ST. VINCENT AND THE GRENADINES

MARITIME ADMINISTRATION

CIRCULAR N° SOL 076

NEW SOLAS REQUIREMENTS FOR LIFTING APPLIANCES AND ANCHOR HANDLING WINCHES ON BOARD SHIPS

(SOLAS Reg. II-1/3-13)

TO:	**SHIPOWNERS, SHIP MANAGERS, MASTERS, RECOGNIZED ORGANIZATIONS**
APPLICABLE TO:	SHIPS OF 500 GROSS TONNAGE AND ABOVE ENGAGED IN INTERNATIONAL VOYAGES
EFFECTIVE AS FROM:	1st January 2026

Date: 09th September 2025

1.Introduction

The International Maritime Organization (IMO) adopted amendments to the SOLAS Convention through Resolution MSC.532(107), introducing new requirements for lifting appliances, anchor handling winches, and associated loose gear.

To support uniform implementation, IMO issued:

- MSC.1/Circ.1662 – Guidelines for anchor handling winches
- MSC.1/Circ.1663 – Guidelines for lifting appliances

These provisions, aimed at improving safety and operational standards, enter into force on 1 January 2026.

2.Application

SOLAS regulation II-1/3-13, applies to:

— Lifting appliances,

— Anchor handling winches, and

— Loose gear used with either lifting appliances or anchor handling winches.

SOLAS regulation II-1/3-13, **does not apply to**:

- Lifting appliances on ships certified as MODUs;
- Lifting appliances used on offshore construction vessels (pipe/cable laying, offshore installation, including ships for decommissioning work), which comply with standards acceptable to the Administration;
- Integrated mechanical equipment for opening/closing hold hatch covers;
- Life-saving launching appliances covered by the LSA Code.

3. Definitions

Lifting appliance means any load-handling ship's equipment:

- used for cargo loading, transfer, or discharge;
- used for raising and lowering hold hatch covers or moveable bulkheads;
- used as engine-room cranes;
- used as stores cranes;
- used as hose handling cranes;
- used for launch and recovery of tender boats and similar applications; and
- used as personnel handling cranes.

Anchor handling winch means any winch for the purpose of deploying, recovering and repositioning anchors and mooring lines in subsea operations

Loose gear means an article of ships equipment by means of which a load can be attached to a lifting appliance or an anchor handling winch but which does not form an integral part of the appliance or load

"installed on or after 1 January 2026" (per SOLAS II-1/2.33) means:

- (a) for ships the keel of which is laid or which is at a similar stage of construction on or after 1 January 2026, any installation date on the ship; or
- (b) for ships other than those specified in (a), including those constructed before 1 January 2009, a contractual delivery date for lifting appliance or anchor handling winches, or in the absence of a contractual delivery date, the actual delivery date of the lifting appliance or anchor handling winches to the ship on or after 1 January 2026.

Competent Person means a person designated or accepted by the RO who has the necessary qualifications, training, knowledge and experience to perform examinations and testing under MSC.1/Circ.1662/1663.

4. Lifting Appliances and associate loose gears with SWL < 1000 kg (SOLAS II-1/3-13.1.3)

All lifting appliances and associated loose gear must be permanently marked with their Safe Working Load (SWL) and supported by documentary evidence. In addition:

- New installations (installed on/after 1 January 2026):
  Maintenance, operation, inspection and testing shall be as per SOLAS II-1/3-13, para.3.

— Existing installations (installed before 1 January 2026):
Testing and maintenance of such appliances to be carried out under the ship's Safety Management System (SMS) by a responsible person on board. Alternatively, full proof load testing under MSC.1/Circ.1663 is required.

5.Design, Construction, Installation, Maintenance, Operation, Inspections and Testing of Lifting Appliances and associated loose gears

— Lifting appliances and loose gear installed on/after 1 Jan 2026 must comply with the RO's requirements, based on MSC.1/Circ.1663 and must be permanently marked and documented with SWL. They should be load after installation and for the first time and after repairs, modifications or alterations of a major character.

— Existing lifting appliances and loose gear (installed before 1 Jan 2026):

  — Must undergo load testing and thorough examination per MSC.1/Circ.1663, starting at the first renewal survey on/after 1 Jan 2026 or after repairs, modifications or alterations of a major character.
  — Certificates from other international instruments (e.g. ILO C.152) may be accepted by this Administration.
  — Where design information is not available, the test load is to be determined using Table 1 of MSC.1/Circ.1663, based on a nominated SWL approved by the RO.

5.1 **Inoperative lifting appliances and associated loose gear**
Inoperative lifting appliances and associated loose gear should be treated as per MSC.1/Circc.1663, para 5**.**

5.2 Design, Construction, Installation, Maintenance, Operation, Inspections and Testing of Anchor Handling Winches and associated loose gears

— Anchor handling winches & loose gear installed on/after 1 Jan 2026 must be designed, constructed, installed and tested with the RO's requirements, based on MSC.1/Circ.1662.

— Existing anchor handling winches and loose gear (installed before 1 Jan 2026):

  — Must be tested and thoroughly examined by the first renewal survey on/after 1 Jan 2026.
  — Verification includes checking for unauthorized modifications, carrying out functional/overload/emergency release tests, and confirming documentation/manuals are onboard.
  — Associated loose gear must undergo proof testing, annual thorough examination, and marking verification. Non-compliant gear must be removed from service.
  — Test loads for loose gear should be to the RO's satisfaction.
  — Existing anchor handling winches with valid certificates of test and thorough examination under another international instrument acceptable to the Administration and issued prior to the entry into force should be considered compliant with the requirement.

5.2.1 **Inoperative Anchor Handling Winches and associated loose gears**

Inoperative **Anchor Handling Winches and associated loose gears** must be treated in accordance with MSC.1/Circ.1662, section 5.

6.Survey and Certification Requirements lifting appliances and associated loose gears

At the first Cargo Ship Safety Construction Renewal Survey or Passenger Ship Safety Survey after 1 Jan 2026, the following must be verified:

- All lifting appliances and associated loose gears, with exception of the lifting appliances with SWL < 1000 kg installed before 1 Jan 2026, certified to an acceptable standard as reflected in this circular
- SWL and essential markings clearly displayed
- All certified lifting appliances on board a ship should be recorded in the Register of Ship's Lifting Appliances and Cargo Handling Gear with the Certificate of test and thorough examination attached to it
- Loose gear permanently marked with ID, SWL, and safety markings
- Load testing & examination carried out by a competent person
- Operation & maintenance manuals available onboard

Additionally:

- Evidence of SWL documentation must be on board
- Lifting appliances must be included in the planned maintenance programme.
- Where manuals are missing, they must be reconstructed per IMO guidelines.
- Operators must be properly trained, qualified, and familiar with the appliances.

Periodic thorough examination:

- Every 12 months (annually): A thorough examination by a competent person. This includes visual inspections, checking of certificates, SWL markings, and condition of the gear.
- Every 5 years (proof load test): A proof load test and thorough examination are required.
- Exceptional circumstances: After repairs, modifications or alterations of major character, another proof load test and examination are required before returning to service.

ROs to this Administration are authorised to carry out inspections required by SOLAS Reg. II-1/3-13 and issue Certificates of test and thorough examination of lifting appliances and loose gears.

6.1 Survey and Certification Requirements of anchor handling winches and associated loose gears

At the first Cargo Ship Safety Construction Renewal Survey or Passenger Ship Safety Survey after 1 Jan 2026, the following must be verified:

- Commissioning test and thorough examination are to be carried out before the first use of the vessel after installation and after major structural parts have been repaired, modified or

changed. Operationally and function tests shall be carried out periodically in accordance with the recommendations of the RO.

- Anchor handling winches follow the testing regime set in MSC.1/Circ.1662, Annex I, including functional, overload and emergency release test, in addition to periodic examinations.

- Anchor handling winches should be provided with a permanently affixed name plate which should include at least the information required by MSC.1/Circ.1662, para 3.4.

Periodic thorough examination:

- Anchor handling winches and associated equipment should be operationally tested annually and five -yearly. The RO should witness the five-Yeary test.

- Exceptional circumstances: After repairs, modifications or alterations of major character, anchor handling winches and associated equipment are to be tested as set in MSC.1/Circ.1662, para 3.2.

A record of thorough testing and examination and evidence of proof testing of loose gear should be maintained and kept on board.

ROs to this Administration are authorised to carry out inspections required by SOLAS Reg. II-1/3-13 and issue records (certificates) of thorough examination of anchor handling winches and loose gear utilized with anchor handling winches.

7. Accident/defect of Lifting Appliances and Anchor Handling Winches

If an accident or defect affects safety/performance:

- The Master/Owner/Manager must report to the Administration (and Port State if bound for a foreign port) at the earliest opportunity.

