

RESOLUTION A.421(XI)

*Adopted on 15 November 1979
Agenda item 10(b)*

**OPERATIONAL STANDARDS FOR RADIOTELEPHONE
ALARM SIGNAL GENERATORS**

THE ASSEMBLY,

RECALLING Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

BEARING IN MIND the provisions of Chapter IV of the International Convention for the Safety of Life at Sea, 1974,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fortieth session,

1. ADOPTS the recommendation on operational standards for radiotelephone alarm signal generators, the text of which is contained in the Annex to the present resolution;
2. RECOMMENDS Administrations to ensure that shipborne radiotelephone alarm signal generators conform to operational standards not inferior to those specified in the Annex to the present resolution.

ANNEX

OPERATIONAL STANDARDS FOR RADIOTELEPHONE ALARM SIGNAL GENERATORS*

1 Introduction

1.1 The radiotelephone alarm signal generator, in addition to meeting the requirements of the Radio Regulations, should comply with the following operational standards.

2 General

2.1 The radiotelephone alarm signal generator should preferably be an integral part of the radiotelephone transmitter, but may be a separate device.

3 Frequency and duration of tones

3.1 The frequency of both the 1300 Hz and 2200 Hz tones should be maintained within a tolerance of ± 1.5 per cent.

* The operational standards apply to new equipment only.

3.2 The duration of each tone should be 250 milliseconds and be maintained within a tolerance of ± 10 milliseconds.

3.3 The interval between successive tones should be as short as possible but should not exceed 4 milliseconds.

4 Modulation

4.1 The output of the device should be sufficient to modulate the associated transmitter in the case of A3/A3H classes of emission to a depth of at least 70 per cent and for an A3J class of emission to within 3 dB of the rated output power (P_p).

4.2 When the transmitter is modulated, the ratio of the amplitude of the stronger radio frequency component to that of the weaker should be within the range 1 to 1.2.

5 Controls and indicators

5.1 All controls should be of such size as to permit normal adjustment to be easily performed. The function and the setting of the controls should be clearly indicated.

5.2 The number of controls available at the exterior of the device should be the minimum necessary for satisfactory and simple operation. The device should be so designed as to prevent activation by mistake.

5.3 The device should be capable of being taken out of operation at any time in order to permit the immediate transmission of a distress message.

5.4 Means should be provided to reduce to extinction any light output from the device which is capable of interfering with safety of navigation.

6 Safety precautions

6.1 Means should be provided, as appropriate, for earthing exposed metallic parts of the device but this should not cause any terminal of the source of electrical energy to be earthed, unless special precautions, to the satisfaction of the Administration, are taken.

6.2 As far as practicable, accidental access to dangerous voltages within the device should be prevented and an appropriate warning notice be affixed.

7 Durability and resistance to effects of climate

7.1 The device should continue to operate in accordance with the operational standards contained in this recommendation under the conditions of sea state, vibration, humidity and change of temperature likely to be expected on board ships.

8 Power supply

8.1 The device should continue to operate in accordance with the operational standards contained in this recommendation in the presence of variations of the power supply to be expected on board ships.

8.2 Provision should be made for protecting the device from the effects of excessive voltages, transients and reversal of the power supply polarity.

9 Duration of alarm signal

9.1 After activation, the device should automatically generate the radiotelephone alarm signal for a period of not less than 30 seconds and not more than 60 seconds, unless manually interrupted.

10 Alarm signal repeat

10.1 After generating the radiotelephone alarm signal or after manual interruption the device should be immediately ready to repeat the signal.

11 Activation of the radiotelephone transmitter

11.1 Provision should be made such that, when the transmitter is operationally ready, the alarm signal generator will automatically switch the transmitter to the transmit condition at the start of the radiotelephone alarm signal and cause it to cease transmission at the conclusion of the signal.

12 Aural monitoring

12.1 The device should be provided with integral means for aural monitoring of the radiotelephone alarm signal with and without activating its associated transmitter.

13 Miscellaneous

13.1 If the device is not an integral part of the radiotelephone transmitter, it should be provided with an external indication of manufacture, type and/or number.

13.2 Information should be provided to enable competent members of the ship's staff to operate and maintain the equipment efficiently.