

Resolution A.702(17)
Adopted on 6 November 1991
(Agenda item 10)

**RADIO MAINTENANCE GUIDELINES FOR THE GLOBAL
MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)
RELATED TO SEA AREAS A3 AND A4**

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,

NOTING regulation IV/15, Maintenance requirements, of the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended by the 1988 GMDSS Conference, and in particular regulation IV/15.7 concerning the methods of ensuring the availability of the functional requirements specified in regulation IV/4, for distress and safety purposes on ships engaged on voyages in sea areas A3 and A4,

NOTING ALSO resolution 5 of the 1988 GMDSS Conference which requests the Maritime Safety Committee to periodically review the requirements of regulation IV/15.7 in the light of experience gained,

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

1. ADOPTS the Guidelines for Ensuring the Availability of Radio Equipment for Ships Engaged on Voyages in Sea Areas A3 and A4 Required by Regulation IV/15.7 of the 1974 SOLAS Convention, as Amended in 1988, set out in the annex to the present resolution:
2. RECOMMENDS that Governments, in applying regulation IV/15.7 to ships, take account of the annexed Guidelines;
3. REQUESTS the Maritime Safety Committee, when periodically reviewing the requirements of regulation IV/15.7, also to review and update the Guidelines as appropriate and to report as necessary to the Assembly.

Annex

GUIDELINES FOR ENSURING THE AVAILABILITY OF RADIO EQUIPMENT FOR SHIPS ENGAGED ON VOYAGES IN SEA AREAS A3 AND A4 REQUIRED BY REGULATION IV/15.7 OF THE 1974 SOLAS CONVENTION, AS AMENDED IN 1988

1 BASIC REQUIREMENT FOR ENSURING AVAILABILITY

1.1 Irrespective of the methods used to ensure the availability of the functional requirements specified in regulation IV/4, and as specified in regulation IV/15.8, a ship should not depart from any port unless and until the ship is capable of performing all distress and safety functions, as set out in regulation IV/4.

1.2 Irrespective of the methods used by the ship, all manufacturers' instruction manuals and maintenance manuals for each piece of equipment required and installed should be available on board. Adequate tools, spare parts and test equipment appropriate to the methods used by the ship, as specified by the Administration, should be provided. The manuals, tools, spare parts and test equipment, as applicable, should be readily accessible.

2 DUPLICATION OF EQUIPMENT FOR ENSURING AVAILABILITY

2.1 If availability is ensured by using a combination of methods which includes duplication of equipment, in addition to the radio installations required by regulations IV/7, IV/10 and IV/11, as appropriate, the following radio installations complying with regulation IV/14 should be available on board ships engaged on voyages in:

- .1 sea area A3 – a VHF radio installation complying with the requirements of regulation IV/7.1.1 and either an MF/HF radio installation complying with the requirements of regulation IV/10.2.1 and being able to comply fully with the watch requirements of IV/12.1.3 or an INMARSAT ship earth station (SES) complying with the requirements of regulation IV/10.1.1. The MF/HF installation or INMARSAT SES installed for duplication should also comply with regulation IV/10.3;
- .2 sea areas A3 and A4 – a VHF radio installation complying with the requirements of regulation IV/7.1.1 and an MF/HF radio installation complying with the requirements of regulation IV/10.2.1 and being able to comply fully with the watch requirements of IV/12.1.3. Ships operating in sea area A4 only occasionally and having originally installed an MF/HF radio installation, may, instead of the additional MF/HF radio installation, install an INMARSAT SES complying with the requirements of regulation IV/10.1.1. The MF/HF radio installation or INMARSAT SES installed for duplication should also comply with regulation IV/10.3.

2.2 The additional radio installations specified in 2.1.1 and 2.1.2 of these Guidelines should each be connected to a separate antenna and be installed and ready for immediate operation.

2.3 It should be possible to connect the additional radio installations specified in 2.1.1 and 2.1.2 (hereinafter referred to as duplicated equipment) to the reserve source or sources of energy required by regulation IV/13.2, in addition to the appropriate radio equipment specified in that regulation (hereinafter referred to as basic equipment). The capacity of the reserve source or sources of energy should be sufficient to operate the particular installation (i.e. the basic equipment or the duplicated

equipment) with the highest power consumption, for the appropriate period specified in regulation IV/13.2.1 to IV/13.2.3. However, the arrangement for the reserve source or sources of energy should be such that a single fault in this arrangement should not be able to affect both the basic and the duplicated equipment.

3 SHORE-BASED MAINTENANCE FOR ENSURING AVAILABILITY

3.1 If availability is ensured by using a combination of methods which includes shore-based maintenance, an arrangement acceptable to the Administration should be established to ensure adequate support of the ship for the maintenance and repair of its radio installations. For example, the following arrangements, among others, may be suitable:

- .1 an agreement with a company known to cover the trading area of the ship to provide maintenance and repair facilities on a call-out basis;
- .2 provision of facilities at the main base of ships engaged on a regular trading pattern. Records of Equipment (Form P, R or C) should include an indication of the types of arrangements for shore-based maintenance.

3.2 It should be recognized that, despite the use of other methods, some reliance on shore-based maintenance to ensure the availability of the functional requirements of the GMDSS will always be necessary.

4 AT-SEA ELECTRONIC MAINTENANCE CAPABILITY FOR ENSURING AVAILABILITY

4.1 If availability is ensured by using a combination of methods which includes at-sea electronic maintenance capability, adequate additional technical documentation, tools, test equipment and spare parts must be carried on board in order to enable the maintainer to perform tests and localize and repair faults in the radio equipment. The extent of this additional technical documentation, tools, measuring equipment and spare parts to be carried on board should be consistent with the equipment installed and should be approved by the Administration. An indication of such approval should be entered in the Records of Equipment (Form P, R or C).

4.2 The person designated to perform functions for at-sea electronic maintenance should either hold an appropriate certificate as specified by the Radio Regulations, as required, or have equivalent at-sea electronic maintenance qualifications, as may be approved by the Administration, taking into account the recommendations* of the Organization on the training of such personnel.

* Refer to Assembly resolution A.703(17), "Training of radio personnel in the global maritime distress and safety system (GMDSS)".