

Merchant Marine Circular

Panama Maritime Authority
General Directorate of Merchant Marine
Control and Compliance Department

MERCHANT MARINE CIRCULAR MMC-152

To: Recognized Organizations (RO's), Ship-owners/Operators, Legal Representatives of Panamanian Flagged Vessels, Panamanian Merchant Marine Consulates, SEGUMAR Regional Offices, ASI Inspectors, Port State Control Inspectors, Shipping Companies and other interested parties.

Subject: Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2021.

Reference: a) Law No.7 of October 27, 1977 - SOLAS 1974,
b) Law No.12 of November 9, 1981 – SOLAS Protocol 1978,
c) Law No.31 of July 11, 2007 – SOLAS Protocol 1988,
d) Law No.29 of July 11, 2007 – Load Line Protocol 1988,
e) Law No.17 of November 9, 1981 – MARPOL 1973,
f) Law No.1 of October 25, 1983 – MARPOL Protocol 1978,
g) Law No.30 of March 26, 2003 – MARPOL Protocol 1997,
h) Resolution A.1156(32) - Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2021, dated December 15, 2021 and adopted through the Resolution No. 107-OMI-253-DGMM of March 8, 2022.

1. Purpose

1.1. This Merchant Marine Circular provides a summary of the principal aspects of the guidelines for the implementation of the Harmonized System of Survey and Certification (HSSC), 2021 on vessels flying Panama flag, aiming to serve of a brief orientation for all interested parties.

2. Introduction

2.1. IMO Resolution A.1156 (32) supersedes the guidelines adopted by resolution A.1140(31), and take account of the harmonized system of survey and certification in the following instruments: SOLAS 74/78; LLC 66/88; MARPOL, BWM Convention, IBC Code; IGCC Code; BCH Code; and Polar Code.

2.2. The HSSC, 2021 take into account the amendments to statutory instruments which entered into force before or on 31 December 2021 [see appendix 1 of Resolution A.1156(32)], and contain the following Survey Guidelines under the following instruments:

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- 2.2.1. 1974 SOLAS Convention, as modified by the Protocol of 1988 relating thereto;
- 2.2.2. 1966 LL Convention, as modified by the Protocol of 1988 relating thereto;
- 2.2.3. MARPOL Convention;
- 2.2.4. International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004; and
- 2.2.5. Mandatory Codes.

3. Types of Survey

- 3.1. The types of survey used in the harmonized system are as follows:
 - 3.1.1. An **initial survey (I)** is a complete inspection before a ship is put into service of all the items relating to a particular certificate, to ensure that the relevant requirements are complied with and that these items are satisfactory for the service for which the ship is intended.
 - 3.1.2. A **periodical survey (P)** is an inspection of the items relating to the particular certificate to ensure that they are in a satisfactory condition and fit for the service for which the ship is intended.
 - 3.1.3. A **renewal survey (R)** is the same as a periodical survey but also leads to the issue of a new certificate.
 - 3.1.4. An **intermediate survey (In)** is an inspection of specified items relevant to the particular certificate to ensure that they are in a satisfactory condition and fit for the service for which the ship is intended.
 - 3.1.5. An **annual survey (A)** is a general inspection of the items relating to the particular certificate to ensure that they have been maintained and remain satisfactory for the service for which the ship is intended.
 - 3.1.6. An **inspection of the outside of the ship's bottom (B)** is an inspection of the underwater part of the ship and related items to ensure that they are in a satisfactory condition and fit for the service for which the ship is intended.
 - 3.1.7. An **additional survey (Ad)** is an inspection, either general or partial according to the circumstances, to be made after:
 - 3.1.7.1. a repair resulting from investigations or whenever any important repairs or renewals are made; or,
 - 3.1.7.2. change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material (BWM Convention Regulation E-1.1.5).

4. Application and Arrangement of the HSSC, 2021

- 4.1. The HSSC, 2021 provides a general framework upon which Administrations are able to base their arrangements for carrying out surveys. It is recognized that survey provisions contained in the HSSC, 2021 are not necessarily applicable to all types and sizes of ship.
- 4.2. For the application of HSSC, 2021, the following guidance on terms used in the survey requirements is provided:

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- 4.2.1.** "Examining", except where used in "examining the plans" or "examining the design", should be understood as an examination, using appropriate techniques, of the components, system or appliance in question for satisfactory provision, arrangement and condition and for any signs of defects, deterioration or damage. The extent of this examination shall be adapted by the surveyor considering the type of survey performed (e.g. initial, annual, renewal) and the actual maintenance condition of the ship and its equipment;
- 4.2.2.** "Testing" should be understood as a functional test of the system or appliance in question, to confirm its satisfactory operation and performance for its intended use.

