

Subject

Annual Test of Automatic Identification System (AIS)

ClassNK

Technical Information

No. TEC-0911
Date 28 June 2012

To whom it may concern

The Annual Test of Automatic Identification System (AIS) was added to SOLAS Chapter V/18 by 2010 Amendments.

This ClassNK Technical Information intends to provide information regarding the Annual Test of AIS.

The Annual Test of AIS should be carried out by a ClassNK approved radio firm in accordance with the IMO MSC.1/Circ.1252, and a copy of the Test Report should be retained on board the ship.

The Test Report will be confirmed at the SE survey (Initial, Periodical, Annual and Renewal surveys) on or after 1 July 2012.

For any questions about the above, please contact:

[For questions on annual testing]

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Attachment:

1. IMO MSC.1/Circ.1252

NOTES:

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Ref. T1/10

MSC.1/Circ.1252
22 October 2007

GUIDELINES ON ANNUAL TESTING OF THE AUTOMATIC IDENTIFICATION SYSTEM (AIS)

- 1 The Maritime Safety Committee, at its eighty-third session (3 – 12 October 2007), approved the Guidelines on annual testing of the Automatic Identification System (AIS) developed by the Sub-Committee on Flag State Implementation, as set out in the annex.
- 2 The purpose of an annual testing is to determine that AIS is operational as defined in appropriate performance standards not inferior to those adopted by the Organization*.
- 3 To assist in achieving this aim, it is recommended that all AIS be subject to a standard method of testing as detailed in the annexed Guidelines.
- 4 Member Governments are invited to bring these Guidelines to the attention of shipping companies, shipowners, ship operators, equipment manufacturers, recognized organizations, shipmasters and all parties concerned.

* Refer to Recommendation on performance standards for a universal shipborne automatic identification system (AIS) (resolution MSC.74(69), annex 4).

ANNEX**GUIDELINES ON ANNUAL TESTING OF THE
AUTOMATIC IDENTIFICATION SYSTEM (AIS)**

- 1 The annual testing of the automatic identification system (AIS) should be carried out by a qualified radio inspector authorized by the administration or a recognized organization.
- 2 The annual testing of the AIS installation should include:
 - .1 installation details including antenna layout, initial configuration report, interconnection diagrams, provision of the pilot plug and power supply arrangements;
 - .2 checking the correct programming of the ships static information;
 - .3 the ability of the AIS to receive ships dynamic information from the appropriate sensors;
 - .4 the ability to correctly input the ships voyage related data;
 - .5 a performance test of the equipment including radio frequency measurements; and
 - .6 an on-air test that the unit is working correctly using for example an appropriate Vessel Traffic Service (VTS) station or a suitable test equipment.
- 3 To accommodate performance test to align with the appropriate survey under the Harmonized System of Survey and Certification (HSSC), the annual testing may be carried out:
 - .1 up to 3 months before the due date of the passenger ship renewal survey or the cargo ship safety equipment renewal survey; and
 - .2 3 months before or after the due date of the cargo ship safety equipment periodical/annual survey (the maximum period between subsequent test is governed by the time window associated to the subsequent surveys, unless either certificate has been extended as permitted by SOLAS regulation I/14, in which case a similar extension may be granted by the Administration).
- 4 The annual testing should be recorded in the form of the model test report given in the appendix. If the language used is neither English, nor French, nor Spanish, the text should include a translation into one of these languages. A copy of the test report should be retained on board the ship.

APPENDIX**AUTOMATIC IDENTIFICATION SYSTEM (AIS) TEST REPORT**

Name of ship/call sign:	
MMSI number:	
Port of registry:	
IMO Number:	
Gross tonnage:	
Date keel laid:	

1. Installation details		
	Item	Status
1.1	AIS transponder type:	
1.2	Type approval certificate	
1.3	Initial installation configuration report on board?	
1.4	Drawings provided? (Antenna-, AIS-arrangement and block diagram)	
1.5	Main source of electrical power,	
1.6	Emergency source of electrical power,	
1.7	Capacity to be verified if the AIS is connected to a battery	
1.8	Pilot plug near pilots operating position?	
1.9	120 V AC provided near pilot plug? (Panama and St. Lawrence requirement)	

2. AIS programming – Static information		
2.1	MMSI number	
2.2	IMO number	
2.3	Radio call sign	
2.4	Name of ship	
2.5	Type of ship	
2.6	Ship length and beam	
2.7	Location of GPS antenna	

3. AIS programming – Dynamic information		
3.1	Ships position with accuracy and integrity status (Source: GNSS)	
3.2	Time in UTC (Source: GNSS)	
3.3	Course over ground (COG) (will fluctuate at dockside) (Source: GNSS)	
3.4	Speed over ground (SOG) (zero at dockside) (Source: GNSS)	
3.5	Heading (Source: Gyro)	
3.6	Navigational status	
3.7	Rate of turn, where available (ROT)	
3.8	Angle of heel, pitch and roll, where available	

4. AIS programming – voyage related information		
4.1	Ships draught	
4.2	Type of cargo	
4.3	Destination and ETA (at masters discretion)	
4.4	Route plan (optional)	
4.5	Short safety-related messages	

5.	Performance test using measuring instrument	
5.1	Frequency measurements AIS ch. 1 and 2, GMDSS ch. 70	
5.2	Transmitting output, AIS ch. 1 and 2, GMDSS ch. 70	
5.3	Polling information ch. 70	
5.4	Read data from AIS	
5.5	Send data to AIS	
5.6	Check AIS response to "virtual vessels"	

6.	"On air" performance test	
6.1	Check reception performance	
6.2	Confirm reception of own signal from other ship/VTS	
6.3	Polling by VTS/shore installation	

Electromagnetic interference from AIS observed to other installations?:

Remarks:

The AIS has been tested according to IMO SN/Circ.227 and resolution MSC.74(69), annex 3		
Name of Radio Inspector	Date and place	Name of Radio Inspector Company