- The vessel will not be considered unseaworthy solely because of the defect, nor face undue delay, provided that:

    - A risk assessment is carried out, and
    - The Master takes appropriate measures to ensure voyage safety despite the inoperative equipment.

Annexes to this circular:

MSC.532(107)

MSC.1/Circ.1662

MSC.1/Circ.1663

ANNEX 2

RESOLUTION MSC.532(107)
(adopted on 8 June 2023)

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO article VIII(b) of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"), concerning the amendment procedure applicable to the annex to the Convention, other than to the provisions of chapter I,

HAVING CONSIDERED, at its 107th session, amendments to the Convention proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the Convention, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2025, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments, the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified the Secretary-General of their objections to the amendments;

3 INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2026 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5 ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

CHAPTER II-1
CONSTRUCTION – STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

Part A
General

Regulation 2
Definitions

1 The following new paragraphs are added after existing paragraph 29:

"30 *Lifting appliance* means any load-handling ship's equipment:

.1 used for cargo loading, transfer, or discharge;

.2 used for raising and lowering hold hatch covers or moveable bulkheads;

.3 used as engine-room cranes;

.4 used as stores cranes;

.5 used as hose handling cranes;

.6 used for launch and recovery of tender boats and similar applications; and

.7 used as personnel handling cranes.

31 *Anchor handling winch* means any winch for the purpose of deploying, recovering and repositioning anchors and mooring lines in subsea operations.

32 *Loose gear* means an article of ships equipment by means of which a load can be attached to a lifting appliance or an anchor handling winch but which does not form an integral part of the appliance or load.

33 The expression *installed on or after 1 January 2026*, as provided in regulation 3-13, means:

.1 for ships the keel of which is laid or which is at a similar stage of construction on or after 1 January 2026, any installation date on the ship; or

.2 for ships other than those specified in .1, including those constructed before 1 January 2009, a contractual delivery date for lifting appliance or anchor handling winches, or in the absence of a contractual delivery date, the actual delivery date of the lifting appliance or anchor handling winches to the ship on or after 1 January 2026."

Part A-1
Structure of ships

2 The following new regulation is added after existing regulation II-1/3-12, together with the associated footnotes:

"**Regulation 3-13**
Lifting appliances and anchor handling winches

1 Application

1.1 Unless expressly provided otherwise, this regulation shall apply to lifting appliances and anchor handling winches, and loose gear utilized with the lifting appliances and the anchor handling winches.

1.2 Notwithstanding the above, this regulation does not apply to:

.1 lifting appliances on ships certified as MODUs;[1]

.2 lifting appliances used on offshore construction ships, such as pipe/cable laying/repair or offshore installation vessels, including ships for decommissioning work, which comply with standards acceptable to the Administration;

.3 integrated mechanical equipment for opening and closing hold hatch covers; and

.4 life-saving launching appliances complying with the International Life-Saving Appliance (LSA) Code.

1.3 The Administration shall determine to what extent the provisions of paragraphs 2.1 and 2.4 do not apply to lifting appliances which have a safe working load below 1,000 kg.

2 Design, construction and installation

2.1 Lifting appliances installed on or after 1 January 2026 shall be:

.1 designed, constructed and installed in accordance with the requirements of a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1 or standards acceptable to the Administration which provide an equivalent level of safety; and

.2 load tested and thoroughly examined after installation and before being taken into use for the first time and after repairs, modifications or alterations of major character.

2.2 Anchor handling winches installed on or after 1 January 2026 shall be designed, constructed, installed and tested to the satisfaction of the Administration, based on the Guidelines developed by the Organization.[2]

2.3 Lifting appliances installed on or after 1 January 2026 shall be permanently marked and provided with documentary evidence for the safe working load (SWL).

2.4 Lifting appliances installed before 1 January 2026 shall be tested and thoroughly examined, based on the Guidelines developed by the Organization[3] and comply with paragraph 2.3 no later than the date of the first renewal survey on or after 1 January 2026.

2.5 Anchor handling winches installed before 1 January 2026 shall be tested and thoroughly examined, based on the Guidelines developed by the Organization[2] no later than the date of the first renewal survey on or after 1 January 2026.

3 Maintenance, operation, inspection and testing

All lifting appliances and anchor handling winches, regardless of installation date, and all loose gear utilized with any lifting appliances and anchor handling winches, shall be operationally tested, thoroughly examined, inspected, operated and maintained, based on the Guidelines developed by the Organization.[2,3]

4 Inoperative lifting appliances and anchor handling winches

Except as provided in regulation I/11(c), while all reasonable steps shall be taken to maintain lifting appliances, anchor handling winches and loose gear to which this regulation applies in working order, malfunctions of that equipment shall not be assumed as making the ship unseaworthy or as a reason for delaying the ship in ports, provided that action has been taken by the master to take the inoperative lifting appliance or anchor handling winch into account in planning and executing a safe voyage.[2, 3]

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1 Ships certified as MODUs are those subject to the MODU Code and which carry a MODU Code Certificate on board issued by the Administration or a recognized organization. The carriage of this certificate includes authorized electronic versions available on board.

2 Refer to the *Guidelines for anchor handling winches* (MSC.1/Circ.1662).

3 Refer to the *Guidelines for lifting appliances* (MSC.1/Circ.1663)."

CHAPTER II-2
CONSTRUCTION – FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

Part A
General

Regulation 1
Application

2 Applicable requirements to existing ships

3 The following new paragraph 2.10 is added after existing paragraph 2.9, together with the associated footnote:

"2.10 Ships constructed before 1 January 2026 shall comply with regulation 10.11.2, as adopted by resolution MSC.532(107), not later than the date of the first survey* on or after 1 January 2026.

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* Refer to the *Unified interpretation of the term "first survey" referred to in SOLAS regulations* (MSC.1/Circ.1290)."

Part C
Suppression of fire

Regulation 10
Fire fighting

4 The following new paragraph 11 is added after existing section 10:

"**11 Fire-extinguishing media restrictions**

The purpose of this paragraph is to protect persons on board against exposure to dangerous substances used in firefighting, as well as to minimize the impact of fire-extinguishing media that are deemed detrimental to the environment.

11.1 Application

This regulation applies to ships constructed on or after 1 January 2026.

11.2 General

11.2.1 The prohibited substances in this regulation shall be delivered to appropriate shore-based reception facilities when removed from the ship.

11.2.2 Use or storage of extinguishing media containing perfluorooctane sulfonic acid (PFOS) shall be prohibited."

CHAPTER V
SAFETY OF NAVIGATION

Regulation 2
Definitions

5 The following new paragraphs are added after existing paragraph 7, together with the associated footnotes:

"8 *Bulk carrier* means a bulk carrier as defined in regulation XII/1.1.[1]

9 *Containership* means a ship which is intended primarily to carry containers.[2]

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1 Refer to *Clarification of the term 'bulk carrier' and guidance for application of regulations in SOLAS to ships which occasionally carry dry cargoes in bulk and are not determined as bulk carriers in accordance with regulation XII/1.1 and chapter II-1* (resolution MSC.277(85)).

2 Refer to the term 'container' as defined in article II of the International Convention for Safe Containers (CSC), 1972."

Regulation 18
Approval, surveys and performance standards of navigational systems and equipment and voyage data recorder

6 The following reference is added to the footnote corresponding to paragraph 2:

"*Performance standards for electronic inclinometers* (resolution MSC.363(92))"

Regulation 19
Carriage requirements for shipborne navigational systems and equipment

7 The following new paragraph 2.12 is added after existing paragraph 2.11:

"2.12 Containerships and bulk carriers of 3,000 gross tonnage and upwards constructed on or after 1 January 2026 shall be fitted with an electronic inclinometer, or other means, to determine, display and record the ship's roll motion."

CHAPTER XIV
SAFETY MEASURES FOR SHIPS OPERATING IN POLAR WATERS

Regulation 2
Application

8 Regulation 2 is replaced by the following:

"**Regulation 2**
Application

1 Unless expressly provided otherwise, this chapter applies to the following ships operating in polar waters:[1]

.1 ships certified in accordance with chapter I;

.2 fishing vessels of 24 metres in length overall and above;

.3 pleasure yachts of 300 gross tonnage and upwards not engaged in trade; and

.4 cargo ships of 300 gross tonnage and upwards but below 500 gross tonnage.

[1] Refer to the *Interim safety measures for ships not certified under the SOLAS Convention operating in polar waters* (resolution A.1137(31)).

