

Subject

Emergency escape breathing devices (EEBDs) onboard the Panama flag vessels

# **ClassNK**

## **Technical Information**

No. TEC-1236

Date 2021年5月17日

To whom it may concern

We have revised the previous ClassNK Technical Information No.TEC-1177 (dated 27 February 2019) related to the Emergency escape breathing devices (EEBDs) onboard the Panama flag vessels. This Technical Information supersedes the previous ClassNK Technical Information No.TEC-1177.

Emergency escape breathing device

### 1. Number of EEBDs

- (1) For cargo ships : At least two EEBDs and one spare EEBD in accommodation.
- (2) For passenger ships carrying not more than 36 passengers : At least two EEBDs per main vertical zone and a total of two spare EEBDs, except those defined in the regulation SOLAS II-2/13.3.4.5.
- (3) For passenger ships carrying more than 36 passengers : At least four EEBDs per main vertical zone and a total of two spare EEBDs, except those defined in the regulation SOLAS II-2/13.3.4.5.
- (4) The minimum number of EEBDs required on machinery spaces of category A where crews are normally employed or may be present on a routine basis shall be as follows:
  - (i) One EEBD at the engine control room, if located within the machinery space;
  - (ii) One EEBD at the workshop areas, if there is, however, a direct access to an escape way from the workshop, an EEBD is not required; and
  - (iii) One EEBD on each deck or platform level near the escape ladder constituting the second means of escape from the machinery space (the other means being an enclosed escape trunk or water tight door at the lower level of the space).
- (5) If the ship has a machinery space with more than one deck, then one EEBD for each deck shall be placed at the same area as in point (4)(iii).

### 2. 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.

\*Spare EEBDs mentioned in item 1 are not to be included in total number.

(To be continued)

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3. Training

At least one EEBD training device shall be provided for training purposes. All EEBD training devices should be placed in addition to EEBDs required for the machinery and accommodation spaces and its spare parts. If onboard means of recharging EEBDs is provided, no additional training cylinder will be necessary. (Additional mask and associated devices for training is still required, although rechargeable means is provided) One (1) of EEBD must be marked for "training" in any case.

4. The above requirements are applied to all Panama flag vessels. ClassNK surveyors are to confirm the compliance at the first periodical Safety Equipment survey on or after 1 May 2018. In case where the arrangement of EEBD needs change, please note that all Fire Control Plans onboard should be corrected accordingly.

For any questions about the above, please contact:

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1. Merchant Marine Circular No.142



**PANAMA MARITIME AUTHORITY  
(AUTORIDAD MARÍTIMA DE PANAMÁ)  
GENERAL DIRECTORATE OF MERCHANT MARINE  
(DIRECCIÓN GENERAL DE MARINA MERCANTE) DEPARTMENT OF  
CONTROL AND COMPLIANCE  
(DEPARTAMENTO DE CONTROL Y CUMPLIMIENTO)**

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(DCCM)  
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**MERCHANT MARINE CIRCULAR MMC-142**

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**To:** Ship-owners/Operators, of Panamanian Flagged Vessels, Class Societies and Recognized Organizations (RO's).

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**Subject:** Emergency Escape Breathing Devices (EEBD)

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**Reference:**

- a. SOLAS 74, 2000 amendments
- b. MSC/Circ.1081 – Unified interpretation of the revised SOLAS Chapter II-2 – 13 June 2003.
- c. SOLAS Amendment 2012 II-2/15.2.2.2
- d. IMO MSC.1/Circ.849 – May 1998

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**1. Purpose**

This Merchant Marine Circular replaces MMC 119.

**2. Application**

The 2000 amendments to SOLAS 74, Chapter II-2, Reg. 13 require Emergency Escape Breathing Devices (EEBD) which will be used for escape from a compartment that has a hazardous atmosphere. The EEBD have become mandatory under the new amendments for all ships to which the safety equipment certificate is required.

