

21 November 2025

Marine Advisory: 36/2025

Subject: HAZARDS ASSOCIATED WITH IMPROPER SECURING OF HEAVY ENGINE SPARES AND LACK OF ENGINE ROOM HEAVY WEATHER PROTOCOLS – GUIDANCE FOR REPORTING, INVESTIGATION, AND PREVENTION OF MARINE CASUALTIES

Reference:

- Health and safety protection, accident prevention, medical care, welfare and social security protection of seafarers - [MLC-005](#).
- ISM Code Part A, Sections 1.2.2, 9 and 10
- IMO Casualty Investigation Code (Resolution MSC.255(84)).
- IMO Guidelines – Appendix 7 of [MSC-MEPC.2/Circ.3](#).
- Liberian Maritime Law – [RLM-107](#), Articles 257 and 258.
- Liberian Maritime Regulations – [RLM-108](#), Regulation 9.257, 9.258.
- Requirements For Marine Investigations and Hearings - [RLM-260](#).

Dear Shipowners/Operators/Masters/Engine Department Personnel:

The purpose of this Marine Advisory is to alert Shipowners, Operators, Masters and Engine department personnel of very serious marine casualties involving Liberian-flagged vessels, specifically related to improper securing of heavy engine spares and inadequate engine room heavy weather preparedness.

Objectives:

- **Raise Awareness** of the hazards and failures that contributed to these incidents.
- **Promote Accountability** by emphasizing the responsibility of companies to investigate all casualties, incidents, and near misses thoroughly and implement corrective and preventive measures fleet-wide.
- **Ensure Compliance** with Liberian Maritime Law ([RLM-107](#)), Regulations ([RLM-108](#)), and IMO requirements, including the ISM Code and [MSC-MEPC.2/Circ.3](#) guidelines.
- **Guide Investigations** by directing companies to follow international standards and best practices for casualty investigation and hazard mitigation.
- **Set Expectations for Reporting** by clarifying that formal reports must include all evidence, statements, supporting documentation, and conclusions.
- **Encourage Cooperation** with the Liberian Administration's investigation process to ensure transparency and timely corrective action.
- **Prevent Future Casualties** by fostering a proactive safety culture, improving operational discipline, and enforcing robust securing of heavy engine spares and heavy weather protocols across the fleet.

Marine Casualties Summaries - Background:

The Administration has identified two very serious marine casualties involving unsecured cylinder heads under the same Company:

A. First Case - Fatal Injury:

A crew member died from excessive bleeding after being struck by a cylinder head in the engine room during rough weather. Emergency medical assistance was coordinated, but the crew members were unable to provide effective first aid.

B. Second Case - Vessel Grounding and Total Loss:

A blackout occurred when a cylinder head in the engine room struck the generator's fuel system. Three crew members sustained injuries. The vessel team was unable to restore the power. The vessel lost propulsion, grounded with cargo and consumables onboard, and was declared a total loss due to hull damage.

Key Safety Failures Identified:

- Both incidents demonstrate a failure to investigate and implement corrective and preventive actions after the first casualty, leading to reoccurrence.
- Improper securing heavy spares using belts/ropes instead of permanent arrangements.
- Absence of engine room heavy weather checklist; risk assessments not accounting for unsecured spares.
- Inadequate emergency preparedness and poor communication between the bridge and the engine room.

Requirements:

1. Reporting

- Submit reports to the Administration along with the completed forms RLM-109 and RLM 109-1 according to the Liberian Regulations, Law, and the Marine Operations Notes requirements.
- The formal investigation reports submitted by companies must include, but not be limited to:
 - All evidence, including photographs, logs, and technical data.
 - Statements from crew members, witnesses, and relevant personnel.
 - Supporting documents, such as medical logs, maintenance records, and training certificates.
 - A clear conclusion based on analysis of the facts and identification of root causes.
 - Include corrective and preventive actions taken or planned to prevent reoccurrence.

2. Cooperation

- Provide timely access to vessel records, crew interviews, and voyage data.
- Fully cooperate with Liberian Administration investigations.

3. Timely Investigation:

- Conduct a thorough internal investigation into marine casualties, incidents, and any related near misses.
- Identify root causes, contributing factors, and systemic failures, IMO Guidelines – Appendix 7 of [MSC-MEPC.2/Circ.3](#).

4. Review and Amend Safety Procedures:

- Enforce robust securing arrangements for heavy spares (steel bars, welded brackets, chains).
- Update SMS to include engine room heavy weather checklist and blackout mitigation protocols.

5. Enhance Crew Training:

- Train engine department team on proper securing techniques and hazard identification.
- Conduct drills for emergency coordination between bridge and engine room.

6. Improve Supervisory Oversight:

- Require verification of securing arrangements by Chief Engineer and Master before heavy weather.
- Implement superintendent audits for compliance.

7. Strengthening Communication Protocols:

- Establish clear reporting lines between vessel(s) and the Company during adverse conditions.

8. Fleet-wide Awareness:

- Issue safety alerts referencing the referred casualties.
- Include lessons learned in pre-joining safety briefings and Company training platforms.
- Conduct fleet-wide audits of securing arrangements and heavy weather preparedness.

The Administration emphasizes the importance of investigating marine casualties and implementing corrective and preventive measures, which are core responsibilities of every Company operating under the Liberian Flag.

For more information, please contact the Investigations Department at investigations@liscr.com.

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