

# THE REPUBLIC OF LIBERIA LIBERIA MARITIME AUTHORITY

22980 Indian Creek Drive Suite 200 Dulles, Virginia 20166, USA Tel: +1 703 790 3434 Fax: +1 703 790 5655 Email: prevention@liscr.com Web: www.liscr.com

#### **01 December 2025**

Marine Advisory: 39/2025

# SUBJECT: Concentrated Inspection Campaign (CIC) on Machinery and Electrical Failures

## Dear Shipowners, ship operators, ship managers, and ship masters:

# **Background**

The Liberian Administration observed a significant increase in machinery and electrical failures among ships navigating regions characterized by dense traffic, complex tidal patterns, and challenging meteorological conditions. Such failures have resulted in serious navigational incidents, prompting expanded Port State Control (PSC) inspections and stricter enforcement measures.

These incidents have raised concerns regarding navigational safety, environmental protection, and continuity of port operations.

# **Key Risks**

Sudden failures such as main engine breakdowns, steering gear malfunctions, or power blackouts may lead to:

- Collisions, groundings, or contact incidents
- Blockage of major fairways disrupting traffic flow
- Environmental pollution from oil or cargo spills
- Endangerment of crew and vessel integrity

#### **PSC Enforcement Actions**

Any vessel experiencing mechanical or electrical failure within PSC navigable waters can be subject to an expanded PSC inspection. Focus areas may include:

- Maintenance and testing records of propulsion and electrical systems
- Crew familiarity with emergency and machinery-handling procedures
- ISM Code compliance and verification of maintenance programs
- Vessel's past deficiencies and corrective actions

Vessels found with concealed or unresolved deficiencies risk:

- Detention and PSC fines
- Repair delays and financial losses (demurrage, off-hire)
- Reputational harm to the owner/operator
- Possible suspension of the Document of Compliance (DOC) or SMC

# **Preventive Measures for Ship Operators**

- a) Pre-Departure and Pre-Entry Checks
  - Ensure comprehensive checks of:
  - Main and auxiliary engines
  - Steering gear, rudder control, and automation systems
  - Power generation and distribution systems
  - Emergency generator and backup circuits
  - Bilge, ballast, and firefighting systems
- b) Critical Operational Controls
  - Emphasize strict adherence to procedures during:
  - Fuel oil changeover
  - Generator load transfers and parallel operations
  - High-consumption equipment usage (e.g., bow thrusters)
  - Ballast/de-ballasting and blackout recovery drills
- c) Maintenance and Training
  - Enforce proactive PMS-based maintenance routines
  - Conduct frequent emergency drills and familiarization
  - Ensure engineers are competent in troubleshooting and PMS usage

## **Mandatory Deficiency Reporting**

Any machinery or electrical defect must be reported immediately to:

- Port State Control
- Flag Administration (Liberia)
- Recognized Organization (Class Society)

Concealment of defects can be treated as violations of SOLAS, MARPOL, and the ISM Code, potentially resulting in detention and legal proceedings.

#### **Immediate Actions Recommended**

All owners, operators, and masters are advised to:

- Reinforce onboard and shore-based safety cultures
- Verify system readiness before port entry
- Promote transparent defect reporting and continuous improvement
- Engage Class and LISCR Fleet Prevention Department for advisory support

#### **References:**

- SOLAS Ch. II-1, III & IX
- MARPOL Annex I
- ISM Code Sections 10 & 11

Shanghai MSA Circular on Machinery and Electrical Failures (2025)

Please contact the Fleet Prevention Department at <u>prevention@liscr.com</u> or telephone +1 703 790 3434 for more information and/or additional guidance or if any of the responses is "No".

\* \* \* \* \*



# **Concentrated Inspection Campaign**

**Questionnaire for the 2025 CIC on Machinery and Electrical Failures** 

Vessel Name:	
IMO Number:	
Port:	
Date:	

No.	Inspection Item	Verification / Evidence Required	Yes	No
1	Valid Safety Management Certificate (SMC) and Document of Compliance (DOC) on board	Certificates and latest audit reports		
2	PMS records for main and auxiliary engines up-to-date	PMS logs, service reports		
3	Function test of the main and auxiliary engines prior to arrival	Engine test logs		
4	Steering gear operational test conducted before pilot boarding	Bridge/engine room log entries		
5	Emergency generator automatic start verified	Test records		
6	Engineers familiar with emergency blackout procedures	Drill records, interviews		
7	Crew trained in troubleshooting electrical/mechanical faults	Training records		
8	No unresolved deficiencies in propulsion/electrical systems	Maintenance log and PSC history		
9	Transparent reporting of failures to PSC, Flag, and Class	Correspondence copies		
10	ISM Code internal audit includes machinery reliability verification	Latest internal audit report		