

Surveyor's Notebook

PASSAGE PLANNING

The International Group of P&I Clubs keeps statistics on the P&I claims attributable to pilot error. There were 260 claims of over \$100,000 between 1999 and 2004:

- 40 incidents a year related to fixed and floating objects
- 15 per year related to collisions
- 2 per year concerned major groundings
- 2 per year resulted in major pollution claims

There are no complete statistics available that indicate which country or port contributed the most number of pilot incidents per ship movement. However, there is certainly anecdotal evidence to suggest that, in some jurisdictions, there are ineffective pilotage authorities. Certain high-profile incidents demonstrate that there are also some supposedly well-regulated authorities that fail in their obligations to provide a competent pilot. The master should be able to expect a competent pilot properly licensed by the appropriate authority.

However, the master's responsibilities continue despite the presence of the pilot on board and he should always be aware of the passage plan being navigated. He should be confident enough in his ability to take over the pilotage duty himself should he be concerned about the performance of the pilot. The company's Safety Management System (SMS) must give masters the proper support and guidance in this respect.

In many cases, where grounding has occurred or where there has been a pilot error, for example, in the *Cosco Busan* incident, the issue of passage planning was raised. Passage planning is no longer a question of having a list of waypoints, courses and distances. It is far more in-depth and should be considered an important task for the officer in charge of navigation; he should be given the time and resources to carry out a proper passage plan and have this drawn up with the input and authorisation of the master. After the passage plan is agreed, it should be available to the other navigating officers.

There is much guidance in the public domain on how to carry out a passage plan. A good start is the International Chamber of Shipping (ICS) – Bridge Procedures Guide Chapter 2 and the Nautical Institute – Bridge Team Management. Also available for specific areas are the comprehensive ‘Passage Planning Guides’, for example, the ‘Malacca Straits’.

It is vital that a comprehensive and usable passage plan is carried out for the planned voyage. Some passage plans are too brief or so full of information that they are overly complex.

The commonly acknowledged principle of passage planning is broken down into four parts:

- appraisal
- planning
- execution
- monitoring

The navigating officer will at least require the following resources:

- up-to-date charts; chart numbers, charted dangers, subsea pipelines, rigs, oil fields, abort points, parallel index information, wheel-over information, suitable anchorages
- navigational warnings
- current and tidal information
- pilot books and sailing directions
- traffic schemes – high-density traffic and fishing vessel areas
- communication and reporting information
- weather information
- hazard / warning or precautionary areas noted on the charts
- pilotage information, boarding areas
- whether additional bridge resources / watchkeepers are required
- under keel clearance and squat information
- speed requirements

Should the voyage route be changed, the passage plan should be amended accordingly. When a voyage is interrupted, for example, when proceeding to an unplanned anchorage or after lifting the anchor, the passage plan must be

adjusted.

The case studies show that often an incident occurred because the passage plan did not take into account that part of the voyage under pilotage. Passage plans must be berth to berth. The ship's passage under pilotage must be closely monitored. That cannot be done unless there is a plan to refer to.

An important aspect of ensuring that a proper passage plan is used is to have the outlines of the plan's requirements stipulated in the company SMS or bridge procedures. The SMS should lay down the format and the requirements of the passage plan as part of company policy and they should be audited as part of the in-house navigational audits or ISM audits.

There have been a large number of highly publicised collisions and groundings in recent years that have been thoroughly investigated. Some of these studies and the club's own claims give rise to conclusions that underpin the thrust of this article: that is, these claims are caused by human error and all are preventable.

(Article extracted from The Standard Club's publication – Standard Safety)