

---

# **RULES FOR RADIO INSTALLATIONS**

**RULES**

## **2019 AMENDMENT NO.2**

Rule No.106            27 December 2019

Resolved by Technical Committee on 22 July 2019

An asterisk (\*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

“Rules for radio installations” has been partly amended as follows:

**Amendment 2-1**

**Chapter 2    SURVEYS**

**2.1      General**

**2.1.2      Time of Registration Surveys and Intervals between Registration Maintenance Surveys\***

Sub-paragraph -2(3) has been amended as follows.

**2**      Registration Maintenance Surveys are to be carried out in accordance with the requirements specified in **(1)** through **(4)** below.

((1) and (2) are omitted.)

**(3)**      Occasional Surveys are to be carried out at the following occasions at times other than the Special Surveys or Periodical Surveys. To implement the survey, in lieu of the traditional ordinary surveys where a surveyor is in attendance, the Society may approve survey methods which it considers to be appropriate.

((a) to (d) are omitted.)

**(4)**      (Omitted)

Paragraph 2.3.2 has been amended as follows.

**2.3.2      Occasional Surveys\***

In an Occasional Survey, radio installations are to be subjected to those tests, measurements and surveys determined to be necessary in each individual cases and the results thereof are to be to the satisfaction of the Surveyor. To implement the survey, in lieu of the traditional ordinary surveys where a surveyor is in attendance, the Society may approve survey methods which it considers to be appropriate.

**EFFECTIVE DATE AND APPLICATION (Amendment 2-1)**

- 1.**      The effective date of the amendments is 27 December 2019.

## Chapter 1 GENERAL

### 1.1 General

#### 1.1.4 Terms and Definitions

Sub-paragraph (19) has been added as follows.

- (19) “Recognized mobile satellite service” means any service which operates through a satellite system and is recognized by the International Maritime Organization, for use in the GMDSS.

## Chapter 3 RADIO INSTALLATIONS

### 3.2 Radio Equipment

Paragraph 3.2.4 has been amended as follows.

#### 3.2.4 ~~INMARSAT~~ **Recognized Mobile Satellite Service Communication Installations\***

~~An INMARSAT~~ recognized mobile satellite service communication installation is to consist of the following devices, separately or in combination, each satisfying the following functional requirements.

- (1) ~~INMARSAT~~ Recognized mobile satellite service ship earth station  
~~The INMARSAT~~ A recognized mobile satellite service ship earth station is to be capable of transmitting and receiving:
  - (a) distress alerts and safety communications using direct-printing telegraphy and/or radiotelephony;
  - (b) general radio communications using either radiotelephony or direct-printing telegraphy; and
  - (c) maintaining a continuous watch for satellite shore-to-ship distress alerts.
- (2) Enhanced group calling receiver  
The enhanced group calling receiver is to be capable of receiving maritime safety information using ~~INMARSAT~~ recognized mobile satellite service enhanced group calling.

## Chapter 4 COMMUNICATION SYSTEMS

### 4.2 Basic Requirements for Radio Equipment\*

Sub-paragraph -1(4) has been amended as follows.

1 Every ship is to be provided with:

- (1) (Omitted)
- (2) (Omitted)
- (3) (Omitted)
- (4) an enhanced group calling receiver if the ship is engaged on voyages in ~~any sea area of INMARSAT coverage~~ A1, or A2 or A3 but in which an international NAVTEX service is not provided;
- (5) (Omitted)

### 4.3 Radio Equipment - Sea Area A1

Sub-paragraph -1(5) has been amended as follows.

1 In addition to meeting the requirements of 4.2, every ship engaged on voyages exclusively in sea area A1 is to be provided with a radio installation capable of initiating the transmission of ship-to-shore distress alerts from the position from which the ship is normally navigated, and operating either:

- (1) (Omitted)
- (2) (Omitted)
- (3) (Omitted)
- (4) (Omitted)
- (5) through ~~the INMARSAT geostationary~~ a recognized mobile satellite service; this requirement may be fulfilled by:
  - (a) ~~an INMARSAT~~ ship earth station, or
  - (b) a satellite EPIRB specified in 3.2.7, either by installing the satellite EPIRB close to, or by remote activation from, the position from which the ship is normally navigated.

### 4.4 Radio Equipment - Sea Areas A1 and A2\*

Sub-paragraph -1(2) has been amended as follows.

