



MARINE SAFETY ALERT

Inspections and Compliance Directorate

May 20, 2022
Washington, DC

Safety Alert 07-22

UNEXPECTED DANGERS: LIFEBOAT REMOTE CONTROL WIRES

This safety alert addresses the importance of visually inspecting lifeboat and davit installations prior to testing with crewmembers on board, and ensuring crew familiarity with company policy related to lifesaving equipment testing. In particular, the remote control wire may be overlooked, yet weaknesses within the linkages or poor spooling of the wire itself can lead to catastrophic failures in the lifeboat launching systems.

During a recent U.S. deep draft container ship inspection, a vessel's crew was lowering the lifeboat when the remote control wire arrangement caused two separate failures:

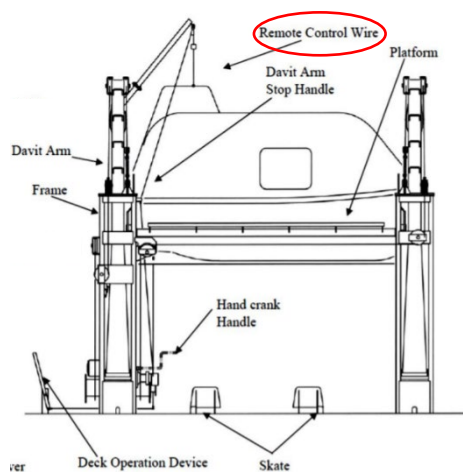


Figure 1 - Davit Launched Lifeboat Arrangement.



Figure 2 - Poorly-spooled Remote Control Wire.

- (1) The first occurred when the remote control wire parted as the lifeboat was being lowered to the waterline with crew on board. Causal factors included poor winch spooling potentially hidden under the outer spools, which led to a wire kink and winding on itself, creating enough force to part the wire.
- (2) The second occurred a day later after the replacement remote control wire was hand spooled from extra wire found on board. While testing with crew on board using the remote control wire to lift the brake, an unexpected pay out of wire led to the winch brake prematurely engaging, which made the lifeboat stop lowering and swing erratically above the embarkation deck. Seconds later, the movement caused the wire to regain tension, which lifted the winch brake arm and caused the lifeboat to lower again. While lowering in a swinging motion, the skeg of the lifeboat caught on the knife-edge of the ship's deck, causing the lifeboat to list more than 90 degrees. Without the quick action of a crewmember who activated the winch brake lever from the deck, the lifeboat could have inverted further and led to catastrophic outcomes.

An internal company investigation of these incidents identified the crew did not follow existing company policy which required a test lowering without crew prior to embarking crew. The company's policy is based off the recommendations contained within MSC.1-Circ.1578, *Guidelines on Safety During Abandon Ship Drills Using*

Lifeboats. While a test lowering may not have prevented these incidents, it would have provided an opportunity for identification of the poor spooling and prompted corrective action without risk to crew.

The Coast Guard **strongly recommends** that ship's crew conduct a thorough visual inspection of lifeboat launching systems and test lowering prior to operation with crew on board, paying special attention to the following inspection points:

- Verify the proper spooling of the remote control wire, expand inspection as necessary.
- Verify the proper position of the remote control wire weight. If the weight is very close to the top of the lifeboat, this may indicate the remote control wire is too long.
- Verify material condition of the shackle that connects the pull cable to the remote control wire within the lifeboat. These steel shackles can corrode in the elements and may be overlooked during weekly/monthly/annual inspections.



Figure 3 - Lifeboat listing more than 90 degrees w/ crew inside.



Figure 4 - Lifeboat skeg caught on deck edge.

Marine inspectors, classification society surveyors, and service technicians should be aware of these risks and bring any concerns to the attention of the vessel's crew.

This Safety Alert is provided for information purposes only and does not relieve any domestic or internationally safety, operationally, or material equipment. Developed by Activities Europe and distributed by the Office of Investigations and Analysis. Please address questions to HQS-SMB-CG-INV@uscg.mil.