**3. Number of EEBDs**

The application of EEBDs provisions onboard Panama flag ships shall be as follows:

- 3.1. At least two (2) EEBDs in accommodation spaces of cargo ships and one (1) spare EEBD. Applicable to new and existing ships.
- 3.2. At least two (2) EEBDs per main vertical zone, and a total of two (2) spare EEBDs. Applicable to new and existing passenger ships carrying not more than 36 passengers.
- 3.3. At least four (4) EEBDs per main vertical zone, and a total of two (2) spare EEBDs. Applicable to new and existing passenger ships carrying more than 36 passengers.
- 3.4. For the purpose of this requirement (based on UI MSC/Circ. 1081), the minimum number of EEBDs required on machinery spaces shall be as follows:
  - 3.4.1. One (1) EEBD at the engine control room if located inside the machinery space;

3.4.2. One (1) EEBD at the machine shop or work shop area. If there is, however, a direct access to an escape way from the workshop, an EEBD is not required; and

3.4.3. One (1) EEBD located near the escape ladder used a second means of escape from the machinery space.

**If the ship has a machinery space with more than one deck, then one (1) EEBD for each deck shall be placed at the same area as in point (3.4.3)**

#### **4. Additional Spares**

4.1. Additional spares are applicable to new and existing ships:

4.1.1. Ships with 10 or less EEBDs<sup>(1)</sup> on board shall carry at least one (1) spare device as it is indicated in point 3 (except for passenger ships).

4.1.2. Ships with 11 to 20 EEBDs<sup>(1)</sup> on board shall carry at least two (2) spare devices.

4.1.3. Ships with more than 20 EEBDs<sup>(1)</sup> on board shall carry spares equal to at least 10% of the total applicable EEBDs (excluding spares indicated in point 3) but no more than 4 spares will be required.

4.2. Additional to the above requirements, the EEBD shall have a service duration of at least 10 minutes. Also, the number and location of EEBDs and spares shall be indicated in the fire control plan.

4.3. For existing ships, the requirement is to be complied with by the first survey after 1 July 2002. For more reference, the 2000 amendments to SOLAS 74, Chapter II-2, Reg. 1.2.2 clarify the applicable requirements to existing ships.

4.4. The detailed technical standards for the EEBD, are separately provided in a mandatory code called "The International Code for the Fire Safety System (FSS Code)" adopted simultaneously.

4.5. Note: "New ships" cited above means ships constructed on or after 1 July 2002 and "Existing ships" means ships constructed prior to that date.

4.6. Authorized Organizations are instructed to follow the above mentioned guidelines, before issuing the appropriate certificate.

#### **5. Training (as per the IMO MSC.1/Circ.849 – May 1998) – SOLAS Amendment 2012 II-2/15.2.2.2**

5.1. Training in the use of the EEBD should be considered as a part of basic safety training. At least one (1) EEBD training device shall be used for training purpose at first Safety Equipment survey on or after 1st May 2018.

5.2. This unit device will be in addition to EEBDs required for the machinery and accommodation spaces unless onboard means of recharging EEBD is provided. If the rechargeable means is provided on board in alignment with the manufacturer's instructions, then no additional EEBD cylinder for training will be necessary, considering that there are several types of them (Additional mask and associated devices

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<sup>1</sup> Spare EEBDs mentioned in section 3 are not to be included in total number.

for training is still required, although rechargeable means is provided). One (1) of EEBD must be marked for training.

5.3. Personnel should be trained to immediately don an EEBD prior to exiting a space when the atmosphere becomes life threatening. This is necessary due to the possibility of encountering smoke during escape. Such training should be accomplished by scheduling routine escape drills for crew members working in the engineering or machinery spaces.

5.4. An EEBD may also be used to escape from a machinery space due to an accidental release of a fixed CO2 system and can be carried by firefighters for the sole purpose of providing the device to personnel in need of emergency assistance.

**January, 2019** – paragraphs of point 4 renumbered, omission of previous text in 1<sup>st</sup> paragraph of section 4 revised and number assigned to sub-paragraphs in point 4.

**January, 2019** - Point 5

**June, 2018**- Point 4, Point 5

**March, 2018** – Point 4, Point 5

**January, 2018** – Point 3 a), b) and c) amended as well as 3 d) ii); subtitle 4 amended, and point 5 “Training added” as per IMO MSC.1/Circ.849 – may, 1998.

**June, 2013**

**November 2005 (revised)**

**April 2002**

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