

## Investigation Report

Date 23 February 2017

Less serious marine casualty

**Collision between the EMSMOON and Friesenbrücke railway bridge at Weener, Ems, on 3 December 2015**

### 1 Summary

At 1823 on 3 December 2015, the Antigua & Barbuda-flagged general cargo ship EMSMOON, which was sailing in ballast with the outgoing tide, collided with the Friesenbrücke railway bridge at Weener, Ems, in good visibility and southerly winds of 3-4 Bft. The bascule bridge was completely destroyed in the process. The ship sustained only minor damage in the bow section. The train between Weener and Leer was stopped in good time three minutes before the collision at the distance signal 700 m away. There were no injuries and no pollutants escaped.

### 2 Safety recommendations

The following safety recommendations do not constitute a presumption of blame or liability in respect of type, number or sequence.

#### 2.1 Federal Waterways and Shipping Administration

The BSU recommends that the Directorate-General for Waterways and Shipping, as well as the Waterways and Shipping Office in Emden improve the safety and efficiency of vessel traffic on the Ems navigable maritime waterway between Papenburg and the Gandersum barrier by

1. replacing existing agreements between the owners, operators, and keepers of bridge structures on one hand and the Federal Waterways and Shipping Administration on the other with procedural instructions, which clearly provide that only VTS Emden may intervene in vessel traffic and which contain clear VHF radio communication procedures, including keywords on the status of a bridge and position of the navigational signals, inter alia;
2. implementing fixed signals at the edge of the fairway that indicate opening/closing times or closures and additionally for maritime shipping the transmission of bridge-related information to the PPUs, which are used by pilots on the Ems, inter alia, as well as installing remote data transmission of the bridge signals at VTS Emden;
3. adapting the geographical information system in the VTS so that information on plotted structures, bridge signals, and vessels can be accessed and monitored in real time on a large-scale electronic chart and passages through a bridge can be managed with binding effect;

4. dredging waiting berths on an ongoing basis depending on the siltation and the depths required for the entire maritime shipping on the Ems between Papenburg and Emden, which safeguards the safety and efficiency of vessel traffic even in the event of obstructions or incidents;
5. publishing the ranges of the bridge and lock signals, taking into account interfering lights, and
6. improving bridge lighting so that the state of the bascules (open or closed) is visible from the river.

## **2.2 EMSMOON**

The BSU recommends that the owners, operators and masters of the EMSMOON only leave operation of the helm and controls to the pilot for short periods when sailing between Emden and Papenburg in either direction and ensure that an officer is responsible for performing the navigational watch properly at all times for the purposes of the pilotage.

## **2.3 Ems pilots**

The BSU recommends that pilots abstain from operating communication equipment and controls on ships fully independently when sailing between Emden and Papenburg in either direction, so that their full attention is devoted to the area of operation on the Ems. In particular, the helm, radar image observation and radio communications should not be performed by one person at the same time. If necessary, a second pilot must be requested in special circumstances and depending on the bridge design.

