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Posted on 09.10.2023 by Adam Parnell

Category: [Superyachts](#)

Report Title Grounding and dismissal

Initial Report

Our reporter, a watchkeeper on a yacht, informed CHIRP that their vessel ran aground while navigating in an area of shallow water at over 9 knots. It was approximately 3 hours after sunrise when the grounding occurred.

Screenshots of ECDIS (Electronic Chart Display and Information System) show that the planned track – shown as a dotted line – went over the top of a 1.9m shoal depth even though the vessel's draft was 2.3m. The vessel's course – shown as a solid line – was starboard of the planned track but still grounded because of a combination of shallow water, speed and squat. This resulted in the vessel dry-docking for several weeks for significant repairs.

The reporter explained that the master created all passage plans, but none were recorded in the vessel's navigation management system and that watchkeepers frequently had to deviate from the planned routes to avoid charted hazards. Our reporter was concerned that the master's proficiency in planning navigationally safe routes was lacking and that they sometimes struggled to interpret RADAR and ECDIS information. The reporter's employment was terminated when they raised these concerns through the company's safety reporting system.

Subsequent correspondence with the reporter revealed that to satisfy the owner or guests' requests to visit certain locations, the vessel often navigated to areas 'by eye,' i.e., visually detecting shallow areas because even large-scale charts lacked sufficient sounding data.

Comment

This report raises several issues. Firstly, although certificated, the master's navigational skills appear inadequate. It is vital that company managers validate the skill of masters and other senior officers and do not rely solely on the possession of a certificate as a measurement of competency. Secondly, route plans should always be cross-checked by another watchkeeper because even the best navigators can make mistakes.

The third issue is that guests' wishes to visit a particular destination need to be balanced against the navigational risks of getting there. In Superyacht FEEDBACK edition 01, we strongly encouraged masters to get agreement from the owner or guests at the outset that they will respect the master's

professional judgement and the need to say 'no' when a request compromises the vessel's safety. Navigating 'by eye' is not sound practice and is unlikely to be accepted as such by an accident investigation board!

CHIRP discussed with the relevant hydrographic office (HO) the issues experienced concerning navigating in the area related to the report. Crucially, a compliant ECDIS system must be used, and the charts must be updated to the latest edition and corrections. It was noted that an official ECDIS system with ENC was not used for the navigation of the vessel.

The HO placed great weight on using the sailing directions for the area as a pre-requisite before planning the passage. They contain valuable navigational information, including the nature of the seabed and the likelihood of shifting sandbanks, which in this case were prone to shifting. The vessel's speed must be set according to the under-keel clearance to avoid significant squat. Most fine-lined superyachts will trim by the stern when experiencing squat effect, and damage to the propellers and rudder can be expected if the vessel touches the seabed.

Source data (Zones of confidence)

The source data for the charts used should be considered part of the navigation passage plan (risk assessment). Again, the area under consideration in the report shows sparse-sounding data, with some of the best data shown by occasional lines of miscellaneous soundings. Risk for groundings must be considered high given the lack of data, and routes that have been proven safe in the past should be considered in the passage planning.

Many hydrographic offices (HO) operate a system for navigators and other watchkeepers to report areas where they believe the chart data is insufficient to support safe navigation. Often, they have limited resources and necessarily prioritise known areas of high traffic (e.g., commercial routes), but they are also keen to understand the needs of other users. When CHIRP contacted the appropriate HO about this report, they immediately added it to their list of areas to be reviewed, and readers are encouraged to do likewise.

Most hydrographic offices have good reporting apps or reporting forms to allow data to be sent so that paper and electronic charts can be updated. CHIRP encourages all superyacht owners and managers to provide the relevant hydrographic offices with the latest sounding data by using the various reporting apps that are available. This will provide reliable data for other users to consider in their passage plans.

The final issue is that of the reporter being sacked for raising safety concerns. This demonstrates a very poor safety culture within the company and does absolutely nothing to reduce safety risks. CHIRP encourages Flag States to introduce employment protections for those who are sacked for raising valid concerns.

Key Issues

Capability – Those responsible for appointing senior officers (e.g., masters or first mates) should satisfy themselves that the appointees can demonstrate practice competence and evidence that they have maintained their skills since qualification, which in some cases might have taken place years or even decades beforehand. This mitigates against skill-fade and any bad habits picked up along the way.

Alerting

(1) Navigation plans and other critical work should always be cross-checked. This helps with the early detection of errors, prevents 'group-think', and can be a powerful learning/teaching opportunity for everyone involved. No one is too senior to learn from others, and rank does not confer infallibility!

(2) Being unafraid to challenge constructively is vital to safety. Sacking someone for raising a safety concern sends a clear signal that your company is not interested in safety.

(3) Navigating in areas which need to be adequately sounded requires those that can record accurate data to do so. Sounding information, passed on to the relevant hydrographic office, is very valuable and helpful for all mariners.

Local Practices – Navigating 'by eye' and similar practices may be accepted unofficial practice in some vessels, but it doesn't mean that it's safe – and "But it's what others do" is not a valid defence. If the correct process (e.g., using charted data) isn't adequate, report it to the relevant authority or to CHIRP.

Culture – Dismissing a person from the company's employment for reporting an incident does not demonstrate a just culture. It should be the aim of every organisation to strive for continual improvement and sharing the learning outcomes from any incident can only help in improving safety. Can you share with CHIRP similar incidents that you have experienced?

lack_of_knowledgeKnowledge

lack_of_assertivenessAssertiveness

normalisation_of_deviationDeviation



