INTERNATIONAL MARITIME ORGANIZATION

E

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Agenda item 9

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Resolution A.1045(27)

Adopted on 30 November 2011
(Agenda item 9)

PILOT TRANSFER ARRANGEMENTS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

NOTING the provisions of regulation V/23 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its eighty-seventh session,

1. ADOPTS the "Recommendation on Pilot Transfer Arrangements", as set out in the Annex to the present resolution;

2. INVITES Governments to draw the attention of all concerned to this recommendation;

3. FURTHER INVITES Governments to ensure that mechanical pilot hoists are not used;

4. REQUESTS Governments to ensure that pilot ladders and their arrangements, use and maintenance conform to standards not inferior to those set out in the annex to the present resolution;

5. REVOKES resolution A.889(21).

Annex

RECOMMENDATION ON PILOT TRANSFER ARRANGEMENTS

1 GENERAL

Ship designers are encouraged to consider all aspects of pilot transfer arrangements at an early stage in design. Equipment designers and manufacturers are similarly encouraged, particularly with respect to the provisions of paragraphs 2.1.2, 3.1 and 3.3.

2 PILOT LADDERS

A pilot ladder should be certified by the manufacturer as complying with this section or with the requirements of an international standard acceptable to the Organization.[1]

2.1 Position and construction

2.1.1 The securing strong points, shackles and securing ropes should be at least as strong as the side ropes specified in section 2.2 below.

2.1.2 The steps of the pilot ladders should comply with the following requirements:

.1 if made of hardwood, they should be made in one piece, free of knots;

.2 if made of material other than hardwood, they should be of equivalent strength, stiffness and durability to the satisfaction of the Administration;

.3 the four lowest steps may be of rubber of sufficient strength and stiffness or other material to the satisfaction of the Administration;

.4 they should have an efficient non-slip surface;

.5 they should be not less than 400 mm between the side ropes, 115 mm wide and 25 mm in depth, excluding any non-slip device or grooving;

.6 they should be equally spaced not less than 310 mm or more than 350 mm apart; and

.7 they should be secured in such a manner that each will remain horizontal.

2.1.3 No pilot ladder should have more than two replacement steps which are secured in position by a method different from that used in the original construction of the ladder, and any steps so secured should be replaced as soon as reasonably practicable by steps secured in position by the method used in the original construction of the pilot ladder. When any replacement step is secured to the side ropes of the pilot ladder by means of grooves in the sides of the step, such grooves should be in the longer sides of the step.

[1] Refer to the recommendations by the International Organization for Standardization, in particular publication ISO 799:2004, *Ships and marine technology – Pilot ladders*.

2.1.4 Pilot ladders with more than five steps should have spreader steps not less than 1.8 m long provided at such intervals as will prevent the pilot ladder from twisting. The lowest spreader step should be the fifth step from the bottom of the ladder and the interval between any spreader step and the next should not exceed nine steps.

2.1.5 When a retrieval line is considered necessary to ensure the safe rigging of a pilot ladder, the line should be fastened at or above the last spreader step and should lead forward. The retrieval line should not hinder the pilot nor obstruct the safe approach of the pilot boat.

2.1.6 A permanent marking should be provided at regular intervals (e.g. 1 m) throughout the length of the ladder consistent with ladder design, use and maintenance in order to facilitate the rigging of the ladder to the required height.

2.2 Ropes

2.2.1 The side ropes of the pilot ladder should consist of two uncovered ropes not less than 18 mm in diameter on each side and should be continuous, with no joints and have a breaking strength of at least 24 Kilo Newtons per side rope. The two side ropes should each consist of one continuous length of rope, the midpoint half-length being located on a thimble large enough to accommodate at least two passes of side rope.[2]

2.2.2 Side ropes should be made of manila or other material of equivalent strength, durability, elongation characteristics and grip which has been protected against actinic degradation and is satisfactory to the Administration.

2.2.3 Each pair of side ropes should be secured together both above and below each step with a mechanical clamping device properly designed for this purpose, or seizing method with step fixtures (chocks or widgets), which holds each step level when the ladder is hanging freely. The preferred method is seizing.[2]

3 ACCOMMODATION LADDERS USED IN CONJUNCTION WITH PILOT LADDERS

3.1 Arrangements which may be more suitable for special types of ships may be accepted, provided that they are equally safe.

3.2 The length of the accommodation ladder should be sufficient to ensure that its angle of slope does not exceed 45°. In ships with large draft ranges, several pilot ladder hanging positions may be provided, resulting in lesser angles of slope. The accommodation ladder should be at least 600 mm in width.

3.3 The lower platform of the accommodation ladder should be in a horizontal position and secured to the ship's side when in use. The lower platform should be a minimum of 5 m above sea level.

3.4 Intermediate platforms, if fitted, should be self-levelling. Treads and steps of the accommodation ladder should be so designed that an adequate and safe foothold is given at the operative angles.

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[2] Refer to the recommendations by the International Organization for Standardization, in particular publication ISO 799:2004, *Ships and marine technology — Pilot ladders*, part 4.3a and part 3, paragraph 3.2.1.

3.5 The ladder and platform should be equipped on both sides with stanchions and rigid handrails, but if handropes are used they should be tight and properly secured. The vertical space between the handrail or handrope and the stringers of the ladder should be securely fenced.

3.6 The pilot ladder should be rigged immediately adjacent to the lower platform of the accommodation ladder and the upper end should extend at least 2 m above the lower platform. The horizontal distance between the pilot ladder and the lower platform should be between 0.1 and 0.2 m.

3.7 If a trapdoor is fitted in the lower platform to allow access from and to the pilot ladder, the aperture should not be less than 750 mm x 750 mm. The trapdoor should open upwards and be secured either flat on the embarkation platform or against the rails at the aft end or outboard side of the platform and should not form part of the handholds. In this case the after part of the lower platform should also be fenced as specified in paragraph 3.5 above, and the pilot ladder should extend above the lower platform to the height of the handrail and remain in alignment with and against the ship's side.

3.8 Accommodation ladders, together with any suspension arrangements or attachments fitted and intended for use in accordance with this recommendation, should be to the satisfaction of the Administration[3].

4 MECHANICAL PILOT HOISTS

The use of mechanical pilot hoists is prohibited by SOLAS regulation V/23.

5 ACCESS TO DECK

Means should be provided to ensure safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the head of the pilot ladder, or of any accommodation ladder, and the ship's deck; such access should be gained directly by a platform securely guarded by handrails. Where such passage is by means of:

.1 a gateway in the rails or bulwark, adequate handholds should be provided at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. Each handhold should be rigidly secured to the ship's structure at or near its base and also at a higher point, not less than 32 mm in diameter and extend not less than 1.2 m above the top of the bulwarks. Stanchions or handrails should not be attached to the bulwark ladder;

.2 a bulwark ladder should be securely attached to the ship to prevent overturning. Two handhold stanchions should be fitted at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. Each stanchion should be rigidly secured to the ship's structure at or near its base and also at a higher point, should be not less than 32 mm in diameter and should extend not less than 1.2 m above the top of the bulwarks. Stanchions or handrails should not be attached to the bulwark ladder.

[3] Refer to SOLAS regulation II-1/3-9 concerning accommodation ladders.

6 SAFE APPROACH OF THE PILOT BOAT

Where rubbing bands or other constructional features might prevent the safe approach of a pilot boat, these should be cut back to provide at least 6 metres of unobstructed ship's side. Specialized offshore ships less than 90 m or other similar ships less than 90 m for which a 6 m gap in the rubbing bands would not be practicable, as determined by the Administration, do not have to comply with this requirement. In this case, other appropriate measures should be taken to ensure that persons are able to embark and disembark safely.

7 INSTALLATION OF PILOT LADDER WINCH REELS

7.1 Point of access

7.1.1 When a pilot ladder winch reel is provided it should be situated at a position which will ensure persons embarking on, or disembarking from, the ship between the pilot ladder and the point of access to the ship, have safe, convenient and unobstructed access to or egress from the ship.

7.1.2 The point of access to or egress from the ship may be by a ship's side opening, an accommodation ladder when a combination arrangement is provided, or a single section of pilot ladder.

7.1.3 The access position and adjacent area should be clear of obstructions, including the pilot ladder winch reel, for distances as follows:

.1 a distance of 915 mm in width measured longitudinally;

.2 a distance of 915 mm in depth, measured from the ship's side plating inwards; and

.3 a distance of 2,200 mm in height, measured vertically from the access deck.

7.2 Physical positioning of pilot ladder winch reels

7.2.1 Pilot ladder winch reels are generally fitted on the ship's upper (main) deck or at a ship's side opening which may include side doors, gangway locations or bunkering points. Winch reels fitted on the upper deck may result in very long pilot ladders.

7.2.2 Pilot ladder winch reels which are fitted on a ship's upper deck for the purpose of providing a pilot ladder which services a ship side opening below the upper deck or, alternatively, an accommodation ladder when a combination arrangement is provided should:

.1 be situated at a location on the upper deck from which the pilot ladder is able to be suspended vertically, in a straight line, to a point adjacent to the ship side opening access point or the lower platform of the accommodation ladder;

.2 be situated at a location which provides a safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the pilot ladder and the place of access on the ship;

.3 be situated so that safe and convenient access is provided between the pilot ladder and the ship's side opening by means of a platform which should extend outboard from the ship's side for a minimum distance of 750 mm, with a longitudinal length of a minimum of 750 mm. The platform should be securely guarded by handrails;

.4 safely secure the pilot ladder and manropes to the ship's side at a point on the ships side at a distance of 1,500 mm above the platform access point to the ship side opening or the lower platform of the accommodation ladder; and

.5 if a combination arrangement is provided, have the accommodation ladder secured to the ship's side at or close to the lower platform so as to ensure that the accommodation ladder rests firmly against the ship's side.

7.2.3 Pilot ladder winch reels fitted inside a ship's side opening should:

.1 be situated at a position which provides a safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the pilot ladder and the place of access on the ship;

.2 be situated at a position which provides an unobstructed clear area with a minimum length of 915 mm and minimum width of 915 mm and minimum vertical height of 2,200 mm; and

.3 if situated at a position which necessitates a section of the pilot ladder to be partially secured in a horizontal position on the deck so as to provide a clear access as described above, then allowance should be made so that this section of the pilot ladder may be covered with a rigid platform for a minimum distance of 915 mm measured horizontally from the ship's side inwards.

7.3 Handrails and handgrips

Handrails and handgrips should be provided in accordance with section 5 to assist the pilot to safely transfer between the pilot ladder and the ship, except as noted in paragraph 7.2.2.3 for arrangements with platforms extending outboard. The horizontal distance between the handrails and/or the handgrips should be not less than 0.7 m or more than 0.8 m apart.

7.4 Securing of the pilot ladder

Where the pilot ladder is stowed on a pilot ladder winch reel which is located either within the ship's side opening or on the upper deck:

.1 the pilot ladder winch reel should not be relied upon to support the pilot ladder when the pilot ladder is in use;

.2 the pilot ladder should be secured to a strong point, independent of the pilot ladder winch reel; and

.3 the pilot ladder should be secured at deck level inside the ship side opening or, when located on the ship's upper deck, at a distance of not less than 915 mm measured horizontally from the ship's side inwards.

7.5 Mechanical securing of pilot ladder winch reel

7.5.1 All pilot ladder winch reels should have means of preventing the winch reel from being accidentally operated as a result of mechanical failure or human error.

7.5.2 Pilot ladder winch reels may be manually operated or, alternatively, powered by either electrical, hydraulic or pneumatic means.

7.5.3 Manually operated pilot ladder winch reels should be provided with a brake or other suitable arrangements to control the lowering of the pilot ladder and to lock the winch reel in position once the pilot ladder is lowered into position.

7.5.4 Electrical, hydraulic or pneumatically driven pilot ladder winch reels should be fitted with safety devices which are capable of cutting off the power supply to the winch reel and thus locking the winch reel in position.

7.5.5 Powered winch reels should have clearly marked control levers or handles which may be locked in a neutral position.

7.5.6 A mechanical device or locking pin should also be utilized to lock powered winch reels.

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PRINCIPLES OF MINIMUM SAFE MANNING

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO Article 28(a) of that Convention which requires the Maritime Safety Committee to consider, inter alia, the manning of seagoing ships from a safety standpoint,

NOTING that safe manning is a function of the number of qualified and experienced seafarers necessary for the safety and security of the ship, crew, passengers, cargo and property and for the protection of the marine environment,

RECOGNIZING the importance of the requirements of the pertinent IMO instruments as well as those adopted by ILO, ITU and WHO relevant to maritime safety and protection of the marine environment,

MINDFUL of the requirements of SOLAS regulation V/14, as amended, with respect to the issue of an appropriate safe manning document or equivalent as evidence of minimum safe manning,

ALSO MINDFUL of the requirements of SOLAS chapter XI-2 and the International Ship and Port Facility Security (ISPS) Code relating to the security of ships and port facilities,

BEING AWARE that the ability of seafarers to maintain observance of these requirements is dependent upon their continued efficiency through conditions relating to training, hours of work and rest, occupational safety, health and hygiene and the proper provision of food,

BELIEVING that international acceptance of broad principles as a framework for administrations to determine the safe manning of ships would materially enhance maritime safety, security and protection of the marine environment,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its eighty-eighth session,

1. ADOPTS the Principles of Minimum Safe Manning, consisting of *Guidelines for the application of principles of safe manning*; *Guidelines for determination of minimum safe*

manning; *Responsibilities in the application of principles of minimum safe manning*; *Guidance on contents and model form of minimum safe manning document* and *Framework for determining minimum safe manning*, as set out in Annexes 1, 2, 3, 4 and 5, respectively, to the present resolution;

2. RECOMMENDS that Governments, in establishing the minimum safe manning levels for ships flying their country's flag, observe the principles set out in Annex 1 and the procedures set out in Annex 5 and take into account the guidelines set out in Annexes 2 and 3;

3. URGES Governments to ensure that minimum safe manning documents contain, as a minimum, the information set out in Annex 4;

4. URGES FURTHER Governments, when exercising port State control functions under international conventions in force with respect to foreign ships visiting their ports, to regard compliance with minimum safe manning documents as evidence that such ships are safely manned;

5. REQUESTS the Maritime Safety Committee to keep this resolution under review and to amend its provisions as necessary;

6. REVOKES resolutions A.890(21) and A.955(23).

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ANNEX 1

GUIDELINES FOR THE APPLICATION OF PRINCIPLES OF MINIMUM SAFE MANNING

1 Introduction

1.1 These Guidelines should be used in applying the principles of minimum safe manning set out in section 3 to ensure the safe operation of ships to which article III of the 1978 STCW Convention, as amended, applies, and the security of ships to which chapter XI-2 of the 1974 SOLAS Convention, as amended, applies, and for the protection of the marine environment.

1.2 The Administration may retain or adopt arrangements which differ from the provisions herein recommended and which are especially adapted to technical developments and to special types of ships and trades. However, at all times the Administration should satisfy itself that the detailed manning arrangements ensure a degree of safety at least equivalent to that established by these Guidelines.

2 Objectives

The objectives of these Guidelines are to ensure that a ship is sufficiently, effectively and efficiently manned to provide safety and security of the ship, safe navigation and operations at sea, safe operations in port, prevention of human injury or loss of life, the avoidance of damage to the marine environment and to property, and to ensure the welfare and health of seafarers through the avoidance of fatigue. These objectives can be achieved through the following:

.1 adoption of a goal-based approach;

.2 standard procedures for effective implementation; and

.3 effective enforcement.

3 Principles of minimum safe manning

3.1 The following principles should be observed in determining the minimum safe manning of a ship:

.1 the capability to:

.1 maintain safe navigational, port, engineering and radio watches in accordance with regulation VIII/2 of the 1978 STCW Convention, as amended, and also maintain general surveillance of the ship;

.2 moor and unmoor the ship safely;

.3 manage the safety functions of the ship when employed in a stationary or near-stationary mode at sea;

.4 perform operations, as appropriate, for the prevention of damage to the marine environment;

.5 maintain the safety arrangements and the cleanliness of all accessible spaces to minimize the risk of fire;

.6 provide for medical care on board ship;

.7 ensure safe carriage of cargo during transit;

.8 inspect and maintain, as appropriate, the structural integrity of the ship; and

.9 operate in accordance with the approved Ship's Security Plan; and

.2 the ability to:

.1 operate all watertight closing arrangements and maintain them in effective condition, and also deploy a competent damage control party;

.2 operate all onboard fire-fighting and emergency equipment and life-saving appliances, carry out such maintenance of this equipment as is required to be done at sea, and muster and disembark all persons on board; and

.3 operate the main propulsion and auxiliary machinery including pollution prevention equipment and maintain them in a safe condition to enable the ship to overcome the foreseeable perils of the voyage.

3.2 The following onboard functions, when applicable, should also be taken into account:

.1 ongoing training requirements for all personnel, including the operation and use of fire-fighting and emergency equipment, life-saving appliances and watertight closing arrangements;

.2 specialized training requirements for particular types of ships and in instances where crew members are engaged in shipboard tasks that cross departmental boundaries;

.3 provision of proper food and drinking water;

.4 need to undertake emergency duties and responsibilities; and

.5 need to provide training opportunities for entrant seafarers to allow them to gain the training and experience needed.

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ANNEX 2

GUIDELINES FOR DETERMINATION OF MINIMUM SAFE MANNING

1.1 The minimum safe manning of a ship should be established taking into account all relevant factors, including the following:

.1 size and type of ship;

.2 number, size and type of main propulsion units and auxiliaries;

.3 level of ship automation;

.4 construction and equipment of the ship;

.5 method of maintenance used;

.6 cargo to be carried;

.7 frequency of port calls, length and nature of voyages to be undertaken;

.8 trading area(s), waters and operations in which the ship is involved;

.9 extent to which training activities are conducted on board;

.10 degree of shoreside support provided to the ship by the company;

.11 applicable work hour limits and/or rest requirements; and

.12 the provisions of the approved Ship's Security Plan.

1.2 The determination of the minimum safe manning of a ship should be based on performance of the functions at the appropriate level(s) of responsibility, as specified in the STCW Code, which include the following:

.1 navigation, comprising the tasks, duties and responsibilities required to:

.1 plan and conduct safe navigation;

.2 maintain a safe navigational watch in accordance with the requirements of the STCW Code;

.3 manoeuvre and handle the ship in all conditions; and

.4 moor and unmoor the ship safely;

.2 cargo handling and stowage, comprising the tasks, duties and responsibilities required to plan, monitor and ensure safe loading, stowage, securing, care during the voyage and unloading of cargo to be carried on the ship;

.3 operation of the ship and care for persons on board, comprising the tasks, duties and responsibilities required to:

.1 maintain the safety and security of all persons on board and keep life-saving, fire-fighting and other safety systems in operational condition;

.2 operate and maintain all watertight closing arrangements;

.3 perform operations, as appropriate, to muster and disembark all persons on board;

.4 perform operations, as appropriate, to ensure protection of the marine environment;

.5 provide for medical care on board the ship; and

.6 undertake administrative tasks required for the safe operation and the security of the ship;

.4 marine engineering, comprising the tasks, duties and responsibilities required to:

.1 operate and monitor the ship's main propulsion and auxiliary machinery and evaluate the performance of such machinery;

.2 maintain a safe engineering watch in accordance with the requirements of the STCW Code;

.3 manage and perform fuel and ballast operations; and

.4 maintain safety of the ship's engine equipment, systems and services;

.5 electrical, electronic and control engineering, comprising the tasks, duties and responsibilities required to:

.1 operate the ship's electrical and electronic equipment; and

.2 maintain the safety of the ship's electrical and electronic systems;

.6 radiocommunications, comprising the tasks, duties and responsibilities required to:

.1 transmit and receive information using the radio equipment of the ship;

.2 maintain a safe radio watch in accordance with the requirements of the ITU Radio Regulations and the 1974 SOLAS Convention, as amended; and

.3 provide radio services in emergencies; and

.7 maintenance and repair, comprising the tasks, duties and responsibilities required to carry out maintenance and repair work to the ship and its machinery, equipment and systems, as appropriate to the method of maintenance and repair used.

1.3 In addition to the factors and functions in paragraphs 1.1 and 1.2, the determination of the minimum safe manning should also take into account:

.1 the management of the safety, security and protection of the environment functions of a ship at sea when not under way;

.2 except in ships of limited size, the provision of qualified deck officers to ensure that it is not necessary for the master to keep regular watches by adopting a three-watch system;

.3 except in ships of limited propulsion power or operating under provisions for unattended machinery spaces, the provision of qualified engineer officers to ensure that it is not necessary for the chief engineer to keep regular watches by adopting a three-watch system;

.4 the maintenance of applicable occupational health and hygiene standards on board; and

.5 the provision of proper food and drinking water for all persons on board, as required.

1.4 In determining the minimum safe manning of a ship, consideration should also be given to:

.1 the number of qualified and other personnel required to meet peak workload situations and conditions, with due regard to the number of hours of shipboard duties and rest periods assigned to seafarers; and

.2 the capability of the master and the ship's complement to coordinate the activities necessary for the safe operation and for the security of the ship and for the protection of the marine environment.

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ANNEX 3

RESPONSIBILITIES IN THE APPLICATION OF PRINCIPLES OF MINIMUM SAFE MANNING

1 Responsibilities of companies

1.1 The Administration may require the company responsible for the operation of the ship to prepare and submit its proposal for the minimum safe manning of a ship in accordance with a form specified by the Administration.

1.2 In preparing a proposal for the minimum safe manning of a ship, the company should apply the principles, recommendations and guidelines contained in this resolution and should be required to:

.1 make an assessment of the tasks, duties and responsibilities of the ship's complement required for its safe operation, for its security, for protection of the marine environment, and for dealing with emergency situations;

.2 ensure that fitness for duty provisions and record of hours are implemented;

.3 make an assessment of numbers and grades/capacities in the ship's complement required for its safe operation, for its security, for protection of the marine environment, and for dealing with emergency situations;

.4 prepare and submit to the Administration a proposal for the minimum safe manning based upon the assessment of the numbers and grades/capacities in the ship's complement required for its safe operation, for its security and for protection of the marine environment, justifying the proposal by explaining how the proposed ship's complement will deal with emergency situations, including the evacuation of passengers, where necessary;

.5 ensure that the minimum safe manning is adequate at all times and in all respects, including meeting peak workload situations, conditions and requirements, and is in accordance with the principles, recommendations and guidelines contained in this resolution; and

.6 prepare and submit to the Administration a new proposal for the minimum safe manning of a ship in the case of changes in trading area(s), construction, machinery, equipment, operation and maintenance or management of the ship, which may affect the safe manning.

2 Approval by the Administration

2.1 A proposal for the minimum safe manning of a ship submitted by a company to the Administration should be evaluated by the Administration to ensure that:

.1 the proposed ship's complement contains the number and grades/capacities of personnel to fulfil the tasks, duties and responsibilities required for the safe operation of the ship, for its security, for protection of the marine environment and for dealing with emergency situations; and

.2 the master, officers and other members of the ship's complement are not required to work more hours than is safe in relation to the performance of their duties and the safety of the ship and that the requirements for work and rest hours, in accordance with applicable national regulations, can be complied with.

2.2 In applying such principles, Administrations should take proper account of existing IMO, ILO, ITU and WHO instruments in force which deal with:

.1 watchkeeping;
.2 hours of work or rest;
.3 safety management;
.4 certification of seafarers;
.5 training of seafarers;
.6 occupational safety, health and hygiene;
.7 crew accommodation and food;
.8 security; and
.9 radiocommunications.

2.3 The Administration should require a company to amend a proposal for the minimum safe manning of a ship if, after evaluation of the original proposal submitted by the company, the Administration is unable to approve the proposed composition of the ship's complement.

2.4 The Administration should only approve a proposal for the minimum safe manning of a ship and issue accordingly a minimum safe manning document if it is fully satisfied that the proposed ship's complement is established in accordance with the principles, recommendations and guidelines contained in this resolution, and is adequate in all respects for the safe operation and the security of the ship and for the protection of the marine environment.

2.5 The Administration may withdraw the minimum safe manning document of a ship if the company fails to submit a new proposal for the ship's minimum safe manning when changes in trading area(s), construction, machinery, equipment or operation and maintenance of the ship have taken place which affect the minimum safe manning.

2.6 The Administration should review and may withdraw, as appropriate, the minimum safe manning document of a ship which persistently fails to be in compliance with rest hours requirements.

2.7 The Administration should consider the circumstances very carefully before allowing a minimum safe manning document to contain provisions for less than three qualified officers in charge of a navigational watch, while taking into account all the principles for establishing safe manning.

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ANNEX 4

GUIDANCE ON CONTENTS AND MODEL FORM OF MINIMUM SAFE MANNING DOCUMENT

1 The following information should be included in the minimum safe manning document issued by the Administration specifying the minimum safe manning:

.1 a clear statement of the ship's name, port of registry, distinctive number or letters, IMO number, gross tonnage, main propulsion power, type and trading area, whether or not the machinery space is unattended and company as defined in the ISM Code;

.2 a table showing the number and grades/capacities of the personnel required to be carried, together with any special conditions or other remarks;

.3 a formal statement by the Administration that, in accordance with the principles and guidelines set out in Annexes 1 and 2, the ship named in the document is considered to be safely manned if, whenever it proceeds to sea, it carries not less than the number and grades/capacities of personnel shown in the document, subject to any special conditions stated therein;

.4 a statement as to any limitations on the validity of the document by reference to particulars of the individual ship and the nature of service upon which it is engaged; and

.5 the date of issue and any expiry date of the document together with a signature for and the seal of the Administration.

2 It is recommended that the minimum safe manning document be drawn up in the form corresponding to the model given in the appendix to this Annex. If the language used is not English, the information given should include a translation into English.

APPENDIX

MODEL FORM OF MINIMUM SAFE MANNING DOCUMENT

MINIMUM SAFE MANNING DOCUMENT

(Official seal) (State)

Issued under the provisions of regulation V/14 of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(Name of the State)

by

(Administration)

Particulars of ship*
Name of ship .....
Distinctive number or letters .....
IMO number .....
Port of registry .....
Gross tonnage:
National .....
International Tonnage Convention, 1969 .....
Main propulsion power (kW) .....
Type of ship .....

Periodically unattended machinery space yes/no

Operating Company
.....

* Alternatively the particulars of the ship may be placed horizontally.

Trading area[**]

The ship named in this document is considered to be safely manned if, when it proceeds to sea, it carries not less than the number and grades/capacities of personnel specified in the table(s) below.

