

PILOTAGE ISSUES

NAVIGATING WITH A PILOT

There should be a sense of increased confidence when the pilot comes on board the ship. Not only does the pilot bring local expertise that reduces the risk of navigating in constrained waterways, he also should add to the bridge team. However, pilots are human and they also make mistakes; they become tired, fall ill and sometimes they are just not good pilots. Whatever their human faults, the master and the watchkeeper must always monitor the pilot's actions and ensure that they are properly integrated into the bridge team.

Language difficulties can also add to problems associated with pilots and these should be taken into account.

When under pilotage, the ship is exposed to higher risks and a pilot's local knowledge should reduce these risks to an acceptable level. The pilot must be integrated into the bridge team and should not be considered as a replacement for a bridge team member. Numerous instances provide evidence that many incidents that occur during pilotage can be attributed to ineffective BRM, and it is often the case that the master and watchkeepers cease to monitor the navigation and position of the ship after the pilot has boarded.

Careful management of the pilot is vital, and when the officers do not monitor the ship's progress or the pilots' actions, this often leads to a major incident. The attitude that the master and the officers can relax when there is a pilot on board must change; in fact, the bridge team should be in a higher state of alertness.

CASE STUDY

A bulk carrier arrived at the pilot station without charts for the pilotage. Due to the poor weather, the pilot boarded inside the normal boarding area and brought with him the appropriate navigational charts; however, no passage plan was plotted on the new charts. Once on board, the pilot tried to plug in his laptop computer to the AIS/GPS system, but there was a fault with the connection and the master called the electrician to assist. The master and the electrician were engaged in the chart room trying to fix the defective connection; the pilot was also in the chartroom on the mobile phone to see if the weather conditions would allow the ship to berth safely and the chief officer was in the wheelhouse with the helmsman. The ship was proceeding in a narrow channel at 12 knots with no one monitoring the ship's position.

When the ship was two cables away from an island lit by a lighthouse, the chief officer decided to alert the pilot. The pilot, now in the wheelhouse, put the ship hard to starboard and full astern, which had little effect on the laden ship and it ran firmly aground, ripping out several double bottoms.

The port state's conclusions from its investigation report can be summarised by:

- insufficient voyage preparation
- deficient bridge team
- no control on the navigation
- no effective master/pilot exchange
- ship's crew did not participate in the navigation.

The observation was also made that all the navigators on the bridge at the time of the grounding had undergone Bridge Team Management training, and it was also a fact that both the master and chief officer were new to the company and to the ship.

Many pilotage authorities are extremely competent and have rigorous controls and appraisals of their pilot's competence and fitness. However, it would be fair to say that there are some that do not. Even the most highly regulated pilotage authorities can fail in providing a competent service. The *Cosco Busan* incident in 2007 highlighted many deficiencies in a supposedly highly regulated environment. IMO resolution A.960 gives recommendations on training and certification and operational procedures for maritime pilots other than deep-sea pilots, but this protocol will be implemented to different levels by the pilotage authorities.

LESSONS LEARNT

- master/pilot briefings are vital, whether for short or for long pilotages. Identify critical areas, mark master and pilot call points on charts and brief the watchkeeper on critical areas and required actions during the passages
- position monitoring under pilotage is vital
- challenging the pilot appropriately should be accepted practice.

NAVIGATING IN PILOTAGE WATERS – WITHOUT A PILOT

A number of high-cost incidents have occurred when the ship was leaving or arriving at a port and the pilot requested that he wanted to board the ship inbound of the pilot boarding station or disembark early before the ship reached the designated pilot station.

Usually pilotage is compulsory and so when the pilot requests to board or leave at a location other than the designated boarding station, it is rarely, if ever, for the benefit of the ship. Sometimes, for example, because of marginal weather conditions, the master's judgement may be required to assess if he should drop the pilot early or when inbound, go through the breakwater before picking up the pilot, but his decision should always be taken with the ship's safety in mind.

Significant claims have occurred because the pilot wanted to get off early or board later, not because of marginal weather conditions but for other reasons, for example the port is short of pilots. These

requests often happen in good weather and so masters and bridge teams are more relaxed and less alert.

Owners should give their masters guidance in these situations and unless it is for weather reasons (and also safe to do so) letting the pilot leave early or picking him up at an inshore location should be carefully considered. The master should consider the risks, including his own familiarity with the port and its approaches, have a passage plan and a full bridge team available. These judgements should not be just driven by commercial pressure.

CASE STUDY

The bulk carrier with an experienced master was leaving a port to which he had been to many times before. The ship left the berth behind schedule during the late afternoon and in good weather, when the pilot told the master that he wanted to disembark before the designated pilot station. This request turned out later to be for the pilot's personal reasons.

