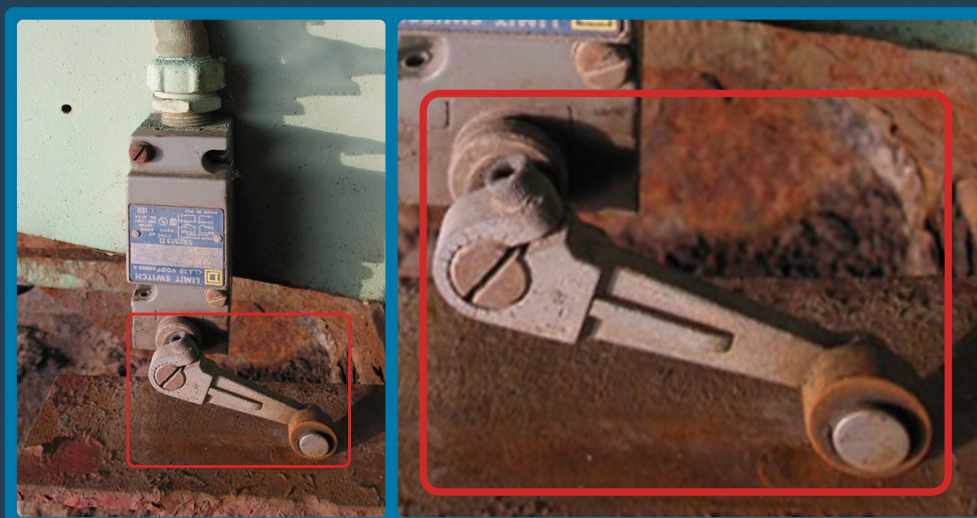


## LIFEBOAT'S LIMIT SWITCH MALFUNCTION



- HELMET ELEMENT 4 'Safety' – Item 8 'Electrical Installations & Machinery'
- Code of Safe Working Practices – Ch.19 'Lifting Equipment & Operations'
- VIQ – Section 5.28 - (Life Saving Equipment)
- TMSA – Element 4, Section 4A.1.4 'Maintenance & Testing Procedures On-Board'

**INCIDENT:** During a HELMET assessment onboard, the PAS Assessor requested from the crew to test the limit switches fitted to the boat davit, with a view to conduct a lifeboat drill. Before the testing, he observed a serious deterioration on the limit switch, attached to the davit arm.

### IMPORTANCE OF PROPER CONDITION

During long voyages these devices are likely to become water-soaked and short circuited. If the limit switch fails to operate properly, while the crew is hoisting the lifeboat, this can result into a serious incident. Taking into consideration the potential consequences of proximity switch fitted to davits' failure, it is essential for vessel's crew to be aware of the switches' limitations and relevant precautions to be taken on each occasion before hoisting the boat.

### SUGGESTIONS

- Issue a fleet safety letter in order to raise awareness on operating the relevant equipment.
- Carry out frequent risk assessments to identify potential hazards for the launching and recovery of the lifeboat, or any other machinery equipped with limit switches.
- Follow a periodical inspection routine for the limit switches to detect wear signs and ensure proper operation, especially when the vessel is at sea for a prolonged period of time.
- Follow manufacturers' recommendations regarding the maintenance, periodic testing and replacement, seeking clarification from manufacturers where ambiguity exists.
- Verify the effectiveness of seals on electrical equipment fitted to boat davit systems on open decks.
- Ensure before the commencement of any lifeboat drill that the switches are fully functional.
- Never hoist relying on such devices during operation.
- Familiarize seafarers with the safe procedures regarding the use of proximity switches.
- Pay attention when cleaning next to the lifeboat with pressure washers. The water may compromise the effectiveness of watertight seals of electrical equipment.

### BEST PRACTICE

Test first the limit switches and then hoist the lifeboat with the winch a few inches before it rests in place and continue by turning the drum by hand.