Grade/capacity	Certificate (STCW regulation)	Number of persons

Special requirements or conditions, if any:

Issued at ..... on the ..... day of .....
(month and year)

Date of expiry (if any) .....

(Seal of the Administration)

.....
(Signature for and on behalf of the Administration)

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[**] Where a trading area other than unlimited is shown, a clear description or map of the trading area should be included in the document.

ANNEX 5

FRAMEWORK FOR DETERMINING MINIMUM SAFE MANNING

PREAMBLE

This framework has been developed to assist Administrations and companies in determining minimum safe manning.

STEPS FOR DETERMINING MINIMUM SAFE MANNING

1 Submission from the company

1.1 Submission of a proposal from the company for minimum safe manning defining the nature of the operation of the ship.

1.2 Submission needs to take into account the requirements of Annexes 2 and 3 in the context of the management of the safety, security and protection of the marine environment functions of a ship.

1.3 The process outlined below should enable companies to achieve greater depth and insight into the interdependencies and interactions of operational elements that influence the amounts of crew member workload and, ultimately, the proposed minimum safe manning level.

Operational functions

1.4 Beginning this process requires the breakdown of the operational elements into functions. Annex 2 provides guidance on the relevant functions that need to be considered, however, this list is not exclusive. Each function can then be broken down into a task list that includes the attributes listed below.

.1 **Duration**: What is the time required to execute each task? Time in this case is measurement of total man hours versus the actual duration taken for task completion, since some tasks can be done in a shorter time by using multiple individuals.

.2 **Frequency**: How often is the task performed? This can be categorized using some form of standard interval (i.e. hourly, daily, weekly, etc.).

.3 **Competence**: What are the skills, training and qualifications needed to consistently perform the task properly?

.4 **Importance**: What is the risk or consequence associated with improper performance?

Operational factors

1.5 Once a function is broken down into specific tasks and their attributes, it is then necessary to determine the specific personnel qualifications, operational policy and procedures, and infrastructure/technology necessary to perform each task. It is important to recognize that these elements may increase or decrease manning levels depending on

availability and appropriate procedures and of specific capability enabling technology/automation.

Task capability

1.6 The information generated in defining the operational factors and functions should be used to determine how many tasks that can be executed by an individual under the possible range of operational conditions. Critical considerations, while conducting this step, are human element limitations and relevant standards and regulations. These include sleep and circadian requirements, physical and mental workload associated with each task, and exposure limits to shipboard environmental conditions such as noise, temperature and toxins.

Workload assessments

1.7 Once steps relating to operational functions, operational factors and task capability have been conducted, the information is then used to determine whether workload will not exceed the minimum hours of rest and/or work as provided in relevant national and international regulations. Considerations, while performing this step, include work period lengths, work schedule designs and whether a single crew member can execute the tasks set in a specific work period or work period(s) per work day.

2 Evaluation by the Administration

2.1 The Administration should evaluate/approve the submission of the company against relevant national and international regulatory requirements and guidelines.

2.2 Having evaluated and approved the proposal the Administration should issue a minimum safe manning document including special requirements and conditions.

3 Maintenance of minimum safe manning document

A company should advise the Administration of any changes that would affect the minimum safe manning document, and in such circumstances prepare and submit a new proposal taking into account Annex 3.

4 Compliance monitoring

The Administration should periodically review the minimum safe manning arrangements.

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INTERNATIONAL MARITIME ORGANIZATION

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ASSEMBLY
27th session
Agenda item 9

A 27/Res.1050
20 December 2011
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Resolution A.1050(27)

Adopted on 30 November 2011
(Agenda item 9)

REVISED RECOMMENDATIONS FOR ENTERING ENCLOSED SPACES ABOARD SHIPS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECALLING ALSO its adoption, by resolution A.864(20), of the *Recommendations for entering enclosed spaces aboard ships*, incorporating therein recommendations for entering cargo spaces, tanks, pump-rooms, fuel tanks, cofferdams, duct keels, ballast tanks and similar enclosed spaces,

BEING CONCERNED about the continued loss of life resulting from personnel entering shipboard spaces in which the atmosphere is oxygen-depleted, oxygen-enriched, toxic or flammable,

BEING AWARE of the work undertaken in this regard by the International Labour Organization, Governments and segments of the private sector,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its eighty-ninth session,

1. ADOPTS the *Revised Recommendations for entering enclosed spaces aboard ships*, as set out in the Annex to the present resolution;

2. INVITES Governments to bring the annexed revised recommendations to the attention of shipowners, ship operators and seafarers, urging them to apply them, as appropriate, to all ships;

3. REQUESTS the Maritime Safety Committee to keep the revised recommendations under review and amend them as necessary;

4. REVOKES resolution A.864(20).

***

ANNEX

REVISED RECOMMENDATIONS FOR ENTERING ENCLOSED SPACES ABOARD SHIPS

PREAMBLE

The objective of these recommendations is to encourage the adoption of safety procedures aimed at preventing casualties to ships' personnel entering enclosed spaces where there may be an oxygen-deficient, oxygen-enriched, flammable and/or toxic atmosphere.

Investigations into the circumstances of casualties that have occurred have shown that accidents on board ships are in most cases caused by an insufficient knowledge of, or disregard for, the need to take precautions rather than a lack of guidance.

The following practical recommendations apply to all types of ships and provide guidance to ship operators and seafarers. It should be noted that on ships where entry into enclosed spaces may be infrequent, for example, on certain passenger ships or small general cargo ships, the dangers may be less apparent, and accordingly there may be a need for increased vigilance.

The recommendations are intended to complement national laws or regulations, accepted standards or particular procedures which may exist for specific trades, ships or types of shipping operations.

It may be impracticable to apply some recommendations to particular situations. In such cases, every endeavour should be made to observe the intent of the recommendations, and attention should be paid to the risks that may be involved.

1 INTRODUCTION

The atmosphere in any enclosed space may be oxygen-deficient or oxygen-enriched and/or contain flammable and/or toxic gases or vapours. Such unsafe atmospheres could also subsequently occur in a space previously found to be safe. Unsafe atmospheres may also be present in spaces adjacent to those spaces where a hazard is known to be present.

2 DEFINITIONS

2.1 *Enclosed space* means a space which has any of the following characteristics:

.1 limited openings for entry and exit;

.2 inadequate ventilation; and

.3 is not designed for continuous worker occupancy,

and includes, but is not limited to, cargo spaces, double bottoms, fuel tanks, ballast tanks, cargo pump-rooms, cargo compressor rooms, cofferdams, chain lockers, void spaces, duct keels, inter-barrier spaces, boilers, engine crankcases, engine scavenge air receivers, sewage tanks, and adjacent connected spaces. This list is not exhaustive and a list should be produced on a ship-by-ship basis to identify enclosed spaces.

2.2 *Adjacent connected space* means a normally unventilated space which is not used for cargo but which may share the same atmospheric characteristics with the enclosed space such as, but not limited to, a cargo space accessway.

2.3 *Competent person* means a person with sufficient theoretical knowledge and practical experience to make an informed assessment of the likelihood of a dangerous atmosphere being present or subsequently arising in the space.

2.4 *Responsible person* means a person authorized to permit entry into an enclosed space and having sufficient knowledge of the procedures to be established and complied with on board, in order to ensure that the space is safe for entry.

2.5 *Attendant* means a person who is suitably trained within the safety management system, maintains a watch over those entering the enclosed space, maintains communications with those inside the space and initiates the emergency procedures in the event of an incident occurring.

3 SAFETY MANAGEMENT FOR ENTRY INTO ENCLOSED SPACES

3.1 The safety strategy to be adopted in order to prevent accidents on entry to enclosed spaces should be approached in a comprehensive manner by the company.

3.2 The company should ensure that the procedures for entering enclosed spaces are included among the key shipboard operations concerning the safety of the personnel and the ship, in accordance with paragraph 7 of the International Safety Management (ISM) Code.

3.3 The company should elaborate a procedural implementation scheme which provides for training in the use of atmospheric testing equipment in such spaces and a schedule of regular onboard drills for crews.

3.3.1 Competent and responsible persons should be trained in enclosed space hazard recognition, evaluation, measurement, control and elimination, using standards acceptable to the Administration.

3.3.2 Crew members should be trained, as appropriate, in enclosed space safety, including familiarization with onboard procedures for recognizing, evaluating and controlling hazards associated with entry into enclosed spaces.

3.4 Internal audits by the company and external audits by the Administration of the ship's safety management system should verify that the established procedures are complied with in practice and are consistent with the safety strategy referred to in paragraph 3.1.

4 ASSESSMENT OF RISK

4.1 The company should ensure that a risk assessment is conducted to identify all enclosed spaces on board the ship. This risk assessment should be periodically revisited to ensure its continued validity.

4.2 In order to ensure safety, a competent person should always make a preliminary assessment of any potential hazards in the space to be entered, taking into account previous cargo carried, ventilation of the space, coating of the space and other relevant factors. The competent person's preliminary assessment should determine the potential for the presence of an oxygen-deficient, oxygen-enriched, flammable or toxic atmosphere. The competent person should bear in mind that the ventilation procedures for an adjacent

connected space may be different from the procedures for the ventilation of the enclosed space itself.

4.3 The procedures to be followed for testing the atmosphere in the space and for entry should be decided on the basis of the preliminary assessment. These will depend on whether the preliminary assessment shows that:

.1 there is minimal risk to the health or life of personnel entering the space; or

.2 there is no immediate risk to health or life but a risk could arise during the course of work in the space; or

.3 a risk to health or life is identified.

4.4 Where the preliminary assessment indicates minimal risk to health or life or potential for a risk to arise during the course of work in the space, the precautions described in sections 5, 6, 7 and 8 should be followed, as appropriate.

4.5 Where the preliminary assessment identifies a risk to life or health, if entry is to be made, the additional precautions specified in section 9 should also be followed.

4.6 Throughout the assessment process, there should be an assumption that the space to be entered is considered to be hazardous until positively proved to be safe for entry.

5 AUTHORIZATION OF ENTRY

5.1 No person should open or enter an enclosed space unless authorized by the master or the nominated responsible person and unless the appropriate safety procedures laid down for the particular ship have been followed.

5.2 Entry into enclosed spaces should be planned and the use of an entry permit system, which may include the use of a checklist, is recommended. An Enclosed Space Entry Permit should be issued by the master or the nominated responsible person, and completed by the personnel who enter the space prior to entry. An example of the Enclosed Space Entry Permit is provided in the appendix.

6 GENERAL PRECAUTIONS

6.1 Entry doors or hatches leading to enclosed spaces should at all times be secured against entry, when entry is not required.

6.2 A door or hatch cover which is opened to provide natural ventilation of an enclosed space may, wrongly, be taken to be an indication of a safe atmosphere and therefore, an attendant may be stationed at the entrance or the use of a mechanical barrier, such as a rope or chain positioned across the opening with an attached warning sign, could prevent such accidental entry.

6.3 The master or the responsible person should determine that it is safe to enter an enclosed space by ensuring that:

.1 potential hazards have been identified in the assessment and as far as possible isolated or made safe;

.2 the space has been thoroughly ventilated by natural or mechanical means to remove any toxic or flammable gases and to ensure an adequate level of oxygen throughout the space;

.3 the atmosphere of the space has been tested as appropriate with properly calibrated instruments to ascertain acceptable levels of oxygen and acceptable levels of flammable or toxic vapours;

.4 the space has been secured for entry and properly illuminated;

.5 a suitable system of communication between all parties for use during entry has been agreed and tested;

.6 an attendant has been instructed to remain at the entrance to the space whilst it is occupied;

.7 rescue and resuscitation equipment has been positioned ready for use at the entrance to the space and rescue arrangements have been agreed;

.8 personnel are properly clothed and equipped for the entry and subsequent tasks; and

.9 a permit has been issued, authorizing entry.

The precautions in subparagraphs .6 and .7 may not apply to every situation described in this section. The person authorizing entry should determine whether an attendant and the positioning of rescue equipment at the entrance to the space are necessary.

6.4 Only trained personnel should be assigned the duties of entering, functioning as attendants or functioning as members of rescue teams. Ships' crews with rescue and first aid duties should be drilled periodically in rescue and first aid procedures. Training should include as a minimum:

.1 identification of the hazards likely to be faced during entry into enclosed spaces;

.2 recognition of the signs of adverse health effects caused by exposure to hazards during entry; and

.3 knowledge of personal protective equipment required for entry.

6.5 All equipment used in connection with entry should be in good working condition and inspected prior to use.

7 TESTING THE ATMOSPHERE

7.1 Appropriate testing of the atmosphere of a space should be carried out with properly calibrated equipment by persons trained in the use of the equipment. The manufacturers' instructions should be strictly followed. Testing of the space should be carried out before any person enters the space and at regular intervals thereafter until all work is completed. Where appropriate, the testing of the space should be carried out at as many different levels as is necessary to obtain a representative sample of the atmosphere in the space. In some cases it may be difficult to test the atmosphere throughout the enclosed space without entering the space (e.g. the bottom landing of a stairway) and this should be taken into account when

assessing the risk to personnel entering the space. The use of flexible hoses or fixed sampling lines, which reach remote areas within the enclosed space, may allow for safe testing without having to enter the space.

7.2 For entry purposes, steady readings of all of the following should be obtained:

.1 21% oxygen by volume by oxygen content meter;

Note: National requirements may determine the safe atmosphere range.

.2 not more than 1% of lower flammable limit (LFL) on a suitably sensitive combustible gas indicator, where the preliminary assessment has determined that there is potential for flammable gases or vapours; and

.3 not more than 50% of the occupational exposure limit (OEL)* of any toxic vapours and gases.

If these conditions cannot be met, additional ventilation should be applied to the space and re-testing should be conducted after a suitable interval.

7.3 Any gas testing should be carried out with ventilation to the enclosed space stopped, and after conditions have stabilized, in order to obtain accurate readings.

7.4 Where the preliminary assessment has determined that there is potential for the presence of toxic gases and vapours, appropriate testing should be carried out, using fixed or portable gas or vapour detection equipment. The readings obtained by this equipment should be below the occupational exposure limits for the toxic gases or vapours given in accepted national or international standards, in accordance with paragraph 7.2. It should be noted that testing for flammability or oxygen content does not provide a suitable means of measuring for toxicity, nor vice versa.

7.5 It should be emphasized that the internal structure of the space, cargo, cargo residues and tank coatings may also present situations where oxygen-deficient areas may exist, and should always be suspected, even when an enclosed space has been satisfactorily tested as being suitable for entry. This is particularly the case for spaces where the path of the supply and outlet ventilation is obstructed by structural members or cargo.

8 PRECAUTIONS DURING ENTRY

8.1 The atmosphere should be tested frequently whilst the space is occupied and persons should be instructed to leave the space should there be a deterioration in the conditions.

8.2 Persons entering enclosed spaces should be provided with calibrated and tested multi-gas detectors that monitor the levels of oxygen, carbon monoxide and other gases as appropriate.

8.3 Ventilation should continue during the period that the space is occupied and during temporary breaks. Before re-entry after a break, the atmosphere should be re-tested. In the event of failure of the ventilation system, any persons in the space should leave immediately.

* It should be noted that the term Occupational Exposure Limit (OEL) includes the Permissible Exposure Limit (PEL), Maximum Admissible Concentration (MAC) and Threshold Limit Value (TLV) or any other internationally recognized terms.

8.4 Particular care should be exhibited when working on pipelines and valves within the space. If conditions change during the work, increased frequency of testing of the atmosphere should be performed. Changing conditions that may occur include increasing ambient temperatures, the use of oxygen-fuel torches, mobile plant, work activities in the enclosed space that could evolve vapours, work breaks, or if the ship is ballasted or trimmed during the work.

8.5 In the event of an emergency, under no circumstances should the attending crew member enter the space before help has arrived and the situation has been evaluated to ensure the safety of those entering the space to undertake rescue operations. Only properly trained and equipped personnel should perform rescue operations in enclosed spaces.

9 ADDITIONAL PRECAUTIONS FOR ENTRY INTO A SPACE WHERE THE ATMOSPHERE IS KNOWN OR SUSPECTED TO BE UNSAFE

9.1 Spaces that have not been tested should be considered unsafe for persons to enter. If the atmosphere in an enclosed space is suspected or known to be unsafe, the space should only be entered when no practical alternative exists. Entry should only be made for further testing, essential operation, safety of life or safety of a ship. The number of persons entering the space should be the minimum compatible with the work to be performed.

9.2 Suitable breathing apparatus, e.g. of the air-line or self-contained type, should always be worn, and only personnel trained in its use should be allowed to enter the space. Air-purifying respirators should not be used as they do not provide a supply of clean air from a source independent of the atmosphere within the space.

9.3 Persons entering enclosed spaces should be provided with calibrated and tested multi-gas detectors that monitor the levels of oxygen, carbon monoxide and other gases as appropriate.

9.4 Rescue harnesses should be worn and, unless impractical, lifelines should be used.

9.5 Appropriate protective clothing should be worn, particularly where there is any risk of toxic substances or chemicals coming into contact with the skin or eyes of those entering the space.

9.6 The advice in paragraph 8.5 concerning emergency rescue operations is particularly relevant in this context.

10 HAZARDS RELATED TO SPECIFIC TYPES OF SHIPS OR CARGO

10.1 Dangerous goods in packaged form

10.1.1 The atmosphere of any space containing dangerous goods may put at risk the health or life of any person entering it. Dangers may include flammable, toxic or corrosive gases or vapours that displace oxygen, residues on packages and spilled material. The same hazards may be present in spaces adjacent to the cargo spaces. Information on the hazards of specific substances is contained in the International Maritime Dangerous Goods (IMDG) Code, the Emergency Procedures for Ships Carrying Dangerous Goods (EMS) and Material Safety Data Sheets (MSDS)[*]. If there is evidence or suspicion that

[*] Refer to the *Recommendations for material safety data sheets (MSDS) for MARPOL Annex I oil cargo and oil fuel* (resolution MSC.286(86)).

leakage of dangerous substances has occurred, the precautions specified in section 9 should be followed.

10.1.2 Personnel required to deal with spillages or to remove defective or damaged packages should be appropriately trained and wear suitable breathing apparatus and appropriate protective clothing.

10.2 Liquid bulk

The tanker industry has produced extensive advice to operators and crews of ships engaged in the bulk carriage of oil, chemicals and liquefied gases, in the form of specialist international safety guides. Information in the guides on enclosed space entry amplifies these recommendations and should be used as the basis for preparing entry plans.

10.3 Solid bulk

On ships carrying solid bulk cargoes, dangerous atmospheres may develop in cargo spaces and adjacent spaces. The dangers may include flammability, toxicity, oxygen depletion or self-heating, as identified in the shipper's declaration. For additional information, reference should be made to the International Maritime Solid Bulk Cargoes (IMSBC) Code.

10.4 Use of Nitrogen as an inert gas*

Nitrogen is a colourless and odourless gas that, when used as an inert gas, causes oxygen deficiency in enclosed spaces and at exhaust openings on deck during purging of tanks and void spaces and use in cargo holds. It should be noted that one deep breath of 100% nitrogen gas will be fatal.

10.5 Oxygen-depleting cargoes and materials

A prominent risk with such cargoes is oxygen depletion due to the inherent form of the cargo, for example, self-heating, oxidation of metals and ores or decomposition of vegetable oils, fish oils, animal fats, grain and other organic materials or their residues. The materials listed below are known to be capable of causing oxygen depletion. However, the list is not exhaustive. Oxygen depletion may also be caused by other materials of vegetable or animal origin, by flammable or spontaneously combustible materials and by materials with a high metal content, including, but not limited to:

.1 grain, grain products and residues from grain processing (such as bran, crushed grain, crushed malt or meal), hops, malt husks and spent malt;

.2 oilseeds as well as products and residues from oilseeds (such as seed expellers, seed cake, oil cake and meal);

.3 copra;

.4 wood in such forms as packaged timber, round wood, logs, pulpwood, props (pit props and other propwood), woodchips, woodshavings, wood pellets and sawdust;

* Refer to the Guidelines on tank entry for tankers using nitrogen as an inerting medium (MSC.1/Circ.1401).

.5 jute, hemp, flax, sisal, kapok, cotton and other vegetable fibres (such as esparto grass/Spanish grass, hay, straw, bhusa), empty bags, cotton waste, animal fibres, animal and vegetable fabric, wool waste and rags;

.6 fish, fishmeal and fishscrap;

.7 guano;

.8 sulphidic ores and ore concentrates;

.9 charcoal, coal, lignite and coal products;

.10 direct reduced iron (DRI);

.11 dry ice;

.12 metal wastes and chips, iron swarf, steel and other turnings, borings, drillings, shavings, filings and cuttings; and

.13 scrap metal.

10.6 Fumigation

When a ship is fumigated, the detailed recommendations contained in the Recommendations on the safe use of pesticides in ships (MSC.1/Circ.1358) should be followed. Spaces adjacent to fumigated spaces should be treated as if fumigated.

11 CONCLUSION

Failure to observe simple procedures can lead to persons being unexpectedly overcome when entering enclosed spaces. Observance of the principles and procedures outlined above will form a reliable basis for assessing risks in such spaces and for taking necessary precautions.

APPENDIX

EXAMPLE OF AN ENCLOSED SPACE ENTRY PERMIT

This permit relates to entry into any enclosed space and should be completed by the master or responsible person and by any persons entering the space, e.g. competent person and attendant.

GENERAL

Location/name of enclosed space

Reason for entry .....

This permit is valid from:_____hrs Date .....
to:_____hrs Date .....
(See Note 1)

SECTION 1 – PRE-ENTRY PREPARATION

(To be checked by the master or nominated responsible person)

	Yes	No
• Has the space been thoroughly ventilated by mechanical means?	.....	.....
• Has the space been segregated by blanking off or isolating all connecting pipelines or valves and electrical power/equipment?	.....	.....
• Has the space been cleaned where necessary?	.....	.....
• Has the space been tested and found safe for entry? (See note 2)	.....	.....
• Pre-entry atmosphere test readings:		
- oxygen .....% vol (21%)* By:		
- hydrocarbon .....% LFL (less than 1%)		
- toxic gases ..... ppm (less than 50% OEL of the specific gas) Time: (See note 3)		
• Have arrangements been made for frequent atmosphere checks to be made while the space is occupied and after work breaks?	.....	.....
• Have arrangements been made for the space to be continuously ventilated throughout the period of occupation and during work breaks?	.....	.....
• Are access and illumination adequate?	.....	.....

* Note that national requirements may determine the safe atmosphere range.

	Yes	No
• Is rescue and resuscitation equipment available for immediate use by the entrance to the space?	"	"
• Has an attendant been designated to be in constant attendance at the entrance to the space?	"	"
• Has the officer of the watch (bridge, engine-room, cargo control room) been advised of the planned entry?	"	"
• Has a system of communication between all parties been tested and emergency signals agreed?	"	"
• Are emergency and evacuation procedures established and understood by all personnel involved with the enclosed space entry?	"	"
• Is all equipment used in good working condition and inspected prior to entry?	"	"
• Are personnel properly clothed and equipped?	"	"

SECTION 2 – PRE-ENTRY CHECKS
(To be checked by each person entering the space)

	Yes	No
• I have received instructions or permission from the master or nominated responsible person to enter the enclosed space	"	"
• Section 1 of this permit has been satisfactorily completed by the master or nominated responsible person	"	"
• I have agreed and understand the communication procedures	"	"
• I have agreed upon a reporting interval of ..... minutes	"	"
• Emergency and evacuation procedures have been agreed and are understood	"	"
• I am aware that the space must be vacated immediately in the event of ventilation failure or if atmosphere tests show a change from agreed safe criteria	"	"

SECTION 3 – BREATHING APPARATUS AND OTHER EQUIPMENT
(To be checked jointly by the master or nominated responsible person and the person who is to enter the space)

	Yes	No
• Those entering the space are familiar with any breathing apparatus to be used	.....	.....
• The breathing apparatus has been tested as follows:		
- gauge and capacity of air supply	.....	.....
- low pressure audible alarm if fitted	.....	.....
- face mask – under positive pressure and not leaking	.....	.....
• The means of communication has been tested and emergency signals agreed	.....	.....
• All personnel entering the space have been provided with rescue harnesses and, where practicable, lifelines	.....	.....

Signed upon completion of sections 1, 2 and 3 by:

Master or nominated responsible person ..... Date ..... Time

Attendant ..... Date ..... Time

Person entering the space..... Date ..... Time

SECTION 4 – PERSONNEL ENTRY
(To be completed by the responsible person supervising entry)

Names .....

Time in ..... Time out .....

SECTION 5 – COMPLETION OF JOB
(To be completed by the responsible person supervising entry)

• Job completed	Date	Time .....
• Space secured against entry	Date	Time .....
• The officer of the watch has been duly informed	Date	Time.....

Signed upon completion of sections 4 and 5 by:

Responsible person supervising entry ..... Date ..... Time .....

THIS PERMIT IS RENDERED INVALID SHOULD VENTILATION OF THE SPACE STOP OR IF ANY OF THE CONDITIONS NOTED IN THE CHECKLIST CHANGE

Notes:

1 The permit should contain a clear indication as to its maximum period of validity.

2 In order to obtain a representative cross-section of the space's atmosphere, samples should be taken from several levels and through as many openings as possible. Ventilation should be stopped for about 10 minutes before the pre-entry atmosphere tests are taken.

3 Tests for specific toxic contaminants, such as benzene or hydrogen sulphide, should be undertaken depending on the nature of the previous contents of the space.

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(Agenda item 9)

PROCEDURES FOR PORT STATE CONTROL, 2011

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO resolution A.787(19), by which it adopted the Procedures for Port State Control, and resolution A.882(21), by which it adopted amendments thereto,

RECALLING FURTHER that, at its twenty-first session, when adopting resolution A.882(21), it requested the Maritime Safety Committee and the Marine Environment Protection Committee to keep the Procedures, as amended, under review, on the basis of experience gained from their implementation,

RECOGNIZING that efforts by port States have greatly contributed to enhanced maritime safety and security, and prevention of marine pollution,

RECOGNIZING ALSO the need to update the Procedures, as amended, to take account of the amendments to IMO instruments which have entered into force or have become effective since the adoption of resolutions A.787(19) and A.882(21),

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee, at its eighty-ninth session, and the Marine Environment Protection Committee, at its sixty-second session,

1. ADOPTS the Procedures for Port State Control, 2011, as set out in the Annex to the present resolution;

2. INVITES Governments, when exercising port State control, to implement the aforementioned Procedures;

3. REQUESTS the Maritime Safety Committee and the Marine Environment Protection Committee to keep the Procedures under review and to amend them as necessary;

4. REVOKES resolutions A.787(19) and A.882(21).

Annex

PROCEDURES FOR PORT STATE CONTROL, 2011

Contents

APPENDICES

CHAPTER 1 – GENERAL

1.1 PURPOSE

This document is intended to provide basic guidance on the conduct of port State control inspections and afford consistency in the conduct of these inspections, the recognition of deficiencies of a ship, its equipment, or its crew, and the application of control procedures.