The pilot did not leave the master with information of what courses to take, what dangers to avoid and/or any information about incoming or outgoing traffic. The watchkeeper had accompanied the pilot to the main deck to disembark and, during this period, the master was alone on the bridge. No positions were maintained on the chart and the master was navigating by 'eye'. For reasons that can only be explained as human error, the master steered the ship the wrong side of a navigational mark and it ran onto submerged rocks, which ripped out the double bottom tanks. The wreck removal and oil pollution costs were significant.

LESSONS LEARNT

- masters should always be very aware of the significant risks that can arise when pilots leave or join the ship before/after the pilot station. Safety management systems should give the master guidance on what should be done in these circumstances. For a number of reasons, the master may not be aware of the full circumstances surrounding the navigation of the ship within the port area. These could include, VTS/pilot relationships, language, local conditions including currents and tidal conditions, fairway depths and draft restrictions, incoming and outgoing traffic, local passing protocols, restrictions, problems with ships in the vicinity, and so on
- masters must ensure a proper handover briefing is given, including full information required for the remainder of the passage if the pilot insists on leaving before he should
- masters should always proceed at a safe speed with or without a pilot, especially within port limits. If the master is left without a pilot, he should always proceed with caution and with a full bridge team
- masters should not relax when navigating (or anchoring) within port areas covered by VTS, as experience shows many ports have VTS arrangements that are not always competent.

OTHER NAVIGATIONAL CONCERNS

NAVIGATING IN SOUTH AMERICAN/AFRICAN RIVERS

The club has experienced a number of significant claims arising from ships navigating in major South American and African rivers. The Marshall Islands administration issued a notice in November 2011 concerning navigational incidents on South American rivers.

"Within the past six months the Maritime Administrator has received six reports of Republic of the Marshall Islands flagged ships grounding during transits of rivers and ports in South America. the overall impacts have been significant.

The underlying factors/root causes of the reported groundings have been:

- *Insufficient coordination between local pilot and harbour tugs*
- *Unpredictable shoaling conditions and strong currents; and,*
- *Inadequate coordination amongst the pilot augmented bridge teams."*

The club's experience mirrors this but with significant grounding and pollution claims. Navigating in these rivers is not easy and owners should provide as much support to their masters as possible before the ship arrives so that the river passage can be planned. The charted information is not always up to date or accurate. Rivers such as the Orinoco River are major rivers that may not be hydrographically mapped out regularly, water depths are uncertain, the course of the river is often changing with shifting sandbanks, navigational marks such as buoys and lights may move because of the currents and moving river beds, and navigational lights are often not operational. These therefore produce significant navigational challenges.

The pilots may be knowledgeable, but their English is often limited and so communication may be hampered. Currents can be considerable and increased by rains, and some of these pilotages can often be over 24 hours in duration and the pilots themselves can become very fatigued. Full bridge teams are required and passages should be carefully planned and monitored.

ANCHORING IN CONGESTED ANCHORAGES

Anchoring in congested anchorages is a frequent cause of major incidents. There are often collisions with other ships or fouling of subsea cables and pipelines. Congested anchorages are extremely hazardous places to navigate in, particularly with a large ship, and masters should give careful consideration to the risks when asked to anchor in these areas. As with incidents occurring when berthing or manoeuvring in a port area, too high a speed is often a significant contributing cause.

A number of collisions also have occurred, for example in the Singapore or Chittagong anchorage areas, when ships have dragged their anchors or when manoeuvring to and from an anchorage position. The fact is that the ships are often too close to each other so as not to provide a reasonable margin of error. Even in apparently benign waters, currents and strong winds can have a significant impact on the ship's passage.

Guidance should be available to masters about the dangers associated with congested anchorages. It is also a fact that commercial pressure is an underlying cause of these incidents in congested anchorages.

A special edition of the *Standard Safety* on anchoring was issued in October 2008 <http://www.standard-club.com/KnowledgeCentre/14.aspx?p=172> and this publication provides useful information.

FISH FARMS

In recent years, the club has seen a rise in claims that resulted from collision damage to fish farms, mussel beds and other aquatic agricultural activities. Fish farming or other sea agricultural activities have sprung up in many places, including the Norwegian Islands, Chilean, Japanese and Chinese coasts, off the west coast of Scotland, the Mediterranean Sea and other areas. Many of these will be noted by the hydrographical survey offices and marked on the charts; however, a number of them are not reported to the hydrographical authorities and are not noted on the charts, although they may be reported locally in the temporary and preliminary notices and/or local navigational broadcasts.

These farms are usually located relatively close to shore, although often in deep enough water for large ships to navigate in. China is a good example of this. Usually they are lit, but often with weak lights on low 'stick' buoys, so they are not easily seen in poor weather conditions. Damage to these structures results in large claims since the farming stock is often of high value.