Grounding of a bulk carrier in heavy weather

Casualty Circular No. 6 of 2003

No. CAS-11-NT(30)/2002 Dated 8th Sept.2003

Sub: Grounding of a bulk carrier in heavy weather

1. Narrative

1.1 A 36000 GT (68000 DWT) bulk carrier was discharging grain in a Japanese port when a typhoon warning was received. The storm was predicted to pass close to the bay adjoining the port. Vessels in port were asked by the port to move out of the port into open waters to ride out the storm.

1.2 In the morning of the day of grounding, vessel proceeded to anchorage in the large bay area outside the port. Master was advised by local pilots that the bay provided a good shelter from the storm. Vessel anchored in about 30 M of water using 6 shackles of chain on her starboard anchor, the nature of seabed being mud. At that time wind force was 4-5 and swell waves about 3 to 4 m. high.

1.3 By 1700 hrs. weather deteriorated as the storm was predicted to pass about 60 miles south of the bay. Anchor station was ordered to be manned and main engine made ready for manoeuvring.

1.4 At 2030 hrs, weather worsened causing the vessel to yaw and ship heavy seas on deck. Attempts were made to relieve the strain on chain by using ahead engines and to heave up the anchor. Vessel grounded at about 2115 hrs. in the vicinity of 3 m charted depth.

1.5 Details of events that followed are not fully confirmed. The vessel was abandoned by all 19 crew members using a lifeboat. Sometime during launching of the boat, due to impacting of L.B. on the shipside, the crew were over thrown on to the ships deck and subsequently died due to drowning. 3 more crew were found on the shore the next morning , 2 declared dead in the hospital and one found dead on the shore. Several persons of those rescued sustained injuries and required prolonged medical and surgical treatment.

2. Lessons to learn

2.1 Vessel was anchored with 6 shackles on starboard anchor; in the face of a typhoon expected to pass at close range. In deteriorating weather conditions and in 30 m depth of wates, the scope of cable, estimated in this case to be about 4 to 5 should have been greater. Greater the scope, greater are the chances of holding position.

2.2 In such cases, it has been noted that those responsible for taking avoiding action, fail to anticipate the dragging of anchor, and take action only when vessel actually starts dragging towards the lee shore. Any movement of vessel outside the swinging circle should be detected and immediate action taken to prevent dragging.

2.3 Mariners are reminded of the emergency preparedness' required to be maintained. In such a situation, it would mean keeping the 2nd anchor stand-by for the use, dropping the 2nd anchor at end of the yaw and veer cable on both anchors to come to an "open hawse ". This undoubtedly is part of normal seamanship technique used in heavy weathers. Certainly, the combination of conditions of worsening weather and the treat of the close by lee shore should call for immediate corrective action rather than totally depend upon local advise.

2.4 Mariners are advised to carefully consider the Merit of abandoning ship when aground in heavy weathers. Because of the threat of damage to survival craft and subsequent danger to lives, only the most severe structural impairment of ship's hull should prompt immediate abandonment. The decision may also have to be based after considerations of type of cargo possibility of shelter for survival craft etc.

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