5. List of certificates required on board ship relating to HSSC, 2021 (some of them depending on type of ship)

- 5.1.** Cargo Ship Safety Equipment Certificate;
- 5.2.** Cargo Ship Safety Construction Certificate;
- 5.3.** Cargo Ship Safety Radio Certificate;
- 5.4.** International Load Line Certificate;
- 5.5.** International Oil Pollution Prevention Certificate;
- 5.6.** International Pollution Prevention Certificate for Carriage of Noxious Liquid Substances in Bulk;
- 5.7.** International Sewage Pollution Prevention Certificate;
- 5.8.** International Air Pollution Prevention Certificate;
- 5.9.** 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;
- 5.10.** International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk;
- 5.11.** Passenger Ship Safety Certificate;
- 5.12.** Polar Ship Certificate; and
- 5.13.** International Ballast Water Management Certificate.

6. Description of the various types of survey

- 6.1. Initial survey:** The initial survey should be held before the ship is put in service, or when a new instrument applies to an existing ship, and the appropriate certificate is issued for the first time.
- 6.2. Annual Survey:** The annual survey should be held within three months before or after each anniversary date of the certificate.
- 6.3. Intermediate Survey:** The intermediate survey should be held within three months before or after the second anniversary date or within three months before or after the third anniversary date of the appropriate certificate and should take the place of one of the annual surveys.
- 6.4. Periodical Survey:** The periodical survey should be held within three months before or after the second anniversary date or within three months before or after the third anniversary date in the case of the cargo ship safety equipment certificate and should take the place of one of the annual surveys; in the case of the cargo ship safety radio certificate, it should be held within three months before or after each anniversary date.

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- 6.5. Renewal Survey:** The renewal survey should be held before the appropriate certificate is renewed. The cargo ship safety construction renewal survey may be commenced at the fourth annual survey and may be progressed during the succeeding year with a view to completion by the fifth anniversary date. The survey items of the fourth annual survey should not be credited to the completion of the renewal survey.
- 6.6. Inspections of the outside of the ship's bottom of cargo ships:** There should be a minimum of two inspections of the outside of the ship's bottom during any five-year period, except where SOLAS 74/88 regulation I/14(e) or (f) is applicable. One such inspection should be carried out on or after the fourth annual survey in conjunction with the renewal of the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate. Where the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate has been extended under SOLAS 74/88 regulation I/14(e) or (f), this five-year period may be extended to coincide with the validity of the certificate. In all cases the interval between any two such inspections should not exceed 36 months.
- 6.7. Additional Survey:** The additional survey should be held:
- 6.7.1.** when required after an investigation; or
 - 6.7.2.** whenever any important repairs or renewals are made; or
 - 6.7.3.** when ballast water management systems (BWMS) are retrofitted on an existing ship to which an International Ballast Water Management Certificate was previously issued.

7. Amplification of Terms and Conditions

- 7.1. Definition of related items - Reference: SOLAS 74/88 regulation I/10(b)(v).**
Related items mean those items which may only be inspected when the ship is in dry dock or undergoing an in-water examination of the outside of its bottom. For oil tankers, chemical tankers and gas carriers, this may mean that the ship has to be specially prepared by, for example, being cleaned and gas freed. Then the survey of items such as the internal examination of cargo tanks may be undertaken at the same time.
- 7.2. Extending to five years a certificate issued for less than five years**
- 7.2.1.** Where a certificate has been issued for a period of less than five years, it is permissible under these regulations or article to extend the certificate so that its maximum period of validity is five years provided that the pattern of surveys for a certificate with a five-year period of validity is maintained.
- 7.3. Extending the period between inspections of the outside of the ship's bottom**
- 7.3.1.** This permits the period of five years in which two inspections of the ship's bottom are to be carried out to be extended when the Cargo Ship Safety Construction Certificate is extended under regulation I/14(e) and (f). However, no extension should be permitted on the period of 36 months between any two such inspections. If the first ship's bottom inspection is carried out between 24 and 27 months, the 36-month limitation may prevent the certificate being extended by the periods permitted in regulation I/14(e) and (f). Reference: SOLAS 74/88 regulation I/10(a)(v).



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7.4. Definition of "short voyage"

7.4.1. For the purpose of these regulations or article, a "short voyage" means a voyage where neither the distance from the port in which the voyage begins to the final port of destination nor the return voyage exceeds 1,000 miles.

7.5. Application of "special circumstances"

7.5.1. The purpose of these regulations or article is to permit Administrations to waive the requirement that a certificate issued following a renewal survey that is completed after the expiry of the existing certificate should be dated from the expiry date of the existing certificate. The special circumstances when this could be permitted are where the ship has been laid up or has been out of service for a considerable period because of a major repair or modification. While the renewal survey would be as extensive as if the ship had continued in service, the Administration should consider whether additional surveys or examinations are required depending on how long the ship was out of service and the measures taken to protect the hull and machinery during this period. Where this regulation is invoked, it is reasonable to expect an examination of the outside of the ship's bottom to be held at the same time as the renewal survey when it would not be necessary to include any special requirements for cargo ships for the continued application of SOLAS 74/88 regulation I/10(a)(v).

