



GOOD CATCH from The American Club

Engine Room Flooding Averted!

Description

Two engineers on a bulk cargo vessel were conducting routine maintenance on the main engine lube oil plate cooler. They had closed the lube oil and the saltwater valves for both the inflow and discharge piping of the plate cooler. However, they failed to follow Lock Out/Tag Out procedures, which require tagging the valves they closed and securing power to the controllers for both pumps.

Meanwhile, cargo operations had finished well ahead of schedule, and the facility asked the vessel to get underway early. In the engine control room, the Third Assistant Engineer began engine starting procedures using the pre-departure checklist. He was just about to remotely start the saltwater pump but decided to double-check the maintenance work first. He remembered that maintenance had been discussed at the morning's engineering meeting. He quickly discovered that the plate cooler maintenance was not finished. He was glad he checked. If he had started the saltwater pump, the flow of saltwater into the engine room could have created major problems.

The Third Assistant Engineer relayed what happened to the Chief Engineer, who documented it as a near miss. At the next toolbox meeting, the Chief Engineer stressed the importance of adhering to the Lock Out/Tag Out procedures to prevent incidents similar to what happened. He reminded all of the engineers that three of the most common reasons for engine room flooding are:

- plate coolers that are accidentally opened during maintenance;
- sea suction strainers and filters that are not properly secured; and
- saltwater piping leaks that become large ruptures.



Potential Damage

Had the valve been opened while the plate cooler was still partially disassembled, salt water would have poured into the engine room. If the flooding was quickly recognized and the valve closed, the result would have just been the addition of several hundred gallons of saltwater into the bilges. However, if not quickly corrected, a large volume of saltwater flooding into the engine room could easily have overflowed the bilges and caused damage to the main engine, auxiliary machinery, and electrical systems in the engine room. Repairing damage from saltwater flooding in the engine room can be very expensive and time-consuming.

What went wrong?

- ★ The engineers conducting the maintenance on the lube oil plate cooler should have followed the Lock Out/ Tag Out procedures. They should have labeled all of the valves they closed and labeled and secured power to the controller for the associated saltwater and lube oil pumps. They also should have posted a notice of their work in the engine control room.

What went right?

- ★ The Third Assistant Engineer paid attention when the morning work assignments were discussed.
- ★ He also did the right thing to verify that a repair was completed instead of just assuming it was completed.
- ★ The incident was properly reported as a near miss.

When you identify a hazard before something goes wrong...

it's a Good Catch.

When you stop an operation before something bad happens...

it's a Good Catch.

When the Lock Out/Tag Out procedures are correctly followed...

that's a Good Catch, too!



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American Steamship Owners Mutual Protection & Indemnity Association, Inc.

American Steamship Owners Marine Insurance Company (Europe), Ltd

Shipowners Claims Bureau, Inc., Manager

New York

tel +1 212 847 4500 fax +1 212 847 4599
email info@american-club.com web www.american-club.com

Houston

tel +1 346 223 9900
email claims@american-club.com

Shipowners Claims Bureau (UK) Ltd.

London

tel +44 20 7709 1390
email claims@scb-uk.com

Shipowners Claims Bureau (Hellas), Inc.

Piraeus

tel +30 210 429 4990 fax +30 210 429 4187
email claims@scb-hellas.com

SCB Management Consulting Services, Ltd.

Hong Kong

tel +852 3905 2150
email hkinfo@scbmcs.com

SCB Management Consulting (China) Co., Ltd.

Shanghai

tel +86 21 3366 5000 fax +86 21 3366 6100
email claims@scbmcs.com