Casualty Circular No. 8 of 2004

F.No.11-NT(44)/2004

Dated 29th November 2004

Sub.:-Power failure on board of Ocean going Tug

- 1. Details of the ship and the voyage:
- 1.1 An Ocean Tug of GT 366 was on an occasional voyage to Vadinar from Mumbai during the month of June. The vessel normally used to trade within harbour waters.
- 1.2 The vessel is class XII within the meaning of MS (LSA) Rules. The vessel had all valid certificates and the annual class survey was recently conducted.

2. NARRATION:

- 2.1 While on voyage from Mumbai to Vadinar, the vessel encountered rough seas and high swell in the vicinity of Saurashtra Coast. Within 24 hrs of sailing from Mumbai, during the stated adverse weather conditions, the vessel encountered complete power failure. Several attempts were made to restart the engine but in vain. Subsequent to the power failure, the vessel started drifting towards shore. The Master decided to anchor in depths of approximately 45mtrs. The vessel continued to roll whilst riding to high swell on stbd anchor and could not restore power supply.
- 2.2 Eventually, one anchor with 9 shackles had to be sacrificed since the windless could not be used due to no power and the vessel had to be towed into the nearby harbour.
- 2.3 The vessel was inspected in harbour and the investigations revealed contamination of fuel with seawater in service tank. Approximately 2.5 MT of fuel was drained out in the settled conditions along side the berth. Thereafter the vessel resumed her voyage to Vadinar.

3. PROBABLE CAUSES:

- 3.1 The air vent hat of service tank on port side was found to have opened up. Signs of corrosion and ill fitting of float disk on seat ring, were also noticed. This would have resulted the float disk not fitting properly on seat ring in the case of air vent hat of service tank. During the high swell and beam seas, there would have been green water on deck. The adverse weather conditions would further aggravate this situation hence the presence of water column remained for longer duration. The presence of water head against air vent allowed ingress of water into diesel oil service tank and situation probably worsened due to churning of oil / water mixture in the tank.
- 3.2 Owing to sea water contamination, the main engine and auxiliaries were rendered in-operable.

4. LESSONS LEARNT

- 4.1 Owners / Managers/ Operators and Masters are advised that when occasional voyages, specially during the monsoon season, are to be undertaken by tugs/ OSVs which are primarily employed in sheltered waters/ harbour limits for prolonged durations, a thorough inspection / test of air vent fittings must be carried out.
- 4.2 Mariners are also reminded that navigation officers tend to underestimate state of seas and swell when encountered from beam or abaft the beam.
- 4.3 Conditions during night navigation may further lead to making wrong assessment of water accumulation on deck against effective freeing arrangements.
- 4.4 Shipping companies/Classification societies are modifying suction arrangements from the fuel tanks or provide drainage in order to obviate effect of water which has found entry into the tank.
- 4.5 The Masters and the Shipping Companies are reminded again that under section 350 of M.S Act, such incidences must be immediately reported.
- 5. This issues with the approval of the Nautical Adviser to the Govt. of India.

Sd/-

(Capt.H.Khatri)

Nautical Surveyor -cum- Dy. Director General of Shipping [Tech]