1 In addition to meeting the requirements of 4.2, every ship engaged on voyages beyond sea area A1, but remaining within sea area A2, is to be provided with:

- (1) (Omitted)
- (2) means of initiating the transmission of ship-to-shore distress alerts by a radio service other than MF operating either:
  - (a) (Omitted)
  - (b) (Omitted)
  - (c) through ~~the INMARSAT geostationary~~ a recognized mobile satellite service by a ship earth station.

Sub-paragraph -3(2) has been amended as follows.

**3** The ship is, in addition, to be capable of transmitting and receiving general radio communications using radiotelephony or direct-printing telegraphy by either:

- (1) (Omitted)
- (2) ~~an INMARSAT~~ recognized mobile satellite service ship earth station.

#### **4.5 Radio Equipment - Sea Areas A1, A2 and A3\***

Sub-paragraph -1(1) and (3) has been amended as follows.

**1** In addition to meeting the requirements of **4.2**, every ship engaged on voyages beyond sea areas A1 and A2, but remaining within sea area A3, if it does not comply with the requirements of **-2**, is to be provided with.

- (1) ~~an INMARSAT~~ recognized mobile satellite service communication installation specified in **3.2.4**;
- (2) (Omitted)
- (3) means of initiating the transmission of ship-to-shore distress alerts by a radio service operating either:
  - (a) (Omitted)
  - (b) (Omitted)
  - (c) through ~~the INMARSAT geostationary~~ a recognized mobile satellite service by an additional ~~INMARSAT~~ ship earth station.

Sub-paragraph -2(2) has been amended as follows.

**2** In addition to meeting the requirements of **4.2**, every ship engaged on voyages beyond sea areas A1 and A2, but remaining within sea area A3, if it does not comply with the requirements of **-1**, is to be provided with:

- (1) (Omitted)
- (2) means of initiating the transmission of ship-to-shore distress alerts by a radio communication service other than HF operating either:
  - (a) (Omitted)
  - (b) through ~~the INMARSAT geostationary~~ a recognized mobile satellite service by a ship earth station.

#### **4.7 Two-way Communication Equipment etc.**

##### **4.7.1 General**

Sub-paragraph -1 has been amended as follows.

**1** All two-way communication equipment (VHF, MF/HF and ~~INMARSAT~~ recognized mobile satellite service) carried on board which is capable of automatically including the ship's position in the distress alert is to be automatically provided with this information from a navigation receiver. If such receiver is not installed, the ship's position is to be manually updated at intervals not exceeding four *hours* so that it is always ready for transmission by the equipment.

**2** If an uninterrupted input of information from the ship's navigational or other equipment to the installation required by this Rule is needed, a means is to be provided to ensure the continuous

supply of such information in the event of failure of the ship's main or emergency source of electrical power.

#### **4.10 Sources of Energy**

Paragraph 4.10.2 has been amended as follows.

##### **4.10.2 Emergency Sources of Energy**

An emergency source of electrical power is to be provided and is to be capable of supplying service to the VHF radio installation as well as for the applicable the MF radio installation, the ~~INMARSAT~~ recognized mobile satellite service communication installation, the MF/HF radio installation required based on the sea areas within which the ship is engaged on voyages for a period of 18 *hours* or more in the case of cargo ships of 500 *tons* gross tonnage and upwards, and for a period of 36 *hours* or more in the case of passenger ships.

##### **4.10.3 Reserve Sources of Energy\***

Sub-paragraph -1 has been amended as follows.

**1** A reserve source or sources of energy are to be provided on every ship to supply the radio installation for the purpose of conducting distress and safety radio communications in the event of failure of the ship's main and emergency sources of electrical power. The reserve source or sources of energy are to be capable of simultaneously operating the VHF radio installation and, as appropriate for the sea area or sea areas for which the ship is equipped, either the MF radio installation, the MF/HF radio installation, or the ~~INMARSAT~~ recognized mobile satellite service communication installation and any of the additional loads mentioned in -3, -4, and -7 for a period of a least:

- (1) one *hour* on ships provided with an emergency source of electrical power, if such source of power complies fully with all relevant requirements of **4.10.2**.
- (2) six *hours* on ships not provided with an emergency source of electrical power complying fully with all relevant requirements of **4.10.2**.

#### **EFFECTIVE DATE AND APPLICATION (Amendment 2-2)**

- 1.** The effective date of the amendments is 1 January 2020.

