Maritec Tanker Management Pvt Ltd
Lotus Corporate Park, G wing – 501, 5th Floor,
Graham Firth Compound,
Goregaon (E) Mumbai – 400063.
Email: ghse@maritectankers.com

SAFETY CIRCULAR ***05th Feb 2019***

TO: Fleet

SUBJECT: Loss of Anchor

Dear Master's,

This circular is being issued in view of several anchor related incidents which have occurred in the fleet during anchoring and as well whilst heaving up anchor.

There have been a total four major anchor related incidents and all of them have resulted in complete loss of Anchor.

The result of our investigation into the cause of each incident can be summarized to below:

- Inappropriate ship handling ,thereby putting undue stress on cable while anchoring or heaving anchor.
- Improper anchor handling technique including uncontrolled release of anchor.
- Inaccurate assessment of weather condition.
- Lack of understanding of the design limitation of anchoring equipment, including settings required for brakes, especially hydraulic brakes.
- Lack of anchoring plan and inadequate communication between bridge and anchoring team.

Each of these incidents have caused serious consequences such as

- Placing at risk the safety of the crew and vessel
- High expenditure.
- Loss of hire.
- Severe loss of company reputation.

The reasons for loss of anchors and chains as explained by P&I clubs are many and include lack of seamanship and inadequate maintenance, but other causes such as instances of the chain and anchor breaking, raise a question mark as to the quality of such parts as provided by manufacturers.

As per P&I club, about one in 200 ships a year has an anchor related claim. Most loose anchors at designated anchorages where the authorities require the lost items to be removed. Serious and costly cases occur when a vessel starts dragging its anchor in bad weather leading to collision with another vessel, grounding and loss of the ship or damage to cables and pipelines on the seabed.

The formula is based on an assumption that the current may reach a speed of 2.5m/s and the wind of 25m/s. These represent quite high forces but it is also assumed that the vessel can use a scope that is the ratio between length of chain paid out and water depth of between 6 and 10.

Class rules also make it clear that the anchoring equipment is only for the temporary mooring of a vessel in a harbour or a sheltered area. They emphasise that it is not designed to hold a ship off a fully exposed coast in bad weather nor to stop a vessel from drifting. Anchoring equipment designed in accordance with the class rules will only hold the vessel in good holding ground and holding power is significantly reduced in poor holding ground.

Given all of the above P&I club recommends that if a vessel is anchored in an area exposed to weather then it should have an established policy on when to leave. In making a decision about whether to stay or to leave, master’s should also be aware of the limitations of his anchoring equipment. As per P&I club some master’s may not fully understand these limitations, even though they are laid down by the class societies.

With the above mentioned limitations in mind, it can be seen from cases of ships dragging anchors in bad weather that master’s have at times placed too much trust in their anchoring equipment. In his view with modern weather forecasts as accurate and reliable as they are, master’s should choose to weigh anchor more often than they do and get out to sea in good time if heavy weather is forecast.

To reduce the risk of accidents, vessels and equipment must be maintained to a high standards. All personnel should be adequately trained with the correct personal protective equipment. Correct procedures should be in place and the required work permits issued with all mooring operations supervised by a competent person. Training in mooring operations should be incorporated into vessels regular schedules and include all personnel.

The ship inspectors reports to the UK Club board included advice on improvement. It was often difficult to grease the equipment on winches correctly noting that all greasing points must be free, working correctly and not painted over. To ensure equipment has been properly greased, each point or number should be highlighted.

For your guidance the following list of actions are to be taken by the vessel and any further repetition of such anchor related incidents must be avoided:

- Compliance with Company SMS Chap 4.32

- Proper planning for Anchoring is to be carried out and discussed with the Bridge team.

- If it is decided to let go the anchor by gravity, recommended procedure is to walk back the anchor up to half a shackle off the bottom, even in shallow water depth.

- Each anchoring operation is to be supervised by a responsible officer. Prior to the anchoring operation the responsible officer is to be fully briefed by the Master of the following :

- ✓ The approximate anchoring position
- ✓ Environmental conditions e.g. wind, current, tide etc.
- ✓ Method of approach and method of anchoring, which anchor to be used
- ✓ Depth of water
- ✓ Final length of cable
- ✓ Use of proper PPE

- The weather condition must be monitored properly during vessel's stay at anchor or prior anchoring. For safety reasons, vessel should avoid anchoring or staying at anchor whenever wind speed exceeds 6 Bf (22 - 27 Knots / 11.3 - 13.9 m/sec) and / or current exceeds 3 Knots.

- Master and other officers involved in anchoring operation must be aware of the limitation posed by on board anchoring equipment. Under no circumstance the windlass to be allowed to operate at a rate higher than maker's recommendation. Maker's guideline must be consulted.

- While using windlass motor for lowering or heaving, the vessel should be Maneuvered in such way that external forces do not cause the motor to turn in wrong direction as this will cause immediate permanent damage to the motor.

- When anchoring in water over 80 meters in depth, which is considered to be deep water anchoring, an enhanced risk assessment must be carried out, taking into consideration the makers' design specifications for the anchor handling system.

- Brake lining thickness and other brake related settings should be verified and these should be in compliance with Maker's manual. The brake drum surface should be free of rust. Lining thickness to be measured at a minimum of 6 points along the drum.

- The holding capability of the anchor brake can be checked by clutching in winch and trying to pay out against the brake for a short time.

- As far as possible, Port and Starboard anchors to be used alternately for anchoring operations

- Carryout a proper visual examination of the exposed length of the anchor chain length; the swivel; forerunner and where possible the D-Shackle for any abnormal wear or damage, before both lowering and heaving up the anchor.

OCIMF Anchoring System and Procedure book must be present on board. Important information from this book should be discussed on board with persons involved in anchoring operation.

Please find below P&I Loss Prevention Bulletin Preventing an Anchor from Dragging for your reference.

This circular is to be part of Master's handing over.

QHSE
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