1.2 APPLICATION

1.2.1 These Procedures apply to ships falling under the provisions of:

.1 the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS);

.2 the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS Protocol 1988);

.3 the International Convention on Load Lines, 1966 (Load Lines);

.4 the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (Load Lines Protocol 1988);

.5 the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto, as amended (MARPOL);

.6 the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW);

.7 the International Convention on Tonnage Measurement of Ships, 1969 (Tonnage); and

.8 the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS),

hereafter referred to as the applicable conventions.

1.2.2 Ships of non-Parties or below convention size should be given no more favourable treatment (see sections 1.5 and 1.6).

1.2.3 In exercising port State control, Parties should only apply those provisions of the conventions which are in force and which they have accepted.

1.2.4 If a port State exercises port State control based on International Labour Organization (ILO) Convention No.147, "Merchant Shipping (Minimum Standards) Convention, 1976", guidance on the conduct of such control inspections is given in the ILO publication "Inspection of Labour Conditions on board Ship: Guidelines for Procedure".

1.3 INTRODUCTION

1.3.1 Under the provisions of the applicable conventions set out in section 1.2 above, the Administration (i.e. the Government of the flag State) is responsible for promulgating laws and regulations and for taking all other steps which may be necessary to give the applicable

conventions full and complete effect so as to ensure that, from the point of view of safety of life and pollution prevention, a ship is fit for the service for which it is intended and seafarers are qualified and fit for their duties.

1.3.2 In some cases it may be difficult for the Administration to exercise full and continuous control over some ships entitled to fly the flag of its State, for instance those ships which do not regularly call at a port of the flag State. The problem can be, and has been, partly overcome by appointing inspectors at foreign ports and/or authorizing recognized organizations to act on behalf of the flag State Administration.

1.3.3 The following control procedures should be regarded as complementary to national measures taken by Administrations of flag States in their countries and abroad and are intended to provide assistance to flag State Administrations in securing compliance with convention provisions in safeguarding the safety of crew, passengers and ships, and ensuring the prevention of pollution.

1.4 PROVISION FOR PORT STATE CONTROL

Regulation 19 of chapter I, regulation 6.2 of chapter IX, regulation 4 of chapter XI-1 and regulation 9 of chapter XI-2 of SOLAS, as modified by the SOLAS Protocol 1988; article 21 of Load Lines, as modified by the Load Lines Protocol 1988; articles 5 and 6, regulation 11 of Annex I, regulation 16.9 of Annex II, regulation 8 of Annex III, regulation 13 of Annex IV, regulation 8 of Annex V and regulation 10 of Annex VI of MARPOL; article X of STCW; article 12 of Tonnage and article 11 of AFS provide for control procedures to be followed by a Party to a relevant convention with regard to foreign ships visiting their ports. The authorities of port States should make effective use of these provisions for the purposes of identifying deficiencies, if any, in such ships which may render them substandard (see section 3.1), and ensuring that remedial measures are taken.

1.5 SHIPS OF NON-PARTIES

1.5.1 Article I(3) of the SOLAS Protocol 1988, article 5(4) of MARPOL, article X(5) of STCW and article 3(3) of AFS provide that no more favourable treatment is to be given to the ships of countries which are not Party to the relevant Convention. All Parties should, as a matter of principle, apply these Procedures to ships of non-Parties in order to ensure that equivalent surveys and inspections are conducted and an equivalent level of safety and protection of the marine environment is ensured.

1.5.2 As ships of non-Parties are not provided with SOLAS, Load Lines or MARPOL certificates, as applicable, or the crew members may not hold STCW certificates, the Port State Control Officer (PSCO), taking into account the principles established in these Procedures, should be satisfied that the ship and crew do not present a danger to those on board or an unreasonable threat of harm to the marine environment. If the ship or crew has some form of certification other than that required by a convention, the PSCO may take the form and content of this documentation into account in the evaluation of that ship. The conditions of and on such a ship and its equipment and the certification of the crew and the flag State's minimum manning standard should be compatible with the aims of the provisions of the conventions; otherwise, the ship should be subject to such restrictions as are necessary to obtain a comparable level of safety and protection of the marine environment.

1.6 SHIPS BELOW CONVENTION SIZE

1.6.1 In the exercise of their functions, the PSCOs should be guided by any certificates and other documents issued by or on behalf of the flag State Administration. In such cases, the PSCOs should limit the scope of inspection to the verification of compliance with those certificates and documents.

1.6.2 To the extent a relevant instrument is not applicable to a ship below convention size, the PSCO's task should be to assess whether the ship is of an acceptable standard in regard to safety and the environment. In making that assessment, the PSCO should take due account of such factors as the length and nature of the intended voyage or service, the size and type of the ship, the equipment provided and the nature of the cargo.

1.7 DEFINITIONS

1.7.1 **Bulk carrier:** whilst noting the definitions in SOLAS regulations IX/1.6 and XII/1.1 and resolution MSC.277(85), for the purposes of port State control, PSCOs should be guided by the ship's type indicated in the ship's certificates in determining whether a ship is a bulk carrier and recognize that a ship which is not designated as a bulk carrier as the ship type on the ship certificate may carry certain bulk cargo as provided for in the above instruments.

1.7.2 **Clear grounds:** Evidence that the ship, its equipment, or its crew does not correspond substantially with the requirements of the relevant conventions or that the master or crew members are not familiar with essential shipboard procedures relating to the safety of ships or the prevention of pollution. Examples of clear grounds are included in section 2.4.

1.7.3 **Deficiency:** A condition found not to be in compliance with the requirements of the relevant convention.

1.7.4 **Detention:** Intervention action taken by the port State when the condition of the ship or its crew does not correspond substantially with the applicable conventions to ensure that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment, whether or not such action will affect the normal schedule of the departure of the ship.

1.7.5 **Inspection:** A visit on board a ship to check both the validity of the relevant certificates and other documents, and the overall condition of the ship, its equipment and its crew.

1.7.6 **More detailed inspection:** An inspection conducted when there are clear grounds for believing that the condition of the ship, its equipment or its crew does not correspond substantially to the particulars of the certificates.

1.7.7 **Port State Control Officer (PSCO):** A person duly authorized by the competent authority of a Party to a relevant convention to carry out port State control inspections, and responsible exclusively to that Party.

1.7.8 **Recognized organization:** An organization which meets the relevant conditions set forth by resolution A.739(18), as amended by resolution MSC.208(81), and resolution A.789(19), and has been authorized by the flag State Administration to provide the necessary statutory services and certification to ships entitled to fly its flag.

1.7.9 **Stoppage of an operation:** Formal prohibition against a ship to continue an operation due to an identified deficiency(ies) which, singly or together, render the continuation of such operation hazardous.

1.7.10 **Substandard ship:** A ship whose hull, machinery, equipment or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformance with the safe manning document.

1.7.11 **Valid certificates:** A certificate that has been issued directly by a Party to a relevant convention or on its behalf by a recognized organization and contains accurate and effective dates meets the provisions of the relevant convention and to which the particulars of the ship, its crew and its equipment correspond.

1.8 PROFESSIONAL PROFILE OF PSCOs

1.8.1 Port State control should be carried out only by qualified PSCOs who fulfil the qualifications and training specified in section 1.9.

1.8.2 When the required professional expertise cannot be provided by the PSCO, the PSCO may be assisted by any person with the required expertise, as acceptable to the port State.

1.8.3 The PSCOs and the persons assisting them should have no commercial interest, either in the port of inspection, or in the ships inspected, nor should PSCOs be employed by, or undertake work on behalf of, recognized organizations.

1.8.4 A PSCO should carry a personal document in the form of an identity card issued by the port State and indicating that the PSCO is authorized to carry out the control.

1.9 QUALIFICATION AND TRAINING REQUIREMENTS OF PSCOs

1.9.1 The PSCO should be an experienced officer qualified as flag State surveyor.

1.9.2 The PSCO should be able to communicate in English with the key crew.

1.9.3 Training should be provided for PSCOs to give the necessary knowledge of the provisions of the applicable conventions which are relevant to the conduct of port State control, taking into account the latest IMO Model Courses for port State control.

1.9.4 In specifying the qualifications and training requirements for PSCOs, the Administration should take into account, as appropriate, which of the internationally agreed instruments are relevant for the control by the port State and the variety of types of ships which may enter its ports.

1.9.5 PSCOs carrying out inspections of operational requirements should be qualified as a master or chief engineer and have appropriate seagoing experience, or have qualifications from an institution recognized by the Administration in a maritime related field and have specialized training to ensure adequate competence and skill, or be a qualified officer of the Administration with an equivalent level of experience and training, for performing inspections of the relevant operational requirements.

1.9.6 Periodic seminars for PSCOs should be held in order to update their knowledge with respect to instruments related to port State control.

CHAPTER 2 – PORT STATE INSPECTIONS

2.1 GENERAL

2.1.1 In accordance with the provisions of the applicable conventions, Parties may conduct inspections by PSCOs of foreign ships in their ports.

2.1.2 Such inspections may be undertaken on the basis of:

.1 the initiative of the Party;

.2 the request of, or on the basis of, information regarding a ship provided by another Party; or

.3 information regarding a ship provided by a member of the crew, a professional body, an association, a trade union or any other individual with an interest in the safety of the ship, its crew and passengers, or the protection of the marine environment.

2.1.3 Whereas Parties may entrust surveys and inspections of ships entitled to fly their own flag either to inspectors nominated for this purpose or to recognized organizations, they should be aware that, under the applicable conventions, foreign ships are subject to port State control, including boarding, inspection, remedial action and possible detention, only by officers duly authorized by the port State. This authorization of PSCOs may be a general grant of authority or may be specific on a case-by-case basis.

2.1.4 All possible efforts should be made to avoid a ship being unduly detained or delayed. If a ship is unduly detained or delayed, it should be entitled to compensation for any loss or damage suffered.

2.2 INITIAL INSPECTIONS

2.2.1 In the pursuance of control procedures under the applicable conventions, which, for instance, may arise from information given to a port State regarding a ship, a PSCO may proceed to the ship and, before boarding, gain, from its appearance in the water, an impression of its standard of maintenance from such items as the condition of its paintwork, corrosion or pitting or unrepaired damage.

2.2.2 At the earliest possible opportunity, the PSCO should ascertain the type of ship, year of build and size of the ship for the purpose of determining which provisions of the conventions are applicable.

2.2.3 On boarding and introduction to the master or the responsible ship's officer, the PSCO should examine the ship's relevant certificates and documents, as listed in appendix 12. When examining 1969 International Tonnage Certificates, the PSCO should be guided by appendix 10.

2.2.4 If the certificates are valid and the PSCO's general impression and visual observations on board confirm a good standard of maintenance, the PSCO should generally confine the inspection to reported or observed deficiencies, if any.

2.2.5 In conducting an initial inspection, the PSCO should check both the validity of the relevant certificates and other documents and the overall condition of the ship, including its equipment, navigational bridge, decks including forecastle, cargo holds/areas, engine-room and pilot transfer arrangements.

2.2.6 In pursuance of control procedures under chapter IX of SOLAS in relation to the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), the PSCO should utilize the guidelines in appendix 8.

2.2.7 If, however, the PSCO from general impression or observations on board has clear grounds for believing that the ship, its equipment or its crew do not substantially meet the requirements, the PSCO should proceed to a more detailed inspection, taking into consideration sections 2.4 and 2.5. In forming such an impression, the PSCO should utilize the guidelines in relevant appendices.

2.3 GENERAL PROCEDURAL GUIDELINES FOR PSCOs

2.3.1 The PSCO should observe the Code of Good Practice for port State control officers (MSC-MEPC.4/Circ.2), as shown in appendix 1, use professional judgement in carrying out all duties and consider consulting others as deemed appropriate.

2.3.2 When boarding a ship, the PSCO should present to the master or to the representative of the owner, if requested to do so, the PSCO identity card. This card should be accepted as documented evidence that the PSCO in question is duly authorized by the Administration to carry out port State control inspections.

2.3.3 If the PSCO has clear grounds for carrying out a more detailed inspection, the master should be immediately informed of these grounds and advised that, if so desired, the master may contact the Administration or, as appropriate, the recognized organization responsible for issuing the certificate and invite their presence on board.

2.3.4 In the case that an inspection is initiated based on a report or complaint, especially if it is from a crew member, the source of the information should not be disclosed.

2.3.5 When exercising control, all possible efforts should be made to avoid a ship being unduly detained or delayed. It should be borne in mind that the main purpose of port State control is to prevent a ship proceeding to sea if it is unsafe or presents an unreasonable threat of harm to the marine environment. The PSCO should exercise professional judgement to determine whether to detain a ship until the deficiencies are corrected or to allow it to sail with certain deficiencies, having regard to the particular circumstances of the intended voyage.

2.3.6 It should be recognized that all equipment is subject to failure and spares or replacement parts may not be readily available. In such cases, undue delay should not be caused if, in the opinion of the PSCO, safe alternative arrangements have been made.

2.3.7 Where the grounds for detention are the result of accidental damage suffered on the ship's voyage to a port, no detention order should be issued, provided that:

.1 due account has been given to the convention requirements regarding notification to the flag State Administration, the nominated surveyor or the recognized organization responsible for issuing the relevant certificate;

.2 prior to entering a port, the master or company has submitted to the port State Authority details of the circumstances of the accident and the damage suffered and information about the required notification of the flag State Administration;

.3 appropriate remedial action, to the satisfaction of the port State Authority, is being taken by the ship; and

.4 the port State Authority has ensured, having been notified of the completion of the remedial action, that deficiencies which were clearly hazardous to safety, health or environment have been rectified.

2.3.8 Since detention of a ship is a serious matter involving many issues, it may be in the best interest of the PSCO to act together with other interested parties (see paragraph 4.1.3). For example, the officer may request the owner's representatives to provide proposals for correcting the situation. The PSCO should also consider cooperating with the flag State Administration's representatives or the recognized organization responsible for issuing the relevant certificates, and consulting them regarding their acceptance of the owner's proposals and their possible additional requirements. Without limiting the PSCO's discretion in any way, the involvement of other parties could result in a safer ship, avoid subsequent arguments relating to the circumstances of the detention and prove advantageous in the case of litigation involving "undue delay".

2.3.9 Where deficiencies cannot be remedied at the port of inspection, the PSCO may allow the ship to proceed to another port, subject to any appropriate conditions determined. In such circumstances, the PSCO should ensure that the competent authority of the next port of call and the flag State are notified.

2.3.10 Detention reports to the flag State should be in sufficient detail for an assessment to be made of the severity of the deficiencies giving rise to the detention.

2.3.11 The company or its representative have a right of appeal against a detention taken by the Authority of a port State. The appeal should not cause the detention to be suspended. The PSCO should properly inform the master of the right of appeal.

2.3.12 To ensure consistent enforcement of port State control requirements, PSCOs should carry an extract of section 2.3 (General procedural guidelines for PSCOs) for ready reference when carrying out any port State control inspections.

2.3.13 PSCOs should also be familiar with the detailed guidelines given in the appendices to these Procedures.

2.4 CLEAR GROUNDS

2.4.1 When a PSCO inspects a foreign ship which is required to hold a convention certificate, and which is in a port or an offshore terminal under the jurisdiction of the port State, any such inspection should be limited to verifying that there are on board valid certificates and other relevant documentation and the PSCO forming an impression of the overall condition of the ship, its equipment and its crew, unless there are "clear grounds" for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates.

2.4.2 "Clear grounds" to conduct a more detailed inspection include:

.1 the absence of principal equipment or arrangements required by the applicable conventions;

.2 evidence from a review of the ship's certificates that a certificate or certificates are clearly invalid;

.3 evidence that documentation required by the applicable conventions and listed in appendix 12 is not on board, incomplete, not maintained or falsely maintained;

.4 evidence from the PSCO's general impressions and observations that serious hull or structural deterioration or deficiencies exist that may place at risk the structural, watertight or weathertight integrity of the ship;

.5 evidence from the PSCO's general impressions or observations that serious deficiencies exist in the safety, pollution prevention or navigational equipment;

.6 information or evidence that the master or crew is not familiar with essential shipboard operations relating to the safety of ships or the prevention of pollution, or that such operations have not been carried out;

.7 indications that key crew members may not be able to communicate with each other or with other persons on board;

.8 the emission of false distress alerts not followed by proper cancellation procedures; and

.9 receipt of a report or complaint containing information that a ship appears to be substandard.

2.5 MORE DETAILED INSPECTIONS

2.5.1 If the ship does not carry valid certificates, or if the PSCO, from general impressions or observations on board, has clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates or that the master or crew is not familiar with essential shipboard procedures, a more detailed inspection as described in this chapter should be carried out, utilizing relevant appendices.

2.5.2 It is not envisaged that all of the equipment and procedures outlined in this chapter would be checked during a single port State control inspection, unless the condition of the ship or the familiarity of the master or crew with essential shipboard procedures necessitates such a detailed inspection. In addition, these Procedures are not intended to impose the seafarer certification programme of the port State on a ship entitled to fly the flag of another Party to STCW or to impose control procedures on foreign ships in excess of those imposed on ships of the port State.

CHAPTER 3 – CONTRAVENTION AND DETENTION

3.1 IDENTIFICATION OF A SUBSTANDARD SHIP

3.1.1 In general, a ship is regarded as substandard if the hull, machinery, equipment or operational safety, is substantially below the standards required by the applicable conventions or if the crew is not in conformance with the safe manning document, owing to, inter alia:

.1 the absence of principal equipment or arrangement required by the conventions;

.2 non-compliance of equipment or arrangement with relevant specifications of the conventions;

.3 substantial deterioration of the ship or its equipment, for example, because of poor maintenance;

.4 insufficiency of operational proficiency, or unfamiliarity of essential operational procedures by the crew; and

.5 insufficiency of manning or insufficiency of certification of seafarers.

3.1.2 If these evident factors as a whole or individually make the ship unseaworthy and put at risk the ship or the life of persons on board or present an unreasonable threat of harm to the marine environment if it were allowed to proceed to sea, it should be regarded as a substandard ship. The PSCO should also take into account the guidelines in appendix 2.

3.2 SUBMISSION OF INFORMATION CONCERNING DEFICIENCIES

3.2.1 Information that a ship appears to be substandard could be submitted to the appropriate authorities of the port State (see section 3.3) by a member of the crew, a professional body, an association, a trade union or any other individual with an interest in the safety of the ship, its crew and passengers, or the protection of the marine environment.

3.2.2 This information should be submitted in writing to permit proper documentation of the case and of the alleged deficiencies. If the information is passed verbally, the filing of a written report should be required, identifying, for the purposes of the port State's records, the individual or body providing the information. The attending PSCO may collect this information and submit it as part of the PSCO's report if the originator is unable to do so.

3.2.3 Information which may cause an investigation should be submitted as early as possible after the arrival of the ship, giving adequate time to the authorities to act as necessary.

3.2.4 Each Party to the relevant convention should determine which authorities should receive information on substandard ships and initiate action. Measures should be taken to ensure that information submitted to the wrong department should be promptly passed on by such department to the appropriate authority for action.

3.3 PORT STATE ACTION IN RESPONSE TO ALLEGED SUBSTANDARD SHIPS

3.3.1 On receipt of information about an alleged substandard ship or alleged pollution risk, the authorities should immediately investigate the matter and take the action required by the circumstances in accordance with the preceding sections.

3.3.2 Authorities which receive information about a substandard ship that could give rise to detention should forthwith notify any maritime, consular and/or diplomatic representatives of the flag State in the area of the ship and request them to initiate or cooperate with investigations. Likewise, the recognized organization which has issued the relevant certificates on behalf of the flag State should be notified. These provisions will not, however, relieve the authorities of the port State, being a Party to a relevant convention, from the responsibility for taking appropriate action in accordance with its powers under the relevant conventions.

3.3.3 If the port State receiving information is unable to take action because there is insufficient time or no PSCOs can be made available before the ship sails, the information should be passed to the authorities of the country of the next appropriate port of call, to the flag State and also to the recognized organization in that port, where appropriate.

3.4 RESPONSIBILITIES OF PORT STATE TO TAKE REMEDIAL ACTION

If a PSCO determines that a ship can be regarded as substandard as specified in section 3.1 and appendix 2, the port State should immediately ensure that corrective action is taken to safeguard the safety of the ship and passengers and/or crew and eliminate any threat of harm to the marine environment before permitting the ship to sail.

3.5 GUIDANCE FOR THE DETENTION OF SHIPS

Notwithstanding the fact that it is impracticable to define a ship as substandard solely by reference to a list of qualifying defects, guidance for the detention of ships is given in appendix 2.

3.6 SUSPENSION OF INSPECTION

3.6.1 In exceptional circumstances where, as a result of a more detailed inspection, the overall condition of a ship and its equipment, also taking into account the crew conditions, are found to be obviously substandard, the PSCO may suspend an inspection.

3.6.2 Prior to suspending an inspection, the PSCO should have recorded detainable deficiencies in the areas set out in appendix 2, as appropriate.

3.6.3 The suspension of the inspection may continue until the responsible parties have taken the steps necessary to ensure that the ship complies with the requirements of the relevant instruments.

3.6.4 In cases where the ship is detained and an inspection is suspended, the port State Authority should notify the responsible parties without delay. The notification should include information about the detention, and state that the inspection is suspended until that authority has been informed that the ship complies with all relevant requirements.

3.7 PROCEDURES FOR RECTIFICATION OF DEFICIENCIES AND RELEASE

3.7.1 The PSCO should endeavour to secure the rectification of all deficiencies detected.

3.7.2 In the case of deficiencies which are clearly hazardous to safety or the environment, the PSCO should, except as provided in paragraph 3.7.3, ensure that the hazard is removed before the ship is allowed to proceed to sea. For this purpose, appropriate action should be taken, which may include detention or a formal prohibition of a ship to continue an operation due to established deficiencies which, individually or together, would render the continued operation hazardous.

3.7.3 Where deficiencies which caused a detention, as referred to in paragraph 3.7.2, cannot be remedied in the port of inspection, the port State Authority may allow the ship concerned to proceed to the nearest appropriate repair yard available, as chosen by the master and agreed to by that authority, provided that the conditions agreed between the port State Authority and the flag State are complied with. Such conditions will ensure that the ship should not sail until it can proceed without risk to the safety of the passengers or crew, or risk to other ships, or without presenting an unreasonable threat of harm to the marine environment. Such conditions may include confirmation from the flag State that remedial action has been taken on the ship in question. In such circumstances the port State Authority should notify the authority of the ship's next port of call, the parties mentioned in paragraph 4.1.4 and any other authority as appropriate. Notification to authorities should be made in the form shown in appendix 14. The authority receiving such notification should inform the notifying authority of action taken and may use the form shown in appendix 15.

3.7.4 On the condition that all possible efforts have been made to rectify all other deficiencies, except those referred to in paragraphs 3.7.2 and 3.7.3, the ship may be allowed to proceed to a port where any such deficiencies can be rectified.

3.7.5 If a ship referred to in paragraph 3.7.3 proceeds to sea without complying with the conditions agreed to by the Authority of the port of inspection that port State Authority should immediately alert the next port, if known, the flag State and all other authorities it considers appropriate.

3.7.6 If a ship referred to in paragraph 3.7.3 does not call at the nominated repair port, the port State Authority of the repair port should immediately alert the flag State and detaining port State, which may take appropriate action, and notify any other authority it considers appropriate.

CHAPTER 4 – REPORTING REQUIREMENTS

4.1 PORT STATE REPORTING

4.1.1 Port State authorities should ensure that, at the conclusion of an inspection, the master of the ship is provided with a document showing the results of the inspection, details of any action taken by the PSCO, and a list of any corrective action to be initiated by the master and/or company. Such reports should be made in accordance with the format in appendix 13.

4.1.2 Where, in the exercise of port State control, a Party denies a foreign ship entry to the ports or offshore terminals under its jurisdiction, whether or not as a result of information about a substandard ship, it should forthwith provide the master and flag State with reasons for the denial of entry.

4.1.3 In the case of a detention, at least an initial notification should be made to the flag State Administration as soon as practicable (see paragraph 2.3.8). If such notification is made verbally, it should be subsequently confirmed in writing. As a minimum, the notification should include details of the ship's name, the IMO number, copies of Forms A and B as set out in appendix 13, time of detention and copies of any detention order. Likewise, the recognized organizations which have issued the relevant certificates on behalf of the flag State should be notified, where appropriate. The parties above should also be notified in writing of the release of detention. As a minimum, this information should include the ship's name, the IMO number, the date and time of release and a copy of Form B as set out in appendix 13.

4.1.4 If the ship has been allowed to sail with known deficiencies, the authorities of the port State should communicate all the facts to the authorities of the country of the next appropriate port of call, to the flag State, and to the recognized organization, where appropriate.

4.1.5 Parties to a relevant convention, when they have exercised control giving rise to detention, should submit to the Organization reports in accordance with SOLAS regulation I/19, article 11 of MARPOL, article 21 of Load Lines, or article X(3) of STCW. Such deficiency reports should be made in accordance with the form given in appendix 13 or 16, as appropriate, or may be submitted electronically by the port State or a regional PSC regime.

4.1.6 Copies of such deficiency reports should, in addition to being forwarded to the Organization, be sent by the port State without delay to the authorities of the flag State and, where appropriate, to the recognized organization which had issued the relevant certificate. Deficiencies found which are not related to the applicable conventions, or which involve ships of non-convention countries or below convention size, should be submitted to flag States and/or to appropriate organizations but not to IMO.

4.1.7 Relevant telephone numbers and addresses of flag States Headquarters to which reports should be sent as outlined above, as well as addresses of flag State offices which provide inspection services should be provided to the Organization[*].

4.2 FLAG STATE REPORTING

4.2.1 On receiving a report on detention, the flag State and, where appropriate, the recognized organization through the flag State Administration, should, as soon as possible, inform the Organization of remedial action taken in respect of the detention which may be submitted electronically by the flag State to GISIS or in a format shown in appendix 17.

