International Code for Ships Operating in Polar Waters

(Polar Code)

MARITIME ADMINISTRATOR
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TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND RECOGNIZED ORGANIZATIONS


References:
(f) IMO Resolution MEPC.329(76), Amendments to the Annex of the *International Convention for the Prevention of Pollution from Ships*, 1973, as modified by protocol of 1978 relating thereto, adopted 17 June 2021
(g) IMO Circulars MEPC.1/Circ.856, Guidance for issuing revised certificates, manuals and record books of MARPOL for compliance with environment-related requirements of the Polar Code, as corrected by MEPC.1/Circ.856/Corr.1, issued 06 August 2015
(h) IMO Circular MSC.1/Circ.1519, Guidance on methodologies for assessing operational capabilities and limitations in ice, issued 6 June 2016.
(i) IMO Circular MSC.1/Circ.1562, Unified interpretation of SOLAS regulation XIV/2.2 and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code, issued 12 December 2016
(j) IMO Circular MSC.1/Circ.1612, Guidance for navigation and communication equipment intended for use on ships operating in polar waters, issued 14 June 2019
(k) IMO Circular MSC.1/Circ.1614, Interim guidelines on life saving appliances and arrangements for ships operating in polar waters, issued 26 June 2019

Inquiries concerning the subject of this Notice should be directed to the Republic of the Marshall Islands Maritime Administrator, c/o Marshall Islands Maritime and Corporate Administrators, Inc., 11495 Commerce Park Drive, Reston, VA 20191-1506 USA. The most current version of all Republic of the Marshall Islands Marine Notices may be found at www.register-iri.com.
The new IMO Guidelines for pleasure yachts (MSC.1/Circ.1642) and fishing vessels (MSC.1/Circ.1641) have been incorporated;

Section 3.9 authorizes Polski Rejestr Statków S.A. (PRS) to survey and issue Polar Ship Certificates;

Section 4.2 incorporates MARPOL Annex I, Chapter 9, Regulation 43A which prohibits the use and carriage for use as fuel of heavy fuel oil (HFO) for certain ships in Arctic waters;

Note Verbale (NV.039) has been included as it corrects Polar Code part I-A, paragraph 1.3.1; and

by deleting the Administrator’s outdated Operational Assessment model and instead relying on the guidance in IMO Circular MSC.1/Circ.1519, TechCirc-26 was also amended accordingly.

This Marine Notice supersedes Rev. Mar/2021.
BACKGROUND

The Polar Code has been developed to increase the safety of ships’ operation and mitigate the impact on the people and environment in polar waters. The Code defines three levels of ship categories (Category A, Category B, and Category C) with decreasing ice operational capabilities.

APPLICABILITY

This Notice applies to all vessels operating in polar waters as follows.

Safety Measures

The Administrator applies Polar Code part I-A to all ships\(^1\) operating in polar waters, regardless of tonnage except for:

- pleasure yachts\(^2\) not engaged in trade; and
- fishing vessels.

For these excepted vessels IMO Guidelines for Safety Measures in MSC.1/Circ.1642 and MSC.1/Circ.1641 must be applied as appropriate.

Pollution Prevention

Ships operating in Polar waters must comply with part II-A of the Polar Code. The pollution prevention measures of the MARPOL convention apply as follows:

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>All ships</td>
</tr>
<tr>
<td>II</td>
<td>All ships certified to carry noxious liquid substances (NLS) in bulk</td>
</tr>
<tr>
<td>IV</td>
<td>Ships engaged in international voyages of 400 gross tonnage and above and ships of less than 400 gross tonnage which are certified to carry more than 15 persons</td>
</tr>
<tr>
<td>V</td>
<td>All ships, unless expressly provided otherwise</td>
</tr>
</tbody>
</table>

Every RMI-flagged vessel must take into consideration the recommendations contained in part I-B and II-B of the Polar Code.

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1. A ship means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, yachts, floating craft and fixed or floating platforms.
2. Pleasure Yachts are Private Yachts and Private Yachts Limited Charter as defined in the RMI Maritime Regulations (MI-108) and the RMI Yacht Code 2021 (MI-103).
DEFINITIONS

The Polar Code contains many definitions; some of which, for the sake of clarity, are provided below.

**Antarctic area** means the sea area south of latitude 60° S as defined in SOLAS XIV/1.2, MARPOL Annexes I/1.11.7, II/13.8.1, IV/17.2, and V/1.14.7.

