

SUMMARY IN ENGLISH

On Sunday 25 February 2018, the fishing boat IDUN was engaged in fishing one-hour driving time west of Tjörn. The master was the only crew on board. Weather conditions were good, with an easterly wind direction of 5–6 m/s, moderate sea and an air temperature of minus 5 degrees.

The fishing vessel IDUN was of catamaran type and thus had two separate hulls. These hulls were uniformly designed and they were both equipped with engine room, cargo hold, fuel tank and storage spaces.

After indication of a generator alarm from the starboard engine, the master opened the hatch to the engine room for control. He observed a significant amount of water there. The master stopped the engine and started the electrical bilge pump. There was no way of visually looking below the engine in order to see where the water filling possibly came from. The master realized how serious the situation was and decided to drive towards land, using the port engine. The situation deteriorated rapidly as the water level continued to increase in the engine room despite bilge pumping. The master therefore decided to alert and request assistance. After calling SOS Alarm, he was at 08:54 forwarded to JRCC which performed alarm for sea rescue. SSRS¹ departed with two rescue boats from the stations Kåringön and Skärhamn.

At 09:19, the first rescue boat from SSRS arrived at IDUN's position. When the rescue boat came alongside IDUN, the list due to the water filling was perceived to be 10 to 15 degrees. The crew from the rescue boat and the master tried to start external pumps. This did not succeed and the attempt had to be terminated. The master's situation aboard the fishing boat was then considered so risky that he was requested to leave IDUN and get over to the rescue boat. At 09:33, shortly after the rescue boats had backed away from IDUN, she capsized to starboard and became floating upside down for a short time before she sunk.

Just over one week after the incident, the Coast Guard decided to start a salvage operation because there was a leak of diesel oil from IDUN. When IDUN was lifted and came above the water surface, it was immediately seen that water ran from a hole on the inside of starboard hull.

The investigation has focused on why the stability of the fishing boat ceased, and if the fishing boat had an opportunity to reach stability equilibrium with actual water filling in the hull. In addition, SHK has investigated the degree of water filling and when the positive stability of the fishing boat completely ceased. The stability investigation conducted by SHK showed that IDUN could never reach an equilibrium position. With water penetration in the engine room, which progressively could enter the cargo hold, the fishing boat lost its stability at a certain amount of water filling. The investigation has also touched on corrosion problems that may occur under certain conditions in boats, and its consequent consequences.

¹ SSRS – Swedish Sea Rescue Society.

The cause for the rapid water filling in the hull of the vessel was the occurrence of a hole of significant size in one of the ship's hull, caused by a corrosion process that has taken place over time. The likely cause of the locally occurring corrosion hole was a defective electrical level sensor. The reason for the capsizing of the vessel was that the water filling into the vessel's engine room could progressively proceed further into the cargo hold via a non-waterproof pipe. This contributed to further water filling and the positive stability of the vessel completely ceased. Contributing to the event was the lack of a ship inspection system for ships in the current size, and hence that there was no control that the vessel complied with current regulations.

Safety Recommendations

None.