

Investigation Report 305/06

2 May 2008

Serious Marine Casualty:

Collision between M/V LASS URANUS AND M/V XIN FU ZHOU on 12 July 2006 on the Elbe River

1 Summary of the Marine Casualty

On 12 July 2006 towards 1426¹ the dry bulk cargo vessel LASS URANUS, proceeding down the Elbe River under German flag, collided with the Chinese flagged large container vessel XIN FU ZHOU, also proceeding down the Elbe, between buoys 132 and 130 off Finkenwerder.

Under good weather and visibility conditions the XIN FU ZHOU sailed behind the LASS URANUS, when suddenly the only Schottel propulsion system operated on board the LASS URANUS failed. After losing her forward propulsion and manoeuvrability, the LASS URANUS, which had kept to the right of the fairway, was unable to undertake effective measures to counter the hydrodynamic forces (suction and displacement streaming) generated during the XIN FU ZHOU's subsequent overtaking. In addition, during the overtaking both downstream vessels came upon the large container ship MSC MELISSA, sailing under Panama flag with destination Hamburg. The passage of the two large container ships, both of which were sailing under pilot's advice, took place at a distance of only approx. 38 m at the same time as the overtaking on a fairway section providing a width of 220 m.

The LASS URANUS turned with its bow to port towards the overtaking vessel, ultimately colliding with it at an angle of almost 80°. The bow of the LASS URANUS was significantly dented when it tore the starboard side hull plating of the XIN FU ZHOU over a length of eight meters above the waterline. Both vessels retained buoyancy and were able to proceed without assistance.

There were no personal injuries and no environmentally harmful substances were released as a result of the casualty.

¹ All times mentioned in the report refer to Central European Summer Time (CEST) = Universal Time (UTC) + 2 hours.

2 Safety Recommendations

The following safety recommendations shall not create a presumption of blame or liability, neither by form, number nor order.

2.1 Vessel traffic participants and pilots

The Federal Bureau of Maritime Casualty Investigation recommends that **vessel traffic participants and pilots** take into account the risk potential of encounter situations on-site the Airbus airstrip area, in particular if the specific situation involves more than two seagoing vessels. Overtaking at this section of the Lower Elbe with another large vessel oncoming simultaneously should be avoided.

2.2 Operators of seagoing vessels

The Federal Bureau of Maritime Casualty Investigation recommends that **operators of seagoing vessels** provide their vessel commands with reliable information concerning the impact of reduced engine ratings on the manoeuvrability of the respective vessel.

2.3 Manufacturers of Voyage Data Recorders

The Federal Bureau of Maritime Casualty Investigation recommends that **manufacturers of voyage data recorders** improve the hardware and software to ensure that recorded data are available in sufficient quality and can be analysed after a marine incident.

An excerpt from a recommendation of Investigation Report 343/04 is reprinted below as a reminder:

The Federal Bureau of Maritime Casualty Investigation recommends the manufacture of the voyage data recorder to evaluate the technical inadequacies of the device that occurred in close co-operation with the Federal Maritime and Hydrographic Agency responsible to type approvals for vessels sailing under German flag and to secure the complete functionality of the system and the required quality of the data to be recorded in accordance with the performance standard of the IMO and the European standard. Furthermore the possibility of a suitable notification to the vessel's command of inadequacies within the device should be reviewed, and if appropriate implemented into practice. This applies especially with regard to the lack of sensor data mandatory for recording.