Tight waters require tight teamwork. This article looks at some of the key ways to minimise the risk of incident in pilotage waters.

Case Study
A vessel grounded during pilotage in Northern Europe on a bank well marked by an illuminated beacon. Prior to the grounding, the co-operation between the ship’s crew and the pilot had been poor, and few steps had been taken to monitor the pilot’s actions. No formal handover took place between the master and the pilot when the pilot departed, and the disembarkation of the pilot reduced the bridge team to a single deck officer, the master. The pilot disembarked just before the most challenging section of the passage and the master, navigating without reference to the chart or radar, failed to alter course at the appropriate time, resulting in grounding and pollution.

Pilots – part of the bridge team
Whilst pilots are primarily chosen for their skill and experience, they are vulnerable to making mistakes. The master in our case study appeared to have placed too much faith in the abilities of the pilot, ignoring the fact that the final responsibility for the ship’s safety was his alone. Pilots will routinely take control of the ship’s navigation in compulsory pilotage areas instead of acting in an advisory capacity. They should instead be treated like a part of the bridge team and be monitored to ensure that their actions are safe and in line with the plan agreed during the master/pilot exchange.

In our case study, the master was content to rely solely on the pilot for the navigation of the vessel and only commenced monitoring the vessel’s passage when the pilot had disembarked. The master’s lack of residual awareness directly contributed to his failure to recognise the imminent danger to his ship. Situational awareness cannot be instantly obtained; it must be built up using the appropriate navigation aids, regardless of how familiar a mariner is with the area.

Single watchkeeper – singular danger
The pilot’s departure reduced the bridge team to the master and the watchkeeping rating, who subsequently left the bridge on a non-essential errand. Single watchkeeping is only permitted by the Standards of Training, Certification and Watchkeeping (STCW) code during daylight hours and only after an account has been taken of the prevailing circumstances and conditions. To do so at night in pilotage waters was at best unwise and at worst a breach of the STCW code.

Tips for working with a pilot:
1. Always conduct a ‘master/pilot exchange’.
2. Agree on a plan, so that the whole bridge team has a shared mental model.
3. Monitor the actions of the pilot using:
   a. position fixes;
   b. parallel indexes;
   c. ECDIS/Radar Overlay;
   d. transits, sectored lights, buoyage.
4. Don’t be afraid to challenge the pilot’s actions.
5. Maintain proper logbook records throughout.
6. Ensure that a proper handover is conducted prior to the pilot’s departure.
Navigation and complacency continued

Officers should remember that, whilst allowed by the STCW code, ships navigated by a single watchkeeper are vulnerable to single point failures, where a single error made by an individual will result in an unsafe occurrence or accident. It should also be noted that whilst a single watchkeeper may be able to recognise the development of an emergency, their ability to take corrective action is limited: a single emergency may require alarms to be silenced, broadcasts to be made and the ship to be manoeuvred.

Complacency
The company that operated the vessel in our case study had a certified safety management system, which detailed the procedures and precautions to take when engaged in navigation. It specified the actions to take when navigating and working with a pilot.

During the course of normal navigation, the officer of the watch is required to confirm the vessel’s:
1. course;
2. speed; and
3. location.

This should be done using the navigational equipment available as often as necessary in the prevailing circumstances. When in compulsory pilotage waters, the pilot and master: "shall exchange information about the cargo, draught and navigational marks. The master and/or the officer on watch shall work closely with the pilot and maintain an accurate check on the progress of the voyage and the location of the vessel."

Had the crew complied with the company’s established procedures, the master would have been more aware of the ship’s position and the implications of disembarking the pilot at their chosen location. It is likely that the accident could have been averted. The master in this case displayed a high level of complacency by failing to ensure that the cross-checks designed to maintain the ship’s safety were carried out. Familiarity with the waters and overconfidence in the pilot’s ability meant that the systems designed to protect the ship and her crew were effectively subverted.

Every officer serving at sea should ask themselves the questions:

"Are we cutting corners? Are we ignoring company procedure for the sake of expediency?"

If the answer to either is yes, they could be exposing their ship and crew to a possible hazardous incident.