Subject: Emergency Escape Breathing Devices (EEBDs)

This technical letter is issued in order to clarify the Liberian Administration’s interpretation of the SOLAS requirements regarding emergency escape breathing devices.

SOLAS II-2 Reg. 13.4.3 states that “On all ships, within the machinery spaces, emergency escape breathing devices shall be situated ready for use at easily visible places, which can be reached quickly and easily at any time in the event of fire. The location of emergency escape breathing devices shall take into account the layout of the machinery space and the number of persons normally working in the spaces”.

SOLAS II-2 Reg. 13.3.4.2 states that for accommodation spaces on Cargo Ships “All ships shall carry at least two emergency escape breathing devices within the accommodation spaces.”

In accordance with the abovementioned SOLAS regulations, the Liberian requirements for the number of EEBDs required on board a Liberian registered ship are as follows:

1. EEBDs for machinery spaces on all Ships

On Liberian flag ships, a minimum of four EEBDs will be required to be placed in the machinery spaces. Two EEBDs should be located in the control room and one located by each escape ladder. For vessels without control rooms a minimum of two EEBDs shall be required subject to a review by the vessel’s classification society of the layout, size and number of persons normally working in the engine room. The location of the EEBDs should be clearly marked, they should be easily accessible, and installed in locations where they will be protected from extreme heat and incidental damage. However, after reviewing the vessel’s layout, the activities typically carried out in the machinery spaces, and evaluating the number of persons normally working in the machinery spaces, the vessel’s classification society may require additional EEBDs in the machinery spaces to meet the intent of SOLAS II-2 Reg. 13.4.3. MSC Circular 849 (copy attached) provides guidelines regarding the performance, location, use, and care of EEBDs. The principles of MSC Circ.849 should be followed when determining if additional EEBDs are needed for Liberian flag ships. If the class society requires additional EEBDs the class society should notify the Administration with the reasons for this requirement.

For the purposes of this regulation, this Administration defines persons normally employed in the machinery spaces as all watchstanders on watch in the machinery spaces, all persons whose normal duty station is a control room or persons who are routinely employed in a workshop located in the machinery spaces and for unmanned engine rooms, any roving watch that routinely enters the
machinery spaces to monitor the condition of the space and its equipment and persons who may routinely performed activities in the engineroom.

2. **EEBDs for accommodation spaces on Cargo Ships**

Liberian flag ships will be required to carry at least two EEBDs in the accommodation spaces. If the ship has a split house, then the minimum EEBD requirement for the accommodation spaces will be increased to 4 (two per house). After reviewing the vessel’s layout and operations, the vessel’s classification society may require additional EEBDs in the accommodation spaces in order to meet the intent of the regulations. If the class society requires additional EEBDs, the class society should notify the Administration with the reasons for this requirement.

The EEBD storage location should be clearly marked and they should be easily accessible. The EEBDs for the accommodation spaces should not be stored in the emergency gear locker.

3. **EEBDs for accommodation spaces on Passenger Ships**

Passenger ships shall comply with the requirements of SOLAS II-2 Reg. 13.3.4.3, 13.3.4.4 and 13.3.4.5 regarding the number of EEBDs to be carried in each main vertical zone. At least two EEBDs shall be carried in each main vertical zone. In passenger ships carrying more than 36 passengers, two additional EEBDs shall be carried in each main vertical zone. The EEBD storage location should be clearly marked and they should be easily accessible. The EEBDs for the accommodation spaces should not be stored in the emergency gear locker.

4. **EEBDs for Chemical Ships**

In addition to the requirements stated above, ships carrying certain chemical cargoes under the provisions of the IBC Code may have to provide additional EEBDs in accordance with the requirements of IBC Code Chapter 14, Regulation 14.2.8.

5. **EEBDs for pump rooms and similar spaces**

Taking into account the number of persons who may enter the pump room during normal operations, EEBDs should be made available for individual carriage for the maximum number of persons who may enter the pump room during such operations. These EEBDs are in addition to ones installed in the engineroom and the accommodation spaces. Ships may opt to install EEBDs in the pump room in lieu of providing additional EEBDs for individual carriage. If this option is chosen a minimum of two EEBDs should be installed in the pump room.

6. **Training Devices**

At least one EEBD training devices shall be provided for training purposes. This devices will be in addition to EEBDs required for the machinery and accommodation spaces. The training device should be clearly marked so that they cannot be confused with operational EEBDs. The training device should not be stowed in the same location as the operational EEBDs. The ship’s periodic safety drills should be modified to include training on the proper use of EEBDs. The ship training and safety management manuals should be modified to include the training requirements for EEBDs.

7. **Spares**
Ships with ten or less EEBDs on board shall carry at least one spare device. Ships with 11 to 20 EEBDs on board shall carry at least two spare devices. Ships with more than 20 EEBDs on board shall carry spares equal to at least 10% of the total EEBDs but no more than 4 spares will be required.

8. Maintenance

Servicing and maintenance of EEBDs should be in accordance with the manufacturer’s instructions. The ship’s periodic safety appliance and equipment inspection and testing procedures should be modified to incorporate the inspection of EEBDs. EEBDs, which have exceeded their service life as indicated by the manufacturer, should be discarded. Any unusable or damaged EEBDs should be promptly disposed of in accordance with manufacturers instructions. Liberia does not require periodic hydrostatic testing for EEBD cylinders.

9. Fire Control Plans

The location and the numbers of EEBDs shall be indicated in the ship’s fire control plan. Revisions to the fire control plan should be endorsed by the attending class society surveyor after confirming the installation of the EEBDs.

10. Approval of EEBDs

EEBDs approved by or acceptable to the vessel’s classification society are acceptable for use on the ship. This includes EEBDs that may have been approved by an authority authorized by another flag state if the vessel’s classification society deems them acceptable.

11. Riding Crews

It is recommended that riding crews, whose functions or activities will require them to be normally employed in the machinery spaces, be required to bring EEBDs with them for individual carriage during their stay on the vessel.

The above requirements become effective for Liberian flag vessels on 1 July 2002. Please contact us if you have any questions regarding this matter.

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Attachment: (1) MSC. Circular 849