

Grounding in unsurveyed waters

The vessel had been loading in a European port and the navigation officer fixed the passage plan for next port of call which was in Mexico. Prior to departure the Master received a weather routing voyage plan, which suggested a route over the Silver Bank and via the Windward Pass to Mexico.

The navigation officer planned the route in the ECDIS and also on the paper chart and found out that the minimum depth the vessel would encounter along the route was in the Silver Bank with a depth of 16 meters according to the British Admiralty chart 3908.

The vessel's draft was 7.5 meters, so a 16-meter water depth was considered acceptable as per the company's ISM under keel clearance procedure. The procedure stated that there has to be a minimum of 20% under keel clearance of the maximum draught. On the British Admiralty chart the Silver Bank is marked "Inadequately Surveyed" in three places. Where the navigation officer had planned the route there was no specific mention of unsurveyed waters. The navigation officer didn't use any Admiralty Sailing Directions for reference when preparing the passage plan.

After checking the entire route on the ECDIS and on the paper charts, the Master decided to follow the suggested weather routing route.

The passage was uneventful over the Atlantic from Europe and the vessel maintained a speed of 13.5 knots.



Shortly after entering the Silver Bank the vessel's bow suddenly swung to starboard, which caused a list for about 3 to 5 seconds, with excessive vibration. The OOW changed to hand steering. A couple of minutes later the vessel's bow swung to starboard, but this time with less vibration. The vessel's bow swung a third time to starboard and listed for about 3 seconds, with vibrations.

The vessel continued the voyage to the next port of call after carrying out a damage assessment. It was found that the forepeak tank and a water ballast tank had water ingress. All the fuel tanks were intact.

The vessel arrived in Mexico and discharged the cargo and carried out an in-water survey. It was found that the tanks had been punctured as the vessel had touched bottom. The vessel had to be repaired in dry-dock. ■

When discussing this case please consider that the actions taken at the time made sense for all involved. Do not only judge, but also ask why you think these actions were taken and could this happen on your vessel?

Discussion

Go to the "File" menu and select "Save as..." to save the pdf-file on your computer.

You can place the marker below each question to write the answer directly into the file.



1. What were the immediate causes of this accident?

2. Is there a risk that this kind of accident could happen on our vessel?

3. How could this accident have been prevented?

4. Do we use all navigational equipment and reference publications when completing a passage plan?

5. Do we have the essential Admiralty publications onboard or the electronic version?

6. When the passage plan is completed, is it a requirement to do a two person check?

7. Do we do a two person check for critical operations?

8. What sections of our SMS would have been breached if any?

9. Does our SMS address these risks?

10. How could we improve our SMS to address these issues?

11. What do you think was the root cause of this accident?

12. Is there any kind of training that we should do that addresses these issues?

Issues to be considered after the discussion

In the Admiralty Sailing Directions, Volume 1, fifth Edition 2011, which was provided on board, the West Indies Pilot chapter states under paragraph 3.8 that the Silver Bank has not been closely examined and it is not advisable to attempt to cross it. When doing the passage plan the sailing directions had not been reviewed before or after making the voyage plan.

Ensure all reference literature is used when making a passage plan. Another important aspect is to do a two-person check on critical operations as a passage plan. It is more likely that another person will find a mistake rather than just doing a double check of what you have done.