RESOLUTION A.664(16) Adopted on 19 October 1989 Agenda item 10

## PERFORMANCE STANDARDS FOR ENHANCED GROUP CALL EQUIPMENT

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECOGNIZING the need to prepare performance standards for enhanced group call equipment in order to ensure the operational reliability of such equipment and to avoid, as far as practicable, adverse interaction between such equipment and other communication and navigation equipment aboard the ship,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fifty-fifth session,

- 1. ADOPTS the Recommendation on Performance Standards for Enhanced Group Call Equipment, the text of which is set out in the Annex to the present resolution;
- 2. NOTES that part A of the INMARSAT design and installation guidelines for enhanced group call equipment is similar to the present performance standards for enhanced group call equipment and to the performance standards for shipborne radio equipment general requirements (resolution A.569(14));
- 3. RECOMMENDS Member Governments to ensure that every enhanced group call equipment which will form part of the global maritime distress and safety system conforms to performance standards not inferior to those specified in the Annex to this resolution, which are in accordance with part A of the INMARSAT design and installation guidelines for enhanced group call equipment;
- 4. INVITES INMARSAT to ensure that any amendments to part A of the INMARSAT design and installation guidelines for enhanced group call equipment be agreed with the Organization prior to their implementation;
- 5. REQUESTS the Maritime Safety Committee to ensure that any proposed amendments to this resolution be agreed with INMARSAT prior to their consideration by the Assembly.

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### **ANNEX**

# RECOMMENDATION ON PERFORMANCE STANDARDS FOR ENHANCED GROUP CALL EQUIPMENT

# 1 INTRODUCTION

- 1.1 The enhanced group call equipment to be used in the INMARSAT system should comply with the general requirements set out in Assembly resolution A.569(14) and the following minimum performance requirements.
- 1.2 The equipment should be capable of producing a printed copy of received information. Received EGC messages may be stored, with indication that the message has been received, for later printing, except for the vital messages referred to in paragraphs 3.2 and 3.5, which should be printed out upon receipt.
- 1.3 The enhanced group call installation may be either separate or combined with other installations.\*
- \* Elements of other installations, e.g. the antenna, low noise amplifier and down-converter of the ship earth station, may be shared for the reception of enhanced group call messages.

# 2 TECHNICAL REQUIREMENTS

The equipment should be type-approved by INMARSAT and should comply with the environmental conditions specified in the INMARSAT technical requirements for the enhanced group call receiver.

# **3 OPERATION**

- 3.1 Means should be provided to enter the ship's position and area code manually so that area group calls can be received. Optionally, the ship's position, as determined by the navigational equipment, may be entered automatically and the area code automatically derived therefrom.
- 3.2 Provision should be made for a specific aural alarm and visual indication at the position from which the ship is normally navigated to indicate receipt of a distress or urgency call or a call having distress category. It should not be possible to disable this alarm and it should only be possible to reset it manually.
- 3.3 The equipment should indicate when it is not correctly tuned or synchronized to the enhanced group call carrier,
- 3.4 Any message should be printed regardless of the character error rate of its reception. The equipment should print a low line mark if a character is received mutilated,
- 3.5 Acceptance or rejection of service codes \*\* should be under the operator's control except that equipment should be unable to reject relevant navigational warnings, meteorological warnings, search and rescue information and certain special warnings, which are directed to a geographical area within which the ship is operating.
- \*\* The meaning of the service codes is the same as for the NAVTEX system (see CCIR Recommendation 540 and the NAVTEX Manual).
- 3.6 Means should be provided not to reprint the same message after it has been received without error.
- 3.7 The printing device should be capable of printing at least the Standard IA Number 5 character set. Other character sets are optionally used according to ISO 2022 or CCITT Recommendation T.61.
- 3.8 The printing device should be able to print at least 40 characters per line.

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3.9 The signal processor and printing device .should ensure that if a word cannot be accommodated in full on one line, it should be transferred to the next line. The printing device should automatically feed five lines after completing the printed messages.

## **4 POWER SUPPLY**

- 4.1 The enhanced group call equipment should normally be powered from the ship's main source of electrical energy. In addition, it should be possible to operate the enhanced group call equipment, and all other equipment necessary for its normal functioning, from an alternative source of energy.
- 4.2 Changing from one source of supply to another, or any interruption of up to 60 s duration of the supply of electrical energy, should not require the equipment to be manually reinitialized and should not result in loss of received messages stored in the memory.

#### **5 ANTENNA SITING**

- 5.1 Where an omnidirectional antenna is used, it is desirable that the antenna be sited in such a position that no obstacle likely to degrade significantly the performance of the equipment appears in the fore and aft directions down to  $-5^{\circ}$  and in the port and starboard directions down to  $-15^{\circ}$ .
- 5.2 Where a stabilized directive antenna is used, it is desirable that the antenna be sited in such a position that no obstacle likely to degrade significantly the performance of the equipment appears in any azimuth down to  $-5^{\circ}$ .
- 5.3 For omnidirectional antennas, objects, especially those within 1 m of the antenna which cause a shadow sector of greater than 2°, are likely to degrade significantly the performance of the equipment.
- 5.4 For directive antennas, objects, especially those within 10 m of the antenna which cause a shadow sector of greater than  $6^{\circ}$ , are likely to degrade significantly the performance of the equipment.