



№ 8/CIRC/FSI

2021 / 05 / 18

To: All Owners, Managers and Representatives of Ships flying
Georgia Flag, Masters and Officers, Recognized Organizations,
Flag State Inspectors, Recognized Agents.

Subject : Magnetic Compasses Adjustment

Reference:

- **International Convention for the Safety of Life at Sea (SOLAS), as amended; International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) as amended;**
- **IMO Assembly Resolution A.382(X), Magnetic Compasses Carriage and Performance Standards, adopted 14 November 1977;**
- **ISO Standard 25862:2019, Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices.**

1. Introduction:

1.1 The magnetic compasses are a very important tool for the safety of navigation. Vessel owners and masters must ensure that magnetic compasses are maintained in good working order, adjusted and a table or curve of residual deviation is available.

2. Purpose:

2.1 The purpose of this Circular is to remind and inform ship owners, operators, managers, masters, officers, seafarer training organisations, coastal pilots and industry organisations that magnetic compasses are an essential tool for the safety of navigation.

2.2 This Circular provides for the policy to adjust and repair magnetic compasses.

3. Application:

3.1 This Circular applies to all vessels, including yachts and mobile offshore units (MOUs), that are required to be fitted with a properly adjusted magnetic compass under SOLAS Reg. V/19.2.

4. Magnetic Compass requirements:

4.1 All vessels must be fitted with a properly adjusted magnetic compass according to ISO 25862:2019. This means magnetic compasses must have a residual deviation within:

- 3° for vessels of 500 or more GT;
- 4° for vessels below 500 GT.

4.2 Observed accuracies must be within 2° of the residual deviation table or curve for safe navigation. At all times the residual deviation table or curve must be prominently displayed on the ship's bridge.

5. Adjust a magnetic compass:

5.1 Magnetic compasses must be adjusted when:

- They are first installed;

- They become unreliable;
- Repairs or structural alterations have been made to the ship that could affect its permanent or induced magnetism;
- Electrical or magnetic equipment close to the compass is installed, removed, or altered;
- They show any physical defects;
- If a record of compass deviations has not been maintained, or the recorded deviations are excessive; or
- Deemed necessary by the master for the safety of navigation, and no less often than every two years; every dry docking or after significant structural work.

5.2 All magnetic compasses must be swung and adjusted:

- At least every two years;
- After dry docking;
- After significant structural work.

6. Monitoring Compass Deviation:

6.1 Watchkeepers must check the compass error after each major course alteration, or at least once per watch where no major alteration has taken place. The observed error must be recorded in a compass deviation book.

6.2 An entry must be made in the compass deviation book when a vessel enters and leaves dry dock.

6.3 In case of compass deviation regularly may show the need for repair, testing, or adjustment. In addition, compasses must be inspected at regular intervals by a competent officer or qualified compass adjuster.

7. Effects on changes of magnetism during the life of the ship:

7.1 Magnetism of a new ship can be particularly unstable. Therefore, the performance of a magnetic compass should be monitored carefully during the early life of the ship, and adjustments made if necessary.

7.2 To ensure a compass is in good working condition, it is important to check performance of magnetic compasses particularly after:

- Carrying cargoes which have magnetic properties;
- Using electromagnetic lifting appliances to load or discharge cargo;
- A vessel has been in a casualty where it has been subject to severe contact or electrical charges;
- A vessel has been operating on short voyages for a long period of time then relocates, which results in a large change in magnetic latitude; or
- A vessel has been laid up or has been lying idle. Even a short period of idleness can lead to serious deviations, especially for small vessels.

8. Compass Adjustments and Repairs:

8.1 All compass adjustments, including those using remote services, must be carried out by a qualified compass adjuster.

8.2 The date of any adjustment and other details must be noted in the compass deviation book. (Including ship position and sea conditions).

8.3 When this adjuster is not available, the ship's master may carry out this work in case of an emergency.

8.4 Repairs must only be made by the compass manufacturer, other competent person, or a company using proper test facilities. When the work is finished the repairer must supply the Owner or Master with a certificate specifying the date the work was done and the applicable standards.

8.5 A compass deviation card must be prepared each time the compass is adjusted. Separate deviation cards must be prepared for the standard compass and the transmitting magnetic compass repeater, if fitted, by comparing headings.

9. Contact Details:

9.1 Recognized Organizations, Shipowner, ship operator or Management Company of a ship flying the Georgian flag may contact the MTA for Additional consultations and assistance.

LEPL – Maritime Transport Agency of Georgia
 Ships Registry and Flag Control Department
 Tel: +995 (422) 274925
 E-mail: fsi@mta.gov.ge
 Hotline/AOH: +995 (577) 221622