---

# **GUIDANCE FOR RADIO INSTALLATIONS**

**GUIDANCE**

## **2019 AMENDMENT NO.1**

Notice No.73      27 December 2019

Resolved by Technical Committee on 22 July 2019



“Guidance for radio installations” has been partly amended as follows:

Amendment 1-1

## Chapter 2 SURVEYS

### 2.1 General

Paragraph 2.1.2 has been amended as follows.

#### 2.1.2 Time of Registration Surveys and Intervals of Registration Maintenance Surveys

**1** The wording “the Society may approve the survey methods which it considers to be appropriate.” in **2.1.2-2(3) of the Rules** means survey methods which the Society considers to be able to obtain information equivalent to that obtained through traditional ordinary surveys where a surveyor is in attendance.

**2** When applying **2.1.2-2(3), of the Rules** to the ships at the beginning stage of construction before 1 January 2017 intended for operation in polar waters as defined in **1.1.1-2, Part I of the Rules for the Survey and Construction of Steel Ships**, a survey is to be carried out to verify compliance with the relevant requirements of **Chapter 5** by the first Special Survey held after 1 January 2018.

Paragraph 2.3.2 has been added as follows.

#### **2.3.2 Occasional Surveys**

The wording “the Society may approve the survey methods which it considers to be appropriate.” in **2.3.2 of the Rules** means survey methods which the Society considers to be able to obtain information equivalent to that obtained through traditional ordinary surveys where a surveyor is in attendance.

### EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 27 December 2019.

## Chapter 2 SURVEYS

### 2.2 Registration Surveys

#### 2.2.1 Submission of Plans and Documents for Approval

Sub-paragraph -4 has been amended as follows.

4 Drawings for antennae arrangements specified in **2.2.1-1(4) of the Rules** are to show the relative location of the antennae used for ~~INMARSAT~~ recognized mobile satellite service communication installations to the ship's structure in those cases where INMARSAT communication installations are mandatory.

#### 2.2.2 Surveys

Sub-paragraph (3) has been amended as follows.

Requirements of the Registration Survey referred to in paragraph **2.2.2 of the Rules** are detailed below:

((1) and (2) are omitted.)

(3) ~~INMARSAT~~ Recognized Mobile Satellite Service Communication Installations

- (a) verify that the antenna is sited in such a position that no obstacles exist which would likely degrade significantly the performance of the equipment.
- (b) verify that the ~~INMARSAT~~ recognized mobile satellite service communication installations are fed from the required sources of electrical power with a changeover facility available among the sources.
- (c) where INMARSAT ~~A or B~~ Fleet-77 is used, verify that a stabilized antenna is capable of accurately tracking the INMARSAT using gyro signals.
- (d) ensure that tests by actual communications or by receiving test messages through telex or telephone are carried out.
- (e) verify the EGC functions for composing and storing of messages, entering ID information, setting up of receiving conditions, and printing. Further, verify that performance verification tests are carried out, and that such messages are received and printed out or stored properly.

((4) to (15) are omitted.)

### 2.3 Registration Maintenance Surveys

#### 2.3.1 Special Surveys and Periodical Surveys

Sub-paragraph (3) has been amended as follows.

Requirements of the Special Survey and Periodical Survey referred to in paragraph **2.3.1 of the Rules** are detailed below:

((1) and (2) are omitted.)

(3) ~~INMARSAT~~ **Recognized Mobile Satellite Service Communication Installations**

- (a) verify that the ~~INMARSAT~~ recognized mobile satellite service communication installations are fed from the required sources of electrical power with a changeover facility available among the sources.
- (b) ensure that tests by actual communications or by receiving test messages through telex or telephone are carried out.
- (c) verify that performance verification tests are carried out, and that messages received by EGC function are printed out or stored properly.

((4) to (14) are omitted.)

## **Chapter 3 RADIO INSTALLATIONS**

### **3.2 Radio Equipment**

Paragraph 3.2.4 has been amended as follows.

#### **3.2.4 ~~INMARSAT~~ Recognized Mobile Satellite Service Communication Installations**

Where an ~~INMARSAT~~ recognized mobile satellite service ship earth station specified in **3.2.4 of the Rules** is equipped with a tracking antenna, a ship's heading signal is to be continuously provided in the event of failure of the ship's main and emergency sources of electrical power.

### **EFFECTIVE DATE AND APPLICATION (Amendment 1-2)**

1. The effective date of the amendments is 1 January 2020.