4.2.2 Relevant telephone numbers and addresses of port State control offices, Headquarters and those who provide inspection services should be provided to the Organization.

4.3 REPORTING OF ALLEGATIONS UNDER MARPOL

4.3.1 A report on alleged deficiencies or on alleged contravention of the discharge provisions relating to the provisions of MARPOL should be forwarded to the flag State as soon as possible, preferably no later than sixty days after the observation of the deficiencies

[*] Such addresses are available in MSC-MEPC.6/Circ.9 (National contact points for safety and pollution prevention and response), as amended, the IMO Internet Home Page and the GISIS module on contact points (http://gisis.imo.org/Public).

or contravention. Such reports may be made in accordance with the format in appendix 13 or 16, as appropriate. If a contravention of the discharge provisions is suspected, then the information should be supplemented by evidence of violations which, as a minimum, should include the information specified in parts 2 and 3 of appendices 3 and 4 of these Procedures.

4.3.2 On receiving a report on alleged deficiencies or alleged contravention of the discharge provisions, the flag State and, where appropriate, the recognized organization through the flag State Administration, should, as soon as possible, inform the Party submitting the report of immediate action taken in respect of the alleged deficiencies or contravention. That Party and the Organization should, upon completion of such action, be informed of the outcome and details, where appropriate, be included in the mandatory annual report to the Organization.

CHAPTER 5 – REVIEW PROCEDURES

5.1 REPORT OF COMMENTS

5.1.1 In the interest of making information regarding deficiencies and remedial measures generally available, a summary of such reports should be made by the Organization in a timely manner in order that the information can be disseminated in accordance with the Organization's procedures to all Parties to the applicable conventions. In the summary of deficiency reports, an indication should be given of flag State action or whether a comment by the flag State concerned is outstanding.

5.1.2 The appropriate Committee should periodically evaluate the summary of the deficiency reports in order to identify measures that may be necessary to ensure more consistent and effective application of IMO instruments, paying close attention to the difficulties reported by Parties to the relevant conventions, particularly in respect to developing countries in their capacity as port States.

5.1.3 Recommendations to address such difficulties, when recognized by the appropriate Committee, should, where appropriate, be incorporated into the applicable IMO instrument and any modifications relating to the procedures and obligations should be made in the port State documentation.

APPENDIX 1

CODE OF GOOD PRACTICE FOR PORT STATE CONTROL OFFICERS CONDUCTING INSPECTIONS WITHIN THE FRAMEWORK OF THE REGIONAL MEMORANDA OF UNDERSTANDING AND AGREEMENT ON PORT STATE CONTROL (MSC-MEPC.4/Circ.2)

Introduction

1 This document provides guidelines regarding the standards of integrity, professionalism and transparency that regional port State control (PSC) regimes expect of all port State control officers (PSCOs) who are involved in or associated with port State control inspections.

Objective

2 The object of this Code is to assist PSCOs in conducting their inspections to the highest professional level. PSCOs are central to achieving the aims of the regional PSC regime. They are the daily contact with the shipping world. They are expected to act within the law, within the rules of their Government and in a fair, open, impartial and consistent manner.

Fundamental principles of the Code

3 The Code of good practice encompasses three fundamental principles against which all actions of PSCOs are judged: integrity, professionalism and transparency. These are defined as follows:

.1 integrity is the state of moral soundness, honesty and freedom from corrupting influences or motives;

.2 professionalism is applying accepted professional standards of conduct and technical knowledge. For PSCOs standards of behaviour are established by the maritime Authority and the general consent of the port State members; and

.3 transparency implies openness and accountability.

4 The list of the actions and behaviour expected of PSCOs in applying these principles are set out in the annex to this appendix.

5 Adhering to professional standards provides greater credibility to PSCOs and places more significance on their findings.

6 Nothing in the Code shall absolve the PSCOs from complying with the specific requirements of the PSC instruments and applicable national laws.

Annex

CODE OF GOOD PRACTICE FOR PORT STATE CONTROL OFFICERS

Actions and behaviour of PSCOs

The PSCOs should:

1 use their professional judgement in carrying out their duties;

Respect

2 remember that a ship is a home as well as a workplace for the ship's personnel and not unduly disturb their rest or privacy;

3 comply with any ship housekeeping rules such as removing dirty shoes or work clothes;

4 not be prejudiced by the race, gender, religion or nationality of the crew when making decisions and treat all personnel on board with respect;

5 respect the authority of the master or his deputy;

6 be polite but professional and firm as required;

7 never become threatening, abrasive or dictatorial or use language that may cause offence;

8 expect to be treated with courtesy and respect;

Conduct of inspections

9 comply with all health and safety requirements of the ship and their administration, e.g. wearing of personal protective clothing, and not take any action or cause any action to be taken which could compromise the safety of the PSCO or the ship's crew;

10 comply with all security requirements of the ship and wait to be escorted around the ship by a responsible person;

11 present their identity cards to the master or the representative of the owner at the start of the inspection;

12 explain the reason for the inspections. However, where the inspection is triggered by a report or complaint they must not reveal the identity of the person making the complaint;

13 apply the procedures of PSC and the convention requirements in a consistent and professional way and interpret them pragmatically when necessary;

14 not try to mislead the crew, for example by asking them to do things that are contrary to the Conventions;

15 request the crew to demonstrate the functioning of equipment and operational activities, such as drills and not make tests themselves;

16 seek advice when they are unsure of a requirement or of their findings rather than making an uninformed decision, for example by consulting colleagues, publications, the flag Administration, the recognized organization;

17 where it is safe to do so accommodate the operational needs of the port and the ship;

18 explain clearly to the master the findings of the inspection and the corrective action required and ensure that the report of inspection is clearly understood;

19 issue to the master a legible and comprehensible report of inspection before leaving the ship;

Disagreements

20 deal with any disagreement over the conduct or findings of the inspection calmly and patiently;

21 advise the master of the complaints procedure in place if the disagreement cannot be resolved within a reasonable time;

22 advise the master of the right of appeal and relevant procedures in the case of detention;

Integrity

23 be independent and not have any commercial interest in their ports and the ships they inspect or companies providing services in their ports. For example, the PSCOs should not be employed from time to time by companies which operate ships in their ports or the PSCOs should not have an interest in the repair companies in their ports;

24 be free to make decisions based on the findings of their inspections and not on any commercial considerations of the port;

25 always follow the rules of their administrations regarding the acceptance of gifts and favours, e.g. meals on board;

26 firmly refuse any attempts of bribery and report any blatant cases to the maritime Authority;

27 not misuse their authority for benefit, financial or otherwise; and

Updating knowledge

28 update their technical knowledge regularly.

APPENDIX 2

GUIDELINES FOR THE DETENTION OF SHIPS

1 Introduction

1.1 When deciding whether the deficiencies found in a ship are sufficiently serious to merit detention, the PSCO should assess whether:

.1 the ship has relevant, valid documentation; and

.2 the ship has the crew required in the minimum Safe Manning Document.

1.2 During inspection, the PSCO should further assess whether the ship and/or crew, throughout its forthcoming voyage, is able to:

.1 navigate safely;

.2 safely handle, carry and monitor the condition of the cargo;

.3 operate the engine-room safely;

.4 maintain proper propulsion and steering;

.5 fight fires effectively in any part of the ship if necessary;

.6 abandon ship speedily and safely and effect rescue if necessary;

.7 prevent pollution of the environment;

.8 maintain adequate stability;

.9 maintain adequate watertight integrity;

.10 communicate in distress situations if necessary; and

.11 provide safe and healthy conditions on board.

1.3 If the result of any of these assessments is negative, taking into account all deficiencies found, the ship should be strongly considered for detention. A combination of deficiencies of a less serious nature may also warrant the detention of the ship. Ships which are unsafe to proceed to sea should be detained upon the first inspection, irrespective of the time the ship will stay in port.

2 General

The lack of valid certificates as required by the relevant instruments may warrant the detention of ships. However, ships flying the flag of States not a Party to a convention or not having implemented another relevant instrument, are not entitled to carry the certificates provided for by the convention or other relevant instrument. Therefore, absence of the required certificates should not by itself constitute a reason to detain these ships; however, in applying the "no more favourable treatment" clause, substantial compliance with the provisions and criteria specified in these Procedures must be required before the ship sails.

3 Detainable deficiencies

To assist the PSCO in the use of these Guidelines, there follows a list of deficiencies, grouped under relevant conventions and/or codes, which are considered to be of such a serious nature that they may warrant the detention of the ship involved. This list is not considered exhaustive, but is intended to give examples of relevant items.

Areas under the SOLAS Convention

1 Failure of proper operation of propulsion and other essential machinery, as well as electrical installations.

2 Insufficient cleanliness of engine-room, excess amount of oily-water mixture in bilges, insulation of piping including exhaust pipes in engine-room contaminated by oil, and improper operation of bilge pumping arrangements.

3 Failure of the proper operation of emergency generator, lighting, batteries and switches.

4 Failure of proper operation of the main and auxiliary steering gear.

5 Absence, insufficient capacity or serious deterioration of personal life-saving appliances, survival craft and launching and recovery arrangements.

6 Absence, non-compliance or substantial deterioration to the extent that it cannot comply with its intended use of fire detection system, fire alarms, fire-fighting equipment, fixed fire-extinguishing installation, ventilation valves, fire dampers, and quick-closing devices.

7 Absence, substantial deterioration or failure of proper operation of the cargo deck area fire protection on tankers.

8 Absence, non-compliance or serious deterioration of lights, shapes or sound signals.

9 Absence or failure of the proper operation of the radio equipment for distress and safety communication.

10 Absence or failure of the proper operation of navigation equipment, taking the relevant provisions of SOLAS regulation V/16.2 into account.

11 Absence of corrected navigational charts, and/or all other relevant nautical publications necessary for the intended voyage, taking into account that electronic charts may be used as a substitute for the charts.

12 Absence of non-sparking exhaust ventilation for cargo pump-rooms.

13 Serious deficiency in the operational requirements listed in appendix 7.

14 Number, composition or certification of crew not corresponding with safe manning document.

15 Non-implementation or failure to carry out the enhanced survey programme in accordance with SOLAS regulation XI-1/2 and resolution A.744(18), as amended.

16 Absence or failure of a voyage data recorder (VDR), when its use is compulsory.

Areas under the IBC Code

1 Transport of a substance not mentioned in the Certificate of Fitness or missing cargo information.

2 Missing or damaged high-pressure safety devices.

3 Electrical installations not intrinsically safe or not corresponding to the Code requirements.

4 Sources of ignition in hazardous locations.

5 Contravention of special requirements.

6 Exceeding of maximum allowable cargo quantity per tank.

7 Insufficient heat protection for sensitive products.

8 Pressure alarms for cargo tanks not operable.

9 Transport of substances to be inhibited without valid inhibitor certificate.

Areas under the IGC Code

1 Transport of a substance not mentioned in the Certificate of Fitness or missing cargo information.

2 Missing closing devices for accommodations or service spaces.

3 Bulkhead not gastight.

4 Defective air locks.

5 Missing or defective quick-closing valves.

6 Missing or defective safety valves.

7 Electrical installations not intrinsically safe or not corresponding to the Code requirements.

8 Ventilators in cargo area not operable.

9 Pressure alarms for cargo tanks not operable.

10 Gas detection plant and/or toxic gas detection plant defective.

11 Transport of substances to be inhibited without valid inhibitor certificate.

Areas under the Load Lines Convention

1 Significant areas of damage or corrosion, or pitting of plating and associated stiffening in decks and hull affecting seaworthiness or strength to take local loads, unless properly authorized temporary repairs for a voyage to a port for permanent repairs have been carried out.

2 A recognized case of insufficient stability.

3 The absence of sufficient and reliable information, in an approved form, which by rapid and simple means, enables the master to arrange for the loading and ballasting of the ship in such a way that a safe margin of stability is maintained at all stages and at varying conditions of the voyage, and that the creation of any unacceptable stresses in the ship's structure are avoided.

4 Absence, substantial deterioration or defective closing devices, hatch closing arrangements and watertight/weathertight doors.

5 Overloading.

6 Absence of, or impossibility to read, draught marks and/or Load Line marks.

Areas under the MARPOL Convention, Annex I

1 Absence, serious deterioration or failure of proper operation of the oily-water filtering equipment, the oil discharge monitoring and control system or the 15 ppm alarm arrangements.

2 Remaining capacity of slop and/or sludge tank insufficient for the intended voyage.

3 Oil Record Book not available.

4 Unauthorized discharge bypass fitted.

5 Failure to meet the requirements of regulation 20.4 or alternative requirements specified in regulation 20.7.

Areas under the MARPOL Convention, Annex II

1 Absence of P and A Manual.

2 Cargo is not categorized.

3 No Cargo Record Book available.

4 Unauthorized discharge bypass fitted.

Areas under the MARPOL Convention, Annex IV

To be developed.

Areas under the MARPOL Convention, Annex V

1 Absence of the garbage management plan.

2 No garbage record book available.

3 Ship's personnel not familiar with disposal/discharge requirements of garbage management plan.

Areas under the MARPOL Convention, Annex VI

1 Absence of valid IAPP Certificate and where relevant EIAPP Certificates and Technical Files.

2 A marine diesel engine, with a power output of more than 130 kW, which is installed on board a ship constructed on or after 1 January 2000, or a marine diesel engine having undergone a major conversion on or after 1 January 2000, which does not comply with the NO_x Technical Code 2008.

3 The sulphur content of any fuel oil used on board ships exceeds the following limits:

.1 4.5% m/m prior to 1 January 2012;

.2 3.5% m/m on and after 1 January 2012; and

.3 0.5% m/m on and after 1 January 2020*.

4 The sulphur content of any fuel used on board exceeds the following limits while operating within a SO_x emission control area:

.1 1.0% m/m on and after 1 July 2010; and

.2 0.1% m/m on and after 1 January 2015,

respectively, as per the amendments adopted by resolution MEPC.176(58).

5 An incinerator installed on board the ship on or after 1 January 2000 does not comply with requirements contained in appendix IV to the Annex, or the standard specifications for shipboard incinerators developed by the Organization (resolutions MEPC.76(40) and MEPC.93(45)).

6 The master or crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment.

Areas under the STCW Convention

1 Failure of seafarers to hold a certificate, to have an appropriate certificate, to have a valid dispensation or to provide documentary proof that an application for an endorsement has been submitted to the Administration.

* Refer to the review provision in MARPOL regulation VI/14.

2 Failure to comply with the applicable safe manning requirements of the Administration.

3 Failure of navigational or engineering watch arrangements to conform to the requirements specified for the ship by the Administration.

4 Absence in a watch of a person qualified to operate equipment essential to safe navigation, safety radiocommunications or the prevention of marine pollution.

5 Inability to provide for the first watch at the commencement of a voyage and for subsequent relieving watches persons who are sufficiently rested and otherwise fit for duty.

6 Failure to provide proof of professional proficiency for the duties assigned to seafarers for the safety of the ship and the prevention of pollution.

Areas which may not warrant a detention, but where, e.g. cargo operations have to be suspended

Failure of the proper operation (or maintenance) of inert gas systems, cargo related gear or machinery should be considered sufficient grounds to stop cargo operation.

APPENDIX 3

GUIDELINES FOR INVESTIGATIONS AND INSPECTIONS CARRIED OUT UNDER ANNEX I OF MARPOL

PART 1

INSPECTION OF IOPP CERTIFICATE, SHIP AND EQUIPMENT

1 Ships required to carry an IOPP Certificate

1.1 On boarding and introduction to the master or responsible ship's officer, the PSCO should examine the IOPP Certificate, including the attached Record of Construction and Equipment, and the Oil Record Book.

1.2 The certificate carries the information on the type of ship and the dates of surveys and inspections. As a preliminary check it should be confirmed that the dates of surveys and inspections are still valid. Furthermore it should be established if the ship carries an oil cargo and whether the carriage of such oil cargo is in conformity with the certificate (see also paragraph 1.11 of the Record of Construction and Equipment for Oil Tankers).

1.3 Through examining the Record of Construction and Equipment, the PSCO may establish how the ship is equipped for the prevention of marine pollution.

1.4 If the certificate is valid and the general impression and visual observations on board confirm a good standard of maintenance, the PSCO should generally confine the inspection to reported deficiencies, if any.

1.5 If, however, the PSCO from general impressions or observations on board has clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate, a more detailed inspection should be initiated.

1.6 The inspection of the engine-room should begin with forming a general impression of the state of the engine-room, the presence of traces of oil in the engine-room bilges and the ship's routine for disposing of oil contaminated water from the engine-room spaces.

1.7 Next a closer examination of the ship's equipment as listed in the IOPP Certificate may take place. This examination should also confirm that no unapproved modifications have been made to the ship and its equipment.

1.8 Should any doubt arise as to the maintenance or the condition of the ship or its equipment, then further examination and testing may be conducted as considered necessary. In this respect reference is made to annex 3 to the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2011 (resolution A.1053(27)).

1.9 The PSCO should bear in mind that a ship may be equipped over and above the requirements of Annex I of MARPOL. If such equipment is malfunctioning the flag State should be informed. This alone however should not cause a ship to be detained unless the discrepancy presents an unreasonable threat of harm to the marine environment.

1.10 In cases of oil tankers, the inspection should include the cargo tank and pump-room area of the ship and should begin with forming a general impression of the layout of the tanks, the cargoes carried, and the routine of cargo slops disposal.

2 Ships of non-Parties to the Convention and other ships not required to carry an IOPP Certificate

2.1 As this category of ships is not provided with an IOPP Certificate, the PSCO should be satisfied with regard to the construction and equipment standards relevant to the ship on the basis of the requirements set out in Annex I of MARPOL.

2.2 In all other respects the PSCO should be guided by the procedures for ships referred to in section 1 above.

2.3 If the ship has some form of certification other than the IOPP Certificate, the PSCO may take the form and content of this documentation into account in the evaluation of that ship.

3 Control

In exercising the control functions, the PSCO should use professional judgement to determine whether to detain the ship until any noted deficiencies are corrected or to allow it to sail with certain deficiencies which do not pose an unreasonable threat of harm to the marine environment. In doing this, the PSCO should be guided by the principle that the requirements contained in Annex I of MARPOL, in respect of construction and equipment and the operation of ships, are essential for the protection of the marine environment and that departure from these requirements could constitute an unreasonable threat of harm to the marine environment.

PART 2

CONTRAVENTION OF DISCHARGE PROVISIONS

1 Experience has shown that information furnished to the flag State as envisaged in appendix 5 of these Procedures is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This appendix is intended to identify information which is often needed by a flag State for the prosecution of such possible violations.

2 It is recommended that, in preparing a port State report on deficiencies, where contravention of the discharge requirements is involved, the authorities of the coastal or port State be guided by the itemized list of possible evidence as shown in part 3 of this appendix. It should be borne in mind in this connection that:

.1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted;

.2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention had occurred.

3 In addition to the port State report on deficiencies, a report should be completed by a port or coastal State, on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:

.1 a statement by the observer of the pollution. In addition to the information required under section 1 of part 3 of this appendix the statement should include considerations which lead the observer to conclude that none of any other possible pollution sources is in fact the source;

.2 statements concerning the sampling procedures both of the slick and on board. These should include location of and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;

.3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;

.4 a statement by the PSCO on board together with the PSCO's rank and organization;

.5 statements by persons being questioned;

.6 statements by witnesses. All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them. All statements should be signed and dated by the person making the statement and, if possible, by a witness to the signing. The names of the persons signing statements should be printed in legible script above or below the signature;

.7 photographs of the oil slick; and

.8 copies of relevant recordings, etc., pages of Oil Record Books, logbooks, discharge.

4 The report referred to in paragraphs 2 and 3 should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

PART 3

ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL ANNEX I DISCHARGE PROVISIONS

1 Action on sighting oil pollution

1.1 Particulars of ship or ships suspected of contravention

.1 Name of ship
.2 Reasons for suspecting the ship
.3 Date and time (UTC) of observation or identification
.4 Position of ship
.5 Flag and port of registry
.6 Type (e.g. tanker, cargo ship, passenger ship, fishing vessel), size (estimated tonnage) and other descriptive data (e.g. superstructure colour and funnel mark)
.7 Draught condition (loaded or in ballast)
.8 Approximate course and speed
.9 Position of slick in relation to ship (e.g. astern, port, starboard)
.10 Part of the ship from which side discharge was seen emanating
.11 Whether discharge ceased when ship was observed or contacted by radio

1.2 Particulars of slick

.1 Date and time (UTC) of observation if different from paragraph 1.1.3
.2 Position of oil slick in longitude and latitude if different from paragraph 1.1.4
.3 Approximate distance in nautical miles from the nearest landmark
.4 Approximate overall dimension of oil slick (length, width and percentage thereof covered by oil)
.5 Physical description of oil slick (direction and form, e.g. continuous, in patches or in windrows)
.6 Appearance of oil slick (indicate categories)
- Category A: Barely visible under most favourable light condition
- Category B: Visible as silvery sheen on water surface
- Category C: First trace of colour may be observed
- Category D: Bright band of colour
- Category E: Colours begin to turn dull
- Category F: Colours are much darker

.7 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kilometres) at the time of observation
.8 Sea state
.9 Direction and speed of surface wind
.10 Direction and speed of current

1.3 Identification of the observer(s)

.1 Name of the observer
.2 Organization with which observer is affiliated (if any)
.3 Observer's status within the organization
.4 Observation made from aircraft/ship/shore/otherwise
.5 Name or identity of ship or aircraft from which the observation was made

.6 Specific location of ship, aircraft, place on shore or otherwise from which observation was made
.7 Activity engaged in by observer when observation was made, for example: patrol, voyage, flight (en route from ... to ...), etc.

1.4 Method of observation and documentation

.1 Visual
.2 Conventional photographs
.3 Remote sensing records and/or remote sensing photographs
.4 Samples taken from slick
.5 Any other form of observation (specify)

Note: A photograph of the discharge should preferably be in colour. Photographs can provide the following information: that a material on the sea surface is oil; that the quantity of oil discharged does constitute a violation of the Convention; that the oil is being, or has been discharged from a particular ship; and the identity of the ship.

Experience has shown that the aforementioned can be obtained with the following three photographs:

- details of the slick taken almost vertically down from an altitude of less than 300 m with the sun behind the photographer;
- an overall view of the ship and "slick" showing oil emanating from a particular ship; and
- details of the ship for the purposes of identification.

1.5 Other information if radio contact can be established

.1 Master informed of pollution
.2 Explanation of master
.3 Ship's last port of call
.4 Ship's next port of call
.5 Name of ship's master and owner
.6 Ship's call sign

2 Investigation on board

2.1 Inspection of IOPP Certificate

.1 Name of ship
.2 Distinctive number or letters
.3 Port of registry
.4 Type of ship
.5 Date and place of issue
.6 Date and place of endorsement.

Note: If the ship is not issued an IOPP Certificate, as much as possible of the requested information should be given.

2.2 Inspection of supplement of the IOPP Certificate

.1 Applicable paragraphs of sections 2, 3, 4, 5 and 6 of the supplement (non-oil tankers)

.2 Applicable paragraphs of sections 2, 3, 4, 5, 6, 7, 8, 9 and 10 of the supplement (oil tankers)

Note: If the ship does not have an IOPP Certificate, a description should be given of the equipment and arrangements on board, designed to prevent marine pollution.

2.3 Inspection of Oil Record Book (O.R.B.)

.1 Copy sufficient pages of the O.R.B. – part I to cover a period of 30 days prior to the reported incident.

.2 Copy sufficient pages of the O.R.B. – part II (if on board) to cover a full loading/unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram.

2.4 Inspection of logbook

.1 Last port, date of departure, draught forward and aft

.2 Current port, date of arrival, draught forward and aft

.3 Ship's position at or near the time the incident was reported

.4 Spot check if positions mentioned in the logbook agree with positions noted in the O.R.B.

2.5 Inspection of other documentation on board

Other documentation relevant for evidence (if necessary make copies) such as:

- recent ullage sheets

- records of monitoring and control equipment.

2.6 Inspection of ship

.1 Ship's equipment in accordance with the supplement of the IOPP Certificate
.2 Samples taken. State location on board
.3 Traces of oil in vicinity of overboard discharge outlets
.4 Condition of engine-room and contents of bilges
.5 Condition of oily water separator, filtering equipment and alarm, stopping or monitoring arrangements
.6 Contents of sludge and/or holding tanks
.7 Sources of considerable leakage on oil tankers.

The following additional evidence may be pertinent:

.8 Oil on surface of segregated or dedicated clean ballast
.9 Condition of pump-room bilges
.10 Condition of COW system
.11 Condition of IG system
.12 Condition of monitoring and control system
.13 Slop tank contents (estimate quantity of water and of oil).

2.7 Statements of persons concerned

If the O.R.B. – part I has not been properly completed, information on the following questions may be pertinent:

.1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
.2 Is the bilge discharge controlled automatically?
.3 If so, at what time was this system last put into operation and at what time was this system last put on manual mode?
.4 If not, what were date and time of the last bilge discharge?
.5 What was the date of the last disposal of residue and how was disposal effected?
.6 Is it usual to effect discharge of bilge water directly to the sea, or to store bilge water first in a collecting tank? Identify the collecting tank
.7 Have oil fuel tanks recently been used as ballast tanks?

If the O.R.B. – part II has not been properly completed, information on the following questions may be pertinent:

.8 What was the cargo/ballast distribution in the ship on departure from the last port?
.9 What was the cargo/ballast distribution in the ship on arrival in the current port?
.10 When and where was the last loading effected?
.11 When and where was the last unloading effected?
.12 When and where was the last discharge of dirty ballast?
.13 When and where was the last cleaning of cargo tanks?
.14 When and where was the last COW operation and which tanks were washed?
.15 When and where was the last decanting of slop tanks?
.16 What is the ullage in the slop tanks and the corresponding height of interface?
.17 Which tanks contained the dirty ballast during the ballast voyage (if ship arrived in ballast)?
.18 Which tanks contained the clean ballast during the ballast voyage (if ship arrived in ballast)?

In addition the following information may be pertinent:

.19 Details of the present voyage of the ship (previous ports, next ports, trade)
.20 Contents of oil fuel and ballast tanks
.21 Previous and next bunkering, type of oil fuel

.22 Availability or non-availability of reception facilities for oily wastes during the present voyage
.23 Internal transfer of oil fuel during the present voyage.

In the case of oil tankers the following additional information may be pertinent:

.24 The trade the ship is engaged in, such as short/long distance, crude or product or alternating crude/product, lightering service, oil/dry bulk
.25 Which tanks clean and dirty
.26 Repairs carried out or envisaged in cargo tanks.