2 Ships subject to paragraph 1.1 constructed before 1 January 2017 shall meet the relevant requirements of the Polar Code by the first intermediate or renewal survey, whichever occurs first, after 1 January 2018.

3 Ships subject to paragraphs 1.2, 1.3 or 1.4 constructed before 1 January 2026 shall meet the relevant requirements of chapters 9-1 and 11-1 in part I-A of the Polar Code by 1 January 2027.

4 In applying part I-A of the Polar Code, consideration should be given to the additional guidance in part I-B of the Polar Code.

5 This chapter shall not apply to ships owned or operated by a Contracting Government and used, for the time being, only in government non-commercial service. However, ships owned or operated by a Contracting Government and used, for the time being, only in government non-commercial service are encouraged to act in a manner consistent, so far as reasonable and practicable, with this chapter.

6 Nothing in this chapter shall prejudice the rights or obligations of States under international law."

Regulation 3
Requirements for ships to which this chapter applies

9 Regulation 3 is replaced by the following:

"**Regulation 3**
Requirements for ships certified in accordance with chapter I

1 Ships subject to regulation 2.1.1 above shall comply with the requirements of the safety-related provision of the introduction and with part I-A of the Polar Code and shall, in addition to the requirements of regulations I/7, I/8, I/9 and I/10, as applicable, be surveyed and certified, as provided for in that Code.

2 Ships subject to regulation 2.1.1 above holding a certificate issued pursuant to the provisions of paragraph 1 shall be subject to the control established in regulations I/19 and XI-1/4. For this purpose, such certificates shall be treated as a certificate issued under regulation I/12 or I/13."

10 The following new regulation is inserted after existing regulation 3:

"**Regulation 3-1**
Requirements for fishing vessels of 24 metres in length overall and above, pleasure yachts of 300 gross tonnage and upwards not engaged in trade and cargo ships of 300 gross tonnage and upwards but below 500 gross tonnage

1 Ships subject to regulations 2.1.2, 2.1.3 or 2.1.4 on all voyages in the Antarctic area and voyages in Arctic waters beyond the outer limit of the territorial sea of the Contracting Government whose flag the ship is entitled to fly shall comply with the provisions of chapters 9-1 and 11-1 of part I-A of the Polar Code, taking into account the introduction and the safety-related provisions of paragraphs 1.2, 1.4 and 1.5 of chapter 1 of part I-A of the Polar Code.

2 Notwithstanding paragraph 1 above, the Administration shall determine to what extent the provisions of regulations 9-1.3.1 and 9-1.3.2 of chapter 9-1 of part I-A of the Polar Code do not apply to:

.1 fishing vessels of 24 metres in length overall and above; and

.2 ships of 300 gross tonnage and upwards but below 500 gross tonnage not engaged in international voyages."

APPENDIX

CERTIFICATES

Record of equipment for passenger ship safety (Form P)

2 Details of life-saving appliances

11 In the table for "Details of life-saving appliances", entries 10 to 10.2 are replaced by the following:

10	Number of immersion suits

Form of Safety Equipment Certificate for Cargo Ships

Cargo Ship Safety Equipment Certificate

Type of ship

12 The following new entry is added after "Gas carrier":

"Containership"

Record of equipment for cargo ship safety (Form E)

2 Details of life-saving appliances

13 In the table for "Details of life-saving appliances", entries 9 to 9.2 are replaced by the following:

9	Number of immersion suits

3 Details of navigational systems and equipment

14 In the table for "Details of navigational systems and equipment", the following new entry is added after existing entry 15 (Bridge navigational watch alarm system (BNWAS)):

"16 Electronic inclinometer"

Form of Safety Certificate for Nuclear Cargo Ships

Nuclear Cargo Ship Safety Certificate

Type of Ship

15 The following new entry is added after "Gas carrier":

"Containership"

Record of equipment for cargo ship safety (Form C)

2 Details of life-saving appliances

16 In the table for "Details of life-saving appliances", entries 9 to 9.2 are replaced by the following:

9	Number of immersion suits

5 Details of navigational systems and equipment

17 In the table for "Details of navigational systems and equipment", the following new entry is added after existing entry 15 (Bridge navigational watch alarm system (BNWAS)):

"16 Electronic inclinometer"

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INTERNATIONAL
MARITIME
ORGANIZATION

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4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MSC.1/Circ.1663
28 June 2023

GUIDELINES FOR LIFTING APPLIANCES

1 The Maritime Safety Committee, at its 107th session (31 May to 9 June 2023), having considered a proposal by the Sub-Committee on Ship Systems and Equipment (SSE), at its eighth session, with a view to ensuring a uniform approach towards the application of the provisions of SOLAS regulation II-1/3-13, adopted by resolution MSC.532(107), approved the *Guidelines for lifting appliances*, as set out in the annex.

2 Member States are invited to use the annexed Guidelines when applying SOLAS regulation II-1/3-13 and to bring it to the attention of ship designers, shipyards, shipowners, equipment manufacturers, other organizations and parties concerned.

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ANNEX

GUIDELINES FOR LIFTING APPLIANCES

1 Application

These Guidelines support the application of SOLAS regulation II-1/3-13 for lifting appliances and loose gear used in association with lifting appliances.

2 Definitions

For the purpose of these Guidelines, the following definitions apply:

.1 *Competent person* means a person possessing the knowledge and experience required for the performance of duties specified in these Guidelines and acceptable as such to the Administration.

.2 *Inspection* means an assessment carried out by a responsible person to ascertain if the lifting appliance or loose gear is in good working condition for continued safe use.

.3 *Responsible person* means a person appointed by the master or company as defined in SOLAS regulation IX/1, as appropriate, possessing the knowledge and experience required for the performance of duties specified in these Guidelines.

.4 *Thorough examination* means a detailed assessment carried out by a competent person in order to determine whether or not the lifting appliance or loose gear is in compliance with the applicable requirements of the Administration.

.5 *Certified* means that the lifting appliance or loose gear has been verified and documented as compliant to the satisfaction of the Administration or recognized organization acting on its behalf.

.6 *Maintenance* means any activity carried out by a responsible person to keep the lifting appliance or loose gear in good working condition for continued safe use.

.7 *Operational testing* means a test carried out by a responsible person to verify the correct functioning of a component or operation of the lifting appliance and/or associated loose gear.

.8 *Load test* means a test in excess of the SWL, carried out in the presence of a competent person in order to check the structural integrity of the lifting appliance and its attachment to and adequacy of its supporting structure.

.9 *Safe working load (SWL)* is the maximum static load at a specified radius which a lifting appliance or item of loose gear is certified to lift for a specified operating condition.

.10 *Certificate of test and thorough examination* means a certificate issued by a competent person upon satisfactory completion of the test and thorough examination of the lifting appliance and/or loose gear.

3 Lifting appliances

3.1 Design, construction and installation

As required by SOLAS regulation II-1/3-13.2.1.1, lifting appliances installed on or after 1 January 2026 should be designed, constructed and installed in accordance with the requirements of a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1 or standards acceptable to the Administration which provide an equivalent level of safety.

3.2 Load testing and thorough examination

3.2.1 Load test

3.2.1.1 Lifting appliances to which SOLAS regulation II-1/3-13.2.1 applies should be load tested to the satisfaction of the Administration after installation and before being taken into use for the first time and after repairs, modifications or alterations of a major character.

3.2.1.2 Lifting appliances to which SOLAS regulation 3-13.2.4 applies should be load tested to the satisfaction of the Administration no later than the date of the first renewal survey on or after 1 January 2026 or after repairs, modifications or alterations of a major character.

3.2.1.3 *Repairs, modifications or alterations of a major character* are those which:

.1 change the safe working load of the lifting appliance; or

.2 affect the strength, stability or service life of the lifting appliance; or

.3 affect the primary load bearing structure of the lifting appliance; or

.4 modify the functionality of the lifting appliance or any part thereof which may affect its strength or safety or structural integrity.

3.2.1.4 Lifting appliances to which SOLAS regulations II-1/3-13.2.1 and 3-13.2.4 apply should be retested at least once in every five years.

3.2.1.5 For load testing of lifting appliances intended for use while the ship is in port or sheltered waters, the test load, as set out in table 1 below, should be established using the SWL. For lifting appliances intended for open-sea operations, the test loads should be to the satisfaction of the Administration or a classification society which is recognized by it, taking into account the applicable dynamic loads.

Table 1: Lifting appliances minimum test loads

SWL of the lifting appliance, in tonnes	Test load, in tonnes
SWL ≤ 20 t	1.25 x SWL
20 t < SWL ≤ 50 t	SWL + 5 t
SWL > 50 t	1.10 x SWL

3.2.1.6 Where the safe working load of the lifting appliances is undocumented and design information is not available, e.g. for lifting appliances which are installed on board before 1 January 2026 and the manufacturer no longer exists, the test load should be calculated using table 1, based on a safe working load nominated by the company, to the satisfaction of the Administration.

