# REPUBLIC OF THE MARSHALL ISLANDS



# International Code for Ships Operating in Polar Waters (Polar Code)

MARITIME ADMINISTRATOR

Aug/2020 MN-2-011-52

# TABLE OF CONTENTS

REFE	RENCES	. 3
PURP	OSE	. 4
BACK	GROUND	. 4
APPL	ICABILITY	. 5
Pol Tab	ety Measureslution Preventionle 1: Annex Applicabilityle 2: Polar Code Applicability Summary	. 5
DEFI	NITIONS	6
Arc Cat Cat Cat Ope	arctic area tic waters egory A ship egory B ship. egory C ship. en water	. 6 . 6 . 6 . 7
REQU	JIREMENTS	. 7
1.0	General	. 7
1.1 1.2	Applicability Structural provisions	
2.0	Safety Measures (part 1-A)	. 7
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9	Polar Water Operational Manual Operational Assessment Goals, Functional Requirements, and Regulations Ship Structure, Machinery Installations, Fire Safety Protection Subdivision and Stability Life-Saving Appliances and Arrangements Navigation Safety and Communications Training and Manning Polar Ship Certificate	. 8 . 8 . 9 . 9
3.0	Pollution Prevention Measures (part II-A)	11
3.1 3.2 3.3	Discharges	12



# REPUBLIC OF THE MARSHALL ISLANDS

# MARITIME ADMINISTRATOR

**Marine Notice** 

No. 2-011-52

**Rev. Aug/2020** 

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

**SUBJECT:** International Code for Ships Operating in Polar Waters (Polar Code)

- **References:** (a) SOLAS, International Convention for the Safety of Life at Sea, Consolidated Edition 2014
  - **MARPOL**, International Convention for the Prevention of Pollution from Ships, Consolidated Edition 2017
  - (c) Polar Code, International Code for Ships Operating in Polar Waters, as amended
  - (d) STCW Convention, International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 2017 Edition
  - **STCW Code,** Seafarers' Training, Certification and Watchkeeping Code, 2017 Edition
  - (f) IMO Assembly Resolution <u>A.1140(31)</u>, Survey Guidelines Under the Harmonized System of Survey and Certification (HSCC), adopted on 04 December 2019
  - (g) IMO Circulars MEPC.1/Circ.856 and MEPC.1/Circ.856/Corr.1, Guidance for issuing revised certificates, manuals and record books of MARPOL for compliance with environment-related requirements of the Polar Code, issued 22 May 2015 and 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

#### **PURPOSE**

This Notice provides the Republic of the Marshall Islands (RMI) Maritime Administrator's (the "Administrator") policies for the implementation of the International Code for Ships Operating in Polar waters (Polar Code or the "Code"), which entered into force on 1 January 2017.

It supersedes Rev. Jun/2020. Transitional provisions on manning and crew training that expired 1 July 2020 have been removed.

#### **BACKGROUND**

The Polar Code has been developed to supplement existing IMO instruments to increase the safety of ships' operation and mitigate the impact on the people and environment in polar waters.

The Polar Code covers both safety and pollution prevention measures<sup>1</sup>. Its provisions are mandatory under:

- the International Convention for the Safety of Life at Sea (SOLAS) with the addition of new chapter XIV (IMO Resolution MSC.386(94), 21 November 2014)<sup>2</sup>;
- the International Convention for the Prevention of Pollution from Ships (MARPOL) with amendments to Annexes I, II, IV, and V (IMO Resolution MEPC.265(68), 15 May 2015); and
- new Regulation 4 of Chapter V of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) and Section A-V/4 of the Seafarers' Training, Certification and Watchkeeping Code (STCW Code).

The Polar Code consists of the Introduction, part I and part II. The Introduction contains mandatory provisions applicable to both parts I and II.

Part I is subdivided into:

- part I-A, which contains mandatory provisions on safety measures; and
- part I-B containing recommendations on safety.

Part II is subdivided into:

- part II-A, which contains mandatory provisions on pollution prevention; and
- part II-B containing recommendations on pollution prevention.

The safety measures were adopted via IMO Resolution <u>MSC.385(94)</u> by the Maritime Safety Committee (MSC) on 21 November 2014. The pollution prevention measures were adopted via IMO Resolution <u>MEPC.264(68)</u> by the Marine Environment Protection Committee (MEPC) on 15 May 2015.

The IMO is considering expanding the scope to non-SOLAS vessels, including fishing vessels and pleasure craft in work in a Phase 2 of the Polar Code. However, work on Phase II is not expected to commence until experience has been gained with SOLAS vessels under the current requirements.