Miscellaneous information:

.27 Comments in respect of condition of ship's equipment
.28 Comments in respect of pollution report
.29 Other comments.

3 Investigation ashore

3.1 Analyses of oil samples

Indicate method and results of the samples' analyses.

3.2 Further information

Additional information on the ship, obtained from oil terminal staff, tank cleaning contractors or shore reception facilities may be pertinent.

Note: Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts, etc.

4 Information not covered by the foregoing

5 Conclusion

.1 Summing up of the investigator's technical conclusions.

.2 Indication of applicable provisions of Annex I of MARPOL which the ship is suspected of having contravened.

.3 Did the results of the investigation warrant the filing of a deficiency report?

PART 4

GUIDELINES FOR IN-PORT INSPECTION OF CRUDE OIL WASHING PROCEDURES

1 Preamble

1.1 Guidelines for the in-port inspection of crude oil washing (COW) procedures, as called for by resolution 7 of the International Conference on Tanker Safety and Pollution Prevention, 1978, are required to provide a uniform and effective control of crude oil washing to ensure compliance of ships at all times with the provisions of MARPOL.

1.2 The design of the crude oil washing installation is subject to the approval of the flag Administration. However, although the operational aspect of crude oil washing is also subject to the approval of the same Administration, it might be necessary for a port State Authority to see to it that continuing compliance with agreed procedures and parameters is ensured.

1.3 The COW Operations and Equipment Manual has been so specified that it contains all the necessary information relating to the operation of crude oil washing on a particular tanker. The objectives of the inspection would then be to ensure that the provisions of the Manual dealing with safety procedures and with pollution prevention are being strictly adhered to.

1.4 The method of the inspection is at the discretion of the port State Authority and may cover the entire operation or only those parts of the operation which occur when the PSCO is on board.

1.5 Inspection will be governed by articles 5 and 6 of MARPOL.

2 Inspections

2.1 A port State should make the appropriate arrangements so as to ensure compliance with requirements governing the crude oil washing of oil tankers. This is not, however, to be construed as relieving terminal operators and ship owners of their obligations to ensure that the operation is undertaken in accordance with the regulations.

2.2 The inspection may cover the entire operation of crude oil washing or only certain aspects of it. It is thus in the interest of all concerned that the ship's records with regard to the COW operations are maintained at all times so that a PSCO may verify those operations undertaken prior to the inspection.

3 Ship's personnel

3.1 The person in charge and the other nominated persons who have responsibility in respect of the crude oil washing operation should be identified. They must, if required, be able to show that their qualifications meet the requirements, as appropriate, of paragraphs 5.2 and 5.3 of the revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems (resolution A.446(XI), as amended).

3.2 The verification may be accomplished by reference to the individual's discharge papers, testimonials issued by the ship's operator or by certificates issued by a training centre approved by an Administration. The numbers of such personnel should be at least as stated in the Manual.

4 Documentation

4.1 The following documents should be available for inspection:

.1 the IOPP Certificate and the Record of Construction and Equipment, to determine:

.1 whether the ship is fitted with a crude oil washing system as required in regulation 33 of MARPOL Annex I;

.2 whether the crude oil washing system is according to and complying with the requirements of regulations 33 and 35 of MARPOL Annex I;

.3 the validity and date of the Operations and Equipment Manual; and

.4 the validity of the Certificate;

.2 the approved Manual;

.3 the Oil Record Book; and

.4 the Cargo Ship Safety Equipment Certificate to confirm that the inert gas system conforms to regulations contained in chapter II-2 of SOLAS, as amended.

5 Inert gas system

5.1 Inert gas system regulations require that instrumentation shall be fitted for continuously indicating and permanently recording at all times when inert gas is being supplied, the pressure and the oxygen content of the gas in the inert gas supply main. Reference to the permanent recorder would indicate if the system had been operating before and during the cargo discharge in a satisfactory manner.

5.2 If conditions specified in the Manual are not being met then the washing must be stopped until satisfactory conditions are restored.

5.3 As a further precautionary measure, the oxygen level in each tank to be washed is to be determined at the tank. The meters used should be calibrated and inspected to ensure that they are in good working order. Readings from tanks already washed in port prior to inspection should be available for checking. Spot checks on readings may be instituted.

6 Electrostatic generation

It should be confirmed either from the cargo log or by questioning the person in charge that presence of water in the crude oil is being minimized as required by paragraph 6.7 of the revised Specifications (resolution A.446(XI), as amended).

7 Communication

It should be established that effective means of communication exist between the person in charge and the other persons concerned with the COW operation.

8 Leakage on deck

PSCOs should ensure that the COW piping system has been operationally tested for leakage before cargo discharge and that the test has been noted in the ship's Oil Record Book.

9 Exclusion of oil from engine-room

It should be ascertained that the method of excluding cargo oil from the machinery space is being maintained by inspecting the isolating arrangements of the tank washing heater (if fitted) or of any part of the tank washing system which enters the machinery space.

10 Suitability of the crude oil

In judging the suitability of the oil for crude oil washing, the guidance and criteria contained in section 9 of the COW Operations and Equipment Manual should be taken into account.

11 Checklist

It should be determined from the ship's records that the pre-crude oil wash operational checklist was carried out and all instruments functioned correctly. Spot checks on certain items may be instituted.

12 Wash programmes

12.1 Where the tanker is engaged in a multiple port discharge, the Oil Record Book would indicate if tanks were crude oil washed at previous discharge ports or at sea. It should be determined that all tanks which will, or may be, used to contain ballast on the forthcoming voyage will be crude oil washed before the ship departs from the port. There is no obligation to wash any tank other than ballast tanks at a discharge port except that each of these other tanks must be washed at least in accordance with paragraph 6.1 of the revised Specifications (resolution A.446(XI), as amended). The Oil Record Book should be inspected to check that this is being complied with.

12.2 All crude oil washing must be completed before a ship leaves its final port of discharge.

12.3 If tanks are not being washed in one of the preferred orders given in the Manual, the PSCO should determine that the reason for this and the proposed order of tank washing are acceptable.

12.4 For each tank being washed it should be ensured that the operation is in accordance with the Manual in that:

.1 the deck mounted machines and the submerged machines are operating either by reference to indicators, the sound patterns or other approved methods;

.2 the deck mounted machines, where applicable, are programmed as stated;

.3 the duration of the wash is as required; and

.4 the number of tank washing machines being used simultaneously does not exceed that specified.

13 Stripping of tanks

13.1 The minimum trim conditions and the parameters of the stripping operations are to be stated in the Manual.

13.2 All tanks which have been crude oil washed are to be stripped. The adequacy of the stripping is to be checked by hand dipping at least in the aftermost hand dipping location in each tank or by such other means provided and described in the Manual. It should be ascertained that the adequacy of stripping has been checked or will be checked before the ship leaves its final port of discharge.

14 Ballasting

14.1 Tanks that were crude oil washed at sea will be recorded in the Oil Record Book. These tanks must be left empty between discharge ports for inspection at the next discharge port. Where these tanks are the designated departure ballast tanks they may be required to be ballasted at a very early stage of the discharge. This is for operational reasons and also because they must be ballasted during cargo discharge if hydrocarbon emission is to be contained on the ship. If these tanks are to be inspected when empty, then this must be done shortly after the tanker berths. If a PSCO arrives after the tanks have begun accepting ballast, then the sounding of the tank bottom would not be available. However, an examination of the surface of the ballast water is then possible. The thickness of the oil film should not be greater than that specified in paragraph 4.2.10(b) of the revised Specifications (resolution A.446(XI), as amended).

14.2 The tanks that are designated ballast tanks will be listed in the Manual. It is, however, left to the discretion of the master or responsible officer to decide which tanks may be used for ballast on the forthcoming voyage. It should be determined from the Oil Record Book that all such tanks have been washed before the tanker leaves its last discharge port. It should be noted that where a tanker back-loads a cargo of crude oil at an intermediate port into tanks designated for ballast, then it should not be required to wash those tanks at that particular port but at a subsequent port.

14.3 It should be determined from the Oil Record Book that additional ballast water has not been put into tanks which had not been crude oil washed during previous voyages.

14.4 It should be verified that the departure ballast tanks are stripped as completely as possible. Where departure ballast is filled through cargo lines and pumps these must be stripped either into another cargo tank, or ashore by the special small diameter line provided for this purpose.

14.5 The methods to avoid vapour emission where locally required will be provided in the Manual and they must be adhered to. The PSCO should ensure that this is being complied with.

14.6 The typical procedures for ballasting listed in the Manual must be observed. The PSCO should ensure this is being complied with.

14.7 When departure ballast is to be shifted, the discharge into the sea must be in compliance with regulations 15 and 34 of Annex I of MARPOL. The Oil Record Book should be inspected to ensure that the ship is complying with this.

APPENDIX 4

GUIDELINES FOR INVESTIGATIONS AND INSPECTIONS CARRIED OUT UNDER ANNEX II OF MARPOL

PART 1

INSPECTION OF CERTIFICATE (COF OR NLS CERTIFICATE), SHIP AND EQUIPMENT

1 Ships required to hold a Certificate

1.1 On boarding and after introducing oneself to the master or responsible ship's officer, the PSCO should examine the Certificate of Fitness or NLS Certificate and Cargo Record Book.

1.2 The Certificate includes information on the type of ship, the dates of surveys and a list of the products which the ship is certified to carry.

1.3 As a preliminary check, the Certificate's validity should be confirmed by verifying that the Certificate is properly completed and signed and that required surveys have been performed. In reviewing the Certificate particular attention should be given to verifying that only those noxious liquid substances which are listed on the Certificate are carried and that these substances are in tanks approved for their carriage.

1.4 The Cargo Record Book should be inspected to ensure that the records are up to date. The PSCO should check whether the ship left the previous port(s) with residues of noxious liquid substances on board which could not be discharged into the sea. The book could also have relevant entries from the appropriate authorities in the previous ports. If the examination reveals that the ship was permitted to sail from its last unloading port under certain conditions, the PSCO should ascertain that such conditions have been or will be adhered to. If the PSCO discovers an operational violation in this respect, the flag State should be informed by means of a deficiency report.

1.5 If the Certificate is valid and the PSCO's general impressions and visual observations on board confirm a good standard of maintenance, the PSCO should, provided that the Cargo Record Book entries do not show any operational violations, confine the inspection to reported deficiencies, if any.

1.6 If, however, the PSCO's general impressions or observations on board show clear grounds for believing that the condition of the ship, its equipment, or its cargo and slops handling operations do not correspond substantially with the particulars of the Certificate, the PSCO should proceed to a more detailed inspection:

.1 initially this requires an examination of the ship's approved Procedures and Arrangements Manual (P and A Manual);

.2 the more detailed inspection should include the cargo and pump-room areas of the ship and should begin with forming a general impression of the layout of the tanks, the cargoes carried, pumping and stripping conditions and cargo;

.3 next a closer examination of the ship's equipment as shown in the P and A Manual may take place. This examination should also confirm that no unapproved modifications have been made to the ship and its equipment; and

.4 should any doubt arise as to the maintenance or the condition of the ship or its equipment then further examination and testing may be conducted as may be necessary. In this respect reference is made to the Survey Guidelines under the Harmonized System of Survey and Certification (resolution A. 1053(27)), as appropriate.

1.7 The PSCO should bear in mind that a ship may be equipped over and above the requirements of Annex II of MARPOL. If such equipment is malfunctioning the flag State should be informed. This alone, however, should not cause a ship to be detained unless the malfunction presents an unreasonable threat of harm to the marine environment.

2 Ships of non-Parties to the Convention

2.1 As this category of ship is not provided with a COF or NLS Certificate as required by Annex II of MARPOL, the PSCO should be satisfied with regard to the construction and equipment standards relevant to the ship on the basis of the requirements set out in Annex II of MARPOL and the Standards for Procedures and Arrangements.

2.2 In all other respects the PSCO should be guided by the procedures for ships referred to in section 1 above (i.e. ships required to hold a Certificate).

2.3 If the ship has some form of certification other than the required Certificate, the PSCO may take the form and content of this document into account in the evaluation of that ship. Such a form of certification, however, is only of value to the PSCO if the ship has been provided with a P and A Manual.

3 Control

In exercising the control functions, the PSCO should use professional judgement to determine whether to detain the ship until any noted deficiencies are rectified or to allow it to sail with certain deficiencies which do not pose an unreasonable threat of harm to the marine environment. In doing this, the PSCO should be guided by the principle that the requirements contained in Annex II of MARPOL, in respect of construction and equipment and the operation of ships, are essential for the protection of the marine environment and that departure from these requirements could constitute an unreasonable threat of harm to the marine environment.

PART 2

CONTRAVENTION OF DISCHARGE PROVISIONS

1 With illegal discharges, past experience has shown that information furnished to the flag State is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This appendix is intended to identify information which will be needed by a flag State for the prosecution of violations of the discharge provisions under Annex II of MARPOL.

2 It is recommended that in preparing a port State report on deficiencies, where contravention of the discharge requirements is involved, the authorities of a coastal or port State should be guided by the itemized list of possible evidence as shown in part 3 of this appendix. It should be borne in mind in this connection that:

.1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted;

.2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention has occurred; and

.3 the discharge may have been oil, in which case part 2 to appendix 3 of this resolution applies (Guidelines for Investigation and Inspections carried out under Annex I of MARPOL).

3 In addition to the port State report on deficiencies, a report should be completed by a port or coastal State, on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:

.1 a statement by the observer of the pollution. In addition to the information required under section 1 of part 3 of this appendix, the statement should include considerations which have led the observer to conclude that none of any other possible pollution sources is in fact the source;

.2 statements concerning the sampling procedures both of the slick and on board. These include location of and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;

.3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;

.4 a statement by the PSCO on board together with the PSCO's rank and organization;

.5 statements by persons being questioned;

.6 statements by witnesses;

.7 photographs of the slick; and

.8 copies of relevant pages of the Cargo Record Book, logbooks, discharge recordings, etc.

4 All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them. All statements should be signed and dated by the person making the statement and, if possible, by a witness

to the signing. The names of the persons signing statements should be printed in legible script above or below the signature.

5 The report referred to in paragraphs 2 and 3 should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

PART 3

ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL ANNEX II DISCHARGE PROVISIONS

1 Action on sighting pollution

1.1 Particulars of ship or ships suspected of contravention

.1 Name of ship and IMO Number
.2 Reasons for suspecting the ship
.3 Date and time (UTC) of observation or identification
.4 Position of ship
.5 Flag and port of registry
.6 Type, size (estimated tonnage) and other descriptive data (e.g. superstructure, colour and funnel mark)
.7 Draught condition (loaded or in ballast)
.8 Approximate course and speed
.9 Position of slick in relation to ship (e.g. astern, port, starboard)
.10 Part of the ship from which discharge was seen emanating
.11 Whether discharge ceased when ship was observed or contacted by radio

1.2 Particulars of slick

.1 Date and time (UTC) of observation if different from item 1.1.3
.2 Position of slick in longitude and latitude if different from item 1.1.4
.3 Approximate distance in nautical miles from the nearest land
.4 Depth of water according to sea chart
.5 Approximate overall dimension of slick (length, width and percentage thereof covered)
.6 Physical description of slick (direction and form, e.g. continuous, in patches or in windrows)
.7 Colour of slick
.8 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kms) at the time of observation
.9 Sea state
.10 Direction and speed of surface wind
.11 Direction and speed of current

1.3 Identification of the observer(s)

.1 Name of the observer
.2 Organization with which observer is affiliated (if any)
.3 Observer's status within the organization

.4 Observation made from aircraft (ship) (shore) or otherwise
.5 Name or identity of ship or aircraft from which the observation was made
.6 Specific location of ship, aircraft, place on shore or otherwise from which observation was made
.7 Activity engaged in by observer when observation was made, for example: patrol, voyage, flight (en route from ... to ...), etc.

1.4 Method of observation and documentation

.1 Visual
.2 Conventional photographs
.3 Remote sensing records and/or remote sensing photographs
.4 Samples taken from slick
.5 Any other form of observation (specify)

Note: A photograph of the discharge should preferably be in colour. The best results may be obtained with the following three photographs:

- details of the slick taken almost vertically down from an altitude of less than 300 metres with the sun behind the photographer;
- an overall view of the ship and "slick" showing a substance emanating from the particular ship; and
- details of the ship for the purposes of identification

1.5 Other information if radio contact can be established

.1 Master informed of pollution
.2 Explanation of master
.3 Ship's last port of call
.4 Ship's next port of call
.5 Name of ship's master and owner
.6 Ship's call sign

2 Investigation on board

2.1 Inspection of the Certificate (COF or NLS Certificate)

.1 Name of ship and IMO Number
.2 Distinctive number or letters
.3 Port of registry
.4 Type of ship
.5 Date and place of issue
.6 Date and place of endorsement
.7 List of Annex II substances the ship is certified to carry
.8 Limitation as to tanks in which these substances may be carried

2.2 Inspection of P and A Manual

.1 Ship equipped with an efficient stripping system
.2 Residue quantities established at survey

2.3 Inspection of Cargo Record Book (CRB)

Copy sufficient pages of the CRB to cover a full loading/unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram

2.4 Inspection of logbook

.1 Last port, date of departure, draught forward and aft
.2 Current port, date of arrival, draught forward and aft
.3 Ship's position at or near the time the incident was reported
.4 Spot check if times entered in the Cargo Record Book in respect of discharges correspond with sufficient distance from the nearest land, the required ship's speed and with sufficient water depth

2.5 Inspection of other documentation on board

Other documentation relevant for evidence (if necessary make copies) such as:

- cargo documents of cargo presently or recently carried, together with relevant information on required unloading temperature, viscosity and/or melting point

- records of temperature of substances during unloading

- records of monitoring equipment if fitted

2.6 Inspection of ship

.1 Ship's equipment in accordance with the P and A Manual
.2 Samples taken; state location on board
.3 Sources of considerable leakage
.4 Cargo residues on surface of segregated or dedicated clean ballast
.5 Condition of pump-room bilges
.6 Condition of monitoring system
.7 Slop tank contents (estimate quantity of water and residues)

2.7 Statements of persons concerned if the CRB has not been properly completed, information on the following questions may be pertinent:

.1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
.2 Which tanks are going to be loaded in the port?
.3 Which tanks needed cleaning at sea? Had the tanks been prewashed?
.4 When and where were these cleaned?
.5 Residues of which substances were involved?
.6 What was done with the tank washing slops?
.7 Was the slop tank, or cargo tank used as a slop tank, discharged at sea?
.8 When and where was the discharge effected?
.9 What are the contents of the slop tank or cargo tank used as slop tank?
.10 Which tanks contained the dirty ballast during the ballast voyage (if ship arrived in ballast)?
.11 Which tanks contained the clean ballast during the ballast voyage (if ship arrived in ballast)?

.12 Details of the present voyage of the ship (previous ports, next ports, trade)
.13 Difficulties experienced with discharge to shore reception facilities
.14 Difficulties experienced with efficient stripping operations
.15 Which tanks are clean or dirty on arrival?
.16 Repairs carried out or envisaged in cargo tanks

Miscellaneous information

.17 Comments in respect of condition of ship's equipment
.18 Comments in respect of pollution report
.19 Other comments

3 Investigation ashore

3.1 Analyses of samples

Indicate method and results of the samples' analyses

3.2 Further information

Additional information on the ship, obtained from terminal staff, tank cleaning contractors or shore reception facilities may be pertinent

Note: Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts, etc.

3.3 Information from previous unloading port terminal

.1 Confirmation that the ship unloaded, stripped or prewashed in accordance with its P and A Manual
.2 The nature of difficulties if any
.3 Restrictions by authorities under which the ship was permitted to sail
.4 Restrictions in respect of shore reception facilities

4 Information not covered by the foregoing

5 Conclusion

.1 Summing up of the investigator's conclusions
.2 Indication of applicable provisions of Annex II of MARPOL which the ship is suspected of having contravened
.3 Did the results of the investigation warrant the filing of a deficiency report?

PART 4

PROCEDURES FOR INSPECTION OF UNLOADING, STRIPPING AND PREWASHING OPERATIONS (MAINLY IN UNLOADING PORTS)

1 Introduction

The PSCO or the surveyor authorized by the Administration exercising control in accordance with regulation 16 of MARPOL Annex II should be thoroughly acquainted with Annex II of MARPOL and the custom of the port as of relevance to cargo handling, tank washing, cleaning berths, prohibition of lighters alongside, etc.

2 Documentation

2.1 The documentation required for the inspection referred to in this appendix consists of:

.1 COF or NLS Certificate;
.2 cargo plan and shipping document;
.3 Procedures and Arrangements (P and A) Manual; and
.4 Cargo Record Book.

3 Information by ship's staff

3.1 Of relevance to the PSCO or the surveyor appointed or authorized by the Administration is the following:

.1 the intended loading and unloading programme of the ship;
.2 whether unloading and stripping operations can be effected in accordance with the P and A Manual and if not the reason why it cannot be done;
.3 the constraints, if any, under which the efficient stripping system operates (i.e. back pressure, ambient air temperature, malfunctioning, etc.); and
.4 whether the ship requests an exemption from the prewashing and the discharge of residues in the unloading port.

3.2 When tank washing is required without the use of water the PSCO or the surveyor appointed or authorized by the Administration is to be informed about the tank washing procedure and disposal of residues.

3.3 When the Cargo Record Book is not up to date, any information on prewash and residue disposal operations outstanding should be supplied.

4 Information from terminal staff

Terminal staff should supply information on limitations imposed upon the ship in respect of back pressure and/or reception facilities.

5 Control

5.1 On boarding and introduction to the master or responsible ship officers, the PSCO or the surveyor appointed or authorized by the Administration should examine the necessary documentation.

5.2 The documentation may be used to establish the following:

.1 noxious liquid substances to be unloaded, their categories and stowage (cargo plan, P and A Manual);
.2 details of efficient stripping system, if fitted (P and A Manual);
.3 tanks which require prewashing with disposal of tank washings to reception facilities (shipping document and cargo temperature);
.4 tanks which require prewashing with disposal of tank washings either to reception facilities or into the sea (P and A Manual, shipping document and cargo temperature);
.5 prewash operations and/or residue disposal operations outstanding (Cargo Record Book); and
.6 tanks which may not be washed with water due to the nature of substances involved (P and A Manual).

5.3 In respect of the prewash operations referred to under paragraph 5.2, the following information is of relevance (P and A Manual):

.1 pressure required for tank washing machines;
.2 duration of one cycle of the tank washing machine and quantity of water used;
.3 washing programmes for the substances involved;
.4 required temperature of washing water; and
.5 special procedures.

5.4 The PSCO or the surveyor authorized by the Administration, in accordance with regulation 16 of MARPOL Annex II, should ascertain that unloading, stripping and/or prewash operations are carried out in conformance with the information obtained in accordance with paragraph 2 (Documentation) of this Part. If this cannot be achieved, alternative measures should be taken to ensure that the ship does not proceed to sea with more than the quantities of residue specified in regulation 12 of MARPOL Annex II, as applicable. If the residue quantities cannot be reduced by alternative measures the PSCO or the surveyor appointed or authorized by the Administration should inform the port State Administration.

5.5 Care should be taken to ensure that cargo hoses and piping systems of the terminal are not drained back to the ship.

5.6 If a ship is exempted from certain pumping efficiency requirements under regulation 4.4 of MARPOL Annex II or requests an exemption from certain stripping or prewashing procedures under regulation 13.4 of MARPOL Annex II the conditions for such exemption set out in the said regulations should be observed. These concern:

.1 regulations 4.2 and 4.3: the ship is constructed before 1 July 1986 and is exempted from the requirement for reducing its residue quantities to specified limits of regulation 12 (i.e. category X or Y substances 300 litres and category Z substances 900 litres). This is subject to the conditions of regulation 4.3 that whenever a cargo tank is to be washed or ballasted, a prewash is required with disposal of prewash slops to shore reception facilities. The COF or NLS Certificate should have been endorsed to the effect that the ship is solely engaged in restricted voyages;

.2 regulation 4.4: the ship is never required to ballast its cargo tanks and tank washing is only required for repair or dry-docking. The COF or NLS Certificate should indicate the particulars of the exemption. Each cargo tank should be certified for the carriage of only one named substance;

.3 regulation 13.4.1: cargo tanks will not be washed or ballasted prior to the next loading;

.4 regulation 13.4.2: cargo tanks will be washed and prewash slops will be discharged to reception facilities in another port. It should be confirmed in writing that an adequate reception facility is available at that port for such purpose; and

.5 regulation 13.4.3: the cargo residues can be removed by ventilation.

5.7 The PSCO or the surveyor appointed or authorized by the Administration must endorse the Cargo Record Book under section J whenever an exemption under regulation 13.4 referred to under paragraph 5.6 above has been granted, or whenever a tank having unloaded category X substances has been prewashed in accordance with the P and A Manual.

5.8 Alternatively, for category X substances, regulation 13.6.1.1 of MARPOL Annex II, residual concentration should be measured by the procedures which each port State authorizes. In this case the PSCO or the surveyor authorized by the Administration must endorse in the Cargo Record Book under section K whenever the required residual concentration has been achieved.

5.9 In addition to paragraph 5.7 above, the PSCO or the surveyor authorized by the Administration shall endorse the Cargo Record Book whenever the unloading, stripping or prewash of category Y and Z substances, in accordance with the P and A Manual, has actually been witnessed.

APPENDIX 5

GUIDELINES FOR DISCHARGE REQUIREMENTS UNDER ANNEXES I AND II OF MARPOL

1 Introduction

1.1 Regulations 15 and 34 of MARPOL Annex I prohibit the discharge into the sea of oil and regulation 13 of Annex II prohibits the discharge into the sea of noxious liquid substances except under precisely defined conditions. A record of these operations shall be completed, where appropriate, in the form of an Oil or Cargo Record Book as applicable and shall be kept in such a place as to be readily available for inspection at all reasonable times.

1.2 The regulations referred to above provide that whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or of its wake, a Party should, to the extent that it is reasonably able to do so, promptly investigate the facts bearing on the issue of whether or not there has been a violation of the discharge provisions.

1.3 The conditions under which noxious liquid substances are permitted to be discharged into the seas include quantity, quality, and position limitations, which depend on category of substance and sea area.

1.4 An investigation into an alleged contravention should therefore aim to establish whether a noxious liquid substance has been discharged and whether the operations leading to that discharge were in accordance with the ship's Procedures and Arrangements Manual (P and A Manual).

