



Luxembourg, 4 April 2022

SAFETY RECOMMENDATION LU-MA-SR/2022-002

1. Context

The ongoing investigation of the fatal occupational accident on board the *Willem De Vlamingh* on 9 October 2021, involving a Power Operated Sliding Watertight Door (POS-WTD), has highlighted a safety issue that requires an immediate safety action. In accordance with the provisions laid down in Art. 9., paragraph 2, of the national amended law dated 30 April 2008 establishing the Administration of technical investigations (AET), safety recommendations may be issued at any time during the investigation, when such an action is deemed necessary.

2. Description

On the 9 October, on board the *Willem De Vlamingh*, a multipurpose and support vessel, berthed in the Port of Anping (Taiwan) a crew member was found trapped in a POS-WTD at around 17:30 (Local Time). The crew member was brought ashore and was pronounced deceased at a local hospital.

In 2018, the AET published the final report¹ of a similar fatal accident on a vessel of the same operator involving a POS-WTD and issued two safety recommendations² to operate the remote control stations for power operated watertight doors in accordance with SOLAS Regulations II-1/13.8.1³. The recent event shows that the above-mentioned recommendations have not been implemented and that an additional life was lost while operating a vessel usually in “doors-closed” mode on a cargo vessel.

The 2018-report highlighted in the conclusions that, when signing on on board the vessel, the crew member “*received a vessel familiarization training which did not include the safe operation of the WTDs*”. In the analysis, it was noted that: “*After the occurrence, the operator decided to implement a safe working practice at group level on how to safely operate a WTD at all times (irrespective of the mode of closure). The safe working practice was implemented within the operators HM system on 1 November 2011.*”

In this latest event, the deceased crew member signed on to the vessel on the day of the occurrence and received table top familiarization training as per company procedures. A module on the safe operation of POS-WTDs was included in the “SHIP FAMILIARISATION PART 2 – ENGINE RATING”, which was needed to be completed “*if possible, before the vessel departs but never later than 14 days after boarding*”. The day of the occurrence, the

¹ [FINAL REPORT: FATAL ACCIDENT ON BOARD IBN BATTUTA ON 29 SEPTEMBER 2011](#)

² LU-MA-2018-001 and LU-MA-2018-002, both addressed to the Luxembourg Maritime Administration

³ SOLAS 2018 consolidated edition

deceased crew member had not received familiarization training on the safe operation of POS-WTDs prior to his first shift, which was due to start at 18:00 LT (night shift). On his way to the engine control room to start his first shift and supposedly on his first passage of WTD4, he got stuck and died later that day in a hospital.

Part 2 of the familiarization training had multiple references related to POS-WTDs. However, a hands-on training module which included the actual operation of this type of door was not part of the training.

3. Objective

The “doors closed” mode is to be seen as an emergency mode with the objective to close all power operated watertight doors within a reasonable timeframe, 60 s in accordance with SOLAS Regulation II-1/13.7.1.6 , and thus limit the consequences in case of a flooding. On passenger ships, the use of this mode shall only be limited to an emergency or for testing purposes. Usually operating in “doors closed” mode exposes the crew members to a potential risk on every passage of a POS-WTD. In the present case, the decision to operate in this mode had been taken at highest management level and can be seen as a transfer of responsibility from the bridge (in case of an emergency) to the crew member operating the door (on a daily basis). Once the closing of the door has been remotely triggered, it can only be reverted by appropriate use of the local control handle. The installed POS-WTDs have no safety guards to detect a potential object or obstacle obstructing the door opening and to eventually stop the door from closing.

In order to highlight the risks related to the operation of POS-WTDs on board a vessel, regardless of the operating mode, it is essential to familiarize crew members with all the particulars of this type of door. When usually operating in “doors closed” mode, the familiarization training shall take place on the first day of the sign-on of a new crew member aboard the vessel and shall include the hands-on operation of a POS-WTD in accordance with the operator’s procedures. Multiple scenarios, reflecting the different door operating modes, their recognition and the related risks shall also be covered. On vessels usually operating in “local control” mode, the familiarization training shall be completed within a reasonable time upon sign-on and before the next switch to “doors closed” mode for testing purposes. Visitors shall also be considered as there have been accidents with power operated doors involving persons not being part of the crew.

4. Safety recommendation

The operation of power operated sliding watertight doors on a vessel, especially in “doors closed” mode, exposes crew members to latent risks. It is therefore important to familiarize crew members with the safe operation of POS-WTDs at the earliest possible time when they sign on to a vessel and before their first use of a POS-WTD.

The AET recommends to the Luxembourg Maritime Administration:

To mandate, on vessels with power operated sliding watertight doors (POS-WTD) registered on the Luxembourg Merchant Fleet register, a dedicated familiarization training on the safe operation of POS-WTDs in accordance with the following requirements:

- 1. For new crew members on vessels usually operating in “doors closed” mode, the familiarization training on the safe operation of POS-WTDs shall be completed on their first day on the vessel and before their first shift;**

2. For new crew members on vessels usually operating in “local control” mode, the familiarization training on the safe operation of POS-WTDs shall be completed within the first week on the vessel and before the next switch to “doors closed” mode for testing purposes;
3. The familiarization training shall:
 - include the hands-on operation of a POS-WTD in accordance with company rules;
 - cover the different operating modes of the POS-WTDs and the associated aural and visual warnings;
 - for each operating mode, highlight the risks related to the operation of POS-WTDs and explain the mitigation measures to control these risks;
 - include previous accidents related to POS-WTDs and highlight the lessons learned from these occurrences;
4. Recurrent familiarization training shall be mandatory for crew members returning onto the vessel after more than 3 month on leave;
5. Visitors⁴ boarding the vessel on a regular basis shall either undergo familiarization training under the same provisions as stated above or be accompanied by a crew member responsible for operating the POS-WTDs.
6. Other visitors shall be accompanied by a crew member responsible for operating the POS-WTDs.

⁴ In the context of this safety recommendation, a visitor is any person other than the master and a crew member.