,
 - ii. Essential actions to take in an emergency, and
 - iii. The method of donning lifejackets.
 - d. Verify effective mustering procedures. Spot-check crew assigned to muster station duties to ensure they demonstrate the following crowd management knowledge (Team 4):
 - i. Importance of keeping order,
 - ii. Ability to use procedures for reducing and avoiding panic,
 - iii. Ability to use passenger lists or devices for evacuation counts,

- iv. Importance of passengers being suitably clothed when mustering, and
- v. Ability to check that passengers have donned their life jackets correctly.
- 4. Abandon Ship Drill (SOLAS III/9 III/25, LSA Code Ch. IV VI, STCW A-V/2, A-VI/2)
 - a. Verify the abandon ship drill meets the functional requirements of SOLAS including:
 - i. Summoning of passengers and crew to muster stations,
 - ii. Reporting to stations and preparing for the duties described in the muster list,
 - iii. Checking that passengers and crew are suitably dressed,
 - iv. Checking that lifejackets are donned correctly,
 - v. Lowering of at least one lifeboat after any necessary preparation for launching,
 - vi. Starting and operating the lifeboat engine,
 - vii. Operation of davits used for launching liferafts,
 - viii. Mock search and rescue of passengers in staterooms, and
 - ix. Instruction in the use of radio lifesaving appliances.
 - b. Spot-check crew members assigned to embarkation stations ensure they are familiar with their duties and demonstrate the ability to embark passengers, including disabled persons and those needing assistance.
 - c. Verify survival craft embarkation and launching stations are adequately illuminated by emergency lighting and are provided with embarkation ladder(s) or descent devices, including securing points.
 - d. Verify lifeboats are stowed attached to launching appliances. Verify that each liferaft is stowed with a float-free arrangement, with its painter permanently attached to the ship.
 - e. Verify survival craft launching/recovery arrangements are provided for bringing davitlaunched survival craft against the ship's side so that persons can safely embark. Verify launching appliances are in working order and ready for immediate use (i.e., davit arms, winch, falls). Spot-check hand gear arrangements and crew knowledge in operation of such equipment.
 - f. Verify all marine evacuation systems (MES), if provided, to ensure launching and operating instructions are marked on or in the vicinity of the container. Verify the drill exercises the procedures required for MES deployment up to the point of immediately preceding actual deployment of the system. Verify the drill is augmented by instruction on the use of the MES using the on-board training aids.
 - g. Verify all lifeboats and rescue boats, including required fittings and equipment are in working order and ready for immediate use. Verify the functionality of propulsion and steering arrangements. Verify condition of retro-reflective material and markings to include:
 - i. Number of persons for which the boat is approved,
 - ii. Name and port of registry of the ship, and
 - iii. Means of identifying the ship to which the boat belongs and the number of the boat marked so that they are visible from above.

- h. Verify crew assigned to liferaft launching and embarkation duties on the muster list report to their stations and prepare for their duties.
- i. Verify crew assigned to lifeboat/rescue boat launching and embarkation duties on the muster list report to their stations and prepare for their duties. Verify persons in charge of each survival craft have a list of survival craft crew and that the crew are acquainted with their duties. Verify the persons in charge are familiar with their duties and demonstrate the following survival craft knowledge:
 - i. Take charge of a survival craft during and after launch (i.e., outfitting of equipment, method of launching, action to take after leaving ship),
 - ii. Operate a survival craft engine (i.e., starting batteries, fuel supply, use of fire extinguisher),
 - iii. Manage survivors (i.e., apportionment of food and water),
 - iv. Use locating devices (i.e., EPIRB, SART, pyrotechnics), and
 - v. Apply first aid (i.e., resuscitation techniques and control of bleeding and shock).
- j. Observe lifeboat/rescue boat launching and recovery arrangements to verify they are in working order and ready for immediate use. Verify the launching appliance operator is able to observe the survival craft at all times, and the preparation & handling of a survival craft does not interfere with the prompt preparation & handling of any other survival craft.

5. Drill De-brief

- a. The team lead should gather all PSC team members to record drill observations and summarize key feedback items to share for the fire drill, passenger evacuation, and abandon ship drill. A drill is considered satisfactory if all drill elements listed in SOLAS III/19.3.4 and 19.3.5 are met, and the crew was substantially familiar with emergency duties. Instances where individual crew member(s) were not familiar with emergency duties may not constitute a failed drill but should be recorded as non-compliance.
- b. The team lead should provide a concise report of drill feedback to include positive observations and potential deficiencies. The team should not critique crew proficiency so long as they meet the training and proficiency requirements prescribed by SOLAS and STCW. The de-brief should not include material deficiencies, which can be shared with the responsible officer at a later time.