7.6. Revalidation of certificates

7.6.1. A certificate ceases to be valid if the periodical, intermediate or annual survey, as appropriate, or the inspection of the outside of the ship's bottom is not completed within the periods specified in the relevant regulation or article. The validity of the certificate should be restored by carrying out the appropriate survey which, in such circumstances, should consist of the requirements of the survey that was not carried out, but its thoroughness and stringency should have regard to the time this survey was allowed to lapse. The Administration concerned should then ascertain why the survey was allowed to lapse and consider further action.

7.7. Meaning of "any five-year period"

7.7.1. Any five-year period is the five-year period of validity of the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate. Reference: SOLAS 74/88 regulation I/10(a)(v).

7.8. Surveys required after transfer of the ship to the flag of another State

7.8.1. The certificates cease to be valid when a ship transfers to the flag of another State and it is required that the Government of the State to which the ship transfers should not issue new certificates until it is fully satisfied that the ship is being properly maintained and that there have been no unauthorized changes made to the structure, machinery and equipment.

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When so requested, the Government of the State whose flag the ship was formerly entitled to fly is obliged to forward, as soon as possible, to the new Administration copies of certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports and records, such as record of safety equipment and conditions of assignment for load line. When fully satisfied by an inspection that the ship is being properly maintained and that there have been no unauthorized changes, in order to maintain the harmonization of the surveys the new Administration may give due recognition to initial and subsequent surveys carried out by, or on behalf of, the former Administration and issue new certificates having the same expiry date as the certificates that ceased to be valid because of the change of flag.

7.9. Recommended conditions for extending the period of validity of a certificate

7.9.1. In SOLAS 74/88 and other mandatory IMO instruments the following provision applies: If a ship at the time when a certificate expires is not in a port in which it is to be surveyed, the Administration may extend the period of validity of a certificate but this extension should be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. No certificate should be extended for a period longer than three months, and a ship to which an extension is granted should not, on its arrival in the port in which is to be surveyed, be entitled by virtue of such extension to leave that port without having a new certificate.

7.10. Inspection of the outside of a passenger ship's bottom

7.10.1. A minimum of two of the inspections of the outside of the ship's bottom during any five- year period should be conducted in dry dock. In all cases, the maximum interval between any two dry-dock bottom inspections should not exceed 36 months.

7.10.2. Where acceptable to the Administration, the minimum number of inspections in dry dock of the outside of the bottom of a passenger ship which is not a ro-ro passenger ship in any five-year period may be reduced from two to one (refer to MSC.1/Circ.1348) In such cases the interval between consecutive inspections in dry dock should not exceed 60 months. The definition of "any five-year period" is the five-year period of validity of the International Load Line Certificate.

7.10.3. Inspections of the ship's bottom required for the renewal survey that are not conducted in dry dock may be carried out with the ship afloat. The bottom inspection, regardless of method, should be carried out within the allowable time window for the Passenger Ship Safety Certificate renewal survey (i.e. within the three-month time window before the expiry date of the certificate). Additionally, inspections of the outside of the ship's bottom conducted afloat should only be carried out when the conditions are satisfactory, and the proper equipment and suitably qualified staff are available. Rudder bearing clearances need not be taken at the afloat inspections.

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7.10.4. Special consideration should be given to ships 15 years of age or over before being permitted to credit inspections afloat.

7.10.5. If a survey in dry dock is not completed within the maximum intervals referred to above, the Passenger Ship Safety Certificate should cease to be valid until the survey in dry dock is completed.

7.11. Survey of radio installations

7.11.1. The survey of the radio installations, including those used in life-saving appliances, should always be carried out by a qualified radio surveyor who has necessary knowledge of the requirements of SOLAS 74, the International Telecommunication Union's Radio Regulations and the associated performance standards for radio equipment. The radio survey should be carried out using suitable test equipment capable of performing all the relevant measurements required by these Guidelines. On satisfactory completion of the survey, the radio surveyor should forward a report of the survey, which should also state the organization he or she represents, to the authorities responsible for the issue of the ship's Cargo Ship Safety Radio Certificate or Passenger Ship Safety Certificate.

7.12. Survey of the automatic identification system (AIS)

7.12.1. The survey of the automatic identification system should always be carried out by a qualified radio surveyor who has necessary knowledge of the requirements of SOLAS 74, the International Telecommunication Union's Radio Regulations and the associated performance standards for radio equipment. The survey of the automatic identification system should be carried out using suitable test equipment capable of performing all the relevant measurements required by and in accordance with the Guidelines on annual testing of the automatic identification system (AIS) (MSC.1/Circ.1252).

