



香港商船資訊

HONG KONG MERCHANT SHIPPING INFORMATION NOTE

Fatally struck by the filter element of a double oil filter

To : Shipowners, Ship Managers, Ship Operators, Masters, Officers and Crew

Summary

At the time of the accident, a deck fitter (*the fitter*) was leading a deck fitter trainee (*the trainee*) to replace the filter element of a double oil filter (*the filter*) for the cargo refrigeration system. While *the fitter* was scrapping the gasket between *the filter* cover and its casing, the filter element inside was suddenly ejected and hit his forehead. Although onshore medical advice was received for the emergency treatment of *the fitter* and *the vessel* changed its course to pick up onshore paramedics (*the paramedics*) to perform first aid a few hours later, *the fitter* was declared dead by *the paramedics* on the same day before arriving ashore. This Note draws the attention of shipowners, ship managers, ship operators, masters, officers, and crew to the lessons learnt from this accident.

The Incident

1. A Hong Kong registered gas carrier (*the vessel*) was en route from Kaohsiung, Taiwan to Houston, United States of America, via the Panama Canal. During the voyage, *the fitter* led *the trainee* to replace the filter element of *the filter* for the cargo refrigeration system in the compressor and motor room as routine maintenance. After opening the top cover of *the filter*, *the fitter* attempted to free the filter element by scrapping the gasket between *the filter* cover and its casing, during which the filter element was suddenly ejected and hit his forehead. *The fitter* then fell backwards onto the walkway grating, losing consciousness with his forehead bleeding. *The trainee* nearby called the bridge immediately to seek assistance. *The fitter* was transferred to *the vessel's* hospital for first aid treatment. Onshore medical advice was sought and treatment was applied to *the fitter*, while *the vessel* diverted her course to pick up *the paramedics*. Unfortunately, *the fitter* was later declared dead by *the paramedics* on board before arriving ashore.

2. The investigation revealed that the main contributory factors of the accident were lack of safety awareness and underestimating the risk of replacing filter element by not strictly following the maker's safety instructions.

Lessons Learnt

3. In order to avoid recurrence of similar accidents in the future, masters, officers, and crew of vessels should:

- (a) conduct maintenance work for refrigeration systems strictly in accordance with the maker's safety instructions; and
- (b) enhance the safe working practices on board, specifically to ensure that when any pressurized equipment and systems require maintenance, they are fully depressurized beforehand.

4. The attention of shipowners, ship managers, ship operators, masters, officers and crew is drawn to the lessons learnt above.

Marine Department
Multi-lateral Policy Division

2 November 2021