Vessel Stability Fatality File



The Golden Ray cargo ship capsized because of inaccurate stability calculations.

The capsizing of the Golden Ray cargo ship off the Georgia coast two years ago, which resulted in more than $200 million in damage, was caused by incorrect calculations about the vessel’s stability, the National Transportation Safety Board said Tuesday.

In its report about the investigation into the September 2019 capsizing, the NTSB also found that two watertight doors had been left open, which caused the vessel to flood after it capsized. The flooding trapped four crew members who were later rescued.

Workers started disassembling the 656-foot vessel and removing it from the water in sections in February 2020. They made the final cut earlier this month and have two more sections to remove, according to the St. Simons Sound Incident Unified Command.

The Golden Ray was carrying 4,100 vehicles and 24 crew members when it overturned while traveling through St. Simons Sound. Ultimately fire, flooding and saltwater corrosion meant the ship was declared a total loss estimated at $62.5 million, the NTSB said in its report, and an estimated $142 million worth of cargo was lost.

The probable cause of the capsizing was the chief officer’s mistake while entering ballast quantities into the stability calculation program, the NTSB report said. That meant the vessel had less stability than the chief officer calculated, the report said.

The operator of the ship also had no procedures to verify the chief officer’s calculations, so the operator and master of the ship didn’t know the Golden Ray was sailing without meeting stability requirements, the NTSB said.