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Ships and marine technology — Marine magnetic compasses, binnacles and azimuth reading devices

AMENDMENT 1

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Normative references

Add the following document as a normative reference:

IEC 61000-4-8:2009, *Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test*

Annex F

Add the following sentence at the end of the annex:

See Annex I for practical specifications and requirements of compass safe distance measurements.

Annex I

Add the following annex after Annex H, before the Bibliography:

Annex I
(informative)

Compass safe distance measurement

I.1 General

This Annex gives practical specifications and requirements on implementing compass safe distance measurements as determined in Annex F. It covers general test conditions, test equipment and test procedures for typical test layouts, in accordance with the requirements in Annex F.

I.2 Test conditions

a) Ambient conditions:

The temperature and relative humidity shall be in accordance with the ambient conditions specified in IEC 60945:2002, 5.2.1.

b) Power supply:

Power supply tolerances shall be in accordance with IEC 60945:2002, 5.2.1.

c) Electromagnetic conditions:

The magnetic environment of the test site shall be independent of any ferromagnetic or electromagnetic influences that can disturb the measurement, the test equipment, the EUT or the earth's magnetic field.

NOTE To achieve this, methods can be taken, such as the use of a homogeneous stabilizing artificial magnetic field to minimize negative effects on the measurement caused by the environment.

I.3 Test equipment

Unless otherwise specified, the following applies:

a) magnetic field generator and Helmholtz coils for magnetization [see Annex F b)] shall conform to IEC 61000-4-8:2009, 6.2 and 6.3;

b) equipment used in the test shall not cause additional electromagnetic interference.

I.4 Test methods

I.4.1 General requirements

a) Mounting kits, stands and other options, accessories and fittings which are normally used and provided with the EUT shall be fitted to the EUT during the measurement. If not, each unit of the EUT should be tested.

As it is unclear how cables, hat rails or other relevant parts are installed in ships, it is possible that these parts are not included in the measurement, even though they should be clearly considered as not a part of the vessel or as a part of the EUT.