



香港商船資訊

HONG KONG MERCHANT SHIPPING INFORMATION NOTE

Cargo liquefaction led to overturning accident

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

Summary

A Hong Kong registered bulk carrier loaded with 55 000 metric tonnes of nickel ore sailed close to a tropical storm with a maximum wind speed of 40 knots while en route. The vessel eventually capsized and sank. As a result, ten crew members went missing. 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 bulk carrier (*the vessel*) loaded with 55 000 metric tonnes of nickel ore departed from Buli, East Halmahera, Indonesia for the port of discharge, Lianyungang, China.
2. While en route, *the vessel* sailed close to the path of a tropical storm with wind of force 8 on the Beaufort Scale with a maximum wind speed of 40 knots. She finally capsized and sank approximately in the position 19°03'N, 124°52'E. Sixteen out of 26 crew members were rescued by two nearby vessels. When the search and rescue operation stood down, ten crew members including the Master were still missing.
3. The investigation into the accident revealed that *the vessel* was loaded with nickel ore with moisture content in excess of the Transportable Moisture Limit, since the crew did not strictly adhere to the requirements stipulated in the International Maritime Solid Bulk Cargoes Code (IMSBC Code) and the company's instructions. As a result, cargo liquefaction and shifting occurred causing *the vessel* heavily listed and capsized eventually when she was near the tropical storm.

4. The investigation also revealed that the crew did not strictly follow the navigation and bridge procedures for adverse weather in voyage planning, and underestimated the effect of adverse weather to the cargo. Furthermore, the Master underestimated the consequence of the liquefaction effect of the cargo and failed to announce abandon ship at early stage.

Lessons Learnt

5. In order to avoid recurrence of similar accidents in future, the masters of ships transporting bulk cargo subject to liquefaction should strictly follow:

- (a) the requirements of the IMSBC Code, especially the requirement of re-certifying the moisture content of the cargo by the shipper if there has been significant rain or snow during the loading of bulk cargo;
- (b) all relevant shipboard procedures for voyage planning avoiding adverse weather; and
- (c) the emergency plan for immediate action, such as abandon ship etc., when ships encounter serious list.

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

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