3.2.2 Thorough examination

3.2.2.1 Lifting appliances should be subject to thorough examination to the satisfaction of the Administration:

.1 upon completion of any load test; and

.2 annually.

3.2.2.2 Where thorough examination does not form part of the renewal survey or annual survey, verification that thorough examination of lifting appliances has been conducted/completed to the satisfaction of the Administration should take place during the renewal survey under SOLAS regulation I/7 or the annual survey under SOLAS regulation I/10, as applicable.

3.2.2.3 If on completion of a thorough examination, the competent person considers the lifting appliance to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that lifting appliance should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The lifting appliance should be clearly marked "not to be used" and the status should be recorded in a register of lifting appliances. While out of service, the relevant actions for inoperative lifting appliances as outlined under section 5 of these Guidelines should be followed.

3.2.3 Records of thorough examination and testing

3.2.3.1 A record of thorough examination and load testing should be maintained in a register of lifting appliances and should be available on board.

3.2.3.2 Load testing and thorough examination may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a competent person. The minimum information to be included in the *Certificate of test and thorough examination*, as set out in the appendix 1, should be used. Alternatively, other formats may be used which are acceptable to the Administration, such as those of a classification society recognized by the Administration.

3.3 Demonstration of compliance

3.3.1 Before being put into use for the first time, lifting appliances installed on or after 1 January 2026 should be certified as compliant with SOLAS regulations II-1/3-13.2.1 and II-1/3-13.2.3 with the recommended scope for demonstration of compliance of lifting appliances comprising the following:

.1 a plan appraisal of the lifting appliance and foundation connections;

.2 verification of materials;

.3 survey, testing and examination during fabrication;

.4 verification of component certificates including its loose gear; and

.5 testing and thorough examination when installed on board.

3.3.2 Lifting appliances installed before 1 January 2026 should be certified as compliant with SOLAS regulation II-1/3-13.2.4 no later than the date of the first renewal survey on or after 1 January 2026.

3.3.3 Existing lifting appliances with valid certificates of test and thorough examination under another international instrument acceptable to the Administration and issued prior to the entry into force of SOLAS regulation II-1/3-13 should be considered compliant with SOLAS regulation II-1/3-13.2.4.

3.3.4 All certified lifting appliances on board a ship should be recorded in the *Register of Ship's Lifting Appliances and Cargo Handling Gear*, as set out in appendix 3, with the *Certificate of test and thorough examination* attached to it (see paragraph 3.2.3.2).

3.3.5 A rigging plan and block list showing the correct reeving and rigging arrangements for the lifting appliance and the associated loose gear positions is to be kept on board, if applicable.

3.4 Marking

3.4.1 The safe working load (SWL) and other information essential for the safe operation of the lifting appliance (e.g. maximum or minimum slewing radius or boom angle) should be permanently and clearly marked in a conspicuous place on the lifting appliance and should be available to the operator.

3.4.2 In all cases where the lifting appliance has a variable load radius rating, the SWLs corresponding to the minimum and maximum radius should be clearly marked in a conspicuous place on the lifting appliance and, in addition, a diagram of the permissible maximum loads over the entire range of use should be displayed in a position clearly visible to the operator.

3.4.3 If the safe working load is established in accordance with paragraph 3.2.1.6, this safe working load should be used for the purpose of compliance with SOLAS regulation II-1/3-13.2.3.

3.5 Maintenance, inspection and operational testing

3.5.1 General

3.5.1.1 Maintenance, inspection, operational testing and their respective intervals should be in accordance with the manufacturer's recommendations, industry standards and guidelines or classification society requirements and recommendations acceptable to the Administration, considering factors such as the operational profile of the ship and the lifting appliance.

3.5.1.2 All lifting appliances should be considered vulnerable to marine environmental conditions which may lead to significant and accelerated deterioration and corrosion, and the inspection and maintenance regime should be implemented accordingly.

3.5.1.3 The inspection and maintenance of lifting appliances may involve working at height, enclosed space entry and other hazards. These hazards should be considered when developing the relevant procedures for undertaking such tasks, including safe access.

3.5.1.4 Examples of items requiring particular attention may include:

.1 corrosion and damage of primary structural members, including crane jibs, crane housings (slewing column), pedestals and foundations/foundation connections, including welds and bolts;

.2 wear, corrosion and damage of mechanical components including winches, hydraulic cylinders, slew bearings, sheaves and pins;

.3 correct setting and functioning of safety, protection and limitation devices;

.4 condition and correct functioning of the lifting appliance as a whole and, in particular, hydraulic or pneumatic arrangements, hydraulic/pneumatic cylinders, motors, hoses, piping, winches, brakes and drums;

.5 corrosion and damage to all means of safe access to the lifting appliances including attached maintenance platforms and extensions, with particular attention to support brackets and welds; and

.6 certification and identification of ropes.

3.5.1.5 Damaged, broken, worn or corroded ropes, including their terminations, should be inspected and discarded according to manufacturers' recommendations, relevant industry standards, international standards (e.g. ISO 4309:2017 on Cranes – Wire ropes – Care and maintenance, inspection and discard) or requirements of classification societies acceptable to the Administration.

3.5.1.6 If, on completion of an inspection, the responsible person considers the lifting appliance to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that lifting appliance should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The lifting appliance should be clearly marked "not to be used" and the status should be recorded in a register of lifting appliances. While out of service, the relevant actions for inoperative lifting appliances as outlined under section 5 of these Guidelines should be followed.

3.5.2 Maintenance manual

3.5.2.1 A maintenance manual for a lifting appliance should be provided by the manufacturer. Where maintenance manuals for existing lifting appliances are not available from the manufacturer, these may be provided by competent third parties.

3.5.2.2 The maintenance manual should, as a minimum, include the following for each lifting appliance:

.1 description of the required inspection regime and maintenance schedules specific to the lifting appliance, checklists and a list of key tools or other items for use when carrying out inspections and maintenance;

.2 instructions for routine repairs/maintenance;

.3 technical maintenance information;

.4 information on recommended lubricants, oil and filter change;

.5 information on slewing bearing maintenance, if applicable;

.6 lists of replaceable parts/components, as well as the inspection/ maintenance/replacement procedures for these parts/components;

.7 lists of sources of spare parts;

.8 model forms for records of inspections and maintenance;

.9 operational test procedures, as well as the pre/post-operational test inspection procedures;

.10 list of components requiring particular attention during inspections, as well as the inspection/maintenance procedures for these components;

.11 recommended intervals for replacement and overhaul of components and equipment;

.12 information on the preservation of the coating and corrosion protection system; and

.13 information regarding special inspection and maintenance in cases where the lifting appliance is not operated for long periods of time.

3.5.3 Records of inspections and maintenance

3.5.3.1 Records of the routine inspection and maintenance of lifting appliances or their components or parts should be maintained and kept on board.

3.5.3.2 The records and particulars of inspection and maintenance may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a responsible person. Any recommendations of the manufacturer for such inspection and maintenance records should be used.

3.6 Operations

3.6.1 General

3.6.1.1 Personnel operating lifting appliances should be qualified, familiarized with the equipment and be authorized by the master.

3.6.1.2 All personnel involved in a lifting operation should understand their role during the operation and, in particular, the signals that may be required to commence, coordinate or stop the operation.

3.6.1.3 Personnel involved in lifting operations should be equipped with appropriate personal protective equipment for the task.

3.6.1.4 Lifting operations should be planned, supervised and carried out so that any identified risks are minimized.

3.6.1.5 Procedures and instructions should relate to the specific type of lifting appliance and should be provided in the operations manual.

3.6.1.6 Due consideration should be given to any limiting conditions such as ship's motion/inclination, wind speeds including wind gusts, environmental conditions such as ice and snow, limitations of the lifting appliance such as SWL and slew radius, etc. of the lifting appliance.

3.6.1.7 Effective communication should be established between ship's personnel and shore-based personnel involved in the lifting operation.

3.6.1.8 Safe means of access to lifting appliances and loads requiring attachment/detachment should be established. Safe areas for the signaller and slinger should be available.

3.6.1.9 When developing plans and procedures for lifting operations, consideration should be given to avoiding any part of the lifting appliances striking any person or other structures in close proximity.

3.6.1.10 Procedures and measures for the safe operation of lifting appliances should take account of applicable international and national instruments and best practices for occupational safety and health.

3.6.1.11 Lifting appliances should be restrained and stowed in order to avoid uncontrolled movement during sea voyages. The stowage and restraining arrangements should be as required by the manufacturer.

