



FINDINGS OF CONCERN

Sector Delaware Bay

December 21, 2022
Philadelphia, PA

Findings of Concern 022-22

PROACTIVE MAINTENANCE FOR STRIKER PLATES

Purpose. The U.S. Coast Guard issues findings of concern to disseminate information related to unsafe conditions that were identified as causal factors in a casualty and could contribute to future incidents. Findings of concern are intended to educate the public, state, or local agencies about the conditions discovered so they may address the findings with an appropriate voluntary action or highlight existing applicable company policies or state/local regulations.

The Incident. During transit, a bulk carrier experienced flooding in the aft oily bilge tank. USCG investigators discovered that the cause of the flooding was the wastage of the hull in way of the striker plate used to sound the tank. The striker plate is a small piece of steel welded over the inner hull of a vessel which serves to protect the hull steel from degradation due to repeated striking (see Figure 1). During tank soundings, which the crew conducted approximately 6 times daily, the weight at the end of the sounding tape within the sounding tube would strike the striker plate at the bottom of the tank. Over time and with repeated strikes, this action wore a hole in the striker plate steel.

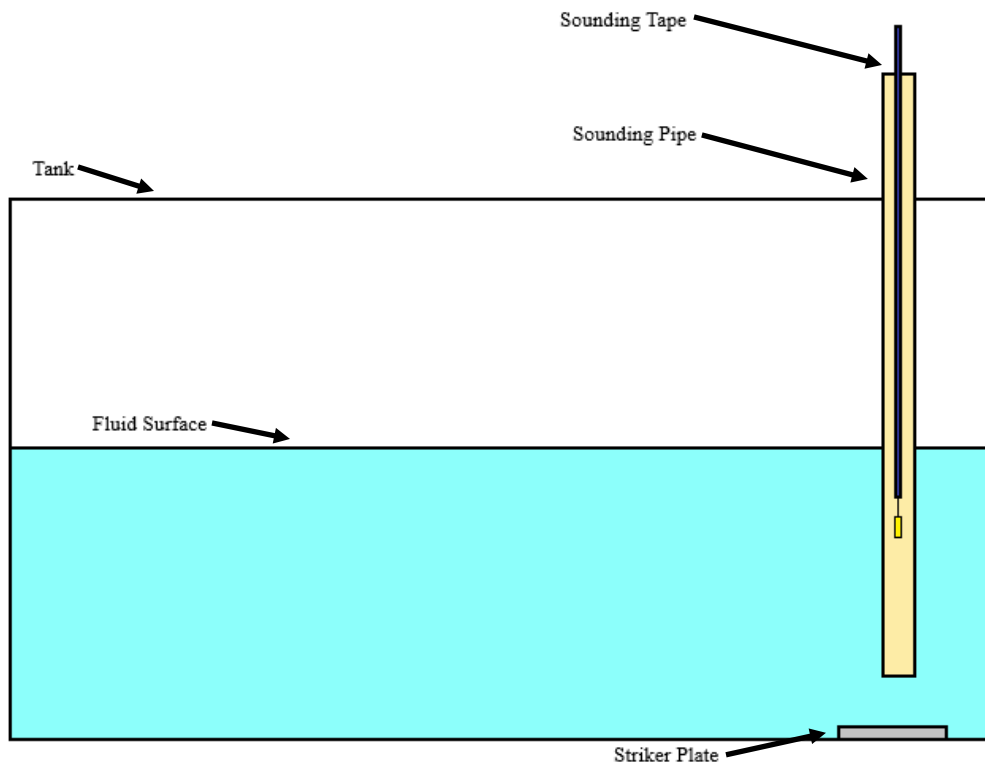


Figure 1 – Diagram of tank with sounding pipe and striker plate.

Contributing Factors and Analysis. The investigation identified the following causal factors:

- Vessel's lack of proactive preventative measures for double deck plating.
- Vessel's lack of inspection procedures to compensate for deck plate strikes.

Findings of Concern. Coast Guard investigators have identified the following measures that, if implemented by owners/operators of vessels, may mitigate the risks posed by these contributing factors:

- Establish a preventative maintenance system that proactively identifies and repairs and/or replaces damaged double bottom deck striker plates.
- Establish a consistent maintenance schedule for the double bottom striker plate to be overhauled within an appropriate time period.

Closing. These findings of concern are provided for informational purpose only and do not relieve any domestic or international safety, operational, or material requirements. For any questions or comments please contact Sector Delaware Bay Investigations Division by phone at (215) 271-4853 or email at PhillyIO@uscg.mil.