



Memo No. TDM004-2024

To: Deputy Registrars, Shipowners, ISM Operators and Recognized Organizations

Re: Tokyo MoU Safety Bulletin Focus on Emergency Power Supply Testing

Recall: Our MMN-23-001 concerning preventive, corrective and reactive actions for PSC inspections and detentions.

Date: 31 July 2024

1. PURPOSE

The International Merchant Marine Registry of Belize (IMMARBE) with the aim of providing updated guidance on the most recent affairs in all MoUs has decided to circulate this Memo to all operators of Belize flagged vessels calling ports in the Tokyo MoU.

This memo further seeks to raise awareness of the potential risk of testing of automatic start of emergency source of electrical power and connection to the emergency switchboard (SOLAS Ch. II-1, Regulation 42 / 43) when using simulated blackout method.

2. BACKGROUND

The Tokyo MoU PSCOs have observed an alarming number of ships that were able to demonstrate a satisfactory test of the emergency generator utilizing a Sequence Test or RTS, but when tested by opening the Main Switch Board (MSB) Bus Tie (controlled blackout), the emergency generator was unable to:

1. automatically start; or
2. provide transitional power; or
3. automatically connect to the emergency switchboard.

As such, these simulated blackout tests of the emergency generator may not meet the requirements of SOLAS Ch. II-1, Reg. 43.7, and more importantly, give ships' engineers a

false sense of readiness of the ship's emergency systems in the case an emergency. This may endanger life, ship, and the environment.

3. ACTIONS REQUIRED BY VESSELS CALLING TOKYO MOU PORTS

To ensure that simulated blackout tests of the emergency generator meets the requirements of SOLAS Ch. II-1, Reg. 43.7 the Technical Department of the International Merchant Marine Registry of Belize (IMMARBE) requires that ALL vessel's calling Tokyo MOU ports to verify that their vessel's comply with the following:

Operators are required to take notice of the attached Tokyo MoU Safety Bulletin and ensure that:

1. **Device Design and Wiring:**

Any devices, like a "Sequential test" selector or "Routine Test Switch" (RTS), used for simulating blackout tests must be designed and wired to use the actual circuit paths specified in SOLAS Chapter II-1, Regulations 42.3.1.2 and 43.3.1.2. This ensures a comprehensive system test.

2. **Updating Safety Management Procedures:**

The company's Safety Management System (SMS) should include procedures for conducting periodic 'Controlled blackout tests' without using the sequence test. This ensures the actual circuit paths required by the SOLAS regulations can be safely and practically tested, ensuring system functionality. Actions taken may include opening the MCR bus-tie circuit breaker while the system is in a normal mode, with operation switches set to auto for a sea-going state.

3. **Regulatory Compliance Awareness:**

The "Sequential test" selector and/or "Routine Test Switch" may not comply with SOLAS Chapter II-1 Regulations 42.5.4 / 43.5.4 if they send a signal to disconnect the inter-connector instead of doing so automatically upon loss of the main power source. They may also fail to meet Chapter II-1 Regulation 42.7 / 43.7 requirements if the complete system is not tested.

Recognized Organizations should consider the following actions when conducting ISM audits related to emergency generator functionality on ships:

1. **Testing Emergency Generator Functionality:**

During inspections and audits, ROs are to ensure that the emergency generator is tested using both the "simulated blackout" routine/sequential test switch and a controlled blackout (as previously described). If there is a discrepancy between the results of these tests, corrective actions should be taken.

2. Addressing Discrepancies:

If the test using the simulated blackout switch is satisfactory but the controlled blackout test is not, necessary actions should be taken. This could involve amending the emergency generator test procedures or ensuring that the test switch circuit paths allow for a complete test of the emergency generator.

3. Modifications and Documentation:

Any required modifications to the routine/sequential test switch circuit paths should be approved by the Recognized Organization. Changes to the emergency generator testing procedure should be documented in the ship's safety management system and preventative maintenance system.

4. Responsibility for Electrical System Design and Approval:

The design and approval of the electrical system are the responsibilities of the Recognized Organization, ensuring compliance with SOLAS requirements.

5. Any other actions as may be deemed necessary by the Recognized Organization.

All Deputy Registrars, Shipowners, ISM Operators and Recognized Organization shall bring the attention of their ship of the content of this Memo.

We anticipate your cooperation and assistance in this regard and look forward to receiving confirmation of this email.



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International Merchant Marine Registry of Belize