3.6.1.12 Personnel operating the lifting appliance should consult the operations manual for any specific instructions related to the lifting operations.

3.6.2 Operations manual

3.6.2.1 An operations manual for a lifting appliance should be provided by the manufacturer. Where operations manuals for existing lifting appliances are not available from the manufacturer, these may be provided by competent third parties.

3.6.2.2 An operations manual should, as a minimum, include the following for each lifting appliance:

.1 design, operational and environmental limitations;
.2 compatible loose gear;
.3 safety instructions; and
.4 operating procedures, including special procedures, if any.

3.6.2.3 For lifting appliances installed before the date of entry into force of SOLAS regulation II-1/3-13 operation manuals should be developed with original manufacture, design and build data and take into account any modifications since installation. Where original data or modification data is not available, operations manual should be developed on the current operational procedures and practices.

4 Loose gear

4.1 Design and manufacturing

Loose gear utilized with lifting appliances to which SOLAS regulations II-1/3-13.2.1 and II-1/3-13.2.4 apply should be designed and manufactured in accordance with requirements acceptable to the Administration or a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1.

4.2 Proof test and thorough examination

4.2.1 Proof test

All loose gear in use with lifting appliances to which SOLAS regulation II-1/3-13 applies should have documentary evidence of a proof test and be retested after repairs, modifications or alterations of a major character to the satisfaction of the Administration. Where an item of loose gear is tested, minimum test loads should be to the satisfaction of the Administration, based on table 2 below.

Table 2: Loose gear minimum test loads

Item	Test load, in tonnes
Single sheave block	4 x SWL
Multi-sheave blocks and hook blocks: SWL ≤ 25 t 25 t < SWL ≤ 160 t 160 t < SWL	 2 x SWL (0.993 x SWL) + 27 1.1 x SWL
Hooks, shackles, chains, rings, swivels, etc.: SWL ≤ 25 t 25 t < SWL	 2 x SWL (1.22 x SWL) + 20
Lifting beams, spreaders, frames, grabs: SWL ≤ 10 t 10 t < SWL ≤ 160 t 160 t < SWL	 2 x SWL (1.04 x SWL) + 9.6 1.1 x SWL
Note 1. Sheave blocks that are permanently attached to, or are integral with the hook, are called hook blocks. Hook blocks are to be tested with the load for multi-sheave blocks. The hook of the hook block is to be tested with the loads for hooks. Note 2. The SWL for a single sheave block, including single sheave blocks with beckets, is to be taken as one half of the resultant load on the head fitting. Note 3. The SWL of a multi-sheave block is to be taken as the resultant load on the head fitting.	

4.2.2 Thorough examination

4.2.2.1 Loose gear should be subject to thorough examination to the satisfaction of the Administration:

.1 upon completion of any proof test; and

.2 annually.

4.2.2.2 Where thorough examination does not form part of the renewal survey or annual survey, verification that thorough examination of loose gear has been conducted/completed to the satisfaction of the Administration should take place during the renewal survey under SOLAS regulation I/7 or the annual survey under SOLAS regulation I/10, as applicable.

4.2.2.3 If, on completion of a thorough examination, the competent person considers the item(s) of loose gear to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that loose gear should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The loose gear should be clearly marked "not to be used" and the status should be recorded in a register of lifting appliances. While out of service, the relevant actions for inoperative loose gear as outlined under section 5 of these Guidelines should be followed.

4.3 Demonstration of compliance

4.3.1 Before being put into use for the first time, loose gear utilized with lifting appliances which comply with SOLAS regulations II-1/3-13.2.1 and 3-13.2.4 should be certified to meet the provisions in section 4.

4.3.2 Certificates of test and thorough examination of certified loose gear should be attached to the *Register of ship's lifting appliances and cargo handling gear* (see paragraph 4.7.1.2).

4.4 Marking

4.4.1 Loose gear should be clearly and permanently marked with its unique identification (serial no.), the SWL and any additional marks required for safe use.

4.4.2 In addition, specific types of loose gear should be marked with the following minimum information:

.1 ramshorn hooks: range of sling angle;

.2 block and hook blocks;

.1 rope diameter;

.2 rigging plan identification mark (for blocks) if any;

.3 lifting beams, spreaders, frames;

.1 tare weight;

.2 allowable sling angles;

.3 details of the safe application of the SWL in case of complex equipment which can be utilized in different ways;

.4 grabs;

.1 tare weight; and

.5 other equipment as per the requirements of the classification society or industry standards acceptable to the Administration.

4.4.3 If there is insufficient space for the marking on the loose gear other than the SWL, the omitted information should be included in the certificate or be provided by other suitable means.

4.5 Operation

Personnel involved in lifting operations which utilize loose gear should be qualified, familiarized with the equipment and be authorized by the master.

4.6 Maintenance and inspection

4.6.1 Maintenance and inspections at respective intervals should be in accordance with the manufacturer's recommendations, industry standards and guidelines or classification society requirements and recommendations acceptable to the Administration considering factors such as the operational profile of the ship and the loose gear.

4.6.2 All loose gear should be considered vulnerable to marine environmental conditions which may lead to significant and accelerated deterioration and corrosion and the inspection and maintenance regime should be implemented accordingly.

4.6.3 The inspection and maintenance of loose gear may involve working at height, enclosed space entry and other hazards. These hazards should be considered when developing the relevant procedures for undertaking such tasks, including safe access.

4.6.4 Loose gear should be inspected by a responsible person before each use.

4.6.5 Examples of aspects requiring particular attention may include:

.1 wear, corrosion, damage and correct functioning of the loose gear;

.2 damaged, worn or corroded chains, including their terminations;

.3 certification and identification of loose gear; and

.4 physical or chemical degradation, including degradation due to the exposure to the environment.

4.6.6 If on completion of an inspection the responsible person considers the loose gear to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then the loose gear should not be used until any deficiency is rectified to the satisfaction of a competent person. The loose gear should be clearly marked "not to be used" and the status should be recorded in a register of lifting appliances. While out of service, the relevant actions for inoperative loose gear as outlined in section 5 should be followed.

4.7 Records of inspection, maintenance, testing and thorough examination

4.7.1 Records of thorough examination and testing

4.7.1.1 A record of thorough examination and evidence of proof testing of loose gear should be maintained in a register of lifting appliances and kept on board.

4.7.1.2 Records of thorough examination may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a competent person. The minimum information to be included in the *Certificate of test and thorough examination of loose gear*, as set out in appendix 2, should be used. Alternatively, other formats may be used which are acceptable to the Administration, such as those of a classification society recognized by the Administration.

4.7.2 Records of inspection and maintenance

4.7.2.1 Records of the routine inspection and maintenance of loose gear should be maintained and kept on board.

4.7.2.2 The records and particulars of inspection and maintenance may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a responsible person. Any recommendations of the manufacturer for such inspection and maintenance records should be used.

5 Inoperative lifting appliances and loose gear

For the implementation of SOLAS regulation II-1/3-13.4, the following actions should be taken by the master to mitigate risks posed by inoperative lifting appliances:

.1 take the inoperative lifting appliance into account in planning and executing a safe voyage;

.2 prevent operation of inoperative lifting appliances;

.3 prevent uncontrolled movement of inoperative lifting appliances or their components using appropriate restraining and preventing arrangements, if required;

.4 store inoperative loose gear separately from in-service loose gear and mark it as being inoperative; and

.5 record a particular lifting appliance or loose gear that is inoperative in the register of ship's lifting appliances until necessary repairs have been completed and it has been load tested or proof tested, as necessary, and thoroughly examined.

APPENDIX 1

SAMPLE CERTIFICATE
OF TEST AND THOROUGH EXAMINATION OF LIFTING APPLIANCES

(Official seal) Certificate No. _____

Name of Ship:

IMO Number:

Call Sign:

Port of Registry:

Name of Owner:

This is to certify that the lifting appliances listed below have been tested and thoroughly examined as required by SOLAS regulation II-1/3-13.

Situation and description of lifting appliance (with distinguishing number or mark, if any) which has been tested and thoroughly examined	Angle to the horizontal or radius at which test load is applied		Test load (tonnes)	Safe working load at angle or radius shown (tonnes)
	Angle (degrees)	Radius (metres)		

This certificate is valid until …… *(dd/mm/yyyy)*

Completion date of the testing and thorough examination on which this certificate is based:

Issued at …… *(place of issue of the certificate)*

Date of issue …… *(dd/mm/yyyy)*

Signature of competent person issuing the certificate …….

