

Lifeboat winch failure

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A report of the UK's Marine Accident Investigation Branch (MAIB) into the failure of a lifeboat winch on a cruise ship has concluded that the winch failed because the lubricating oil used for the freewheel sprag couplings was too viscous and did not match the type of oil specified by the manufacturer.

What happened?

The incident occurred during a routine lifeboat drill. As one of the ship's lifeboats was being recovered after the exercise, it lowered uncontrollably into the water, still attached to the fall wires. The ship's electrical engineer sustained injury when, as a result of the incident, the winch hand crank handle, that had been left attached to the winch drive, hit him on the head when the winch started.

On investigation, the MAIB discovered that the inside surface of the outer face of the freewheel clutch had severe wear and scuffing with signs of overheating. The freewheel coupling and oil had been changed on the winch about four months before the incident.

The manufacturer reported that the davit winch failed because the oil used was too viscous, preventing the coupling locking mechanism from operating. Slipping of the coupling caused the oil to overheat. Lubricating properties would then be lost, causing a damage to running surfaces.

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