

CASE STUDY

A loaded bulk carrier departed a port and after dropping off the pilot, the master left the bridge, handing over to the second officer. The second officer left the auto pilot as set by the master and did not monitor the ship's progress or put a position on the chart for over 40 minutes. 20 minutes after the master left the bridge, the ship had run aground at 14 knots, seriously damaging the hull and steering gear.

LESSONS LEARNT

- a proper watch handover briefing is essential
- watchkeepers must retain situational awareness
- frequent checks on the ship's position-keeping is fundamental for safe navigation
- deviations from the passage plans require additional vigilance in coastal waters.



BRIDGE PROCEDURES

Bridge navigational procedures should be a part of the owner's Safety Management System and this should outline the owner's requirements on how the bridge is to be managed. This is an important procedure and serious consideration should be given to its contents. Initially bridge procedures should include the guidance referred to in the *ICS Bridge Procedures Guide (4 Ed 2007)* and other similar guidance material. However, the following should also be considered to be a part of bridge procedures even if not addressed in the *ICS Bridge Procedures Guide*:

- when to pick up and disembark the pilot
- pilot briefings and duties under pilotage
- training the lookout
- appraisal of navigational competence
- appropriate watchkeeping manning (for example, river transits, heavy traffic, unfamiliar port approaches)
- fatigue management.

The scourge of using the mobile telephone on the bridge should be restricted. A number of case studies point to the use of the mobile phone as instrumental in causing the incident.

BRIDGE FAMILIARISATION

There is a firm perception that when an owner engages a navigational officer, it is on the basis of accepting that his certificate of competency is proof that he will be acceptable on board their ships. Most companies have for some years been diligent in making sure that the certificates of competency are 'genuine'; however, the 'blind' acceptance that the certificate of competency is an assurance that the person is a competent navigator is certainly a false one. A demanding pre-joining navigational assessment is one way of determining if those navigators are suitable.

When the new watchkeeper joins the ship, often he has had no proper familiarisation on that particular bridge and rarely does he have an overlap voyage with the watchkeeper being relieved. It is also rare that a competence assessment is done prior to taking control of the watch, and that should be of some concern.

A significant number of navigational collisions or groundings have occurred soon after the watchkeeper has joined the ship. However, the method of employing the seafarer from a third-party manager or crewing agency could mean that there is less control on who is employed, less control on their competence, experience and suitability.

Owners should ensure that assessments of competence are carried out before a watchkeeper takes over the bridge watch for the first time. No employer ashore would employ a person in a similar position of authority, without some proper assessment, so why should it be accepted on ships.

CASE STUDY

A ship at night was steaming in a traffic separation scheme, at high speed in high density traffic. The experienced master had just joined the ship the previous day but had never sailed with the junior officer who took over the evening watch. The master was therefore unaware of the watchkeeper's competence or confidence on the bridge.

The weather and visibility were good and a lookout was on the bridge. The watchkeeper had to monitor the ship's position and make a number of alterations of course for small ships. He mistook a slow-moving coastal ship being overtaken as a crossing vessel, altered course and ran the ship aground at full speed.

The inexperienced junior officer was overwhelmed by the amount of navigational duties he had to cope with and he lost his situational awareness. He appeared to have little understanding of the COLREGS and was not confident enough to call the master. The master did not ensure that the watchkeeper was supported in a busy navigational area and he did not carry out a proper assessment on the watchkeeper before he was left to do the watch on his own. This is also not an isolated example, and it is often found that the master apparently does not consider it necessary to provide support to junior watchkeepers in busy waters.

THE COLLISION REGULATIONS – (COLREGS)

The issue of not fully understanding and complying with the COLREGS is possibly the major cause of collision incidents. It is difficult to understand, because after a collision, more often than not the watchkeeper has indeed got the correct certificate of competency. However, there is much evidence from many navigational incidents, not only from the club's analysis of incidents but also from incidents in the public domain that suggest that numerous bridge watchkeepers, including masters, appear to have a lack of understanding or a disregard of the COLREGS. This raises a number of questions which could include:

- are the certificates of competency properly examined by the examining authorities?
- are the candidates for watchkeepers properly screened by companies prior to signing on?
- is there a need for additional training and examining of the COLREGS?

RESPONSIBILITIES

- training institutions should make sure that the COLREGS are taught effectively
- managers and owners should ensure that navigating officers recruited for their ships, especially for the first time, are competent navigators. Evidence shows that reliance on the certificates of competency is no longer acceptable as proof that the watchkeeping officer understands the COLREGS. Owners must positively make the effort to engender a safe navigational culture on board their ships
- masters should assess watchkeepers' navigational competence
- bridge watchkeepers should ensure they have the proper navigational skills.

