

RESOLUTION A.574(14)

*Adopted on 20 November 1985
Agenda item 10(b)*

**RECOMMENDATION ON GENERAL REQUIREMENTS FOR
ELECTRONIC NAVIGATIONAL AIDS**

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 that regulation V/12(r) of the International Convention for the Safety of Life at Sea, 1974, as amended, requires all shipborne navigational equipment installed on ships on or after 1 September 1984 to conform to appropriate performance standards not inferior to those adopted by the Organization,

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

1. ADOPTS the Recommendation on General Requirements for Electronic Navigational Aids, set out in the Annex to the present resolution;
2. RECOMMENDS Member Governments to ensure that shipborne electronic navigational aids conform to performance standards not inferior to those specified in the Annex to the present resolution;
3. DECIDES that this Recommendation shall supersede resolution A.281(VIII).

ANNEX

**RECOMMENDATION ON GENERAL REQUIREMENTS FOR
ELECTRONIC NAVIGATIONAL AIDS**

1 INTRODUCTION

1.1 Equipment required by regulation V/12 of the 1974 SOLAS Convention as amended and other electronic navigational aids, where appropriate, should comply with the general requirements set out in this Recommendation.

1.2 The equipment, including facilities which are provided in addition to the appropriate IMO performance standards, should enhance the safety of navigation.

1.3 Where an item of equipment provides a facility which is additional to the minimum requirements of both this Recommendation and the appropriate performance standards

adopted by the Organization, the operation and, as far as is reasonably practicable, the malfunction of such additional facility should not degrade the performance of the equipment below those minimum standards.

2 OPERATION

2.1 The number of operational controls, their design and manner of function, location, arrangement and size should provide for simple, quick and effective operation. The controls should be arranged in a manner which minimizes the chance of inadvertent operation.

2.2 All operational controls should permit normal adjustments to be easily performed and should be easy to identify from the position at which the equipment is normally operated.

2.3 Adequate illumination should be provided to enable identification of controls and facilitate reading of displays at all times. Facilities for dimming should be provided.

3 POWER SUPPLY

3.1 Equipment should continue to operate in accordance with the requirements of relevant recommendations in the presence of variations of the power supply normally to be expected in a ship.

3.2 Means should be incorporated for the protection of equipment from the effects of excessive current and voltage, transients and accidental reversal of the power supply polarity.

3.3 If provision is made for operating equipment from more than one source of electrical energy, arrangements for rapidly changing from one source to the other should be incorporated.

4 DURABILITY AND RESISTANCE TO ENVIRONMENTAL CONDITIONS

Equipment should be capable of continuous operation under the conditions of various sea states, vibration, humidity and temperature likely to be experienced in the ship in which it is installed.

5 INTERFERENCE

5.1 All reasonable and practicable steps should be taken to eliminate the causes of, and to suppress, electromagnetic interference between the equipment concerned and other equipment on board.

5.2 Mechanical noise from all units should be limited so as not to prejudice the hearing of sounds on which the safety of the ship might depend.

5.3 Each unit of equipment normally to be installed in the vicinity of a standard or a steering magnetic compass should be clearly marked with the minimum safe distance at which it may be mounted from such compasses.

6 MISCELLANEOUS

6.1 Equipment should be so constructed and installed that it is readily accessible for inspection and maintenance. Inadvertent access to dangerous voltages within equipment should be prevented.

6.2 Equipment should be so constructed that it is capable of being operated properly and readily by a suitably qualified member of a ship's staff.

6.3 Information should be provided to enable suitably qualified members of a ship's staff to operate and maintain equipment efficiently.

6.4 Equipment should be provided with an external indication of the manufacturer, the equipment type or model identification and the serial number of the unit.

6.5 Equipment should be installed in such a manner that it is capable of meeting the appropriate performance standards.