## Fatal accident on board Hong Kong Registered Ship *Ocean Amber* at Richards Bay, South Africa on 20 February 2013

## 1. The Incident

- 1.1 At 2107 hours on 20 February 2013, a fatal accident happened on board a Hong Kong registered bulker carrier, *Ocean Amber ("the vessel")*, when she was anchored at the Richards Bay, South Africa at an approximate position of 280 53.78 S, 0320 10.68 E.
- 1.2 Due to strong wind and rough sea in the anchorage area, *the vessel* rolled heavily. *The vessel* dragged her anchor and drifted towards another vessel.
- 1.3 The anchor party was summoned to forecastle to heave up the anchor. At the same time, the vessel was maneuvered using main propulsion power to keep her away from the ship at the stern. During the operation, the anchor chain was found leading astern and not coming up. Suddenly the hydraulic motor of the windlass exploded.
- 1.4 A seaman, who was operating the windlass, was hit by debris on his neck and jaw. He sustained serious injuries and died on board later.
- 1.5 The investigation revealed the main contributory factors causing the accident was overloading of the hydraulic motor of the anchor windlass which was attributed by the followings: -
  - (a) dragging of anchor and anchor chain on the seabed;
  - (b) shock-loading of anchor windlass system when *the vessel* rolled and pitched heavily under strong wind and rough sea situation;
  - (c) frictional force while the anchor chain was touching of the hull;
  - (d) fouling of anchor by an abandoned anchor chain on the seabed; and
  - (e) severe rise of hydraulic pressure inside the hydraulic motor by runaway of the anchor chain that started in a flash before the explosion.

## 2. Lessons learnt

- 2.1 To avoid recurrence of similar accident, It is important that : -
  - (a) overloading of hydraulic motor of anchor windlass should be avoided especially when the equipment is operated in heavy weather condition or the anchor and chain are fouled by underwater object;
  - (b) watchkeeping officers should closely monitor the ship's position and any

deterioration of weather and sea conditions in order to avoid such situation; and

(c) if practicable, a safety guard to cover the hydraulic motor of anchor windlass should be provided.