The Code defines three levels of ship categories (Category A, Category B, and Category C) with decreasing ice operational capabilities. Key elements of the Polar Code include requirements for:

- a Polar Water Operational Manual;
- a risk-based operational assessment (Operational Assessment);
- ships' structure;
- machinery and systems exposed to, and/or affected by, the cold;
- manning and crew training; and
- a Polar Ship Certificate.

#### **APPLICABILITY**

This Notice applies to all RMI vessels operating in polar waters on or after 1 January 2017 as follows:

**Safety Measures:** All ships<sup>3</sup> operating in polar waters constructed on or after 1 January 2017 must comply with part I-A of the Polar Code upon delivery. Ships constructed before 1 January 2017 (existing ships) must meet the part I-A requirements by the first intermediate or renewal survey, whichever occurs first after 1 January 2018.

**Pollution Prevention:** All ships (new and existing) operating in Polar waters must comply with part II-A of the Polar Code in accordance with the relevant MARPOL Annexes:

Table 1: Annex Applicability

Annex I	All ships
Annex II All ships certified to carry noxious liquid substances (NLS) in bulk	
Annex IV	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
Annex V All ships, unless expressly provided otherwise	

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.

A summary of the applicability of the Polar Code provisions is provided in Table 2, below.

Table 2: Polar Code Applicability Summary

Ship Date of Build			part II-A Pollution Prevention Measures	Polar Ship Certificate Issuance		Training Requirements	Documentation Revisions
Before 1 January 2017	SOLAS Vessels	First intermediate or renewal SOLAS survey, whichever occurs first, after 01 January 2018	1 January 2017 MARPOL Annexes I, II, and V - All ships; MARPOL Annex IV - Ships on an	SOLAS Vessels	First intermediate or renewal SOLAS survey, whichever occurs first, after 1 January 2018	STCW Basic and Advanced Training under Regulation V/4  1 July 2018 for ships with Polar Ship Certificate  See §2.8 for detailed requirements	See IMO Circular MEPC.1/Circ.85 6, as amended, for guidance
	NON- SOLAS Vessels	1 January 2018	International Voyage	NON- SOLAS Vessels	1 January 2018		
On or after 1 January 2017	Upo	n delivery	Upon delivery	Upon delivery		1 July 2018	

#### **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* areas that are ice free 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.

The Administrator is applying the part I-A Polar Code requirements to all vessels regardless of tonnage or type operating in polar waters. See also the RMI Yacht Code (MI-103).

**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.<sup>5</sup>

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 General

### 1.1 Applicability

Every RMI-flagged vessel operating in polar waters must comply with the mandatory provisions part I-A and part II-A, as applicable; and fully take into consideration the recommendations contained in part I-B and part II-B of the Polar Code.

# 1.2 Structural provisions

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

# 2.0 Safety Measures (part 1-A)

#### 2.1 Polar Water Operational Manual

- 2.1.1 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.
- 2.1.2 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:
  - .1 include information on the ship-specific capabilities and limitations as determined by the Operational Assessment (See §2.2, below);
  - .2 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;
  - .3 include or refer to specific risk-based procedures to be followed in the event of incidents in polar waters;
  - .4 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

Refer to the World Meteorological Organization (WMO) <u>Sea Ice Nomenclature</u>.

- .5 include or refer to risk-based procedures to be followed when using icebreaker assistance, as applicable.
- 2.1.3 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 in order to retain a common structure that will facilitate review.<sup>6</sup>
- 2.1.4 In order 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.

# 2.2 Operational Assessment

- 2.2.1 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.
- 2.2.2 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.
- 2.2.3 The Administrator has developed a model Polar Code Operational Assessment that may be used by ship operators in conducting the Operational Assessment.
- 2.3 Goals, Functional Requirements, and Regulations

Compliance with the goals, functional requirements, and regulations laid out in each of the 12 chapters contained in part I-A of the Polar Code is required. In §2.4 through §2.9, below, certain requirements are drawn out for emphasis, but they are not intended to constitute all of the requirements and should not be substituted for a thorough reading of the Polar Code.

2.4 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 §2.9.2 below to approve materials of:

- 2.4.1 exposed structures in ships;
- 2.4.2 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
- 2.4.3 exposed fire safety systems.

It is an RMI National Requirement to utilize the format contained in Appendix II.

# 2.5 Subdivision and Stability

- 2.5.1 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.
- 2.5.2 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.

# 2.6 Life-Saving Appliances and Arrangements<sup>7</sup>

- 2.6.1 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.
- 2.6.2 Regulation 8.3.3.3.2 of the Polar Code requires both individual (personal) and shared (group) survival equipment. The additional guidance to Chapter 8 provides lists of resources to be taken into account when considering such equipment and is to be carefully considered.
- 2.6.3. The guidance contained 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.

