

Republic of the Marshall Islands

MARITIME ADMINISTRATOR

11495 COMMERCE PARK DRIVE, RESTON, VIRGINIA 20191-1506
TELEPHONE: +1-703-620-4880 FAX: +1-703-476-8522
EMAIL: maritime@register-iri.com WEBSITE: www.register-iri.com

MARINE SAFETY ADVISORY No. 16-17

To: Owners/Operators, Masters, Nautical Inspectors, Recognized Organizations

Subject: EXPLOSION AND FIRE ON BOARD A BULK CARRIER LADEN WITH COAL

Date: 16 May 2017

The Republic of the Marshall Islands (RMI) Maritime Administrator (the “Administrator”) is currently conducting a Very Serious Marine Casualty Investigation into a multi-seafarer occupational fatality that recently occurred on board an RMI-flagged vessel. Two (2) seafarers died and two (2) others were severely burned following an explosion and fire in the Boatswain’s Store Room. The purpose of this Advisory is to share some preliminary findings that may be helpful in identifying potential risks and preventing similar casualties.

The RMI-flagged vessel involved was a bulk carrier laden with coal. The Bosun’s Store Room was accessible by way of:

1. two (2) watertight doors located on the upper deck port and starboard; and
2. a deck hatch located forward of the anchor windlasses through the overhead of the Bosun’s Store Room.

Within the Bosun’s Store Room there were access points for the Windlass Control Room (aft) and a Void Space below. Of particular note was that within the Windlass Control Room there was an Access Hatch directly to the No. 1 Cargo Hold.

Based on the Administrator’s preliminary analysis, the likely immediate cause of the explosion and fire was methane gas leaking from the No. 1 Cargo Hold and entering the Windlass Control Room and adjacent spaces through the No. 1 Cargo Hold Forward Access Hatch. The ignition source of the explosion was likely an electric charge when a light or another electrical component was energized or some other ignition source. It is noted that the lighting, wiring, and electrical fittings were not explosion proof.

The Administrator recommends that ship owners, ship management (Designated Persons Ashore), and Masters review the bulker’s cargo arrangements and as necessary employ appropriate risk assessment and risk mitigation measures through their Safety Management Systems such as, but not limited to:

1. gas detection procedures;
2. compliance of gas sampling equipment operability and maintenance;
3. enclosed space entry procedures;

This MSA expires one (1) year after its issuance, unless otherwise noted, extended, superseded, or revoked.

4. ventilation;
5. securing of cargo hold access hatches;
6. designated smoking areas; and
7. hot work permits.

The Administrator's investigation is on-going. The final investigation report will be published on the Administrator's website when completed.