Poor stability caused man overboard

It was late autumn and the vessel had loaded timber logs. A large portion of the logs was loaded on deck. The Chief Officer had overseen the loading and the crew had secured the cargo. This was a normal operation that the crew had done many times before. The vessel was fully loaded and didn't have much ballast onboard.

During the voyage to the destination port the crew checked and secured the cargo as required. The weather during the voyage was favourable at about 4 on the Beaufort scale, so there were no strong winds or difficult sea. The vessel didn't roll during the voyage.

When the vessel got closer to land, the Chief Officer pumped out even more ballast so the vessel had a lesser draft. The Chief Officer thought the vessel was just around the permissible draught at departure so he wanted to have a lesser draught when berthing.

As the vessel was approaching the port, one of the ABs went forward to prepare for arrival. At the same time as the vessel altered course, a heavy gust of wind hit the side of it and caused the vessel to list almost 20° which caused the deck cargo to shift. Because the cargo shifted the vessel started to list almost 40°. This had a spiralling effect and the lashings started to break and logs fell into the sea.

At the same time the AB on the bow fell into the water because of the excessive list. He wasn't wearing a life jacket. The AB could be seen holding on to some logs. The Master on the bridge lost sight of him for a while during the tumultuous event and when he looked for the AB again he couldn't see him. The Chief Officer, who was also on the bridge, had released the MOB light from the bridge wing and also thrown another lifebuoy towards the AB.

The master called the VTS on the radio and informed them that they had a man overboard and that they had lost sight of him and needed assistance.

Because of all the timber that had fallen overboard, the vessel started to right itself. The vessel still had a list of about 10°.

The master also ordered the anchor to be dropped and launched the MOB boat to search for the AB.

The AB was never found. ■

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.

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?

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. Is it required to wear a life jacket when working on deck?

5. How do we ensure that we maintain proper stability during the entire voyage?

6. Do we recalculate stability during a ballast operation?

7. How often do we inspect the cargo-securing equipment?

8. Do we have certificates for the required cargo-securing equipment?

9. If we have straps how often are they inspected?

10. If straps are found cut are they immediately replaced?

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

12. Does our SMS address these risks?

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

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

15. Is there any kind of training that we could do that addresses these issues?

Issues to be considered

- In the following investigation it was found that some of the cargo lashings were not strong enough. Some of the straps also had cuts and abrasions which means they were even less strong.
- The vessel was also found to be overloaded.
- The vessel did ballast as per the stability booklet in the loading port, but deballasted too much before arrival. This, in combination with the deck cargo, caused the intact stability criteria to be insufficient. The vessel had almost no stability when approaching the port.
- When the vessel made the last alteration and was hit by the gust of wind, which was only at 6 on the Beaufort scale it caused the vessel to list heavily because of the poor stability.