(Seal or stamp of the issuing authority)

APPENDIX 2

SAMPLE CERTIFICATE
OF TEST AND THOROUGH EXAMINATION OF LOOSE GEAR

(Official seal) Certificate No. _____

Name of Ship:

IMO Number:

Call Sign:

Port of Registry:

Name of Owner:

This is to certify that the loose gear listed below have been tested and thoroughly examined as required by SOLAS regulation II-1/3-13.

Distinguishing number or mark	Description of loose gear	Number tested	Date of test	Test load applied (tonnes)	Safe working load (tonnes)

Name and address of makers or suppliers: ....

Name and address of the company of
competent person who witnessed
testing and carried out thorough examination: .....

Name of the competent person and
position in public service, association, company: .....

Completion date of the testing and thorough examination on which this certificate is based:

Issued at ……. *(place of issue of the certificate)*

Date of issue …… *(dd/mm/yyyy)*

Signature of competent person issuing the certificate …….

(Seal or stamp of the issuing authority)

APPENDIX 3

SAMPLE FORM
OF REGISTER OF LIFTING APPLIANCES AND CARGO HANDLING GEAR

Name of Ship

Official Number

Call Sign

Port of Registry

Name of Owner

Thorough examination of lifting appliances and loose gear

(1) Situation and description of lifting appliances and loose gear (with distinguishing numbers or marks, if any) which have been thoroughly examined (see note 1).	(2) Certificate nos.	(3) I certify that on the date to which I have appended by signature, the gear shown in column (1) was thoroughly examined and no defects affecting its safe working condition were found other than those shown in column (4) date and signature (see note 2).	(4) Remarks

Note 1:
If all the lifting appliances are thoroughly examined on the same date it will be sufficient to enter in column (1) 'All lifting appliances and loose gear'. If not, the parts which have been thoroughly examined on the dates stated must be clearly indicated.

Note 2:
The thorough examinations to be indicated in column (3) include:
(a) Initial
(b) 12-monthly
(c) Five-yearly
(d) Repair/damage
(e) Other thorough examinations including those associated with heat treatment

INTERNATIONAL MARITIME ORGANIZATION

E

4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MSC.1/Circ.1662
27 June 2023

GUIDELINES FOR ANCHOR HANDLING WINCHES

1 The Maritime Safety Committee, at its 107th session (31 May to 9 June 2023), having considered a proposal by the Sub-Committee on Ship Systems and Equipment, at its eighth session, with a view to ensuring a uniform approach towards the application of SOLAS regulation II-1/3-13, adopted by resolution MSC.532(107), approved *Guidelines for anchor handling winches*, as set out in the annex.

2 Member States are invited to use the annexed Guidelines when applying SOLAS regulation II-1/3-13 and to bring them to the attention of ship designers, shipyards, shipowners, equipment manufacturers and other organizations and parties concerned.

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ANNEX

GUIDELINES FOR ANCHOR HANDLING WINCHES

1 Application

These Guidelines support the application of SOLAS regulation II-1/3-13 for anchor handling winches, associated equipment and loose gear used in association with anchor handling winches.

2 Definitions

For the purpose of these Guidelines, the following definitions apply:

.1 *Brake holding force* is the maximum force for which the winch brake is designed.

.2 *Brake holding capacity* is the maximum line pull that the winch brake can withstand without slipping of the brake.

.3 *Maximum line pull* is the maximum sustained force the winch is capable of pulling.

.4 *Static bollard pull* is the maximum sustained pulling force a vessel is capable of generating at maximum power (i.e. 100% maximum continuous rating (MCR)) and zero forward speed.

.5 A *wire* means a dedicated line (wire rope, synthetic rope or chain cable) used for the handling of anchors by means of an anchor handling winch.
The wire may include connecting loose gear.

.6 *Chain stopper* is a device used for securing and holding a section of wire, thereby relieving the load on the winch drum.

.7 *Competent person* means a person possessing the knowledge and experience required for the performance of duties specified in these guidelines and acceptable as such to the Administration.

.8 *Inspection* means an assessment carried out by a responsible person to ascertain if the anchor handling winches or associated loose gear are in good working condition for continued safe use.

.9 *Responsible person* means a person appointed by the master or company as defined in SOLAS regulation IX/1, as appropriate, possessing the knowledge and experience required for the performance of duties specified in these Guidelines.

.10 *Thorough examination* means a detailed assessment carried out by a competent person in order to determine whether or not the anchor handling winches or associated loose gear are in compliance with the applicable requirements of the Administration.

.11 *Certified* means that the anchor handling winches or associated loose gear have been verified and documented as compliant to the satisfaction of the Administration or recognized organization acting on its behalf.

.12 *Maintenance* means any activity carried out by a responsible person to keep the anchor handling winches or associated loose gear in good working condition for continued safe use.

.13 *Operational testing* means a test carried out by a responsible person to verify the correct functioning of a component or operation of the anchor handling winches and/or associated loose gear.

.14 *Load test* means a test in excess of the maximum line pull, carried out in the presence of a competent person in order to check the structural integrity of the anchor handling winches and their attachment to and adequacy of their supporting structure.

3 Anchor handling winches

3.1 Design, construction and installation

3.1.1 General

Anchor handling winches and associated equipment should be designed, constructed and installed in accordance with the requirements of a classification society which is recognized by the Administration in accordance with the provisions of SOLAS regulation XI-1/1 or standards acceptable to the Administration which provide an equivalent level of safety. In addition to the above, anchor handling winches that fall under the scope of SOLAS regulation II-1/3-13.2.2 should also comply with the additional guidance specified under paragraphs 3.1.2 to 3.1.8 below.

3.1.2 Speed control and handling

3.1.2.1 The anchor handling winches should be capable of hoisting and lowering in a controlled manner, and should be provided with adjustable speed control between the minimum and maximum speeds.

3.1.2.2 The winch operating controls should be designed to pay out the wire by moving the control lever away from the winch operator and heave in by pulling the control lever towards the operator. All operating controls should be permanently marked with signs indicating their purpose and the operating direction.

3.1.2.3 The winch operating controls should be of the "hold-to run" type, which will cause the hoisting or lowering motion to automatically stop when the control lever is released by the operator.

3.1.3 Tension control

Anchor handling winches should be equipped with tension control to ensure that the system is not overloaded in the event that the anchor being handled gets stuck, entangled or is exposed to similar situations.

3.1.4 Overload alarm and monitoring

3.1.4.1 Winches should be provided with continuous load monitors and an audible and visual overload alarm.

3.1.4.2 The overload alarm should be programmable for lower levels of load.

3.1.5 Control stations

3.1.5.1 The main control station should be placed in a position on the bridge which has a clear view of the deck area. Operators should be able to visually monitor anchor handling winches and associated equipment and, if the view is obstructed, cameras or video monitoring devices may be used for this purpose.

3.1.5.2 The anchor handling winch may be controlled from more than one position provided that an arrangement to prevent more than one position from exercising control at any one time is fitted.

3.1.5.3 Each control station should be provided with:

.1 means for two-way communication with the main control station;

.2 an arrangement to prevent inadvertent actuation;

.3 adequate protection of personnel; and

.4 sufficient illumination.*

3.1.6 Spooling device

Anchor handling winches should be equipped with remotely operated spooling devices.

3.1.7 Emergency release

3.1.7.1 Anchor handling winches should be designed to facilitate emergency release of the load on the wire in a safe and controlled manner, both under normal as well as dead-ship conditions.

3.1.7.2 The controls for actuation of the emergency release should be placed at the main control station. Emergency release function may also be available at the local control station.

3.1.7.3 Emergency release control should be protected against unintentional activation.

3.1.7.4 The design and operation of the emergency release should take into consideration restrictions on the pay-out speed of the wire due to inertia and any restrictions due to onboard arrangements.

3.1.7.5 Instructions for the operation of the emergency release should be clearly displayed at the navigation bridge and locally at the winch.

* The minimum lighting level is at least 320 Lux.

3.1.7.6 After an emergency release, the complete anchor handling winch system should be inspected for signs of damage or deterioration. Any identified damage or deterioration should be rectified before the anchor handling winch is put back into service.

3.1.8 Associated anchor handling equipment

3.1.8.1 Chain stopper

3.1.8.1.1 Anchor handling vessels should be equipped with chain or wire stoppers (hereafter referred to as chain stoppers).

3.1.8.1.2 A chain stopper should be equipped with an audible alarm which is activated when the stopper is either being engaged or disengaged.

3.1.8.1.3 A chain stopper should be equipped with an emergency release that is functional in all conditions, including dead-ship situations.

3.1.8.1.4 Emergency release of chain stopper should include disengaging of pins and other equipment that may prevent releasing the wire or cause the wire to get stuck/entangled during release.