7.13. Surveys for ships intended to operate in polar waters*

7.13.1. In accordance with SOLAS 74/88 regulations XIV/2.1 and 3.1, MARPOL Annex I regulation 47, MARPOL Annex II regulation 22, MARPOL Annex IV regulation 18 and MARPOL Annex V regulation 14, the Polar Code is a standalone instrument, providing requirements additional to SOLAS 74/88 and MARPOL for ships intended to operate in polar waters. The requirements of the Polar Code should be surveyed in the context of the surveys under SOLAS 74/88 and MARPOL, but do not form separate survey types. * Refer to the Unified interpretations of SOLAS regulation XIV/2.2 and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code (MSC.1/Circ.1562).

8. Summary of amendments to mandatory instruments reflected in the survey guidelines under the HSSC, 2021

8.1. Amendments to mandatory instruments are summarized below to facilitate amendments to the Survey Guidelines under the HSSC in the future:



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- 8.1.1. **SOLAS 74:** up to and including the 2018 amendments in IMO resolution MSC.436(99) dated 24 May 2018, adopted through Resolution No. 107-OMI-215-DGMM 11 December 2019.
- 8.1.2. **SOLAS Protocol 1988:** up to and including the 2015 amendments in IMO resolution MSC.395(95) of 11 June 2015 adopted through Resolution No.106-OMI-184-DGMM on 12 December 2016.
- 8.1.3. **LL Protocol 1988:** up to and including the 2014 amendments in IMO Resolution MSC.375(93) of 22 May 2014, adopted through Resolution No.106-OMI-163-DGMM on 24 December 2015.
- 8.1.4. **MARPOL:** up to and including the 2019 amendments, in IMO Resolution MEPC.316(74) of 17 May 2019, adopted through Resolution No. 107-OMI-231-DGMM of May 15, 2020.
- 8.1.5. **BWM Convention:** up to and including the 2018 amendments in IMO Resolution MEPC.299(72) of 13 April 2018, adopted through Resolution No.107-OMI-208-DGMM on 18 July 2019.
- 8.1.6. **NOX Technical Code 2008:** up to and including the 2019 amendments in IMO Resolution MEPC.317(74) of 17 May 2019, adopted through Resolution No. 107-OMI-232-DGMM of May 15, 2020.
- 8.1.7. **IBC Code:** up to and including the 2019 amendments in IMO resolutions MEPC.318(74)/MSC.460(101) of 17 May 2019 and 14 June 2019 respectively, adopted through Resolutions No.107-OMI-238-DGMM of 31 July 2020 and No.107-OMI-238-DGMM of 31 July 2020,
- 8.1.8. **IGC Code:** up to and including the 2018 amendments in IMO resolution MSC.441(99) of 24 May 2018, adopted through Resolution No.107-OMI-219-DGMM on 11 December 2019.
- 8.1.9. **BCH Code:** up to and including the 2019 amendments in IMO resolutions MEPC.319(74) of 17 May 2019 and MSC.463(101) of 14 June 2019, adopted through Resolution No. 106-OMI-241-DGMM on 31 July 2020.
- 8.1.10. **LSA Code:** up to and including the 2017 amendments in IMO resolution MSC. 425(98), dated 15 June 2017 adopted through Resolution No. 107-OMI-217-DGMM on 11 December 2019.
- 8.1.11. **FSS Code:** up to and including the 2016 amendments in IMO resolution MSC. 410(97) dated 25 November 2016 adopted through Resolution No.107-OMI-218-DGMM on 11 December 2019.
- 8.1.12. **IGF Code:** up to and including the 2017 amendments in IMO resolution MSC.422(98) dated 15 June 2017, adopted through Resolution No. 107-OMI-225-DGMM on 11 December 2019.
- 8.1.13. **Polar Code** in Resolution MSC.385(94) and MEPC.264(68) of 21 November 2014 and 15 May 2015 respectively, adopted through Resolutions No. 106-OMI-181-DGMM on 25 October 2016 and No. 106-OMI-180-DGMM on 25 October 2016, respectively.
- 8.1.14. **BWMS Code** in IMO Resolution MEPC.300(72) of 21 April 2018, adopted through Resolution No.107-OMI-206-DGMM on 18 July 2019



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June, 2022 – References to adoption of Resolution A.1156(32) - Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2021, following points amended 1.1, 2.1, 2.2, 2, 4, 4.1, 4.2 and 5. Point 8 completely revised.

June, 2020 - Adoption of Resolution A.1140(31) Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2019

October, 2007 - Implementation of the 1988 Harmonized System of Survey and Certification (HSSC)

Inquiries concerning the subject of this Merchant Marine Circular or any other request should be forward to:

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