6. Passenger Muster – (SOLAS III/19)

- a. Verify the ship's procedure for the passenger muster and safety briefing required to take place prior to or immediately upon departure. Review the passenger safety briefing announcement script/recording to verify it includes the following instructions (Team 1):
 - i. Use of lifejackets,
 - ii. Actions to take in an emergency, and
 - iii. Location of the ship's medical facilities.
- b. If the ship uses information cards/posters, video displays, or smartphone applications to the supplement the briefing, examine those elements to ensure the systems are functioning as intended. Verify proficiency of crew members assigned to the duty of lifejacket donning instruction. This verification is completed during the walkthrough portion of the exam. (Team 2)

L. Procedures for Ro-Ro Passenger Ships.

- 1. <u>Hull Walk</u> (SOLAS II-1/17-1)
 - a. Note the shell doors in the open position and verify positions at the bridge indicating panel.
- 2. Crew Training and Certification (STCW A-V/2, A-VI/2)
 - a. Verify completion of Passenger Safety, Cargo Safety and Hull Integrity training for masters, chief mates, chief engineer officers, second engineer officers, and persons assigned immediate responsibility for embarking and disembarking passengers, for loading, discharging, or securing cargo, or for closing hull openings on board ro-ro passenger ships.
 - b. Verify completion of Fast Rescue Boat training for at least two crews of each fast rescue boat.
- 3. <u>Logs and Records</u> (SOLAS II-1/23)
 - a. Verify entries in the ship's logbook recording the time of the last closing of shell doors.
- 4. Escape Routes (SOLAS II-2/13)
 - a. Verify handrails are provided in escape route corridors along the entire escape route. Verify escape routes are clear of obstructions, while noting that tables and chairs which may be cleared to provide open space are permitted. Escape routes need to only be kept clear of obstructions (i.e., cleaning carts, bedding, luggage, boxes of goods) when the ship is underway. Verify the mimic plans showing "you are here" position is prominently displayed in public spaces (typically stairway landings).
- 5. Fire Safety Protection of Vehicle, Special Category, and Ro-Ro Spaces (SOLAS II-2/20)
 - a. Verify effective power ventilation to give at least 10 air changes per hour (6 air changes per hour if carrying not more than 36 passengers).
 - b. Verify installation of fixed fire detection & alarm and fixed fire-extinguishing systems. Verify required deck scuppers are free from blockage to ensure rapid discharge of fixed fire-extinguishing system water.
 - c. Verify portable fire extinguishers are provided at each deck level in each ro-ro space spaced not more than 20 m apart on both sides of the space. Verify at least 3 water-fog applicators and 1 portable foam applicator are provided in each ro-ro space.
- 6. Fast Rescue Boat (SOLAS III/26)

Verify fast rescue boat, including required fittings and equipment are in working order and ready for immediate use. Verify the functionality of propulsion and steering arrangements. Verify the boat is fitted with a VHF radio set which is hands-free and watertight.

M. Procedures for Polar Code Ships.

- 1. Ship Certificates
 - a. Verify the Polar Ship Certificate is onboard, valid, and has endorsement(s).

2. Crew Training and Certification – (STCW A-V/4)

a. Verify completion of basic and/or advanced training for masters and deck officers on ships operating in polar waters.

3. Logs, Manuals, and Records – (Polar Code Ch. 2)

a. Review Polar Water Operational Manual to ensure it contains ship specific limitations and procedures.

4. Safety Arrangements – (Polar Code Ch. 4, Ch. 6, Ch. 11, Ch. 13)

- a. Verify galley facilities are provided with grab rails on the front of cooking equipment for use by the crew during ice operations. Verify deep fat fryers are located separately from hotplates or other hot surfaces and are provided with an oil-tight lid.
- b. Verify towing arrangements include a line-throwing apparatus capable of delivering messenger lines of the transfer of towing equipment.
- c. Verify portable water and foam extinguishers are not located in any position that is exposed to freezing temperatures.
- d. Verify adequate supplies of protective clothing and thermal insulating materials are provided.
- e. Verify personal survival kits (PSK) and group survival kits (GSK) are stored so they may be easily retrieved in an emergency situation. Verify PSK and GSK inspections are carried out annually.
- f. Verify the ship is provided with manual inflation pumps in a warm space in the vicinity of liferafts.

5. Navigation Arrangements – (Polar Code Ch. 12)

- a. Verify the ship is provided with the following equipment:
 - i. A second independent echo-sounding depth device,
 - ii. An independent radar system that operates in the 3 GHz range,
 - iii. At least two searchlights controllable from conning positions, and
 - iv. A suitable means to de-ice conning position windows.
- b. Verify the ship is provided with equipment capable of receiving ice & weather charts and displaying ice imagery.

N. Procedures for IGF Code Ships.

1. <u>Crew Training and Certification</u> – (STCW A-V/3)

- a. Verify completion of basic training on LFF ships for seafarers responsible for designated safety duties associated with the care, use or in emergency response to the fuel on ships.
- b. Verify completion of advanced training on LFF ships for masters, engineering officers and all personnel with immediate responsibility ships for the care and use of fuels and fuel systems.

2. Logs, Manuals, and Records – (IGF Code Ch. 18)

- a. Verify presence of the maintenance procedures for the fuel containment system and electrical equipment installed in hazardous locations.
- b. Verify presence of bunkering operations documentation including transfer procedures, emergency actions, bunker safety checklist, and bunker delivery notes.

3. Airlocks – (IGF Code Ch. 5)

- a. Verify airlocks are mechanically ventilated at an overpressure relative to the adjacent hazardous area or space. Verify free and easy passage, and they are not used for storage.
- b. Verify the doors are self-closing without any hold-backs.
- c. Verify installation of permanently installed gas detector.

J. M. Kling

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