MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

FLYER TO THE SHIPPING INDUSTRY

Grounding of the product tanker *ASTRAL*, after dragging anchor off the Isle of Wight, England, on 10 March 2008

Astral

Narrative

On 10 March 2008, the Swedish registered tanker *Astral* dragged her anchor in Storm Force 10 winds and grounded on the Princessa Shoal, east of the Isle of Wight. The vessel sustained indentations to her hull and extensive damage to her rudder and steering gear; there was no pollution and the vessel remained watertight.

Astral had anchored at the Nab Anchorage, 0.9 mile south of the Princessa Shoal, on 7 March 2008 to await a berth at Fawley Marine Terminal to discharge a cargo of diesel oil. On 9 March increasingly severe weather forecasts were received predicting gale force winds from the south. Later that evening the duty Vessel Traffic Services officer advised all the vessels at anchor of the weather forecast and recommended that their engines should be available if required.

During the early morning of 10 March, the weather deteriorated as the wind increased to southerly Force 10. At 0650 *Astral* started to drag anchor to the north. The officer of the watch alerted the master at 0710 and requested the main engine, which was on 10 minutes notice, be started. The engine was available for use at 0721 and the master applied power ahead. However, the vessel continued to drag northwards and grounded on the Princessa Shoal at 0725.

The MAIB database shows that since 1992 there have been 21 accidents in United Kingdom territorial waters involving merchant vessels of over 500 gross tons dragging their anchor and subsequently grounding. Weather conditions contributed to 19 of these accidents, the anchoring position was relevant to 16, and in 7 cases the engines were not ready when needed.

Safety Lessons

The MAIB continues to see examples of vessels grounding, having dragged their anchors in heavy weather because the masters, in general, have:

- Not planned the anchorage sufficiently.
- Not ensured that the anchor position is obtained on anchoring, and the bridge and safety swinging circles have been plotted.
- Not instigated an effective anchor watch which ensures the vessel's position is frequently and effectively checked.
- Not ensured main engine readiness is appropriate to the circumstances.
- Following warnings and forecasts of adverse weather, not reviewed their precautions and taken further steps as necessary.
- Remained at anchor off lee shores or in the vicinity of hazards in conditions exceeding, or forecast to exceed, the limitations of their anchor equipment and their ability to get underway safely.

To try and prevent such accidents occurring in the future, **Owners and operators** are strongly advised to review their SMS procedures for anchoring to ensure they address the above safety issues and, specifically:

1. That masters have clear guidance on the capability of their vessel's anchoring system, including the:
   - Holding power of the anchor in various bottom types.
   - Strength of the anchor system components, including that of the windlass.
   - Effect of windage and yaw in various loading conditions.
2. The hazards to personnel working on the foc'stle or cable deck in adverse weather.
3. That although an anchorage might have been allocated by a harbour or VTS authority, the safety of the vessel and decision to sail remains the master's responsibility.
4. And, most importantly, that masters should not hesitate to get underway or to seek a more sheltered anchorage should the forecast or actual weather and sea conditions warrant it.

Further details on the accident and the subsequent investigation can be found in the MAIB's investigation report, which is posted on its website:

www.maib.gov.uk

Alternatively, a copy of the report will be sent on request, free of charge.

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