**Arctic waters** are as defined in SOLAS Chapter XIV/1.3 and MARPOL Annexes I/46.2, II/21.2, IV/17.3 and V/13.2, but are essentially the sea area north of latitude 60° with *exemptions* of ice-free areas, due to the effects of the Gulf Stream current.

**Category A ship** means a ship designed for operation in polar waters in at least medium, first-year ice, which may include old ice inclusions.

**Category B ship** means a ship not included in Category A, designed for operation in polar waters in at least thin, first-year ice, which may include old ice inclusions.

**Category C ship** means a ship designed to operate in open water or in ice conditions less severe than those included in Category A or B.

**Open water** means a large area of freely navigable water in which sea ice is present in concentrations less than 1/10. No ice of land origin is present.  

**Other waters** means waters with more than 1/10 ice cover or with any ice of land origin.

**Polar waters** means Arctic waters or the Antarctic area.

REQUIREMENTS

1.0 *Polar Code Compliance*

The Polar Code is mandatory under:

1.1 the International Convention for the Safety of Life at Sea (SOLAS), chapter XIV;

1.2 the International Convention for the Prevention of Pollution from Ships (MARPOL) with amendments to Annexes I, II, IV, and V; and

1.3 regulation 4 of Chapter V of the STCW Convention, and section A-V/4 of the STCW Code.

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3. The publication is available from the World Meteorological Organization, *WMO Sea Ice Nomenclature*
2.0 Structural Provisions

The structural provisions (ship design and arrangements) of the Polar Code must be applied in accordance with the rules of the Classification Society chosen by the ship owner or operator.

3.0 Safety Measures (part 1-A)

3.1 Polar Water Operational Manual

.1 A vessel operating in polar waters must carry onboard a Polar Water Operational Manual (PWOM), which contains sufficient information regarding the ship’s operational capabilities and limitations in order to support the decision-making process of the Master and the crew of the ship.

.2 The PWOM must be developed by the shipowner or ship operator in accordance with Chapter 2 part 1-A of the Polar Code which requires the PWOM to:

   a. include information on the ship-specific capabilities and limitations as determined by the Operational Assessment (See §3.2, below);

   b. include or refer to specific risk-based procedures to be followed in normal operations and in order to avoid encountering conditions that exceed the ship’s capabilities;

   c. include or refer to specific risk-based procedures to be followed in the event of incidents in polar waters;

   d. include or refer to specific risk-based procedures to be followed in the event that conditions are encountered which exceed the ship's specific capabilities and limitations; and

   e. include or refer to risk-based procedures to be followed when using icebreaker assistance, as applicable.

.3 The Administrator requires the model format contained in Appendix II of the Polar Code, along with the associated guidance, to be used in the development of the PWOM to retain a common structure that will facilitate review.

4. It is an RMI National Requirement to utilize the format contained in Appendix II.
.4 To ensure that the PWOM adequately addresses each element listed in the model format contained in Appendix II of the Polar Code, as applicable, the PWOM must be reviewed (not approved) by a Recognized Organization (RO), prior to the issuance of a Polar Ship Certificate.

3.2 Operational Assessment

.1 To establish procedures or operational limitations, an assessment of the ship and its equipment must be carried out by the shipowner or ship operator in accordance with Polar Code part 1-A paragraph 1.5. This includes considering the anticipated range of operating and environment conditions (e.g., operation in low air temperature, operation in ice, operation in high latitude, potential for abandonment onto ice or land) and hazards.

.2 The guidance contained in IMO Circular MSC.1/Circ.1519, Guidance on methodologies for assessing operational capabilities and limitations in ice, must be taken into consideration in conducting an Operational Assessment.

3.3 Goals, Functional Requirements, and Regulations

.1 Compliance is required with the goals, functional requirements, and regulations laid out in each of the 12 chapters contained in part I-A of the Polar Code.

.2 In §3.4 – §3.9, below, certain requirements are emphasized, but they are not intended to constitute all of the requirements. They should not be substituted for a thorough reading of the Polar Code.

3.4 Ship Structure, Machinery Installations, Fire Safety Protection

In accordance with Polar Code Regulations 3.3.1, 6.3.2, 6.3.3, and 7.3.2, the Administrator has authorized the entities listed in §3.9.1 (below) to approve materials of:

.1 exposed structures in ships;

.2 exposed machinery and foundations for ships intended to operate in low air temperatures, or for ships ice strengthened in accordance with Polar Code Chapter 3; and

.3 exposed fire safety systems.

