Safety ALERT

Lifeboat Unexpectedly Descends — Alert 25-2

WHAT HAPPENED:

In November 2024 while experiencing weather conditions of 60 Knots wind and a 5.0 meter (16ft) sea state, a lifeboat on board a drilling unit working in the North Sea unexpectedly descended to the sea without human intervention from its normally stowed position due to a winch failure. As the lifeboat reached the sea, the crew mobilized to the winch location and attempted to arrest further deployment of the cable, but due to the weather condition the stern wire failed, leaving the lifeboat attached only by the bow wire. Despite efforts to secure it, the bow wire later parted, and the lifeboat drifted away before being recovered.

Figure 1 - VIKING Norsafe davit winches NW-150-NO

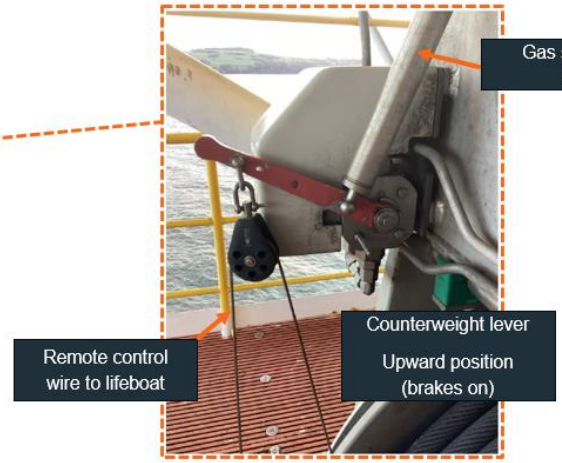

Figure 2 – Counterweight lever in the upward position (brakes on)

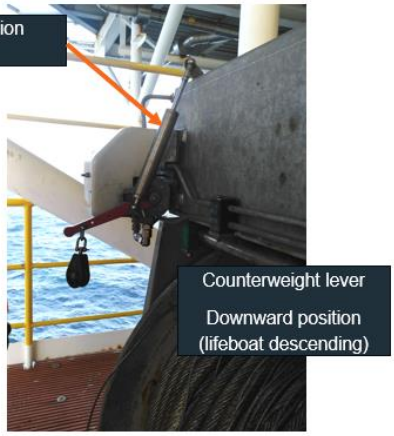

Figure 3 - Counterweight lever in the downward position (lifeboat descending)

Disassembly of the lifeboat davit gas strut showing corrosion

A Safety Alert can consist of any type of health, safety & environment (HSE) notification or Near Miss/Near Hit alert. Proactive Alerts on jobs well done are also encouraged.

CONTRIBUTING FACTORS:

This incident was a result of several contributing factors. The gas strut, a critical component of the winch system, suffered from corrosion, leading to a loss of pressure and failure. Upon removal and closer examination of this failed component, it was determined that the surface of the piston rod had corroded to the point that the cylinder's integrity was compromised causing the pressurized gas to escape and rendering the strut inoperable. The material used for the gas strut was not suitable for marine environments, making it more susceptible to degradation. Maintenance practices lacked clear guidelines for inspection and replacement of the subject component, which contributed to the failure going undetected. Furthermore, the design of the system relied heavily on the gas strut, making it a single point of failure without redundancy.

LESSONS LEARNED:

Regular inspections of lifeboat components, particularly gas struts and other critical parts, are essential to prevent unexpected failures. Equipment used in marine environments must be made from corrosion-resistant materials to ensure longevity and reliability. Maintenance manuals should provide clear guidelines on inspection intervals and replacement schedules to prevent oversight. Finally, lifeboat systems should be designed with redundancy in mind to prevent single points of failure from compromising safety.