## 2.7 Navigation Safety and Communications

- 2.7.1 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.
- 2.7.2 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.
- 2.7.3 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.
- 2.7.4 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.

It should be noted that in accordance with the outcomes of the 97<sup>th</sup> session of the IMO Maritime Safety Committee (21 to 25 November 2016), the Ship Systems and Equipment (SSE) and Navigation Communications Search and Rescue (NCSR) Sub-Committees will be reviewing, adapting and/or developing the necessary requirements (on testing and performance standards as relates to personal life-saving appliances, pyrotechnics, survival craft, fire safety, communication navigation etc.) with respect to the Polar Code.

### 2.8 Training and Manning

2.8.1 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, as summarized in following table.<sup>8</sup>

## 2.8.2 Qualifications:

Ice Conditions	Tankers	Passenger Vessels	All other vessels	
Ice Free	Not applicable	Not applicable	Not applicable	
Open Waters	Basic training for Master, Chief Mate, and OICNWs	Basic training for Master, Chief Mate, and OICNWs	Not applicable	
Other Waters	<ul> <li>Advanced training for Master and Chief Mate.</li> <li>Basic training for Master, Chief Mate, and OICNWs</li> </ul>	<ul> <li>Advanced training for Master and Chief Mate.</li> <li>Basic training for Master, Chief Mate, and OICNWs</li> </ul>	<ul> <li>Advanced training for Master and Chief Mate.</li> <li>Basic training for Master, Chief Mate, and OICNWs</li> </ul>	

- 2.8.3 The Administrator allows for the use of 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.
  - .1 This does not relieve the vessel's crew of their duties and obligations for the safety of the vessel.
- 2.8.4 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.
- 2.8.5 Every crew member must receive familiarization training on the procedures and equipment contained or referenced in the PWOM relevant to their assigned duties.
- 2.8.6 Further information on training requirements is provided in MI-118.
- 2.8.7 Private yachts, which are not a Private Yacht Limited Charter (PYLC) or a Yacht Engaged in Trade (YET), do not fall under the regulations of the SOLAS Convention and therefore are not required to have Minimum Safe Manning Certificates (MSMCs). Owners of private yachts that would like to operate in polar waters may request a MSMC. If so 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.

\_

<sup>&</sup>lt;sup>8</sup> 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.

# 2.9 Polar Ship Certificate

Every vessel to which the Polar Code applies 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.1Circ.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.

2.9.1 The Administrator has authorized the following ROs to issue Polar Ship Certificates on its behalf:

American Bureau of Shipping (ABS)	DNV-GL
Bureau Veritas (BV)	Indian Register of Shipping (IRS)
China Classification Society (CCS)	Korean Register (KR)
Class NK (NK)	Lloyd's Register (LR)
Croatian Register of Shipping (CRS)	Rina Services S.p.A (RINA)
Russian Register of Shipping (RS)	

2.9.2 A Polar Ship Certificate may be issued by an RO listed in §2.9.1, above, after successful completion of an initial survey.

For category C cargo ships, if the result of the assessment [Polar Code, Part 1-A] in paragraph 1.5 is that no additional equipment or structural modification 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.

(Polar Code – International Code for Ships Operating in Polar Waters)

- 2.9.3 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.
- 2.9.4 The validity of the Polar Ship Certificate will not affect the validity of other certificates.

#### 3.0 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.

#### 3.1 Discharges

- 3.1.1 In the Arctic discharges of the following are prohibited:
  - .1 oil or oily mixtures<sup>9</sup>; and
  - .2 noxious liquid substances, or mixtures containing such substances<sup>10</sup>.
- 3.1.2 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.
- 3.1.3 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.

#### 3.2 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.

### 3.3 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.

#### 3.3.1 MARPOL Annex I

- .1 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.
- .2 Ships built before 1 January 2017and operating in polar waters are permitted to use their existing International Oil Pollution Prevention (IOPP) certificate until its expiry, as there are no additional structural requirements for existing ships. See IMO Circular MEPC.1/Circ. 856.

In accordance with Polar Code part II-A, Chapter 1, paragraph 1.1.3, subject to the approval of the Administrator, a Category A ship constructed before 1 January 2017 that cannot comply with the prohibition on the discharge of oil or oily mixtures from machinery spaces and is operating continuously in Arctic waters for more than 30 days, must comply not later than the first intermediate or renewal survey, whichever comes first, one year after 1 January 2017. Until such date these ships must comply with the discharge requirements of MARPOL Annex I regulation 15.3.

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.

#### 3.3.2 MARPOL Annex II

- .1 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.
- .2 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.

# 3.3.3 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.

#### 3.3.4 MARPOL Annex V

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