# Foundering of a log carrier

## Casualty Circular No. 1 of 2005

F.No.11- NT(21)/2003

Dated 5th April 2005

**Sub:** Foundering of a log carrier

#### 1. NARRATION:

- 1.1 A log carrier of GT 4041 anchored at outer roads of a port after a voyage of seven days duration. The vessel was loaded with 4100 MT of logs and was drawing 7.47 mtrs (mean), her maximum tropical timber load line draft. The declared GM on departure from last port was 0.38 mtrs. On arrival, the calculated GM of the vessel was 0.32 mtrs. After about 12 hrs at anchorage the vessel was observed to be dragging her anchor. At this time, wind force had increased to 6 Beaufort scale and swells about 4-5 mtrs. The anchor was weighed and the vessel was re-anchored with seven shackles, on the port anchor. At this time, abnormal sound of movement of deck cargo, was noticed. It was decided to have the anchor again. However when the anchor was three shackles on deck, it was observed that vessel was listing to about 15deg to starboard. The heaving of anchor was stopped. Soon thereafter, the cargo lashing at no.2 starboard side parted the deck cargo alongwith bulwork got washed out over board. With this development, the vessel became up-right momentarily and then she was listed 10-15 deg to port. Port list continued to increase to about 20 degs, and the deck cargo lashings, at No.1 hatch top, also parted and part of deck cargo along- with side bulwork got washed out overboard.
- 1.2 It was observed that the bulwork on both sides, mainly abreast No. 2 Stbd side and abreast no.1 port side, was completely washed out alongwith the air-vents and ballast pipefittings on the deck and there was ingress of water from these openings to the hold.
- 1.3 After few minutes, Chief Engineer reported that there is ingress of water in the engine room from the top and the water is falling on top of the main generator panel. Suddenly there was a black- out in the vessel, apparently due to short circuit.
- 1.4 Sensing danger of ship foundering, Master abandoned ship.

### 2. PROBABLE CAUSES:

- 2.1 The vessel was carrying logs even though she was not a proper log carrier. The vessel was loaded up to her tropical timber loadline marks and infact had almost half of the total cargo on her main deck.
- 2.2 There is a clear possibility that the stability of the vessel had seriously reduced due to absorption of lot of water by way of deck cargo of logs. This would have caused the sudden listing of the vessel to starboard side. The shifting of deck cargo due to snapping of deck lashings further aggravated the situation. Eventually, the vessel sustained severe damage to deck fittings due to movement of cargo over board. This resulted in ingress of water in the engine room and cargo hold through air vents and ballast pipe fittings. Engine room entrance door was left open which in all probability allowed the ingress of water into the main generator panel. This resulted in sudden black out due to short-circuiting.

#### 3. LESSON LEARNT:

3.1 It is important that while calculating the GM, other aspects of stability such as angle of vanishing stability

and the GZ curve, are also established while taking into account the possibility of absorption of water by deck cargo through water spray.

4. This issues with the approval of Nautical Adviser to the Govt. of India.

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