

SUB-COMMITTEE ON HUMAN ELEMENT,
TRAINING AND WATCHKEEPING
11th session
Agenda item 9

Document Symbol
Document date, i.e. 14 November 2023
Language: i.e. Original: ENGLISH
Pre-session public release: ☐

ANY OTHER BUSINESS

Training for Deck Officers in the IALA Maritime Buoyage System

Submitted by the International Association of Marine Aids to Navigation
and Lighthouse Authorities (IALA)

SUMMARY

Executive summary: This document provides information on the potential need for expanded training for deck officers on the IALA Maritime Buoyage System (MBS).

Strategic direction, if applicable: Not applicable

Output: Not applicable

Action to be taken: Paragraph 10

Related documents: IMO Model Course 7.01 Master and Chief Mate and 7.03 Officer in charge of a navigational watch

Introduction

1 The domain of Marine Aids to Navigation (AtoN) is experiencing significant technological advancements due to digitalization. These developments introduce new challenges and complexities, necessitating updated and comprehensive training for deck officers.

2 The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Maritime Buoyage System ("the MBS") is subject to periodic review^{sed}. In 2010, IALA adopted a revised MBS which included the introduction of the emergency wreck marking buoy, more complete descriptions of other aids to navigation specifically excluded from the original MBS and the integration of electronic marks via radio transmission. In June 2023, the 14th IALA General Assembly held in Rio de Janeiro, Brazil approved further updates to the MBS. These included the incorporation of Mobile AtoN, the inclusion of the various types of maritime autonomous surface ships (MASS) as they relate to use of the MBS and the consideration of matters related to sustainability.

3 The development of the MBS coupled with the shift towards digital AtoN technologies indicates that a review of training practices may be beneficial. This will ensure that deck officers acquire the necessary knowledge and skill to maximize their use of AtoN thereby enhancing safe and efficient navigation.

Background

4 The current International Convention on Standards of Training, Certification and Watchkeeping for Seafarers Code (“the STCW Code”) prescribes two hours of dedicated training for familiarity with the MBS. Given the complexity of modern AtoN systems, this duration may no longer be considered sufficient for deck officers to gain a comprehensive understanding of the MBS.

5 IALA has identified potential opportunities to develop and modernize the training protocols contained within the STCW Code with respect to the MBS:

- .1 Insufficient training: The STCW Code currently specifies two dedicated training hours for the MBS, which may no longer be sufficient to ensure a thorough understanding of the MBS when considering the complexity of modern AtoN systems.
- .2 Technological evolution: The dynamic nature of maritime navigation, coupled with technological advancements in AtoN, emphasizes the need for current and relevant training for deck officers.

Discussion

6 Recent marine casualties have also served to collectively demonstrate the requirement for a comprehensive and up to date knowledge of the MBS amongst deck officers.

7 The UK Marine Accident Investigation Branch (“the MAIB”) report 07/2021 on the grounding of the **Kaami** in 2020 highlights a lack of understanding of buoyage by the bridge team. This incident emphasizes the need for improved knowledge of the MBS.

8 Similarly, the MAIB report 22/2017 on the grounding of the **Muros** in 2016 identifies a deficiency in the understanding of the Officer of the Watch with respect to safe navigation in terms of the ship's track and conformance with the buoyage in the area.

9 The continued importance of physical AtoN alongside digital AtoN was affirmed at the IALA conference in Brazil in May 2023. This reinforces the need to ensure that training in both digital and traditional AtoN systems reflects current and emerging technologies and practices.

Action requested of the Sub-Committee

10 The Sub-Committee is requested to take account of the information provided when considering any future amendments to the STCW Code.