3.1.8.1.5 Emergency release of the chain stopper should be designed for remote operation in order to minimize the risk of injury to personnel.

3.1.8.1.6 The emergency release mechanism of the chain stopper should be protected against unintentional activation.

3.1.8.1.7 Instructions for the operation of the emergency release should be clearly displayed at the navigation bridge and locally at the emergency release control mechanism.

3.1.8.1.8 After an emergency release, the chain stopper system should be inspected for signs of damage or deterioration. Any identified damage or deterioration should be rectified before the chain stopper is put back into service.

3.2 Testing and thorough examination

3.2.1 Commissioning test

3.2.1.1 For anchor handling winches to which SOLAS regulation II-1/3-13.2.2 applies, a commissioning test should be carried out according to the manufacturer's instructions and the requirements of a classification society which is recognized by the Administration in accordance with SOLAS regulation XI-1/1, or with applicable national or international standards acceptable to the Administration and which provide an equivalent level of safety. The commissioning test should include the following:

.1 Function tests at light load to verify the correct working of the winch and its controls over the full operating range.

.2 An overload test to verify the capacity and integrity of the anchor handling winch, the attachment of the winch to ship and the adequacy of the ship's supporting structure.

.3 Test of emergency release and residual holding force in the wire. The test should be performed with the wire attached to an onshore strong point, or an anchor on the seabed or a similar arrangement.

.4 Residual brake holding force after emergency release should be verified by test.

.5 Function test of the whole winch system including static bollard pull test and brake holding capacity test. Where it is not practicable to verify the brake holding capacity by testing, the same may be demonstrated through calculations.

3.2.1.2 After repairs, modifications or alterations of a major character, anchor handling winches are to be tested in accordance with 3.2.1.1.1, 3.2.1.1.2 and 3.2.1.1.5. If the emergency release system is affected by these repairs, modifications or alterations of a major character, the anchor handling winches are to be additionally tested in accordance with 3.2.1.1.3 and 3.2.1.1.4.

3.2.1.3 Repairs, modifications or alterations of a major character are those which:

.1 change the rated wire pull of the anchor handling winch;

.2 affect the strength, stability or service life of the anchor handling winch;

.3 affect the primary load bearing structure of the anchor handling winch; or

.4 modify the functionality of the anchor handling winch or any part thereof which may affect its strength or safety or structural integrity.

3.2.1.4 Anchor handling winches that are not designed for towing do not need to undergo the bollard pull test in 3.2.1.1.5. Functional testing other than the static bollard pull test is still required.

3.2.2 Periodical testing

Anchor handling winches and associated equipment should be operationally tested annually and five-yearly according to the manufacturer's recommendation and the requirements or recommendations of a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1. The annual test should include function tests of all equipment. The Administration or recognized organization should witness the five-yearly test.

3.2.3 Thorough examination

3.2.3.1 Anchor handling winches and associated equipment should be subject to a thorough examination to the satisfaction of the Administration during annual surveys required by SOLAS regulations I/7 for passenger ships and I/10 for cargo ships, before re-entering service after any structural repairs or modifications of major character and after load testing.

3.2.3.2 If on completion of a thorough examination, the competent person considers the anchor handling winch to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that anchor handling winch should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The anchor handling winch should be clearly marked "not to be used" and the status should be recorded as outlined in 3.2.4. While out of service, the relevant actions for inoperative anchor handling winches as outlined under section 5 of these Guidelines should be followed.

3.2.4 Records of testing and thorough examination

Records of thorough examination and testing may be documented in any convenient form, provided each entry includes the necessary information, is clearly legible and is authenticated by the competent person. The relevant classification society or equivalent forms for documenting the thorough examination and testing should be considered for use.

3.3 Demonstration of compliance

3.3.1 Before being put into use for the first time, anchor handling winches installed on or after 1 January 2026 should be certified by the Administration or a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1 as compliant with SOLAS regulations II-1/3-13.2.2 with the recommended scope for demonstration of compliance of anchor handling winches comprising the following:

.1 a plan appraisal of the anchor handling winch and foundation connections;

.2 verification of materials;

.3 survey, testing and examination during fabrication;

.4 verification of component certificates including its loose gear; and

.5 testing and thorough examination when installed on board.

3.3.2 Anchor handling winches installed before 1 January 2026 should be certified by the Administration or a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1 as compliant with SOLAS regulation II-1/3-13.2.5 no later than the date of the first renewal survey on or after 1 January 2026.

3.3.3 Existing anchor handling winches with valid certificates under another international instrument acceptable to the Administration and issued prior to the entry into force of SOLAS regulation II-1/3-13 should be considered compliant with SOLAS regulation II-1/3-13.2.5.

3.3.4 Demonstration of compliance certified as per paragraphs 3.3.1.and 3.3.2 should be recorded in accordance with paragraph 3.2.4.

3.4 Nameplate

3.4.1 Anchor handling winches should be provided with a permanently affixed name plate which should include at least the following information:

.1 details of the manufacturer (name, address);

.2 model name/number;

.3 serial number;

.4 date of manufacture and date of installation;

.5 details of power supply;

.6 details of wire (e.g. length, diameter);

.7 maximum brake holding capacity, metric tons;

.8 maximum line pull, metric tons;

.9 maximum static bollard pull, metric tons;

.10 placeholder for the classification society's surveyor's stamp;

.11 drum size; and

.12 winch speed.

3.4.2 Detailed specifications of anchor handling winches, such as the following information, can be included in other documentation, e.g. anchor handling winches' operation/maintenance manual on board:

.1 date of manufacture and date of installation;

.2 details of power supply;

.3 details of wire (e.g. length, diameter);

.4 maximum brake holding capacity, metric tons;

.5 maximum line pull, metric tons;

.6 maximum static bollard pull, metric tons;

.7 placeholder for the classification society's surveyor's stamp;

.8 drum size; and

.9 winch speed.

3.4.3 It should be ensured that the documentation on board can be unambiguously related to the actual winch, i.e. by referring to the unique serial number.

3.5 Maintenance, inspection and operational testing

3.5.1 General

3.5.1.1 Maintenance, inspection, operational testing and their respective intervals should be in accordance with the manufacturer's recommendations, industry standards and guidelines or classification society requirements and recommendations acceptable to the Administration, considering factors such as the operational profile of the ship and the anchor handling winch.

3.5.1.2 All anchor handling winches and associated equipment should be considered vulnerable to marine environmental conditions which may lead to significant and accelerated deterioration and corrosion, and the inspection and maintenance regime should be implemented accordingly.

3.5.1.3 The inspection and maintenance of anchor handling winches and associated equipment may involve working at height, enclosed space entry and other hazards. These hazards should be considered when developing the relevant procedures for undertaking such tasks, including safe access.

3.5.1.4 Examples of items requiring particular attention may include:

.1 corrosion and damage of primary structural members, such as winch frames and bedplates, drums, foundations and foundation connections, including welds and bolts;

.2 wear, corrosion and damage of mechanical components including hydraulic/pneumatic cylinders, pins, winch drums, chain wheels, wire-spooling and guide systems, clutches, bearings, rollers, shafts, gears, bearings and brakes;

.3 correct setting and functioning of safety, protection and limiting devices;

.4 condition and correct functioning of the anchor handling winch as a whole and, in particular, the piping/hoses, hydraulic arrangements, spooling devices, motors, and electrical and control systems;

.5 corrosion and damage to all means of safe access to the anchor handling winch, including attached maintenance platforms and extensions, with particular attention to support brackets and welds; and

.6 certification and identification of all wires.

3.5.1.5 Damaged, broken, worn or corroded wires, including their terminations connecting loose gear, should be inspected and discarded according to manufacturers' recommendations, relevant industry standards, international standards or requirements of classification societies acceptable to the Administration.

3.5.1.6 If on the completion of an inspection, the responsible person considers the anchor handling winch to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that anchor handling winch should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The anchor handling winch should be clearly marked not to be used and the status should be recorded in accordance with 3.2.4. While out of service, the relevant actions for inoperative anchor handling winches as outlined under section 5 of these Guidelines should be followed.

3.5.2 Maintenance manual

3.5.2.1 A maintenance manual for an anchor handling winch should be provided by the manufacturer. Where maintenance manuals for existing anchor handling winches are not available from the manufacturer, these may be provided by competent third parties.

