



September 15, 2021

CSI Client Advisory 09-2021

SUBJECT: Accommodation Ladder Turntable Pin Failures

The U.S. Coast Guard's Inspections and Compliance Division recently issued Marine Safety Alert (05-21) regarding a potentially dangerous condition on accommodation ladders (see attached). The Safety Alert advises that after a recent accident resulting in injury, marine inspectors carried out a concentrated inspection campaign and found aged turntable pins that had been largely ignored without maintenance or replacement. Without proper maintenance and inspection, corrosion of the pins can lead to catastrophic failure leading to injury or death.

Although there are currently no statutory requirements for maintenance of replacement of the turntable pins, the Coast Guard strongly recommends the following:

- 1) Maintain the turntable pins.
- 2) Periodically inspect the condition of the turntable pins and replace them when necessary.
- 3) Revise accommodation ladder maintenance plans to include turntable pins.

Should you have any questions regarding this advisory, please contact our office. This Client Advisory, along with previously issued CSI Advisories, can be retrieved from our website, www.compliancesystemsinc.com.



MARINE SAFETY ALERT
Inspections and Compliance Directorate

September 13, 2021
Washington, DC

Safety Alert 05-21

CORRODED TURNTABLE PINS CAN CAUSE STRUCTURAL FAILURE ON ACCOMMODATION LADDERS

A recent marine casualty resulting in an injury of a crewmember onboard a foreign freight vessel brought to light a potentially dangerous situation involving the turntable pin on accommodation ladders. Currently, there are no established timelines or requirements to replace turntable pins. Without proper and periodic examination and replacement, corrosion can ultimately lead to structural failure.

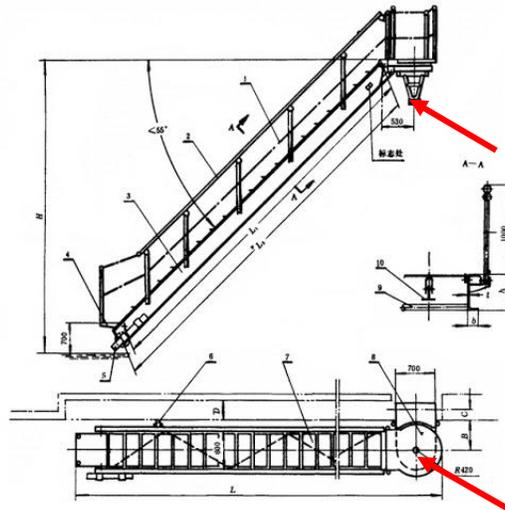


Figure 1: Pin location on the Accommodation Ladder Turntable

After the incident, the Coast Guard noted that multiple foreign flag vessels had accommodation ladder turntable pins in service for more than 20 years without replacement. Guidelines on the maintenance of accommodation ladders is contained within 74 SOLAS (14) II-1/3-9, MSC.1/Circ. 1331, and 74 SOLAS (14) III/20.7.2; however, none of the aforementioned references include maintenance guidelines for the turntable pins.



While the turntable pin may seem like a minor component, its failure can cause significant harm to all persons utilizing the accommodation ladder. In this instance, the vessel's crew was in the process of stowing the accommodation ladder when the turntable pin failed. As a result, a crewmember who was on the accommodation ladder at the time fell approximately 30 feet and sustained serious injuries.

Figure 2: Accommodation ladder connection pin with severe corrosion over the pin's fracture surface & sidewall and on the surface of the hub.



Figure 3: Surface corrosion and contamination are evident on the fracture surface of the failed turntable pin. Severe corrosion pits and surface cracks are also visible on the sidewall, which could have provided an indicator of the pin's unsafe condition prior to failure.

The Coast Guard **strongly recommends** that vessel owners and operators:

- Maintain the turntable pins.
- Periodically inspect the condition of the turntable pins and replace them when necessary.
- Revise accommodation ladder maintenance plans to include turntable pins.

This Safety Alert is provided for informational purposes only and does not relieve any domestic or international safety, operational, or material requirement. Developed by the Investigators of Sector Delaware Bay and distributed by the Office of Investigations and Analysis. Questions may be sent to HQS-SMB-CG-INV@uscg.mil.