



Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation
Federal Higher Authority subordinated to the Ministry of Transport
and Digital Infrastructure

Interim Investigation Report

pertaining to the investigation report No. 330/13

Serious marine casualty

**Collision between MV CORAL IVORY and MV SIDERFLY
on the Kiel Canal on 28 October 2013**

29 October 2014

Under the terms of § 28 Para. 1 sentence 1 of the law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Act – SUG) of 16 June 2002, as amended in the announcement of 1 March 2012 (Federal Law Gazette I, page 390), last amended by Art. 16 Para. 22 of the decree of 19 October 2013 Federal Law Gazette I, page 3836) in conjunction with Art. 14 Para. 2 of the directive 2009/18/EC of the European Parliament and the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector, the Federal Bureau of Maritime Casualty Investigation publishes an interim report in case an investigation report dealing with very serious or serious accidents cannot be prepared within the term of 12 months.

Issued by:

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Summary

At about 0256 CET the Netherlands registered LPG-tanker CORAL IVORY (IMO No: 9207039, GT: 5831, year of build: 2000) collided with the cargo vessel SIDERFLY flying the Flag of Saint Vincent and the Grenadines (IMO No. 8412405, GT: 2882, year of build: 1985) west of the viaduct Brunsbüttel. The CORAL IVORY, with a length of about 116 m, carried Ammonia and had departed from her berth in the port of Ostermoor south of the canal route a few minutes before. She sailed under pilot guidance, was steered by a canal helmsman heading towards Kiel, and began to turn into the Kiel Canal. In the course of this manoeuvre the vessel deviated too far into the northern part of the Canal despite the operation of the bow thruster and collided with the SIDERFLY, heading for Brunsbüttel.

The CORAL IVORY came loose from the SYDERFLY shortly after the collision by means of an astern manoeuvre. In the course of further efforts to move the CORAL IVORY further from the scene of the accident and back towards the port of departure the forecastle of the CORAL IVORY hit the port side of SIDERFLY level of the fore edge of the bridge. CORAL IVORY, only slightly damaged, was able to subsequently return to the port of Ostermoor.

The SIDERFLY, with a length of about 100 m, was laden with a crystalline, nontoxic fertilizer, and also sailed under pilot guidance. On the first collision she was hit by the ice strengthened bow of the CORAL IVORY at her port side in the forward area of the vessel. The collision led to a crack in the shell plating of the vessel of about 6 x 4.5 m. As a consequence thereof three ballast tanks and a so called void space filled up with approximately 380 tons of water within a short period of time. Moreover, collision induced shifts within the vessels structure caused four cracks in the wall of the cargo hold 1 of the SIDERFLY. About 70 further tons of water could flow into the vessel through these relatively small apertures and resulted in the vessel listing and threatening to founder.

Due to the strong wind, blowing from a south-westerly direction, the SIDERFLY, unable to manoeuvre, drifted close to the embankment toward the east. The vessel could be stopped approx. 500 m east of the viaduct by dropping the starboard anchor.

The bridge crews of CORAL IVORY and SIDERFLY called for external assistance for the apparently seriously damaged SIDERFLY by VHF immediately after the accident had occurred. The coastal motor vessel SUSANNE, about to begin the canal passage immediately after the CORAL IVORY, immediately deployed a working boat with two crew members. The boat reached the SIDERFLY at about 0310 and took 4 crew members of the vessel on board. The other 5 crew members and the pilot were shortly afterwards recovered by the pilot boat KIEBITZ having rushed to the damaged vessel. Two tugs having reached the damaged vessel already shortly after the accident were able to push the SIDERFLY provisionally against the northern canal embankment and prevent the vessel, with a list of about 25° to port, from foundering.

At 0445 the Central Command for Maritime Emergencies assumed overall control of the operation and coordinated the technical demanding stabilization of the damaged vessel struck on the northern canal embankment in the following hours and days.

The slipping and possible capsizing of the **SIDERFLY** could be prevented with the aid of chains and rope connections firmly anchored on shore and used to fix the **SIDERFLY** fore and aft. And the buoyancy could be reestablished subsequently. The Kiel Canal had to be closed in order to enable the complex process of securing the **SIDERFLY**. This was even more complicated and impeded by the gale force increasing further to a hurricane. The Kiel Canal could only be fully opened to the traffic in consultation with the public authorities involved at 1700 on 31 October 2013, 3 days after the accident. The **SIDERFLY** was shifted to the port of Brunsbüttel on 6 November 2013. After attempts to sell the vessel had failed, the towage of the vessel, being in strong need for repair, to a yard started on 5 February 2014. There the vessel was to be dismantled.

The Federal Bureau of Maritime Casualty Investigation (BSU) started its investigation on board the **CORAL IVORY** due to the fact that Germany was the Coastal State affected. The investigation focusses on the task to clarify the primary causes of the accident. The evaluation of the VDR recordings of the **CORAL IVORY** and the radio communication of the Vessel Traffic Services Brunsbüttel are of particular importance in the course of the investigation. In addition, the boundary conditions of the accident are taken into consideration. With respect to the latter, the BSU and an extern expert considered the question, if possibly deficiencies of the vessel's structure possibly contributed to the rapid occurring list of the vessel. This was not the case.

Since the assessment of all sources of information is a time-consuming process, account for the fact that the time limit of one year set by the European Union and implemented into national law by the Federal Republic of Germany, to publish an investigation report after a very serious or serious marine casualty has occurred, cannot be satisfied without serious losses with respect to the conclusions and safety recommendations giving distinction to the report.

After careful appreciation of all relevant factors, and under the proposition to present an investigation report meeting the international benchmarks and foremost serving the purpose of enhancing the safety of shipping, the BSU has therefore decided to suspend the publication date of the final investigation report, and publish the present preliminary report.