

Failed shackle on vessel life raft

Safety Flash Published on 17 December 2019 Generated on 20 January 2025 IMCA SF 30/19

There was a failure of two stainless steel “D” shackles forming part of a life raft hydrostatic release assembly on a vessel.

What happened?

The failure was discovered whilst the vessel was in the 500m safety zone of an installation.

A crew member noticed one of the vessel’s starboard life raft containers was in the water. The life raft was still attached to the vessel via the painter (rope).

The crew member immediately notified the bridge team who stopped all non-essential operations and informed the installation.

The vessel deck crew attempted to recover the life raft intact by using the painter; however, the life raft inflated. The inflated life raft was secured to the side of the vessel which then departed the 500m safety zone and safely recovered the life raft to deck.



What went wrong?

The failed/parted shackles released the strap securing the life raft container to its stand.

As a result, the life raft container fell into the water but remained connected to the vessel via the painter.

The life raft inflated (as expected) when tension was applied to the painter.

The shackles potentially failed due to crevice corrosion over time.

What actions were taken?

- Appropriate authorities were informed, and arrangements were made to replace the inflated life raft.
- All remaining life raft stainless steel shackles were replaced.
- Inspections were carried out to identify vessel equipment with potential for crevice corrosion and galvanic corrosion.
- Weekly checks to be carried out on the condition of shackles during weekly life raft inspection.
- The preventive maintenance schedule was improved to ensure the timely replacement of such stainless steel shackles before they fail.

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