

Investigation Report 34/16

Date 14 October 2016

Serious marine casualty

Grounding of the CSCL INDIAN OCEAN in the River Elbe on 3 February 2016

1 Summary

On 3 February 2016, the large container ship CSCL INDIAN OCEAN, flying the flag of Hong Kong, was en route from Felixstowe to Hamburg. The pilots were replaced at about 2016 off Brunsbüttel. Besides the two Elbe pilots, the master, an officer on watch (OOW), a helmsman, and a lookout were now on the bridge.

An alarm sounded on the bridge at about 2210. This could not be attributed to anything to begin with. Shortly afterwards, it became clear that the helm had stopped responding. The pilot responsible immediately advised STOP ENGINE and FULL ASTERN. Furthermore, the anchor was to be manned and the bow thruster activated. The two oncoming vessels were notified so that they could take evading action in good time.

A crew member had run to the steering gear compartment in the meantime, where he restarted the steering gear. The helm responded again at 2215. The effect of the HARD TO STARBOARD and HALF AHEAD manoeuvre now ordered was insufficient and the CSCL INDIAN OCEAN ran aground south of buoy 116 at 2220.

The damage assessment immediately initiated by the crew revealed that no leaks had formed.

From 2255 onwards, initially one tug and ultimately up to six tugs attempted to haul the ship back into the fairway. Since this failed, it was decided to wait for the next high tide.

Involving seven tugs, the second attempt to haul the vessel at about midday on 4 February also failed.

The German Central Command for Maritime Emergencies (CCME) then took charge of coordinating the third attempt to haul the vessel free. After extensive preparations, 12 tugs started to haul the CSCL INDIAN OCEAN back into the fairway at 0200 on 9 February. This attempt succeeded, enabling the ship to continue her voyage to the port of Hamburg.

No environmental pollution was found.

This investigation brought to light that an additionally installed safety system (SAFEMATIC) was improperly fitted in that it blocked the steering gear upon activation.

2 SAFETY RECOMMENDATIONS

The following safety recommendations do not constitute a presumption of blame or liability.

2.1 The owner, China Shipping Container Lines

The Federal Bureau of Maritime Casualty Investigation recommends that the owner inspect sister ships to determine whether their SAFEMATIC is also wired incorrectly and whether the cables of the hydraulic locking system also terminate at a switch cabinet.

2.2 Classification society of the CSCL INDIAN OCEAN

The BSU recommends that the classification society broaden the periodic inspections of the SAFEMATIC to include the implementation of a helm manoeuvre in SAFEMATIC mode.

2.3 Federal Ministry of Transport and Digital Infrastructure

The Federal Bureau of Maritime Casualty Investigation recommends that the Federal Ministry of Transport and Digital Infrastructure continually enhance existing technical plans for accidents involving large container ships, discharging containers from an above-average height, in particular.

2.4 Manufacturer of the steering gear, HATLAPA

The Federal Bureau of Maritime Casualty Investigation recommends that the manufacturer of the steering gear equip its system with internal error logging to make it easier to understand future helm failures.

2.5 Federal Ministry of Transport and Digital Infrastructure

The Federal Bureau of Maritime Casualty Investigation recommends that the Federal Ministry of Transport and Digital Infrastructure propose that the IMO examine whether SOLAS should be supplemented by the requirement of internal error logging within the steering gear and thus minimise future helm failures and increase safety at sea through the analysis thereof.