Anchor Handling Safety Fatality File

Fatality during anchor handling operation

A member has reported a fatal incident which occurred during anchor handling operations. The incident occurred on an anchor handling tug (AHT) whilst crew were attempting to disconnect an anchor buoy (weighing 1.4 tons) from its pennant wire shortly after retrieval.

The anchor buoy was winched onto the deck of the AHT until the pennant was in the wire stopper used to prevent the buoy from being pulled back towards the stern by sudden tension on the pennant wire. Two crew members were disconnecting a shackle between the pennant wire connected to an anchor on the seabed and the buoy on deck, when suddenly the pennant wire came under tension. The wire stopper failed to stop the pennant wire effectively and the sudden tension on the pennant wire jerked the buoy towards the stern of the vessel. The two crew members who were busy disconnecting the shackle were struck by the moving buoy. One crew member died instantly, the other suffered a minor injury.

Root cause

Our member investigated, and the root cause of the incident was determined to be that the wire stopper failed to stop the pennant wire. This happened because an incorrect (oversized with respect to the diameter of the pennant wire) ‘U-shaped insert’ was mounted into the wire stopper. This ‘U-shaped insert’ also displayed excessive wear and tear. Because of this the socket at the end of the pennant was able to pass through the wire stopper when the pennant wire came under tension.

The sudden tension on the pennant wire came about because the survey screen on the bridge of the AHT displayed a ‘design anchor position’ instead of the ‘as laid’ anchor position. Based on the information presented by the survey screen, it was assumed that there was sailing slack in the pennant wire when in fact, it was being tensioned.