1.5 Recognizing the likelihood that many of the violations of the discharge provisions will take place outside the immediate control and knowledge of the flag State, Article 6 of MARPOL provides that Parties shall cooperate in the detection of violations and the enforcement of the provisions using all appropriate and practicable measures of detection and environmental monitoring, adequate procedures for reporting and gathering evidence. MARPOL also contains a number of more specific provisions designed to facilitate that cooperation.

1.6 Several sources of information about possible violations of the discharge provisions can be indicated. These include:

.1 Reports by masters: Article 8 and Protocol I of MARPOL require, inter alia, a ship's master to report certain incidents involving the discharge or the probability of a discharge of oil or oily mixtures, or noxious liquid substances or mixtures containing such substances;

.2 Reports by official bodies: Article 8 of MARPOL requires furthermore that a Party issue instructions to its maritime inspection vessels and aircraft and to other appropriate services to report to its authorities incidents involving the discharge or the probability of a discharge of oil or oily mixtures, or noxious liquid substances or mixtures containing such substances;

.3 Reports by other Parties: Article 6 of MARPOL provides that a Party may request another Party to inspect a ship. The Party making the request shall supply sufficient evidence that the ship has discharged oil or oily mixtures,

noxious liquid substances or mixtures containing such substances, or that the ship has departed from the unloading port with residues of noxious liquid substances in excess of those permitted to be discharged into the sea; and

.4 Reports by others: It is not possible to list exhaustively all sources of information concerning alleged contravention of the discharge provisions. Parties should take all circumstances into account when deciding upon investigating such reports.

1.7 Action which can be taken by States other than the flag or port States that have information on discharge violations (hereinafter referred to as coastal States):

.1 Coastal States, Parties to MARPOL, upon receiving a report of pollution by oil or noxious liquid substances allegedly caused by a ship, may investigate the matter and collect such evidence as can be collected. For details of the desired evidence reference is made to appendices 3 and 4;

.2 If the investigation referred to under subparagraph .1 above discloses that the next port of call of the ship in question lies within its jurisdiction, the coastal State should also take port State action as set out in paragraphs 2.1 to 2.6 below;

.3 If the investigation referred to in subparagraph .1 above discloses that the next port of call of the ship in question lies within the jurisdiction of another Party, then the coastal State should in appropriate cases furnish the evidence to that other Party and request that Party to take port State action in accordance with paragraphs 2.1 to 2.6 below; and

.4 In either case referred to in subparagraphs .2 and .3 above and if the next port of call of the ship in question cannot be ascertained, the coastal State shall inform the flag State of the incident and of the evidence obtained.

2 Port State action

2.1 Parties shall appoint or authorize officers to carry out investigations for the purpose of verifying whether a ship has discharged oil or noxious liquid substances in violation of the provisions of MARPOL.

2.2 Parties may undertake such investigations on the basis of reports received from sources indicated in paragraph 1.6 above.

2.3 These investigations should be directed toward the gathering of sufficient evidence to establish whether the ship has violated the discharge requirements. Guidelines for the optimal collation of evidence are given in appendices 3 and 4.

2.4 If the investigations provide evidence that a violation of the discharge requirements took place within the jurisdiction of the port State, that port State shall either cause proceedings to be taken in accordance with its law, or furnish to the flag State all information and evidence in its possession about the alleged violation. When the port State causes proceedings to be taken, it shall inform the flag State.

2.5 Details of the report to be submitted to the flag State are set out in appendix 16.

2.6 The investigation might provide evidence that pollution was caused through damage to the ship or its equipment. This might indicate that a ship is not guilty of a violation of the discharge requirements of Annex I or Annex II of MARPOL provided that:

.1 all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and

.2 the owner or the master did not act either with intent to cause damage or recklessly and with knowledge that damage would probably result.

2.7 However, action by the port State as set out in chapter 3 of these Procedures may be called for.

3 Inspection of crude oil washing (COW) operations

3.1 Regulations 18, 33 and 35 of MARPOL Annex I, inter alia, require that crude oil washing of cargo tanks be performed on certain categories of crude carriers. A sufficient number of tanks shall be washed in order that ballast water is put only in cargo tanks which have been crude oil washed. The remaining cargo tanks shall be washed on a rotational basis for sludge control.

3.2 Port State Authorities may carry out inspections to ensure that crude oil washing is performed by all crude carriers either required to have a COW system or where the owner or operator chooses to install a COW system in order to comply with regulation 18 of MARPOL Annex I. In addition compliance should be ensured with the operational requirements set out in the revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems (resolution A.446(XI), as amended). This can best be done in the ports where the cargo is unloaded.

3.3 Parties should be aware that the inspection referred to in paragraph 3.2 may also lead to the identification of a pollution risk, necessitating additional action by the port State as set out in chapter 3 of these Procedures.

3.4 Detailed guidelines for in-port inspections of crude oil washing procedures have been approved and published by IMO (Crude Oil Washing Systems, revised edition, 1983) and are set out in part 4 to appendix 3.

4 Inspection of unloading, stripping and prewash operations

4.1 Regulation 16 of MARPOL Annex II requires Parties to MARPOL to appoint or authorize surveyors for the purpose of implementing the regulation.

4.2 The provisions of regulation 16 are aimed at ensuring in principle that a ship having unloaded, to the maximum possible extent, noxious liquid substances of category X, Y or Z, proceeds to sea only if residues of such substances have been reduced to such quantities as may be discharged into the sea.

4.3 Compliance with these provisions is in principle ensured in the case of categories X, Y and Z substances through the application of a prewash in the unloading port and the discharge of prewash residue water mixtures to reception facilities, except that in the case of non-solidifying and low viscosity categories Y and Z substances, requirements for the efficient stripping of a tank to negligible quantities apply in lieu of the application of a prewash. Alternatively for a number of substances ventilation procedures may be employed for removing cargo residues from a tank.

4.4 Regulation 16.6 permits the Government of the receiving Party to exempt a ship proceeding to a port or terminal under the jurisdiction of another Party from the requirement to prewash cargo tanks and discharge residue/water mixtures to a reception facility.

4.5 Existing chemical tankers engaged on restricted voyages may by virtue of regulation 4.3 of MARPOL Annex II be exempted from the quantity limitation requirements of regulations 12.1 to 12.3. If a cargo tank is to be ballasted or washed, a prewash is required after unloading category Y or Z substances and prewash residue water mixtures must be discharged to shore reception facilities. The exemption should be indicated on the certificate.

4.6 A ship whose constructional and operational features are such that ballasting of cargo tanks is not required and cargo tank washing is only required for repairs or dry-docking may by virtue of regulation 4.4 be exempted from the provisions of regulation 12 of MARPOL Annex II provided that all conditions mentioned in regulation 4.4 are complied with. Consequentially, the certificate of the ship should indicate that each cargo tank is only certified for the carriage of one named substance. It should also indicate the particulars of the exemption granted by the Administration in respect of pumping, piping and discharge arrangements.

4.7 Detailed instructions on efficient stripping and prewash procedures are included in a ship's Procedures and Arrangements Manual. The Manual also contains alternative procedures to be followed in case of equipment failure.

4.8 Parties should be aware that the inspection referred to in paragraphs 1.3 and 1.4 above may lead to the identification of a pollution risk or of a contravention of the discharge provisions, necessitating port State action as set out in chapter 3 of these Procedures.

4.9 For details in respect of inspections under this section reference is made to appendix 4.

APPENDIX 6

GUIDELINES FOR MORE DETAILED INSPECTIONS OF SHIP STRUCTURAL AND EQUIPMENT REQUIREMENTS

1 Introduction

If the PSCO from general impressions or observations on board has clear grounds for believing that the ship might be substandard, the PSCO should proceed to a more detailed inspection, taking the following considerations into account.

2 Structure

2.1 The PSCO's impression of hull maintenance and the general state on deck, the condition of such items as ladderways, guard rails, pipe coverings and areas of corrosion or pitting should influence the PSCO's decision as to whether it is necessary to make the fullest possible examination of the structure with the ship afloat. Significant areas of damage or corrosion, or pitting of plating and associated stiffening in decks and hull affecting seaworthiness or strength to take local loads, may justify detention. It may be necessary for the underwater portion of the ship to be checked. In reaching a decision, the PSCO should have regard to the seaworthiness and not the age of the ship, making an allowance for fair wear and tear over the minimum acceptable scantlings. Damage not affecting seaworthiness will not constitute grounds for judging that a ship should be detained, nor will damage that has been temporarily but effectively repaired for a voyage to a port for permanent repairs. However, in this assessment of the effect of damage, the PSCO should have regard to the location of crew accommodation and whether the damage substantially affects its habitability.

2.2 The PSCO should pay particular attention to the structural integrity and seaworthiness of bulk carriers and oil tankers and note that these ships must undergo the enhanced programme of inspection during surveys under the provision of regulation XI-1/2 of SOLAS.

2.3 The PSCO's assessment of the safety of the structure of those ships should be based on the Survey Report File carried on board. This file should contain reports of structural surveys, condition evaluation reports (translated into English and endorsed by or on behalf of the Administration), thickness measurement reports and a survey planning document. The PSCO should note that there may be a short delay in the update of the Survey Report File following survey. Where there is doubt that the required survey has taken place, the PSCO should seek confirmation from the recognized organization.

2.4 If the Survey Report File necessitates a more detailed inspection of the structure of the ship or if no such report is carried, special attention should be given by the PSCO, as appropriate, to hull structure, piping systems in way of cargo tanks or holds, pump-rooms, cofferdams, pipe tunnels, void spaces within the cargo area, and ballast tanks.

2.5 For bulk carriers, PSCOs should inspect holds' main structure for any obviously unauthorized repairs. For bulk carriers the port State control officer should verify that the bulk carrier booklet has been endorsed, the water level alarms in cargo holds are fitted, and where applicable, that any restrictions imposed on the carriage of solid bulk cargoes have been recorded in the booklet and the bulk carrier loading triangle is permanently marked.

3 Machinery spaces

3.1 The PSCO should assess the condition of the machinery and of the electrical installations such that they are capable of providing sufficient continuous power for propulsion and for auxiliary services.

3.2 During inspection of the machinery spaces, the PSCO should form an impression of the standard of maintenance. Frayed, disconnected or inoperative quick-closing valve wires, disconnected or inoperative extended control rods or machinery trip mechanisms, missing valve hand wheels, evidence of chronic steam, water and oil leaks, dirty tank tops and bilges or extensive corrosion of machinery foundations are pointers to an unsatisfactory organization of the systems' maintenance. A large number of temporary repairs, including pipe clips or cement boxes, will indicate reluctance to make permanent repairs.

3.3 While it is not possible to determine the condition of the machinery without performance trials, general deficiencies, such as leaking pump glands, dirty water gauge glasses, inoperable pressure gauges, rusted relief valves, inoperative or disconnected safety or control devices, evidence of repeated operation of diesel engine scavenge belt or crankcase relief valves, malfunctioning or inoperative automatic equipment and alarm systems, and leaking boiler casings or uptakes, would warrant inspection of the engine-room logbook and investigation into the record of machinery failures and accidents and a request for running tests of machinery.

3.4 If one electrical generator is out of commission, the PSCO should investigate whether power is available to maintain essential and emergency services and should conduct tests.

3.5 If evidence of neglect becomes evident, the PSCO should extend the scope of an investigation to include, for example, tests on the main and auxiliary steering gear arrangements, overspeed trips, circuit breakers, etc.

3.6 It must be stressed that while detection of one or more of the above deficiencies would afford guidance to a substandard condition, the actual combination is a matter for professional judgement in each case.

4 Conditions of assignment of load lines

It may be that the PSCO has concluded that a hull inspection is unnecessary but, if dissatisfied on the basis of observations on deck, with items such as defective hatch closing arrangements, corroded air pipes and vent coamings, the PSCO should examine closely the conditions of assignment of load lines, paying particular attention to closing appliances, means of freeing water from the deck and arrangements concerned with the protection of the crew.

5 Life-saving appliances

5.1 The effectiveness of life-saving appliances depends heavily on good maintenance by the crew and their use in regular drills. The lapse of time since the last survey for a Safety Equipment Certificate can be a significant factor in the degree of deterioration of equipment if it has not been subject to regular inspection by the crew. Apart from failure to carry equipment required by a convention or obvious defects such as holed lifeboats, the PSCO should look for signs of disuse of, obstructions to, or defects with survival craft launching and recovery equipment which may include paint accumulation, seizing of pivot points, absence of greasing, condition of blocks and falls, condition of lifeboat lifting hook attachment to the lifeboat hull and improper lashing or stowing of deck cargo.

5.2 Should such signs be evident, the PSCO would be justified in making a detailed inspection of all life-saving appliances. Such an examination might include the lowering of survival craft, a check on the servicing of liferafts, the number and condition of lifejackets and lifebuoys and ensuring that the pyrotechnics are still within their period of validity. It would not normally be as detailed as that for a renewal of the Safety Equipment Certificate and would concentrate on essentials for safe abandonment of the ship, but in an extreme case could progress to a full Safety Equipment Certificate inspection. The provision and functioning of effective overside lighting, means of alerting the crew and passengers and provision of illuminated routes to assembly points and embarkation positions should be given importance in the inspection.

6 Fire safety

6.1 Ships in general: The poor condition of fire and wash deck lines and hydrants and the possible absence of fire hoses and extinguishers in accommodation spaces might be a guide to a need for a close inspection of all fire safety equipment. In addition to compliance with convention requirements, the PSCO should look for evidence of a higher than normal fire risk; this might be brought about by a poor standard of cleanliness in the machinery space, which together with significant deficiencies of fixed or portable fire-extinguishing equipment could lead to a judgement of the ship being substandard.

6.2 Passenger ships: The PSCO should initially form an opinion of the need for inspection of the fire safety arrangements on the basis of consideration of the ship under the previous headings and, in particular, that dealing with fire safety equipment. If the PSCO considers that a more detailed inspection of fire safety arrangements is necessary, the PSCO should examine the fire control plan on board in order to obtain a general picture of the fire safety measures provided in the ship and consider their compliance with convention requirements for the year of build. Queries on the method of structural protection should be addressed to the flag Administration and the PSCO should generally confine the inspection to the effectiveness of the arrangements provided.

6.3 The spread of fire could be accelerated if fire doors are not readily operable. The PSCO should inspect for the operability and securing arrangements of those doors in the main zone bulkheads and stairway enclosures and in boundaries of high fire risk spaces, such as main machinery rooms and galleys, giving particular attention to those retained in the open position. Attention should also be given to main vertical zones which may have been compromised through new construction. An additional hazard in the event of fire is the spread of smoke through ventilation systems. Spot checks might be made on dampers and smoke flaps to ascertain the standard of operability. The PSCO should also ensure that ventilation fans can be stopped from the master controls and that means are available for closing main inlets and outlets of ventilation systems.

6.4 Attention should be given to the effectiveness of escape routes by ensuring that vital doors are not maintained locked and that alleyways and stairways are not obstructed.

7 Regulations for preventing collisions at sea

A vital aspect of ensuring safety of life at sea is full compliance with the collision regulations. Based on observations on deck, the PSCO should consider the need for close inspection of lanterns and their screening and means of making sound and distress signals.

8 Cargo Ship Safety Construction Certificate

The general condition of the ship may lead the PSCO to consider matters other than those concerned with safety equipment and assignment of load lines, but nevertheless associated with the safety of the vessel, such as the effectiveness of items associated with the Cargo Ship Safety Construction Certificate, which can include pumping arrangements, means for shutting off air and oil supplies in the event of fire, alarm systems and emergency power supplies.

9 Cargo Ship Safety Radio Certificates

The validity of the Cargo Ship Safety Radio Certificates and associated Record of Equipment (Form R) may be accepted as proof of the provision and effectiveness of its associated equipment, but the PSCO should ensure that appropriate certificated personnel are carried for its operation and for listening periods. Requirements for maintenance of radio equipment are contained in SOLAS regulation IV/15. The radio log or radio records should be examined. Where considered necessary, operational checks may be carried out.

10 Means of access to ship

10.1 Prior to boarding a ship, the PSCO should assess the means of embarkation on and disembarkation from the ship. The PSCO should be guided by SOLAS regulation II-1/3-9 noting its application for ships constructed on or after 1 January 2010 but also noting that paragraph 3 of this regulation applies to all ships and requires that:

.1 the means of embarkation and disembarkation shall be inspected and maintained in suitable condition for their intended purpose, taking into account any restrictions related to safe loading; and

.2 all wires used to support the means of embarkation and disembarkation shall be maintained as specified in SOLAS regulation III/20.4.

10.2 In regard to the maintenance of the means of embarkation and disembarkation, the PSCO should refer to the Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation (MSC.1/Circ.1331).

10.3 During the inspection, the PSCO should also ensure that the pilot transfer arrangements comply with SOLAS regulation V/23 and the Unified interpretation of SOLAS regulation V/23 (MSC.1/Circ.1375).

11 Equipment in excess of convention or flag State requirements

Equipment on board which is expected to be relied on in situations affecting safety or pollution prevention must be in operating condition. If such equipment is inoperative and is in excess of the equipment required by an appropriate convention and/or the flag State, it should be repaired, removed or, if removal is not practicable, clearly marked as inoperative and secured.

APPENDIX 7

GUIDELINES FOR CONTROL OF OPERATIONAL REQUIREMENTS

1 Introduction

1.1 When, during a port State control inspection, the PSCO has clear grounds according to section 2.4 of the present Procedures, the following onboard operational procedures may be checked in accordance with this resolution. However, in exercising controls recommended in these guidelines, the PSCO should not include any operational tests or impose physical demands which, in the judgement of the master, could jeopardize the safety of the ship, crew, passengers, control officers or cargo.

1.2 When carrying out operational control, the PSCO should ensure, as far as possible, no interference with normal shipboard operations, such as loading and unloading of cargo and ballasting, which is carried out under the responsibility of the master, nor should the PSCO require demonstration of operational aspects which would unnecessarily delay the ship.

1.3 Having assessed the extent to which operational requirements are complied with, the PSCO then has to exercise professional judgement to determine whether the operational proficiency of the crew as a whole is of a sufficient level to allow the ship to sail without danger to the ship or persons on board, or presenting an unreasonable threat of harm to the marine environment.

1.4 When assessing the crew's ability to conduct an operational drill, the mandatory minimum requirements for familiarization and basic safety training for seafarers, as stated in the Convention STCW, shall be used as a benchmark.

2 Muster list

2.1 The PSCO may determine if the crew members are aware of their duties indicated in the muster list.

2.2 The PSCO may ensure that muster lists are exhibited in conspicuous places throughout the ship, including the navigational bridge, the engine-room and the crew accommodation spaces. When determining if the muster list is in accordance with the regulations, the PSCO may verify whether:

.1 the muster list shows the duties assigned to the different members of the crew;

.2 the muster list specifies which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use;

.3 the muster list specifies the substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions;

.4 the muster list shows the duties assigned to crew members in relation to passengers in case of emergency; and

.5 the format of the muster list used on passenger ships is approved and is drawn up in the language or languages required by the ship's flag State and in the English language.

2.3 To determine whether the muster list is up to date, the PSCO may require an up-to-date crew list, if available, to verify this.

2.4 The PSCO may determine whether the duties assigned to crew members manning the survival craft (lifeboats or liferafts) are in accordance with the regulations and verify that a deck officer or certificated person is placed in charge of each survival craft to be used. However, the Administration (of the flag State), having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling and operation of liferafts to be placed in charge of liferafts in lieu of persons qualified as above. A second-in-command shall also be nominated in the case of lifeboats.

2.5 The PSCO may determine whether the crew members are familiar with the duties assigned to them in the muster list and are aware of the locations where they should perform their duties.

3 Communication

3.1 The PSCO may determine if the key crew members are able to communicate with each other, and with passengers as appropriate, in such a way that the safe operation of the ship is not impaired, especially in emergency situations.

3.2 The PSCO may ask the master which languages are used as the working languages and may verify whether the language has been recorded in the logbook.

3.3 The PSCO may ensure that the key crew members are able to understand each other during the inspection or drills. The crew members assigned to assist passengers should be able to give the necessary information to the passengers in case of an emergency.

4 Search and Rescue Plan

For passenger ships, the PSCO may verify that there is on board an approved plan for cooperation with appropriate search and rescue services in event of an emergency.

5 Fire and abandon ship drills

5.1 The PSCO witnessing a fire and abandon ship drill should ensure that the crew members are familiar with their duties and the proper use of the ship's installations and equipment.

5.2 When setting a drill scenario, witnessing the drill and finally assessing the standard of the drill, it is important to emphasize that the PSCO is not looking for an exceptional drill, particularly on cargo ships. The main points for the PSCO to be satisfied are:

.1 In the event of a shipboard emergency can the crew organize themselves into an effective team to tackle the emergency?

.2 Can the crew communicate effectively?

.3 Is the master in control and is information flowing to/from the command centre? and

.4 In the event of the situation getting out of hand can the crew safely abandon the ship?

5.3 It is important that when setting the scenario the PSCO clearly explains to the master exactly what is required and expected during the drill, bearing in mind there may be language difficulties. PSCOs should not be intimidating, not interfere during the drill nor offer advice. The PSCO should stand back and observe only, making appropriate notes. It is important to emphasize that the PSCO's role is not to teach or train but to witness.

5.4 Drills should be carried out at a safe speed. PSCOs should not expect to see operational drills conducted in real time. During drills, care should be taken to ensure that everybody familiarizes themselves with their duties and with the equipment. If necessary, drills should be stopped if the PSCO considers that the crew are carrying out unsafe practices or if there is a real emergency.

5.5 Language difficulty between the PSCO and non-English speaking crews can make it difficult to put across the intentions for the conduct of the exercise. Care needs to be exercised when an unsatisfactory drill takes place, this is to ensure differentiation between the crew possibly failing to understand the attending PSCO's intention and failure through lack of crew competence.

6 Fire drills

6.1 The PSCO may witness a fire drill carried out by the crew assigned to these duties on the muster list. After consultation with the master of the vessel, one or more specific locations of the ship may be selected for a simulated fire. A crew member may be sent to the location(s) and activate a fire alarm system or use other means to give alarm.

6.2 At the location the PSCO can describe the fire indication to the crew member and observe how the report of fire is relayed to the bridge or damage control centre. At this point most ships will sound the crew alarm to summon the fire-fighting parties to their stations. The PSCO should observe the fire-fighting party arriving on the scene, breaking out their equipment and fighting the simulated fire. Team leaders should be giving orders as appropriate to their crews and passing the word back to the bridge or damage control centre on the conditions. The fire-fighting crews should be observed for proper donning and the use of their equipment. The PSCO should make sure that all the gear is complete. Merely mustering the crew with their gear is not acceptable. Crew response to personnel injuries can be checked by selecting a crew member as a simulated casualty. The PSCO should observe how the word is passed and the response of stretcher and medical teams. Handling a stretcher properly through narrow passageways, doors and stairways is difficult and takes practice.

6.3 The drill should, as far as practicable, be conducted as if there were an actual emergency.

6.4 Those crew members assigned to other duties related to a fire drill, such as the manning of the emergency generators, the CO_2 room, the sprinkler and emergency fire pumps, should also be involved in the drill. The PSCO may ask these crew members to explain their duties and if possible to demonstrate their familiarity.

6.5 On passenger ships, special attention should be paid to the duties of those crew members assigned to the closing of manually operated doors and fire dampers. These closing devices should be operated by the responsible persons in the areas of the simulated fire(s) during the drill. Crew members not assigned to the fire-fighting teams are generally assigned to locations throughout the passenger accommodations to assist in passenger evacuation. These crew members should be asked to explain their duties and the meaning of the various emergency signals and asked to point out the two means of escape from the area, and where the passengers are to report. Crew members assigned to assist passengers should be able to communicate at least enough information to direct a passenger to the proper muster and embarkation stations.

7 Abandon ship drills

7.1 After consultation with the master, the PSCO may require an abandon ship drill for one or more survival craft. The essence of this drill is that the survival craft are manned and operated by the crew members assigned to them on the muster list. If possible the PSCO should include the rescue boat(s) in this drill. SOLAS chapter III gives specific requirements on abandon ship training and drills, of which the following principles are particularly relevant.

7.2 The drill should, as far as practicable, be conducted as if there was an actual emergency.

7.3 The abandon ship drill should include:

.1 summoning of (passengers and) crew to the muster station(s) with the required alarm and ensuring that they are aware of the order to abandon ship as specified in the muster list;

.2 reporting to the 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 the necessary preparation for launching;

.6 starting and operating the lifeboat engine;

.7 operation of the davits used for launching liferafts;

.8 a mock search and rescue of passenger trapped in their staterooms (if applicable);

.9 instructions in the use of radio life-saving appliances;

.10 testing of emergency lighting for mustering and abandonment; and

.11 if the ship is fitted with marine evacuation systems, exercising of the procedures required for the deployment of such systems up to the point immediately preceding actual deployment.

7.4 If the lifeboat lowered during the drill is not the rescue boat, the rescue boat should be lowered as well, taking into account that it is boarded and launched in the shortest possible time. The PSCO should ensure that crew members are familiar with the duties assigned to them during abandon ship operations and that the crew member in charge of the survival craft has complete knowledge of the operation and equipment of the survival craft. Care needs to be taken when requiring a ship to lower lifeboats. The number of persons inside the lifeboats during launching for the purpose of a drill should be at the master's discretion noting that SOLAS does not require persons in the lifeboat during lowering and recovery. The purpose of this is to reduce the risk of accidents during launching and recovery, however this must be balanced out with the risk of embarking/disembarking the boat whilst it is in the water, if the boat is to be taken away and run.

7.5 Each survival craft should be stowed in a state of continuous readiness so that two crew members can carry out preparations for embarking and launching in less than five minutes.

7.6 On passenger ships, it is required that lifeboats and davit-launched liferafts are capable of being launched within a period of 30 min after all persons have been assembled with lifejackets donned.

7.7 On cargo ships, it is required that lifeboats and davit launched liferafts are capable of being launched within a period of 10 min.

8 Assessment of drills

8.1 When witnessing a drill, the PSCO should seek:

.1 confirmation that the crew follow what is required of them by the muster list;

.2 confirmation that there are sufficient personnel assigned to the various parties to cope with the duties given to them;

.3 confirmation that there is an effective means of communication between the party, the party leader and the bridge and that relevant information is being passed bi-directionally;

.4 confirmation of the efficiency of the crew working as a team. This would be based on questioning of personnel and observation of their actions. The response times should be noted of the various parties in assembling at their stations. The reaction of the parties to unplanned events should also be noted;

.5 confirmation that key members of the crew are able to understand each other;

.6 confirmation of the efficiency of the equipment used, for example:

.1 that the fire alarms are audible and efficient;

.2 that the fire doors close as required; and

.3 that items of personal fire-fighting equipment appear well maintained; and

.7 confirmation that the response time was considered fast enough (taking into account safety of the drill as indicated in paragraph 5.4 of this appendix), considering the size of the ship and the locations of fire, personnel and fire-fighting equipment.