HOW TO ENSURE THAT NAVIGATING WATCHKEEPERS HAVE THE RIGHT COMPETENCE

The lack of understanding of the COLREGS can be addressed by considering:

- rigorous pre-joining assessment
- navigational audits, including engendering a safe navigational culture
- appraisals of watchkeepers to include bridge competence assessment
- additional training, for example computer-based assessments
- to include bridge competence in ISM masters reviews.

CASE STUDY

In 2011, a large container ship was proceeding at 21 knots from Hong Kong to Shanghai. The second officer was on watch and at 0200 hours the AB lookout was allowed to leave the bridge to carry out fire patrols. The visibility was good although reduced at times by heavy rain and moderate seas. At 0200 hours, the ship was overtaking a slow-moving freighter and was clearing some fishing vessels on the port side. However, the watchkeeper was concerned by the movement of a large fishing vessel ahead not showing regulation lights and he decided to leave this fishing vessel two miles to starboard by making a bold alteration of course to port. Four minutes later, the ship collided with another unseen fishing vessel. The collision resulted with the fishing vessel sinking with fatalities.

The Flag State investigation resulted with some conclusions, including:

- the watchkeeper was not competent to keep a bridge watch
- there was a failure to comply with the COLREGS, master's night orders and the Flag State guidance for carrying out a safe navigational watch
- watchkeeper did not reduce to a safe speed when navigating in heavy traffic
- watchkeeper released the lookout from the bridge
- altered course to port when the ship was the stand on vessel.

The Flag State considered that these were serious departures from regulation, guidance and best practice that brought the knowledge, competency and judgement of the watchkeeper into question. The watchkeeper had sailed with the owner for many years.

The above incident is not an isolated case study and the club's experience often suggests that similar situations are regularly happening. A proper assessment of the navigational competence of officers prior to joining the owner and an assessment of the watchkeeping competency by the master should be considered as part of the joining and familiarisation process.

CASE STUDY

A large ship was navigating off the coast, with the master and a junior officer of the watch on the bridge. The ship encountered fog patches and the lookout was sent down below to work on deck and shortly afterwards the fog closed in to become dense. The ship maintained its course and speed of more than 20 knots and no fog signals were sounded. A radar target was picked up one mile ahead and a small alteration of course to starboard was made by the junior watchkeeper. The master countermanded this alteration and the watchkeeper thinking that the master had command of the watch did not challenge the master's order.

The collision resulted with the small ship sinking. The small ship also failed to sound fog signals or take avoiding action.

LESSONS LEARNT

- comply with the COLREGS
- proceed at a safe and appropriate speed
- use fog signals
- have a lookout at appropriate times
- encourage 'challenge and response' from the junior officers
- check masters and bridge team effectiveness with navigational audits.

KEEPING A LOOKOUT – COLREGS RULE 5

Rule 5 states: *Every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate to the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.*

Keeping a lookout is the first rule to comply with whilst on the bridge. Looking out of the bridge windows and seeing what is ahead, astern and either side of you seems to be stating the obvious, but experience and case studies show that many navigators appear to forget this advice.

The lookout is an integral and important part of the bridge team. There are a large number of incidents that could have been prevented by a well-trained lookout. It is implicit in STCW 95 that at all times during the hours of darkness and in busy shipping areas when underway a separate dedicated lookout must be kept on the bridge in addition to the watchkeeper.

COLLISIONS WITH FISHING VESSELS

Fishing vessels have always been a source of irritation to the officer of the watch. They rarely show the correct navigational lights, hardly ever abide by collision regulations, behave erratically, fish in traffic separation schemes and more often than not do not keep a proper lookout. However, they share the sea lanes with ships and we therefore have to deal with their actions in as safe a way as possible.

Club data over the past 10 years shows a definite increasing trend in the number of collisions involving fishing vessels. These collisions show an increase particularly in Asian and most noticeably in Chinese and adjacent waters. This could be because of the increased trade to that geographical area, the fact that sophisticated electronic devices (VDR, shore VTS and radar) can confirm that a collision has taken place and the fact that the fishing communities in these areas are reporting incidents to the authorities. The costs of the collisions are also increasing and the fact that the fishing vessel was not showing the correct lights or navigating without a proper lookout seems to have little bearing on the outcome of the claim or the subsequent court proceedings.