Collision and Safe Navigation in Restricted Visibility

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

Summary

A Hong Kong registered bulk carrier collided with a Belizean general cargo ship off Weihai, China, in restricted visibility. The collision resulted in the foundering of the general cargo ship and loss of lives. This information note draws the attention of the shipboard officers to the importance of adhering to the provisions of the International Regulations for the Prevention of Collisions at Sea (COLREGS) at all times, particularly in restricted visibility.

The Incident

1. In May 2009, a Hong Kong registered bulk carrier collided with a Belizean general cargo ship in coastal waters off Weihai, China. The collision occurred at about 0724 hours in very poor visibility condition of about 20 metres.

2. Before the collision, the bridge team of the Hong Kong registered ship consisted of only the Chief Officer (the officer of the watch - OOW) and the duty Able Seaman (AB). Two radars and one AIS were installed onboard but only one radar was operational and used. Although the master had been informed of the situation, neither had the ship’s speed been reduced nor the engine room been requested to put the main engines on stand-by, and the ship was proceeding at a full speed of about 11.2 knots.

3. The OOW and the duty AB kept watch on the bridge. They maintained look-out by sight and radar as well as by hearing. However, the OOW was unable to detect any target on the radar, and despite that, he did not use the AIS to help identify the presence of other vessels in the vicinity. Had the OOW used the AIS, he could have detected the Belizean ship, which was equipped with an AIS, was proceeding on a nearly reciprocal course. Under these circumstances and assuming that there were no other vessels or traffic in the vicinity, the OOW maintained the same course and speed in the very poor visibility condition and took no action until the collision took place.
4. The investigation into the accident revealed that:
- the bridge team of the Hong Kong ship failed to maintain a proper look-out by all available means, in particular, the proper use of the AIS;
- both the Hong Kong and Belizean ship failed to proceed at a safe speed; and
- the Belizean ship inappropriately adopted a succession of small alterations of course in taking actions to avoid collision.

Lessons Learnt

5. The lessons to be learnt from this accident are:

a) The purpose of AIS is to help identify vessels, assist in target tracking, simplify information exchange and provide additional information to assist situation awareness. The vessel information in the AIS can also be used to compare and verify the performance of the radar. The OOW should use all available means including the AIS to help identify the presence of other vessels in the vicinity, particularly in restricted visibility, so as to maintain a proper look-out, in addition to, by sight and radar(s) as well as by hearing.

b) The vessel shall at all times proceed at a safe speed (with due consideration to the factors listed in COLREGS Rule 6) adapted to the prevailing circumstances and conditions of restricted visibility, and have her engines on stand-by ready for immediate manoeuvre.

c) In taking actions to avoid collision, a succession of small alterations of course and/or speed should be avoided. Instead, any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar.

d) The OOW should fully understand, properly follow and comply with the COLREGS at all times, in particular, Rule 19, Rule 35 and section I of Part B (Rule 4 to Rule 10) in restricted visibility. The management company should provide necessary guidance or checklist for their bridge watch-keeping officers and to implement measures to ensure their compliance with COLREGS at all times as well as any procedure required in the International Safety Management (ISM) Code.

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

Marine Department
Multi-lateral Policy Division

11 March 2010