

February 18, 2021

Marine Accident of Cargo vessel "JIA DE" Foundering  
Occurred at Higashi-Ogi Island offing to the south-east, Kawasaki City,  
Kanagawa Prefecture, Japan  
October 12, 2019.

It is considered probable that the accident occurred because the cargo vessel JIA DE foundered due to the fact that sea water which was being retained due to wave uprush on the upper deck (hereafter referred to as "the Retained Water") began flooding due to taking on sea water in the interior of the cargo holds, and then her steering was uncontrollable and she was receiving winds and wave uprush from the port fore side to port side, and furthermore her hull greatly heeled to the starboard side and she continued to be flooded due to taking on sea water in the interior of the cargo holds, and she subsequently rolled over due to her stability having been decreasing and flooding due to taking on sea water into the interior of the cargo holds progressed, with the result being that she foundered. This situation began while JIA DE was anchoring in the nighttime under conditions of rolling and pitching due to receiving winds and waves that had increased due to the typhoon No.19 (Asian name "Hagibis") approaching the area of K1 anchorage point of Keihin Port.

It is considered probable that the Retained Water on the deck of JIA DE began flooding due to taking on sea water in the interior of the cargo holds because the lids for opening parts of the ventilation cylinders of the cargo holds were in an open condition, and the water receiver railings at the connection parts between the panels of the hatch covers of the cargo holds had a number of broken holes and some part of the panels of the hatch covers were deformed, and thereby the hatch covers were not securely weather-tight. In addition, it is considered probable that wave uprush on the deck further increased because her dry draft had been decreasing due to ingress water into the interior of the cargo holds and the Retained Water.

It is considered probable that JIA DE was in a state in which her steering was uncontrollable because ingress water that infiltrated into the marine diesel oil (MDO) tank interior through the vents on the upper deck was supplied to the diesel generator engines with MDO through the fuel oil supply line of the diesel generator engines, and then the diesel generator engines experienced combustion failure or misfiring, and subsequently stopped, and thereby the blackout occurred.

In view of the results of this accident investigation, the Japan Transport Safety Board recommends that the Panama Maritime Authority, the Republic of Panama (hereafter referred to as "Panama") as the flag state of JIA DE should take the following measures to prevent similar accidents and to reduce damage.

The Panama Maritime Authority should instruct the Owners and the Management Companies (hereafter referred to as "the Companies") of Panama flag vessels to engage in the following practices due to securing safety for crewmembers and vessels in stormy weather and rough seas.

- (1) The Companies should instruct masters and crewmembers to reliably carry out closing of opening parts on exposed decks such as lids of opening parts of ventilation cylinders of cargo holds, etc. in case that stormy weather and rough seas are expected.
- (2) The Companies should instruct masters and crewmembers to secure significant dry draft in any sea condition, and therefore should crewmembers to carry out adjustment of the ship's condition.
- (3) The Companies should instruct masters and crewmembers to carry out the drain discharging operation in which each drain valve of fuel oil tanks is operated not only periodically as routine work, but also on a timely basis in a condition of rolling and pitching in stormy weather and rough seas so as not to supply fuel oil with infiltrated water into the fuel oil supply lines of generator engines, etc. in case that air vent pipes of fuel oil tanks were not equipped automatic opening and closing-type air vent head, etc. to automatically prevent the infiltration of water.
- (4) The Companies should instruct masters and crewmembers to conduct refresher training for crewmembers concerning survival techniques at sea for getting ready for abandon ship, such as taking out belongings, escape behavior from the interior of vessel, putting on a life jacket and immersion suit, dressing warmly, etc.
- (5) The Companies should implement maintenance necessary including the water receiver railings of the hatch cover to secure weather-tightness of the hatch cover of the cargo holds themselves with regard to vessels managed and owned by the Companies.