Subject: Automatic Identification System (AIS)

Purpose:
This Bulletin is to remind ship owners, masters, and navigational officers of the importance of proper AIS installation, testing, and maintenance in order to ensure the transmission of accurate information.

Inaccurate and/or missing AIS information is a safety concern.

Background:
It has come to Transport Canada’s attention that there have been occasions where a vessel’s AIS information has not been accurate. Some of the information, such as ship’s position, may be incorrect because the ship’s global navigation satellite system (GNSS) antenna and AIS antenna reference points were not correctly set on installation. This correct system installation is critical to ensure the vessel’s position, and its relation to other vessels is accurately displayed.

Other potential discrepancies could be caused by input errors from the operator (i.e. destination, estimated time of arrival (ETA), cargo, draught) and/or poorly configured or calibrated ship sensors (i.e. speed, heading, course over the ground).

Regulatory Requirements:
The Navigation Safety Regulations require;
- Equipment to be installed, tested and maintained so as to minimize malfunction (ss. 7.(1)),
- All reasonable steps to be taken to maintain the equipment in good working order (ss. 7.(2)), and
- The AIS be operated taking into account the annex to International Maritime Organization (IMO) Resolution A.917 (22), Guidelines for the Onboard Operational Use of Shipborne Automatic Identification Systems (AIS) (ss. 65.(5)).

(please note that Resolution A.917 (22) has been revised by IMO, Revised Guidelines for the Onboard Operational Use of Shipborne Automatic Identification System (Resolution A.1106 (29)).

Keywords: Automatic Identification Systems (AIS) Navigation Safety Regulations IMO Revised Guideline Res. A1106(29)

Questions concerning this Bulletin should be addressed to:

1. Automatic Identification Systems (AIS) AMSEC Transport Canada
3. IMO Revised Guideline Res. A1106(29) 613-998-9026 Tower C, Place de Ville

Contact us at: marinesafety-securitemaritime@tc.gc.ca or 1-855-859-3123 (Toll Free).
Correct Installation:
To ensure the AIS is correctly installed and the vessel’s position is correctly displayed, the IMO Guidelines for Installation of a Shipborne Automatic Identification System (SN/Circ.227) should be taken into account.

Verification of Information:
Mariners are reminded to verify the accuracy of their AIS information. Among other things, the IMO Resolution A.1106 (29) stipulates the following:

- “To ensure that own ship’s static information is correct and up-to-date, the officer of the watch (OOW) should check the data whenever there is a reason for it. As a minimum, this should be done once per voyage or once per month, whichever is shorter. The data may be changed only on the authority of the master.”
- “The users remain responsible for all information entered into the system and the information added by the sensors.”
- “The OOW should also periodically check the following dynamic information:
  - Positions given according to WGS 84;
  - Speed over ground; and
  - Sensor information.”

Caution: Use of AIS in Collision Avoidance:
IMO Resolution A.1106 (29) also provides the following guidance concerning the use of AIS in collision avoidance situations:

- “AIS information may merely be used to assist in collision avoidance decision-making. When using the AIS in the ship-to-ship mode for anti-collision purposes, the following cautionary points should be borne in mind:
  - AIS is an additional source of navigation information, it does not replace, but supports, navigational systems such as radar target-tracking and VTS; and
  - The use of AIS does not negate the responsibility of the OOW to comply at all times with the Collision Regulations, particularly rule 7 when determining whether risk of collision exists.”

References:
- IMO Resolution A.1106 (29), Revised Guidelines for the Onboard Operational Use of Shipborne Automatic Identification System (AIS)
- IMO SN/Circ.227, Guidelines for the Installation of a Shipborne Automatic Identification System (AIS)
- IMO MSC.1/Circ.1252, Guidelines on Annual Testing of the Automatic Identification System (AIS)
- Navigation Safety Regulations, SOR/2005-134