3.5 Subdivision and Stability

.1 Category A and B ships constructed on or after 1 January 2017 must be able to withstand flooding resulting from hull penetration due to ice impact.
Information on the icing allowance included in the stability calculations as required under Regulations 4.3.1.1 and 4.3.1.2 must be provided in the PWOM.

3.6 Life-Saving Appliances and Arrangements

.1 Exposed escape routes on ships constructed on or after 1 January 2017 must be arranged so as not to hinder passage by persons wearing suitable polar clothing.

.2 Regulation 8.3.3.2 of the Polar Code requires both individual (personal) and shared (group) survival equipment. Carefully consider the resource lists and additional guidance in Regulation 8 when considering this equipment.

.3 The guidance in IMO Circular MSC.1/Circ.1614, Interim guidelines on life saving appliances and arrangements for ships operating in polar waters, must be taken into consideration when operating in polar waters.

3.7 Navigation Safety and Communications

.1 Ships constructed on or after 1 January 2017 and ice strengthened in accordance with Chapter 3 of the Polar Code must have either two independent echo-sounding devices or one echo-sounding device with two separate independent transducers.

.2 Category A and B ships constructed on or after 1 January 2017 must have bridge wings that are enclosed or designed to protect navigational equipment and operating personnel.

.3 Ships intended to provide icebreaking escort must be equipped with a sound signaling system mounted to face astern to indicate escort and emergency maneuvers to following ships as described in the International Code of Signals.

.4 The guidance contained in IMO Circular MSC.1/Circ.1612, Guidance for navigation and communication equipment intended for use on ships operating in polar waters, must be taken into consideration when operating in polar waters.
3.8 Training and Manning

.1 Masters, Chief Mates, and Officers in Charge of a Navigational Watch (OICNW) on board ships operating in polar waters must be qualified in accordance with the STCW Convention and Code\(^5\), as summarized in below table.

.2 Qualifications:

<table>
<thead>
<tr>
<th>Ice Conditions</th>
<th>Tankers</th>
<th>Passenger Vessels</th>
<th>All other vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice Free</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Open Waters</td>
<td>Basic training for Master, Chief Mate, and OICNWs</td>
<td>Basic training for Master, Chief Mate, and OICNWs</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
| Other Waters   | • Advanced training for Master and Chief Mate.  
                 • Basic training for Master, Chief Mate, and OICNWs | • Advanced training for Master and Chief Mate.  
                 • Basic training for Master, Chief Mate, and OICNWs | • Advanced training for Master and Chief Mate.  
                 • Basic training for Master, Chief Mate, and OICNWs |

.3 The Administrator allows using a person(s) other than the Master, Chief Mate, or OICNW to satisfy the requirements of part I-A, Chapter 12 of the Polar Code, such as ice pilots. This does not relieve the vessel’s crew of their duties and obligations for the safety of the vessel.

.4 Masters, Chief Mates, and OICNWs who have been evaluated as qualified will receive a notation on their endorsement that qualifies them for polar water service at either the operational or management level. A separate certificate will not be issued.

.5 Every crew member must receive familiarization training on the procedures and equipment contained or referenced in the PWOM relevant to their assigned duties.

.6 Further information on training requirements is provided in MI-118.

.7 A pleasure yacht may request a Minimum Safe Manning Certificate (MSMC). If requested, the MSMC will be issued at the corresponding commercial yacht levels and seafarers will be required to be trained in accordance with the STCW Convention and STCW Code, including for polar waters.

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\(^5\) This includes the standards of competence for basic and advanced training found in A-I/11.4 and A-V/4, including Tables A-V/4-1 and A-V/4-2, of the STCW Code.
3.9 Polar Ship Certificate

.1 Every vessel to which part I-A applies\(^6\) must have on board a valid Polar Ship Certificate issued in accordance with chapter 1, paragraph 1.3 of the Polar Code. See IMO Circular MSC.1/Circ.1562, *Unified interpretation of SOLAS regulation XIV/2.2 and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code.*

a. The Administrator has authorized ROs on its behalf to issue Polar Ship Certificates. See MG 2-11-15.

b. A Polar Ship Certificate may be issued by an RO listed after successful completion of an initial survey.

*For category C cargo ships, if the result of the assessment [Polar Code, Part I-A] in paragraph 1.5 is that no additional equipment or structural modifications is required to comply with the Polar Code, the Polar Ship Certificate may be issued base upon documented verification that the ship complies with all relevant requirements of the Polar Code. In this case, for continued validity of the certificate, an onboard survey should be undertaken at the next scheduled survey.*

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c. A Polar Ship Certificate must include a supplement recording equipment required by the Polar Code (Record of Equipment). Polar Ship Certificate validity, survey dates, and endorsements must be harmonized with the relevant SOLAS certificates in accordance with the provisions of SOLAS Regulation I/14.

d. The validity of the Polar Ship Certificate will not affect the validity of other certificates.

