SOLAS Chapter V, Regulation 19.2

-- Carriage requirements for shipborne navigational systems and equipment

2 Shipborne navigational equipment and systems

2.1 All ships irrespective of size shall have:

.6 a receiver for a global navigation satellite system or a terrestrial radionavigation system, or other means, suitable for use at all times throughout the intended voyage to establish and update the ship's position by automatic means;

2.3 All ships of 300 gross tonnage and upwards and passenger ships irrespective of size shall, in addition to meeting the requirements of paragraph 2.2, be fitted with:

.5 a properly adjusted transmitting heading device¹, or other means to transmit heading information for input to the equipment referred to in paragraphs 2.3.2, 2.3.3 and 2.4.

- 2.4 All ships of 300 gross tonnage and upwards engaged on international voyages and cargo ships of 500 gross tonnage and upwards not engaged on international voyages and passenger ships irrespective of size shall be fitted with an automatic identification system (AIS), as follows:
 - .1 ships constructed on or after 1 July 2002;
 - .2 ships engaged on international voyages constructed before 1 July 2002:
 - .2.1 in the case of passenger ships, not later than 1 July 2003;
 - .2.2 in the case of tankers, not later than the first survey² for safety equipment on or after 1 July 2003;
 - .2.3 in the case of ships, other than passenger ships and tankers, of 50,000 gross tonnage and upwards, not later than 1 July 2004;
 - .2.4 in the case of ships, other than passenger ships and tankers, of 300 gross tonnage and upwards, but less than 50,000 gross tonnage, not later than the first safety equipment survey 'after 1 July 2004 or by 31 December 2004, whichever occurs earlier; and
 - .3 ships not engaged on international voyages constructed before 1 July 2002, not later than 1 July 2008;
 - .4 the Administration may exempt ships from the application of the requirements of this paragraph when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs .2 and .3;
 - .5 AIS shall:
 - .1 provide automatically to appropriately equipped shore stations, other ships and aircraft information, including the ship's identity, type, position, course, speed, navigational status and other safety-related information;
 - .2 receive automatically such information from similarly fitted ships;
 - .3 monitor and track ships; and
 - .4 exchange data with shore-based facilities;
 - .6 the requirements of paragraph 2.4.5 shall not be applied to cases where international agreements, rules or standards provide for the protection of navigational information; and
 - .7 AIS shall be operated taking into account the guidelines adopted by the Organization. Ships fitted with AIS shall maintain AIS in operation at all times except where international agreements, rules or standards provide for the protection of navigational information.
- 2.5 All ships of 500 gross tonnage and upwards shall, in addition to meeting the requirements of paragraph 2.3 with the exception of paragraphs 2.3.3 and 2.3.5, and the requirements of paragraph 2.4, have:

.1 a gyro compass, or other means, to determine and display their heading by shipborne non-magnetic means and to transmit heading³ information for input to the equipment referred in paragraphs 2.3.2, 2.4 and 2.5.5;

¹ Recommendation on Performance Standards for marine transmitting magnetic heading devices (TMHDs) (resolution MSC.86(70), annex 2)

² The first safety equipment survey means the first annual survey the first periodical survey or the first renewal survey for safety equipment, whichever is due first after 1 July 2004 and, in addition, the case of ships under construction, the initial survey. [See SOLAS I/8].

³ Recommendations on Performance Standards for marine transmitting heading devices (THDs) (resolution MSC.116(73)).