8.2 If the PSCO determines that the crew are unfamiliar with their duties or incapable of safely operating the life-saving and fire-fighting equipment, the PSCO should halt the drill, notify the master that the drill was unsuccessful and use their professional judgement to establish the next steps, noting the likelihood that this will establish "clear grounds" for a more detailed inspection.

9 Damage control plan and Shipboard Oil Pollution Emergency Plan (SOPEP) or Shipboard Marine Pollution Emergency Plans (SMPEP)

9.1 The PSCO may determine if a damage control plan is provided on a passenger ship and whether the crew members are familiar with their duties and the proper use of the ship's installations and equipment for damage control purposes. The same applies with regard to SOPEP on all ships and SMPEP where applicable.

9.2 The PSCO may determine if the officers of the ship are aware of the contents of the damage control booklet which should be available to them, or of the damage control plan.

9.3 The officers may be asked to explain the action to be taken in various damage conditions.

9.4 The officers may also be asked to explain about the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof and the arrangements for the correction of any list due to flooding.

9.5 The officers should have a sound knowledge of the effect of trim and stability of their ship in the event of damage to and consequent flooding of a compartment and counter-measures to be taken.

10 Fire control plan

10.1 The PSCO may determine if a fire control plan or booklet is provided and whether the crew members are familiar with the information given in the fire control plan or booklet.

10.2 The PSCO may verify that fire control plans are permanently exhibited for the guidance of the ship's officers. Alternatively, booklets containing the information of the fire control plan may be supplied to each officer, and one copy should at all times be available on board in an accessible position. Plans and booklets should be kept up to date, any alterations being recorded thereon as soon as possible.

10.3 The PSCO may determine that the responsible officers, especially those who are assigned to related duties on the muster list, are aware of the information provided by the fire control plan or booklet and how to act in case of a fire.

10.4 The PSCO may ensure that the officers in charge of the ship are familiar with the principal structural members which form part of the various fire sections and the means of access to the different compartments.

11 Bridge operation

11.1 The PSCO may determine if officers in charge of a navigational watch are familiar with bridge control and navigational equipment, changing the steering mode from automatic to manual and vice versa, and the ship's manoeuvring characteristics.

11.2 The officer in charge of a navigational watch should have knowledge of the location and operation of all safety and navigational equipment. Moreover, this officer should be familiar with procedures which apply to the navigation of the ship in all circumstances and should be aware of all information available.

11.3 The PSCO may also verify the familiarity of the officers on all the information available to them such as manoeuvring characteristics of the ship, life-saving signals, up-to-date nautical publications, checklists concerning bridge procedures, instructions, manuals, etc.

11.4 The Permit to Operate High-Speed Craft includes limitations of the maximum significant wave height (and wind force for hovercraft) within which the craft may operate. When carrying out inspections of HSC, PSCOs may verify by the logbook and the weather records whether these limitations have been respected. PSCOs may find that a voyage had to be completed when worse weather conditions than permitted were encountered, but a new voyage should not commence in such conditions.

11.5 The PSCO may verify the familiarity of the officers with procedures such as periodic tests and checks of equipment, preparations for arrival and departure, changeover of steering modes, signalling, communications, manoeuvring, emergencies and logbook entries.

12 Cargo operation

12.1 The PSCO may determine if ship's personnel assigned specific duties related to the cargo and cargo equipment are familiar with those duties, any dangers posed by the cargo and with the measures to be taken in such a context.

12.2 With respect to the carriage of solid bulk cargoes, the PSCO should verify, as appropriate, that cargo loading is performed in accordance with a ship's loading plan and unloading in accordance with a ship's unloading plan agreed by the ship and the terminal, taking into account the information provided by the loading instrument, where fitted.

12.3 The PSCO, when appropriate, may determine whether the responsible crew members are familiar with the relevant provisions of the International Maritime Solid Bulk Cargoes (IMSBC) Code, particularly those concerning moisture limits and trimming of the cargo, the Code of Safe Practice for Ships Carrying Timber Deck Cargoes (2011 TDC code) and the Code of Safe Practice for Cargo Stowage and Securing.

12.4 Some solid materials transported in bulk can present a hazard during transport because of their chemical nature or physical properties. Section 2 of the IMSBC Code gives general precautions. Section 4 of the IMSBC Code contains the obligation imposed on the shipper to provide all necessary information to ensure a safe transport of the cargo. The PSCO may determine whether all relevant details, including all relevant certificates of tests, have been provided to the master from the shipper.

12.5 For some cargoes, such as cargoes which are subject to liquefaction, special precautions are given (see section 7 of the IMSBC Code). The PSCO may determine whether all precautions are met with special attention for the stability of those ships engaged in the transport of cargoes subject to liquefaction and solid hazardous waste in bulk.

12.6 Officers responsible for cargo handling and operation and key crew members of oil tankers, chemical tankers and liquefied gas carriers should be familiar with the cargo and cargo equipment and with the safety measures as stipulated in the relevant sections of the IBC and IGC Codes.

12.7 For the carriage of grain in bulk, reference is made to part C, chapter VI of SOLAS and the International Code for the Safe Carriage of Grain in Bulk (resolution MSC.23(59)).

12.8 The PSCO may determine whether the operations and loading manuals include all the relevant information for safe loading and unloading operations in port as well as in transit conditions.

13 Operation of the machinery

13.1 The PSCO may determine if responsible ship's personnel are familiar with their duties related to operating essential machinery, such as:

.1 emergency and stand-by sources of electrical power;

.2 auxiliary steering gear;

.3 bilge and fire pumps; and

.4 any other equipment essential in emergency situations.

13.2 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

.1 emergency generator:

.1 actions which are necessary before the engine can be started;

.2 different possibilities to start the engine in combination with the source of starting energy; and

.3 procedures when the first attempts to start the engine fail.

.2 stand-by generator engine:

.1 possibilities to start the stand-by engine, automatic or by hand;

.2 blackout procedures; and

.3 load-sharing system.

13.3 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

.1 which type of auxiliary steering gear system applies to the ship;

.2 how it is indicated which steering gear unit is in operation; and

.3 what action is needed to bring the auxiliary steering gear into operation.

13.4 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

.1 bilge pumps:

.1 number and location of bilge pumps installed on board the ship (including emergency bilge pumps);

.2 starting procedures for all these bilge pumps;

.3 appropriate valves to operate; and

.4 most likely causes of failure of bilge pump operation and their possible remedies.

.2 fire pumps:

.1 number and location of fire pumps installed on board the ship (including the emergency fire pump);

.2 starting procedures for all these pumps; and

.3 appropriate valves to operate.

13.5 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

.1 starting and maintenance of lifeboat engine and/or rescue boat engine;

.2 local control procedures for those systems which are normally controlled from the navigating bridge;

.3 use of the emergency and fully independent sources of electrical power of radio installations;

.4 maintenance procedures for batteries;

.5 emergency stops, fire detection system and alarm system operation of watertight and fire doors (stored energy systems); and

.6 change of control from automatic to manual for cooling water and lube oil systems for main and auxiliary engines.

14 Manuals, instructions, etc.

14.1 The PSCO may determine if the appropriate crew members are able to understand the information given in manuals, instructions, etc., relevant to the safe condition and operation of the ship and its equipment and that they are aware of the requirements for maintenance, periodic testing, training, drills and recording of logbook entries.

14.2 The following information should, inter alia, be provided on board and PSCOs may determine whether it is in a language or languages understood by the crew and whether crew members concerned are aware of the contents and are able to respond accordingly:

.1 instructions concerning the maintenance and operation of all the equipment and installations on board for the fighting and containment of fire should be kept under one cover, readily available in an accessible position;

.2 clear instructions to be followed in the event of an emergency should be provided for every person on board;

.3 illustrations and instructions in appropriate languages should be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of their muster station, the essential action they must take in an emergency and the method of donning lifejackets;

.4 posters and signs should be provided on or in the vicinity of survival craft and their launching controls and shall illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;

.5 instructions for onboard maintenance of life-saving appliances;

.6 training manuals should be provided in each crew mess room and recreation room or in each crew cabin. The training manual, which may comprise several volumes, should contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best method of survival;

.7 Shipboard Oil Pollution Emergency Plan in accordance with regulation 37 of MARPOL Annex I, or Shipboard Marine Pollution Emergency Plan in accordance with regulation 17 of MARPOL Annex II, where applicable; and

.8 stability booklet, associated stability plans and stability information.

15 Oil and oily mixtures from machinery spaces

15.1 The PSCO may determine if all operational requirements of Annex I of MARPOL have been met, taking into account:

.1 the quantity of oil residues generated;

.2 the capacity of sludge and bilge water holding tank; and

.3 the capacity of the oily water separator.

15.2 An inspection of the Oil Record Book should be made. The PSCO may determine if reception facilities have been used and note any alleged inadequacy of such facilities.

15.3 The PSCO may determine whether the responsible officer is familiar with the handling of sludge and bilge water. The relevant items from the guidelines for systems for handling oily wastes in machinery spaces of ships may be used as guidance. Taking into account the above, the PSCO may determine if the ullage of the sludge tank is sufficient for

the expected generated sludge during the next intended voyage. The PSCO may verify that, in respect of ships for which the Administration has waived the requirements of regulations 14(1) and (2) of MARPOL Annex I, all oily bilge water is retained on board for subsequent discharge to a reception facility.

15.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with the Revised consolidated format for reporting alleged inadequacy of port reception facilities (MEPC/Circ.349 of November 1998).

16 Loading, unloading and cleaning procedures for cargo spaces of tankers

16.1 The PSCO may determine if all operational requirements of Annexes I or II of MARPOL have been met taking into account the type of tanker and the type of cargo carried, including the inspection of the Oil Record Book and/or Cargo Record Book. The PSCO may determine if the reception facilities have been used and note any alleged inadequacy of such facilities.

16.2 For the control on loading, unloading and cleaning procedures for tankers carrying oil, reference is made to paragraphs 3.1 to 3.4 in appendix 5 where guidance is given for the inspection of crude oil washing (COW) operations. In appendix 3, the PSCO may find detailed guidelines for in-port inspection of crude oil washing procedures.

16.3 For the control on loading, unloading and cleaning procedures for tankers carrying noxious liquid substances, reference is made to paragraphs 4.1 to 4.9 in appendix 5 where guidance is given for the inspection of unloading, stripping and prewash operations. In appendix 4 more detailed guidelines for these inspections are given.

16.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with MEPC/Circ.349 (November 1998).

16.5 When a vessel is permitted to proceed to the next port with residues of noxious liquid substances on board in excess of those permitted to be discharged into the sea during the ship's passage, it should be ascertained that the residues can be received by that port. At the same time that port should be informed if practicable.

17 Dangerous goods and harmful substances in packaged form

17.1 The PSCO may determine if the required shipping documents for the carriage of dangerous goods and harmful substances carried in packaged form are provided on board and whether the dangerous goods and harmful substances are properly stowed and segregated and the crew members are familiar with the essential action to be taken in an emergency involving such packaged cargo (see SOLAS regulation VII/3).

17.2 Ships types and cargo spaces of ships over 500 gross tonnage built on, or after, 1 September 1984 and ships types and cargo spaces of ships less than 500 gross tonnage built on, or after, 1 February 1992 are to fully comply with the requirements of SOLAS chapter II-2. Administrations may reduce the requirements for ships of less than 500 gross tonnage but such reductions shall be recorded in the document of compliance. A document of compliance is not required for ships which only carry class 6.2, class 7 or dangerous goods in limited quantities.

17.3 Annex III of MARPOL contains requirements for the carriage of harmful substances in packaged form which are identified in the IMDG Code as marine pollutants. Cargoes which are determined to be marine pollutants should be labelled and stowed in accordance with Annex III of MARPOL.

17.4 The PSCO may determine whether a Document of Compliance is on board and whether the ship's personnel are familiar with this document provided by the Administration as evidence of compliance of construction and equipment with the requirements. Additional control may consist of:

.1 whether the dangerous goods have been stowed on board in conformity with the Document of Compliance, using the dangerous goods manifest or the stowage plan, required by SOLAS chapter VII. This manifest or stowage plan may be combined with the one required under Annex III of MARPOL;

.2 whether inadvertent pumping of leaking flammable or toxic liquids is not possible in case these substances are carried in under-deck cargo spaces; or

.3 determining whether the ship's personnel are familiar with the relevant provisions of the Medical First Aid Guide and Emergency Procedures for Ships Carrying Dangerous Goods.

18 Garbage

18.1 The PSCO may determine if all operational requirements of Annex V of MARPOL have been met. The PSCO may determine if the reception facilities have been used and note any alleged inadequacy of such facilities.

18.2 Guidelines for the implementation of Annex V of MARPOL were approved by the MEPC at its twenty-ninth session and have been amended on numerous occasions. The Guidelines can be found within the consolidated text of MARPOL Annex V. One of the objectives of these guidelines is to assist ship operators complying with the requirements set forth in Annex V and domestic laws.

18.3 The PSCO may determine whether:

.1 ship's personnel are aware of these Guidelines, in particular section 3 "Minimizing the amount of potential garbage" and section 4 "Shipboard garbage handling and storage procedures"; and

.2 ship's personnel are familiar with the disposal and discharge requirements under Annex V of MARPOL inside and outside a special area and are aware of the areas determined as special areas under Annex V of MARPOL.

18.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with MEPC/Circ.349 (November 1998).

19 Sewage

19.1 The PSCO may determine:

.1 if all operational requirements of Annex IV of MARPOL have been met. The PSCO may determine if the sewage treatment system, comminuting and disinfecting system or holding tank has been used and note any alleged inadequacy of the system or holding tank; and

.2 that appropriate ship's personnel are familiar with the correct operation of the sewage treatment system, comminuting and disinfecting system or holding tank.

19.2 The PSCO may determine whether appropriate ship's personnel are familiar with the discharge requirements under regulation 11 of MARPOL Annex IV.

19.3 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with the Waste reception facility reporting requirements (MEPC/Circ.470 of 27 July 2005).

20 Air pollution prevention

The PSCO may determine whether:

.1 the master or crew is familiar with the procedures to prevent emissions of ozone-depleting substances;

.2 the master or crew is familiar with the proper operation and maintenance of diesel engines, in accordance with their Technical Files;

.3 the master or crew has undertaken the necessary fuel changeover procedures or equivalent, associated with demonstrating compliance within a SO_x emission control area;

.4 the master or crew is familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;

.5 the master or crew is familiar with the operation of the shipboard incinerator, as required by regulation 16(2) of MARPOL Annex VI, within the limit provided in appendix IV to the Annex, in accordance with the operational manual;

.6 the master or crew recognizes the regulation of emissions of volatile organic compounds (VOCs), when the ship is in ports or terminals under the jurisdiction of a Party to the 1997 Protocol to MARPOL in which VOCs emissions are to be regulated, and is familiar with the proper operation of a vapour collection system approved by the Administration (in case the ship is a tanker as defined in regulation 2(12) of MARPOL Annex VI); and

.7 the master or crew is familiar with bunker delivery procedures in respect of bunker delivery notes and retained samples as required by regulation 18 of MARPOL Annex VI.

APPENDIX 8

GUIDELINES FOR PORT STATE CONTROL RELATED TO THE ISM CODE

1 To the extent applicable, the PSCO should examine the copy of the Document of Compliance (DOC), issued to the company, and the Safety Management Certificate (SMC), issued to the ship. An SMC is not valid unless the company holds a valid DOC for that ship type. The PSCO should in particular verify that the type of ship is included in the DOC and that the company's particulars are the same on both the DOC and the SMC.

2 During the examination of onboard documents and certificates, PSCOs should recognize:

.1 the common practice of issuing, after successfully completing an audit, SMCs and DOCs valid for a period not exceeding 5 months, to cover the period between completion of the audit and issuance of the full term certificate by either the Administration or the recognized organization; and

.2 that the current valid DOC with proper annual endorsements is normally only available in the company to which it has been issued and that the copy on board may not reflect the annual endorsements that exist on the valid DOC held by the company.

3 If a ship has onboard Interim Certificates (DOC and/or SMC), the PSCO should check whether they have been issued in accordance with the provisions of ISM Code paragraphs 14.1 and 14.2. The PSCO should take into consideration the planned arrangements for the implementation of the Safety Management System as referred to in the ISM Code, paragraph 14.4, and should recognize that the full and effective functioning of the SMS has not been audited under an Interim SMC as per the ISM Code.

4 A more detailed inspection of the Safety Management System (SMS) should be carried out if clear grounds are established. Clear grounds may include absent or inaccurate ISM Code certification or detainable (or many non-detainable) deficiencies in other areas.

5 When carrying out a more detailed inspection, the PSCO may utilize, but not be limited to, the following questions to ascertain the extent of compliance with the ISM Code (references to the relevant paragraphs of the ISM Code are given in italic print in brackets).

.1 Is there a company safety and environmental protection policy and is the appropriate ship's personnel familiar with it? (*paragraph 2.2*)

.2 Is safety management documentation (e.g. manual) readily available on board? (*paragraph 11.3*)

.3 Is relevant documentation on the SMS in a working language or language understood by the ship's personnel? (*paragraph 6.6*)

.4 Can senior ship officers identify the company responsible for the operation of the ship and does this correspond with the entity specified on the ISM Code certificates? (*paragraph 3*)

.5 Can senior ship officers identify the "designated person"? (*paragraph 4*)

.6 Are procedures in place for establishing and maintaining contact with shore management in an emergency? (*paragraph 8.3*)

.7 Are programmes for drills and exercises to prepare for emergency actions available on board? (*paragraph 8.2*)

.8 How have new crew members been made familiar with their duties if they have recently joined the ship and are instructions which are essential prior to sailing available? (*paragraph 6.3*)

.9 Can the master provide documented proof of his responsibilities and authority, which must include his overriding authority? (*paragraph 5*)

.10 Have non-conformities been reported to the company and has corrective action been taken by the company? PSCOs should not normally scrutinize the contents of any Non Conformity Note (NCN) resulting from internal audits. (*paragraphs 9.1 and 9.2*)

.11 Does the ship have a maintenance routine and are records available? (*paragraph 10.2*)

6 Deficiencies in the Safety Management System should be recorded in the PSCO's inspection report. The port State Authority should, if necessary, inform the flag State of deficiencies found in the SMS. Those deficiencies identified in the SMS, which are defined as major non-conformities in the Revised guidelines on implementation of the ISM Code by Administrations (resolution A.1022(26)), have to be rectified by removing the immediate threat or hazard before sailing. Whenever the deficiencies identified during the inspection are indicative of the existence of a major non-conformity resulting in the vessel's detention, an additional audit shall be carried out by the flag State or the recognized organization acting on its behalf to determine compliance or non-compliance in accordance with the procedures for safety management audits. The procedures set out in chapter 3 of those Procedures are applicable.

APPENDIX 9

GUIDELINES FOR PORT STATE CONTROL RELATED TO LRIT

1 PURPOSE

These Guidelines are intended to provide basic guidance to PSCOs to verify compliance with the requirements of SOLAS for Long Range Identification and Tracking (LRIT).

2 APPLICATION

2.1 LRIT equipment is required by SOLAS regulation V/19-1, and resolution MSC.263(84) requires all passenger ships, cargo ships (including high-speed craft) over 300 tons and Mobile Offshore Drilling Units (MODU) to send LRIT position information at least every 6 hours. Ships fitted with Automatic Identification System (AIS) and operated exclusively within sea area A1 are not required to comply with LRIT. Sea area A1 is defined by SOLAS regulation IV/2.1.12 as "an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government".

2.2 SOLAS Contracting Governments are expected to maintain a LRIT Data Centre, either on a national basis, or on a regional or cooperative basis with other flag States, and notify the IMO of it. In turn, these LRIT Data Centres will forward, upon request, LRIT information from ships entitled to fly their flag, to other SOLAS Contracting Governments through the International LRIT Data Exchange. Port States are entitled to request the LRIT information from foreign ships that have indicated their intention to enter a port, port facility or place under its jurisdiction.

2.3 In most cases a stand-alone Inmarsat C or Inmarsat Mini-C terminal used for GMDSS or Ship Security Alert System will function as the LRIT terminal, but other equipment may be employed for the LRIT function (example Inmarsat D+ or Iridium).

3 INSPECTION OF SHIPS REQUIRED TO CARRY LRIT EQUIPMENT

3.1 Initial inspection

3.1.1 The PSCO should first establish the sea area the ship is certified to operate in. This verification should ensure that the ship is subject to the LRIT regulation in relation to its ship type and tonnage. After the certificate check, the PSCO should verify that:

.1 the Record of Equipment (Form E, P or C) indicates LRIT as required, if applicable*;

.2 a Statement of Conformity/Conformance Test Report (see MSC.1/Circ.1307) is on board; and

.3 the equipment identified by the ship's representative as the designated LRIT terminal is switched on.**

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* Noting that a Record of Equipment is required for cargo ships greater than 500 gross tonnage and passenger ships.

** Note: In exceptional circumstances and for shortest duration possible LRIT is capable of being switched off or may transmit less frequently (SOLAS regulation V/19-1.7.2) and resolution MSC.263(84), paragraph 4.4.1.

3.1.2 In case of recent transfer of flag, the PSCO may further ensure that:

.1 a conformance test report has been re-issued if the new flag State does not recognize the issuing body of the existing conformance test report; or

.2 a new conformance test has been carried out by the Application Service Provider (ASP) on behalf of the Administration before issuance of a new test report and certificate.

3.2 Clear grounds

Conditions which may warrant a more detailed inspection of equipment used for LRIT may comprise the following:

.1 defective main or emergency source of energy;

.2 information or indication that LRIT equipment is not functioning properly;

.3 ship does not hold conformance test report; and

.4 the "record of navigational activities" indicates that the LRIT installation has been switched off and that this has not been reported to the flag Administration as required by SOLAS regulation V/19-1.7.2.

3.3 More detailed inspection

3.3.1 In case of doubt or reports of malfunctioning of the LRIT installation, the flag Administration may be contacted to determine if the ship's LRIT information has been reliably relayed to the LRIT Data Centre.

3.3.2 If any issues are identified at the initial inspection, a more detailed inspection of equipment used for LRIT may comprise the following:

.1 verification of the power supply which should be connected to the main source of energy and the emergency source of energy, there is no requirement for an uninterrupted power source. If the LRIT is part of the GMDSS radio-installation, the power supply should conform to GMDSS regulations;

.2 inspection of the "record of navigational activities" log to establish if and when the installation has been switched off and if this has been reported to the flag Administration (SOLAS regulation V/19-1.7.2 and resolution MSC.263(84), paragraph 4.4.1); and

.3 ensuring that any conformance test report is issued on behalf of the flag State, even by itself or by an authorized Application Service Provider (see MSC.1/Circ.1377/Rev.2, as may be updated), available for a ship that has installation of LRIT.

4 Deficiencies warranting detention

4.1 A PSCO should use professional judgment to determine whether to detain the ship until any noted deficiencies are corrected or to permit a vessel to sail with deficiencies*.

4.2 In order to assist the PSCO in the use of these Guidelines, the following deficiencies should be considered to be of such nature that they may warrant the detention of a ship:

.1 absence of a valid LRIT Conformance test report; and

.2 the master or the responsible officer are not familiar with essential shipboard operational procedures relating to LRIT.

4.3 Taking into account the guidance found in the Guidance on the implementation of the LRIT system (MSC.1/Circ.1298), PSCOs are also advised that ships should not be detained if the LRIT installation on board works, but the shore-side installation or organization is not able to receive, relay or process the information.

4.4 PSCOs are advised that a flag State may issue a short-term certificate. This could happen if, following a successful inspection for the issuance of a Conformity Test report, the ASP has not been able to issue a document yet, or if the ASP is not able to perform a conformance test in due time upon request of the shipowner.

* SOLAS regulation V/16: "Whilst all reasonable steps shall be taken to maintain the equipment required by this chapter in efficient working order, malfunctions of that equipment shall not be considered as making the ship unseaworthy or as a reason for delaying the ship in ports where repair facilities are not readily available, provided suitable arrangements are made by the master to take the inoperative equipment or unavailable information into account in planning and executing a safe voyage to a port where repairs can take place."

APPENDIX 10

GUIDELINES FOR PORT STATE CONTROL UNDER THE 1969 TONNAGE CONVENTION

1 The International Convention on Tonnage Measurement of Ships, 1969, which came into force on 18 July 1982, applies to:

.1 new ships, i.e. ships the keels of which were laid on or after 18 July 1982; and

.2 existing ships, i.e. ships the keels of which were laid before 18 July 1982, as from 18 July 1994,

except that for the purpose of application of the SOLAS, MARPOL and STCW Conventions, the following interim schemes indicated in paragraph 2 may apply.

2 In accordance with the interim schemes adopted by the Organization*, the Administration may, at the request of the shipowner, use the gross tonnage determined in accordance with national rules prior to the coming into force of the 1969 Tonnage Convention, for the following ships:

.1 for the purpose of SOLAS:

.1 ships the keels of which were laid before 1 January 1986;

.2 in respect of SOLAS regulation IV/3, ships the keels of which were laid on or after 1 January 1986 but before 18 July 1994; and

.3 cargo ships of less than 1,600 tons gross tonnage (as determined under the national tonnage rules) the keels of which were laid on or after 1 January 1986 but before 18 July 1994;

.2 for the purpose of STCW, ships falling under the categories of paragraphs 2.1.1 and 2.1.3 above, except that for the purpose of 1995 amendments to STCW the interim scheme does not apply (see regulation I/15.3 of the 1995 STCW amendments); and

.3 for the purpose of MARPOL ships of less than 400 tons gross tonnage (as determined under the national tonnage rules) the keel of which were laid before 18 July 1994.

3 For ships to which the above interim schemes apply, a statement to the effect that the gross tonnage has been measured in accordance with the national tonnage rules should be included in the "REMARKS" column of the International Tonnage Certificate (1969) and in the footnote to the figure of the gross tonnage in the relevant SOLAS, MARPOL and STCW certificates.

* Resolutions A.494(XII) in respect to SOLAS, A.540(13) in respect to STCW 78, and A.541(13) in respect to MARPOL.