.2 For voluntary certification of non-SOLAS vessels refer to *TechCirc-26.*

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6. See NV.039 – Correction of Part I-A of the Polar Code
4.0 Pollution Prevention Measures (part II-A)

Polar Code part II-A contains both operational and structural requirements that pertain to MARPOL Annex I, Annex II, Annex IV, and Annex V. All ships operating in polar waters must comply with these requirements, as applicable.

4.1 Discharges

.1 In the Arctic discharges of the following are prohibited:

   a. oil or oily mixtures; and
   b. noxious liquid substances, or mixtures containing such substances\(^7\).

.2 In polar waters the discharge of sewage is prohibited, except when performed in accordance with MARPOL Annex IV and the additional requirements imposed by paragraph 4.2 of chapter 4 of part II-A of the Polar Code.

.3 In polar waters the discharge of garbage into the sea is permitted in accordance with regulation 4 of MARPOL Annex V and the additional requirements imposed by paragraphs 5.2.1 and 5.2.2 of chapter 5 of the Polar Code.

4.2 Prohibiting Heavy Fuel Oil (HFO) as fuel in the Arctic

.1 On or after 1 July 2024 the use and carriage of HFO\(^8\) as fuel by ships in Arctic waters is prohibited under regulation 43A of MARPOL Annex I, per MEPC.329(76).

.2 Ships which meet construction standards\(^9\) regarding oil fuel tank protection must comply on or after 1 July 2029.

.3 Ships engaged in securing the safety of ships, or in search and rescue operations, and ships dedicated to oil spill preparedness and response are exempted.

4.3 Structural Requirements

Additional tank protection is required for category A and B ships constructed on or after 1 January 2017 in accordance with part II-A, Chapter 1, paragraph 1.2 of the Polar Code.

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7 See Polar Code part II-A, Chapter 2, paragraph 2.1.3 with respect to Category A and B ships constructed on or after 1 January 2017 regarding Administrator approval for the carriage of certain NLS in cargo tanks of type 3 ships.
8 Refer to oils listed in MARPOL Annex I, Regulation 43.1.2.
9 MARPOL Annex I, Regulation 12A; or Polar Code Chapter 1, part II-A, Regulation 1.2.1.
4.4 MARPOL Shipboard Documentation

Compliance with the Polar Code’s pollution prevention measures must be reflected in existing certificates, manuals, and record books through the relevant MARPOL Annexes. These amendments to the shipboard documentation must be made prior to entering polar waters on or after 1 January 2017.

.1 MARPOL Annex I

a. Oil Record Books, manuals, and shipboard oil pollution emergency plans (SOPEP) or the shipboard marine pollution emergency plan (SMPEP) as required by MARPOL Annex I must be updated to take into account operation in polar waters.

b. Ships built before 1 January 2017 and operating in polar waters are permitted to use their existing IOPP certificate until its expiry, as there are no additional structural requirements for existing ships. See IMO Circular MEPC.1/Circ. 856, as corrected by MEPC.1/Circ.856/Corr.1.

.2 MARPOL Annex II

a. Operation in polar waters must be taken into account, as relevant, in the Cargo Record Book, the Manual, and the SMPEP for NLS required by MARPOL Annex II.

b. The Administrator grants automatic approval to ships introducing modifications to paragraphs 1.3 and 4.4 of their Procedures and Arrangements Manual in accordance with IMO Circular MEPC.1/Circ.856. This approval will remain valid until the first scheduled survey related to the NLS Certificate or the Certificate of Fitness.

.3 MARPOL Annex IV

Unless expressly provided otherwise, any ship certified to operate in polar waters must comply with chapter 4 of part II-A of the Polar Code, in addition to any other applicable requirements of MARPOL Annex IV.

.4 MARPOL Annex V

a. Operation in polar waters must be taken into account, as appropriate, in the Garbage Record Book, Garbage Management Plan, and the placards as required by MARPOL Annex V.

b. The Garbage Record Book form has been amended to refer to the provisions of chapter 5 of part II-A of the Polar Code. No approval is needed for ships introducing modifications to the Garbage Record Book §4.1.3. See IMO Circular MEPC.1/Circ. 856.