3.5.2.2 The maintenance manual should, as a minimum, include the following for each anchor handling winch:

.1 description of the required inspection regime and maintenance schedules specific to the anchor handling winch, checklists and a list of key tools or other items for use when carrying out inspections and maintenance;

.2 instructions for routine repairs/maintenance;

.3 technical maintenance information;

.4 information on recommended lubricants, oil and filter change;

.5 information on bearing maintenance, if applicable;

.6 lists of replaceable parts/components, as well as the inspection/ maintenance/replacement procedures for these parts/components;

.7 lists of sources of spare parts;

.8 model forms for records of inspections and maintenance;

.9 operational test procedures, as well as the pre/post-operational test inspection procedures;

.10 list of components requiring particular attention during inspections, as well as the inspection/maintenance procedures for these components;

.11 recommended intervals for replacement and overhaul of components and equipment;

.12 information on the preservation of the coating and corrosion protection system; and

.13 information regarding special inspection and maintenance in cases where the anchor handling winch is not operated for long periods of time.

3.5.3 Records of maintenance and inspection

3.5.3.1 Records of the routine inspection and maintenance of anchor handling winches or their components or parts should be maintained and kept on board.

3.5.3.2 The records and particulars of inspection and maintenance may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a responsible person. Any recommendations of the manufacturer for such inspection and maintenance records should be used.

3.6 Operations

3.6.1 General

3.6.1.1 Personnel operating anchor handling winches and their associated equipment should be qualified, familiarized with the equipment and be authorized by the master.

3.6.1.2 All personnel involved in an anchor handling winch operation should understand their role during the operation and, in particular, the signals that may be required to commence, coordinate or stop the operation.

3.6.1.3 Personnel involved in anchor handling winch operations should be equipped with appropriate personal protective equipment for the task.

3.6.1.4 Anchor handling winch operations should be planned, supervised and carried out so that any identified risks are minimized.

3.6.1.5 Procedures and instructions should relate to the specific type of anchor handling winch and should be provided in the operations manual.

3.6.1.6 Due consideration should be given to any limiting operational conditions, such as the ship's motion/inclination, environmental conditions including sea state, maximum wind speeds including wind gusts, ice and snow accretion, as well as limitations of the anchor handling winch, such as maximum line pull, maximum brake holding capacity, etc.

3.6.1.7 Effective communication should be established among ship's personnel as well as other ships/offshore units involved in the anchor handling winch operation.

3.6.1.8 Safe means of access to anchor handling winches and the work area should be established. Safe areas for the personnel involved should be available.

3.6.1.9 When developing plans and procedures for anchor handling winch operations, consideration should be given to prevention of accidents or incidents due to the wires striking any person or other structures in close proximity.

3.6.1.10 Procedures and measures for the safe operation of anchor handling winches should take account of applicable international and national instruments and best practices for occupational safety and health.

3.6.1.11 Personnel operating the anchor handling winch should consult the operations manual for any specific instructions related to the anchor handling operations.

3.6.1.12 Periodic drills for emergency release and emergency brake operation should form part of the planned maintenance schedule.

3.6.2 Operations manual

3.6.2.1 An operations manual for the anchor handling winches should be provided by the manufacturer. Where operations manuals for existing anchor handling winches are not available from the manufacturer, these may be provided by competent third parties.

3.6.2.2 The operations manual should, as a minimum, include the following for each anchor handling winch:

.1 design, operational and environmental limitations;

.2 compatible loose gear, if any;

.3 safety instructions; and

.4 operating procedures, including emergency procedures, if any.

3.6.2.3 For anchor handling winches installed before 1 January 2026, their operations manual should be developed with original manufacture, design and build data, and take into account any modifications since installation. Where original data or modification data is not available, the operations manuals should be developed on the current operational procedures and practices.

4 Loose gear

4.1 Design and manufacturing

Loose gear utilized with anchor handling winches to which SOLAS regulations II-1/3-13.2.2 and II-1/3-13.2.5 apply should be designed and manufactured in accordance with requirements acceptable to the Administration or a classification society which is recognized by the Administration in accordance with the provisions of regulation XI-1/1.

4.2 Proof test and thorough examination

4.2.1 Proof test

All loose gear in use with anchor handling winches and associated equipment to which SOLAS regulation II-1/3-13 applies should have documentary evidence of a proof test and be retested after repairs, modifications or alterations of major character acceptable to the Administration.

4.2.2 Thorough examination

4.2.2.1 Loose gear should be subject to thorough examination to the satisfaction of the Administration:

.1 after any proof test; and

.2 annually.

4.2.2.2 If on completion of a thorough examination, the competent person considers the item(s) of loose gear to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then that loose gear should be taken out of service until any deficiency is rectified to the satisfaction of a competent person. The loose gear should be clearly marked "not to be used" and the status should be recorded as detailed in sub-section 4.7. While out of service, the relevant actions for inoperative loose gear as outlined under section 5 of these Guidelines should be followed.

4.3 Demonstration of compliance

4.3.1 Before being put into use for the first time, the loose gear utilized with anchor handling winches which comply with SOLAS regulations II-1/3-13.2.2 and 3-13.2.5 should be certified to meet the provisions in section 4.

4.3.2 The existing loose gear utilized with anchor handling winches and associated equipment to which SOLAS regulations II-1/3-13.2.2 and II-1/3-13.2.5 apply, with valid certificates under another international instrument acceptable to the Administration and issued prior to the entry into force of SOLAS regulation II-1/3-13, should be considered compliant with SOLAS regulation II-1/3-13.5.

4.4 Marking

4.4.1 Loose gear should be clearly and permanently marked with its unique identification (serial no.), safe working load (SWL) and any additional marks required for safe use.

4.4.2 If there is insufficient space for the marking on the loose gear other than the SWL, the omitted information should be included in the certificate or be provided by other suitable means.

4.5 Operation

The personnel involved in anchor handling winch operations which utilize loose gear should be qualified, familiarized with the equipment and be authorized by the master.

4.6 Maintenance and inspection

4.6.1 Maintenance and inspections at respective intervals should be in accordance with the manufacturer's recommendations, industry standards and guidelines or classification society requirements and recommendations acceptable to the Administration, considering factors such as the operational profile of the ship, anchor handling winch and the loose gear.

4.6.2 All loose gear should be considered vulnerable to marine environmental conditions which may lead to significant and accelerated deterioration and corrosion, and the inspection and maintenance regime should be implemented accordingly.

4.6.3 Hazards particular to the inspection and maintenance of loose gear should be considered when developing the relevant procedures for undertaking such tasks.

4.6.4 Loose gear should be inspected by a responsible person before each use.

4.6.5 Examples of aspects requiring particular attention may include:

.1 wear, corrosion, damage and correct functioning of the loose gear;

.2 damaged, worn or corroded chains, including their terminations;

.3 certification, identification and marking of loose gear; and

.4 physical or chemical degradation, including degradation due to the exposure to the environment.

4.6.6 If on completion of an inspection the responsible person considers the loose gear to be unsafe for operation or not in compliance with the applicable requirements of the Administration, then the loose gear should not be used until any deficiency is rectified to the satisfaction of a competent person. The loose gear should be clearly marked "not to be used" and the status should be recorded. While out of service, the relevant actions for inoperative loose gear as outlined in section 5 should be followed.

4.7 Records of inspection, maintenance, testing and thorough examination

4.7.1 Records of thorough examination and testing

4.7.1.1 A record of thorough examination and evidence of proof testing of loose gear should be maintained and kept on board.

4.7.1.2 Records of thorough examination and testing may be documented in any convenient form, provided each entry includes the necessary information, is clearly legible and is authenticated by the competent person. Forms issued by the relevant classification society recognized by the Administration or any equivalent forms for documenting the thorough examination and testing should be considered for use.

4.7.2 Records of inspection and maintenance

4.7.2.1 Records of the routine inspection and maintenance of loose gear should be maintained and kept on board.

4.7.2.2 The records and particulars of inspection and maintenance may be documented in any convenient form, provided each entry contains the necessary information, is clearly legible and is authenticated by a responsible person. Any recommendations of the manufacturer for such inspection and maintenance records should be used.

5 Inoperative anchor handling winches, associated equipment and loose gear

For the implementation of SOLAS regulation II-1/3-13.4, the following actions should be taken by the master to mitigate risks posed by inoperative anchor handling winches and associated loose gear and wire:

.1 take the inoperative anchor handling winches, associated equipment and wire into account in planning and executing a safe voyage;

.2 prevent the operation of inoperative anchor handling winches and associated loose gear and equipment;

.3 prevent uncontrolled movement of inoperative anchor handling winches or associated loose gear and equipment using appropriate restraining and preventing arrangements, if required;

.4 store inoperative wires and loose gear separately from in-service wires and loose gear and mark it as being inoperative; and

.5 record the particulars of anchor handling winches or loose gear, associated equipment and wire that is inoperative as detailed in paragraph 3.2.4 and/or 4.7.1 until necessary repairs have been completed and it has been tested or proof tested, as necessary, and thoroughly examined.