4 The PSCO should take the following actions as appropriate when deficiencies are found in relation to the 1969 Tonnage Convention:

.1 if a ship does not hold a valid International Tonnage Certificate (1969), the ship loses all privileges of the 1969 Tonnage Convention, and the flag State should be informed without delay;

.2 if the required remarks and footnote are not included in the relevant certificates on ships to which the interim schemes apply, this deficiency should be notified to the master; and

.3 if the main characteristics of the ship differ from those entered on the International Tonnage Certificate (1969), so as to lead to an increase in the gross tonnage or net tonnage, the flag State should be informed without delay.

5 The control provisions of article 12 of the 1969 Tonnage Convention do not include the provision for detention of a ship holding a valid International Tonnage Certificate (1969).

APPENDIX 11

MINIMUM MANNING STANDARDS AND CERTIFICATION

1 Introduction

The guiding principles for port State control of the manning of a foreign ship should be to establish conformity with:

.1 the flag State's safe manning requirements. Where this is in doubt the flag State should be consulted; and

.2 the international provisions as laid down in SOLAS, STCW and in the Principles of minimum safe manning (resolution A. 1047(27)).

2 Manning control

2.1 If a ship is manned in accordance with a safe manning document or equivalent document issued by the flag State, the PSCO should accept that the ship is safely manned unless the document has clearly been issued without regard to the principles contained in the relevant instruments in which case the PSCO should act according to the procedures defined in paragraph 2.3.

2.2 If the actual crew number or composition does not conform to the manning document, the port State should request the flag State for advice as to whether or not the ship should be allowed to sail with the actual number of crew and its composition. Such a request and response should be by expedient means and either Party may request this communication in writing. If the actual crew number or composition is not brought into accordance with the safe manning document or the flag State does not advise that the ship could sail, the ship may be considered for detention after the criteria set out in section 4 have been taken into proper account.

2.3 If the ship does not carry a safe manning document or equivalent, the port State should request the flag State to specify the required number of crew and its composition and to issue a document as quickly as possible.

2.4 In case the actual number or composition of the crew does not conform to the specifications received from the flag State the procedure as contained in paragraph 2.2 applies.

2.5 If the flag State does not respond to the request this should be considered as clear grounds for a more detailed inspection to ensure that the number and composition of the crew is in accordance with the principles laid down in section 1 above. The ship should only be allowed to proceed to sea if it is safe to do so, taking into account the criteria for detention indicated in section 4. In any such case the minimum standards to be applied should be no more stringent than those applied to ships flying the flag of the port State.

3 Control under the provisions of STCW

Control exercised by the PSCO should be limited to the following:

.1 verification that all seafarers serving on board, who are required to be certificated, hold an appropriate certificate or a valid dispensation, or provide documentary proof that an application for an endorsement has been submitted to the Administration;

.2 verification that the numbers and certificates of the seafarers serving on board are in conformity with the applicable safe manning requirements of the Administration; and

.3 assessment of the ability of the seafarers of the ship to maintain watchkeeping standards as required by the Convention if there are clear grounds for believing that such standards are not being maintained because any of the following have occurred:

.1 the ship has been involved in a collision, grounding or stranding, or

.2 there has been a discharge of substances from the ship when underway, at anchor or at berth which is illegal under any international convention, or

.3 the ship has been manoeuvred in an erratic or unsafe manner whereby routeing measures adopted by the Organization or safe navigation practices and procedures have not been followed, or

.4 the ship is otherwise being operated in such a manner as to pose a danger to persons, property or the environment.

4 Detention related to minimum manning standards and certification

Before detaining a ship, the following should be considered:

.1 length and nature of the intended voyage or service;

.2 whether or not the deficiency poses a danger to ships, persons on board or the environment;

.3 whether or not appropriate rest periods of the crew can be observed;

.4 size and type of ship and equipment provided; and

.5 nature of cargo.

APPENDIX 12

LIST OF CERTIFICATES AND DOCUMENTS

List of certificates and documents which to the extent applicable should be checked during the inspection referred to in paragraph 2.2.3 (as appropriate):

1 International Tonnage Certificate (1969);

2 Reports of previous port State control inspections;

3 Passenger Ship Safety Certificate (SOLAS reg.I/12);

4 Cargo Ship Safety Construction Certificate (SOLAS reg.I/12);

5 Cargo Ship Safety Equipment Certificate (SOLAS reg.I/12);

6 Cargo Ship Safety Radio Certificate (SOLAS reg.I/12);

7 Cargo Ship Safety Certificate (SOLAS reg.I/12);

8 Special Purpose Ship Safety Certificate (SOLAS reg.I/12, SPS Code reg.1.7);

9 For ro-ro passenger ships, information on the A/A-max ratio (SOLAS reg.II-1/8-1*);

10 Damage control plans and booklets (SOLAS reg.II-1/19);

11 Stability information (SOLAS reg.II-1/5-1 and LLC 66/88 reg.10);

12 Manoeuvring Booklet and information (SOLAS reg.II-1/28);

13 Unattended machinery spaces (UMS) evidence (SOLAS reg.II-I/46.3);

14 Exemption Certificate and any list of cargoes (SOLAS reg.II-2/10.7.1.4);

15 Fire control plan (SOLAS reg.II-2/15.2.4);

16 Fire safety operational booklet (SOLAS reg.II-2/16.3.1);

17 Dangerous goods special list or manifest, or detailed stowage plan (SOLAS reg.II-2/19 and ILO Convention No.134 art.4.3(h));

18 Document of compliance Dangerous Goods (SOLAS reg.II-2/19.4);

19 Ship's logbook with respect to the records of drills, including security drills, and the log for records of inspection and maintenance of life-saving appliances and arrangements and fire-fighting appliances and arrangements (SOLAS regs.III/19.5 and 20.6);

20 Minimum Safe Manning Document (SOLAS reg.V/14.2);

* Refer to Resolution 1 of the 1995 SOLAS Conference.

21 SAR coordination plan for passenger ships trading on fixed routes (SOLAS reg.V/7.3);

22 LRIT Conformance Test Report;

23 Copy of the Document of compliance issued by the testing facility, stating the date of compliance and the applicable performance standards of VDR (voyage data recorder) (SOLAS reg.V/18.8);

24 For passenger ships, List of operational limitations (SOLAS reg.V/30.2);

25 Cargo Securing Manual (SOLAS reg.VI/5.6);

26 Bulk Carrier Booklet (SOLAS reg.VI/7.2);

27 Loading/Unloading Plan for bulk carriers (SOLAS reg.VI/7.3);

28 Document of authorization for the carriage of grain (SOLAS reg.VI/9);

29 INF (International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships) Certificate of Fitness (SOLAS reg.VII/16 and INF Code reg.1.3);

30 Copy of Document of Compliance issued in accordance with the International Management Code for the Safe Operation of Ships and for Pollution Prevention (DoC) ISM Code (SOLAS reg.IX/4.2);

31 Safety Management Certificate issued in accordance with the International Management Code for the Safe Operation of Ships and for Pollution Prevention (SMC) (SOLAS reg.IX/4.3);

32 High-Speed Craft Safety Certificate and Permit to Operate High-Speed Craft (SOLAS reg.X/3.2 and HSC Code 94/00 reg.1.8.1);

33 Continuous Synopsis Record (SOLAS reg.XI-1/5);

34 International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk, or the Certificate of Fitness for the Carriage of Liquefied Gases in Bulk, whichever is appropriate (IGC Code reg.1.5.4);

35 International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk, or the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk, whichever is appropriate (IBC Code reg.1.5.4 and BCH Code reg.1.6.3);

36 International Oil Pollution Prevention Certificate (MARPOL Annex I reg.7.1);

37 Survey Report Files (in case of bulk carriers or oil tankers) (SOLAS reg.XI-1/2);

38 Oil Record Book, parts I and II (MARPOL Annex I regs.17 and 36);

39 Shipboard Marine pollution emergency plan for Noxious Liquid Substances (MARPOL Annex II reg.17);

40 (Interim) Statement of compliance Condition Assessment Scheme (CAS) (MARPOL Annex I regs.20.6 and 21.6.1);

41 For oil tankers, the record of oil discharge monitoring and control system for the last ballast voyage (MARPOL Annex I reg.31.2);

42 Shipboard Oil Pollution Emergency Plan (MARPOL Annex I reg.37.1);

43 International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS) (MARPOL Annex II reg.9.1);

44 Cargo Record Book (MARPOL Annex II reg.15);

45 Procedures and Arrangements Manual (chemical tankers) (MARPOL Annex II reg.14.1);

46 International Sewage Pollution Prevention Certificate (ISPPC) (MARPOL Annex IV reg.5.1);

47 Garbage Management Plan (MARPOL Annex V reg.9.2);

48 Garbage Record Book (MARPOL Annex V reg.9.3);

49 International Air Pollution Prevention Certificate (IAPPC) (MARPOL Annex VI reg.6.1);

50 Logbook for fuel oil change-over (MARPOL Annex VI reg.14.6);

51 Type approval certificate of incinerator (MARPOL Annex VI reg.16.6);

52 Bunker delivery notes (MARPOL Annex VI reg.18.3);

53 Engine International Air Pollution Prevention Certificate (EIAPPC) (NO_x Technical Code 2008 reg.2.1.1.1);

54 Technical files (NO_x Technical Code 2008 reg.2.3.6);

55 Record book of engine parameters (NO_x Technical Code reg.6.2.2.7.1);

56 International Load Line Certificate (1966) (LLC 66/88 art.16.1);

57 International Load Line Exemption Certificate (LLC 66/88 art.16.2);

58 Certificates issued in accordance with STCW Convention (STCW art.VI, reg.I/2 and STCW Code section A-I/2);

59 Table of shipboard working arrangements (STCW Code section A-VIII/1.5 and ILO Convention No.180 art. 5.7);

60 Mobile Offshore Drilling Unit Safety Certificate (MODU Code 2009 chapter I section 6);

61 Certificate of insurance or any other financial security in respect of civil liability for oil pollution damage (CLC 69/92 art.VII.2);

62 Certificate of insurance or any other financial security in respect of civil liability for Bunker oil pollution damage (BUNKERS 2001 art.7.2);

63 International Ship Security Certificate (ISSC) (ISPS Code part A/19.2);

64 Record of AFS (AFS 2001 Annex 4 reg.2);

65 International Anti-Fouling System Certificate (IAFS Certificate) (AFS 2001 Annex 4 reg.2); and

66 Declaration on AFS (AFS 2001 Annex 4 reg.5).

For reference:

1 Certificate of Registry or other document of nationality (UNCLOS art.9.1.2);

2 Certificates as to the ship's hull strength and machinery installations issued by the classification society in question (only to be required if the ship maintains its class with a classification society);

3 Cargo Gear Record Book (ILO Convention No.32 art.9.2(4) and ILO Convention No.152 art.25);

4 Certificates loading and unloading equipment (ILO Convention No.134 art.4.3(e) and ILO Convention No.32 art.9(4));

5 Medical certificates (ILO Convention No.73); and

6 Records of hours of work or rest of seafarers (ILO Convention No.180 part II art. 8.1).

APPENDIX 13

REPORT OF INSPECTION IN ACCORDANCE WITH IMO PORT STATE CONTROL PROCEDURES*

FORM A

(Reporting authority)
(Address)
(Telephone)
(Telefax)

Copy to: Master
Head office
PSCO

If ship is detained, copy to:
Flag State
IMO
Recognized organization, if applicable

1 Name of reporting authority ..... **2** Name of ship .....

3 Flag of ship ..... **4** Type of ship .....

5 Call sign ..... **6** IMO number .....

7 Gross tonnage ..... **8** Deadweight (where applicable) .....

9 Year of build ..... **10** Date of inspection .....

11 Place of inspection ..... **12** Classification society .....

13 Date of release from detention** .....

14 Particulars of ISM company (details or IMO Company Number)** .....

15 Relevant certificate(s)**

	a) Title	b) Issuing authority	c) Dates of issue and expiry
1	.....	.....	.....
2	.....	.....	.....
3	.....	.....	.....
4	.....	.....	.....
5	.....	.....	.....
6	.....	.....	.....
7	.....	.....	.....
8	.....	.....	.....
9	.....	.....	.....
10	.....	.....	.....
11	.....	.....	.....
12	.....	.....	.....

d) Information on last intermediate or annual survey**

	Date	Surveying authority	Place
1	.....	.....	.....
2	.....	.....	.....
3	.....	.....	.....
4	.....	.....	.....
5	.....	.....	.....
6	.....	.....	.....
7	.....	.....	.....
8	.....	.....	.....
9	.....	.....	.....
10	.....	.....	.....
11	.....	.....	.....
12	.....	.....	.....

16 Deficiencies	No	Yes (see attached FORM B)	
17 Penalty imposed	No	Yes	Amount:
18 Ship detained	No	Yes ***	
19 Supporting documentation	No	Yes (see annex)	

Issuing office ..... Name .....
(duly authorized PSCO of reporting authority)

Telephone .....

Telefax ..... Signature .....

<u>This report must be retained on board for a period of two years and must be available for consultation by port State control officers at all times.</u>

* This inspection report has been issued solely for the purposes of informing the master and other port States that an inspection by the port State, mentioned in the heading, has taken place. This inspection report cannot be construed as a seaworthiness certificate <u>in excess of</u> the certificate the ship is required to carry.

** To be completed in the event of a detention.

*** Masters, shipowners and/or operators are advised that detailed information on a detention may be subject to future publication.

REPORT OF INSPECTION IN ACCORDANCE WITH IMO PORT STATE CONTROL PROCEDURES

FORM B

(Reporting authority)
(Address)
(Telephone)
(Telefax)

Copy to: Master
Head office
PSCO

If ship is detained, copy to:
Flag State
IMO
Recognized organization, if applicable

2 Name of ship ..... **6** IMO number .....

10 Date of inspection ..... **4** Place of inspection .....

21 Nature of deficiency[1])	Convention[2])	**22** Action taken[3])
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Name .....
(duly authorized PSCO of reporting authority)

Signature .....

1 This inspection was not a full survey and deficiencies listed may not be exhaustive. In the event of a detention, it is recommended that full survey is carried out and all deficiencies are rectified before an application for re-inspection is made.

2 To be completed in the event of a detention.

3 Actions taken include, i.e.: ship detained/released, flag State informed, classification society informed, next port informed.

APPENDIX 14

**REPORT OF DEFICIENCIES
NOT FULLY RECTIFIED OR ONLY PROVISIONALLY REPAIRED**

**In accordance with the provision of paragraph 3.7.3 of
IMO Port State Control Procedures (resolution A.1052(27))**

**(Copy to maritime Authority of next port of call, flag Administration,
or other certifying authority as appropriate)**

1 From (Country/region) ..... **2** Port .....

3 To (Country/region) ..... **4** Port .....

5 Name of ship ..... **6** Date departed .....

7 Estimated place and time of arrival .....

8 IMO number ..... **9** Flag of ship and POR .....

10 Type of ship ..... **11** Call sign .....

12 Gross tonnage ..... **13** Year of build .....

14 Issuing authority of relevant certificate(s) .....

15 Nature of deficiencies to be rectified

……..
……..
……..
……..
……..
……..
……..

16 Suggested action
(including action at next port of call)

……..
……..
……..
……..
……..
……..
……..

17 Action taken

……
……
……
……
……
……
……

Reporting Authority ..... Office .....

Name ..... Telefax .....
(duly authorized PSCO of reporting authority)

Signature ..... Date .....

APPENDIX 15

REPORT OF ACTION TAKEN TO THE NOTIFYING AUTHORITY

In accordance with the provision of paragraph 3.7.3 of IMO Port State Control Procedures (resolution A.1052(27))

(by Telefax and/or Mail)

1 To: (Name) .....
(Position) .....
(Authority) .....
Telephone ..... Telefax .....
Date: .....

2 From: (Name) .....
(Position) .....
(Authority) .....
Telephone ..... Telefax .....

3 Name of ship .....

4 Call sign ..... **5** IMO Number .....

6 Port of inspection .....

7 Date of inspection .....

8 Action taken

a) Deficiencies	b) Action taken
……	……
……	.....
……	.....
……	.....
……	.....
……	.....
……	.....
……	.....
……	.....
……	.....

9 Next port ..... (Date) .....

10 Supporting documentation No Yes (See attached)

Signature .....

APPENDIX 16

FORMAT FOR THE REPORT OF CONTRAVENTION OF MARPOL (article 6)

IMO PORT STATE CONTROL PROCEDURES

(resolution A.1052(27))

(Issuing authority)
(Address)
(Telephone)
(Telefax)

Copy to: Master

1 Reporting country .....

2 Name of ship .....

3 Flag of ship .....

4 Type of ship .....

5 Call sign ..... **6** IMO number .....

7 Gross tonnage ..... **8** Deadweight ..... (where appropriate)

9 Year of build ..... **10** Classification society .....

11 Date of incident ..... **12** Place of incident .....

13 Date of investigation .....

14 In case of contravention of discharge provisions, a report may be completed in addition to port State report on deficiencies. This report should be in accordance with parts 2 and 3 of appendix 3 and/or parts 2 and 3 of appendix 4, as applicable, and should be supplemented by documents, such as:

.1 a statement by the observer of the pollution;

.2 the appropriate information listed under section 1 of part 3 of appendices 3 and 4 to the Procedures, the statement should include considerations which lead the observer to conclude that none of any other possible pollution sources is in fact the source;

.3 statements concerning the sampling procedures both of the slick and on board. These should include location of and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;

.4 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;

.5 if applicable, a statement by the PSCO on board together with the PSCO's rank and organization;

.6 statements by persons being questioned;

.7 statements by witnesses;

.8 photographs of the slick; and

.9 copies of relevant pages of Oil/Cargo Record Books, logbooks, discharge recordings, etc.

Name and Title (duly authorized contravention investigation official)

.....

.....

.....

.....
Signature

APPENDIX 17

COMMENTS BY FLAG STATE ON DETENTION REPORT

Name of ship: .....

IMO number/call sign: .....

Flag State: .....

Gross tonnage: .....

Deadweight (where appropriate): .....

Date of report: .....

Report by: .....

Classification Society: .....

Recognized Organization involved: .....

.....

☐ Did you receive the notification of detention? (tick the box if the answer is 'yes')

Action taken

a) Deficiencies	b) Cause	c) Action taken
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...
……..	…….....	……...

Additional Information: .....

APPENDIX 18

LIST OF INSTRUMENTS RELEVANT TO PORT STATE CONTROL PROCEDURES

Instrument	Name	IMO body	Remark
A.797(19)	Safety of ships carrying solid bulk cargoes	DSC	
A.1047(27)	Principles of minimum safe manning	MSC/STW	
MSC.159(78)	Interim guidance on control and compliance measures to enhance maritime security	MSC/FSI	
MSC.286(86)	Recommendations for material safety data sheets (MSDS) for MARPOL Annex I	BLG	
MSC/Circ.447	Control under SOLAS regulation I/19 – Recommendation on radar reflectors for liferafts and on training manuals	DE	
MSC/Circ.592	Carriage of dangerous goods	DSC	
MSC/Circ.606	Port State concurrence with SOLAS exemptions	FSI	
MSC/Circ.635	Tonnage measurement of certain ships relevant to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978	SLF	
MSC/Circ.656	Safety of ships carrying solid bulk cargoes	DSC	
MSC/Circ.811	Identification of float-free arrangements for liferafts	DE	
MSC/Circ.887	Interpretation of the term "other strategic points" in SOLAS regulation III/50 and LSA Code section VII/7.2	DE	
MSC/Circ.890 MEPC/Circ.354	Interim guidelines for port State control related to the ISM Code	FSI	
MSC/Circ.907	Application of SOLAS regulation III/28.2 concerning helicopter landing areas on non ro-ro passenger ships	DE	

Instrument	Name	IMO body	Remark
MSC/Circ.918	Guidance for port State control officers in respect of certificates of competency issued under the provision of the STCW Convention	FSI/STW	
MSC/Circ.955	Servicing of life-saving appliances and radiocommunication equipment under the harmonized system of survey and certification (HSSC)	FSI	
MSC/Circ.1011, MEPC/Circ.383	Measures to improve port State control procedures	FSI	
MSC/Circ.1012	Endorsement of certificates with the date of completion of the survey on which they are based	FSI	
MSC/Circ.1016	Application of SOLAS regulation III/26 concerning fast rescue boats and means of rescue systems on ro-ro passenger ships	DE	
MSC/Circ.1030	Guidance for port State control officers on issues related to certificates of competency	FSI/STW	
MSC/Circ.1032	Guidance for port State control officers on references to STCW 95 in certificates, endorsements and documentary evidence	FSI/STW	
MSC/Circ.1089	Guidance on recommended anti-fraud measures and forgery prevention measures for seafarers' certificate	FSI/STW	
MSC/Circ.1097	Guidance relating to the implementation of SOLAS chapter XI-2 and the ISPS Code	MSC	
MSC/Circ.1107	Application of SOLAS regulation II-1/3-6 on access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers and application of the technical provisions for means of access for inspections	DE	
MSC/Circ.1111	Guidance relating to the implementation of SOLAS chapter XI-2 and the ISPS Code	MSC	
MSC/Circ.1112	Shore leave and access to ships under the ISPS Code	MSC	
MSC/Circ.1113	Guidance to port State control officers on the non-security related elements of the 2002 SOLAS amendment	MSC	

Instrument	Name	IMO body	Remark
MSC/Circ.1117	Guidance for checking the structure of bulk carriers	DE	
MSC/Circ.1133	Reminder of the obligation to notify flag States when exercising control and compliance measures	FSI	
MSC/Circ.1059 MEPC/Circ.401	Procedures concerning observed ISM Code major non-conformities	FSI	
MSC/Circ.1151 MEPC/Circ.426 FAL.2/Circ.87	Revised list of certificates and documents required to be carried on board ships	FAL	
MSC/Circ.1156	Guidance on the access of public authorities, emergency response services and pilots on board ships to which SOLAS chapter XI-2 and the ISPS Code apply	MSC	
MSC/Circ.1176	Unified interpretations to SOLAS chapters II-1 and XII and to the technical provisions for means of access for inspections	DE	
MSC.1/Circ.1191	Further reminder of the obligation to notify flag States when exercising control and compliance measures	MSC/FSI	
MSC.1/Circ.1196	Means of embarkation on and disembarkation from ships	DE	
MSC.1/Circ.1197	Amendments to the unified interpretations to SOLAS chapters II-1 and XII approved by MSC/Circ.1176	DE	
MSC.1/Circ.1198	Application of SOLAS regulation XII/6.3 on corrosion prevention of dedicated seawater ballast tanks in all types of ships and double-sided skin spaces of bulk carriers and application of the performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers	DE	
MSC.1/Circ.1199	Interim guidance on compliance of ships carrying dry cargoes in bulk with requirements of SOLAS chapters II-1, III, IX, XI-1 and XII	DE	
MSC.1/Circ.1208	Promoting and verifying continued familiarization of GMDSS operators on board ships	STW	
MSC.1/Circ.1221	Validity of type approval certification for marine products	FSI	

Instrument	Name	IMO body	Remark
MSC.1/Circ.1235	Guidelines on security-related training and familiarization for shipboard personnel	STW	
MSC.1/Circ.1326	Clarification of SOLAS regulation III/19	DE	
MSC.1/Circ.1331	Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation	DE	
MSC.1/Circ.1402	Safety of pilot transfer arrangements	FSI	
MEPC.104(49)	Guidelines for brief sampling of anti-fouling systems on ships	FSI	
MEPC.208(62)	2011 Guidelines for inspection of anti-fouling systems on ships	FSI	
MEPC.129(53) MEPC/Circ.472	Guidelines for port State control under MARPOL Annex VI	FSI	
MEPC.173(58)	Guidelines for ballast water sampling (G2)	MEPC/BLG	
MEPC.174(58)	Guidelines for approval of ballast water management systems (G8)	MEPC	
MEPC.181(59)	2009 Guidelines for port State control under the revised MARPOL Annex VI	MEPC/BLG	
MEPC.184(59)	2009 Guidelines for exhaust gas cleaning system	MEPC/BLG	
MEPC/Circ.411	Guidance for port State control officers on issues related to the Form of the Oil Record Book Part I	MEPC	
MEPC/Circ.479	Guidelines for port State control officers whilst checking compliance with the Condition Assessment Scheme (CAS)	MEPC/FSI	
MEPC/Circ.479/ Corr.1	Guidelines for port State control officers whilst checking compliance with the Condition Assessment Scheme (CAS)	MEPC/FSI	
MEPC.1/Circ.508	Bunker delivery note and fuel oil sampling	MEPC/FSI	

Instrument	Name	IMO body	Remark
MEPC.1/Circ.513	Validity of the IOPP Certificate and Supplements issued under the current MARPOL Annex I after 1 January 2007	MEPC	
MEPC.1/Circ.516	Public access to the condition assessment scheme (CAS) database	MEPC	
MEPC.1/Circ.637	Fuel oil availability and quality	MEPC	
MEPC.1/Circ.640	Interim guidance on the use of the oil record book concerning voluntary declaration of quantities retained on board in oily bilge water holding tanks and heating of oil residue (sludge)	DE	
MEPC.1/Circ.675	Discharge of cargo hold washing water in the Gulfs area and Mediterranean Sea area under MARPOL Annex V	MEPC	
MSC-MEPC.2/Circ.2	IMO requirements on carriage of publication on board ships	FSI/NAV	
MSC-MEPC.4/Circ.1	Retention of original records/documents on board ships	FSI	
MSC-MEPC.4/Circ.2	Code of good practice for port State control officers	MSC/MEPC	
MSC-MEPC.4/Circ.3	Blanking of bilge discharge piping systems in port	MSC/MEPC	
MSC-MEPC.5/Circ.6	Guidance on the timing of replacement of existing certificates by the certificates issued after the entry into force of amendments to certificates in IMO instruments	FSI	
STCW.7/Circ.12	Advice for port State control officers and recognized organizations on action to be taken in cases where not all seafarers carry certificates and endorsements meeting STCW 95 requirement after 1 February 2002	STW	
STCW.7/Circ.16	Clarification of transitional provisions relating to the 2010 Manila Amendments to the STCW Convention and Code	MSC/STW	
STCW.7/Circ.17	Advice for port State control officers on transitional arrangements leading up to the full implementation of the requirements of the 2010 Manila Amendments to the STCW Convention and Code on 1 January 2017	MSC/STW	
	Guidelines on port State control under the 2004 BWM Convention	MEPC/FSI	Under development