

Passage planning, pilot to berth

Time for the pilot to prepare the plan?

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Even though it is not specifically mentioned in the ISM Code, passage planning – and specifically a berth-to-berth passage plan (B2B) is one of the procedures for which every auditor wishes to see proof of compliance. While nobody will question that passage planning is essential for conducting a safe voyage, questions can be raised about the format of the passage plan and about who is to prepare specific parts of it.

As from the implementation of the ISM Code I have held a dissident view on pilot-to-berth (P2B) passage planning; however every time I tried to advocate my ideas, they were greeted with scepticism.

I recently attended the European Maritime Pilots Association (EMPA) 2010 AGM where the now retired Harbour Master of Rotterdam, Captain Jaap Lems presented a paper about P2B passage planning and to my great surprise and delight, he fully reflected my own opinions. As a result, I think it is high time to pick up on this line of thought again and in this article I shall try to highlight the important issues related to this controversial subject. My intention is to kick off a wider debate and try to change the way things are done, for the better.

So what is so controversial about my views? I strongly believe that it is not the ship's staff who should prepare the plan for the P2B stretch of the voyage, but the pilotage service or the harbour master's office in consultation with the pilots.

There are a large number of arguments in favour of such an approach. But first, what has changed to make this possible?

Email over satellite. The advent of email onboard ships is (almost) as important an innovation as was the steam engine to sail. There is hardly a ship afloat anymore that has no email on board. So let's try to use this wonderful technology to our fullest advantage and explore every possible means of enhancing safety at sea as well as the welfare of the seafarers.

I'd like to start by pointing out some difficulties of the 'traditional' P2B passage plan, drawn up by the ship's staff.

Of course it is important to realise that there can be big differences between ports and the length of the passage under pilot's advice. In some ports the sea passage will end at about one foot from the breakwaters, and the berth will be just around the corner. In other ports, the 'stranger on the bridge', or a succession of strangers, may well be on board for more than 24 hours.

This makes a tremendous difference for the human resources employed onboard the ship, when the ship's staff has to prepare the P2B passage plan. And we all know how much administrative workload already affects the crew, causing 'paper fatigue'.

I want to make a bold statement here: the human resources that are put into the preparation of an elaborate P2B passage plan could be put to much better use on cargo watch duties or, just as important, to reduce the workload on all officers and allow for some rest or de-stressing.

Why does a master take a pilot on board? Exactly; the pilot has that extra bit of knowledge about local conditions and/or customs, procedures that the master cannot extract from sailing directions, charts and so on. Making the master prepare a passage plan P2B is de facto asking the master to acquire the same knowledge and experience as the pilot.

An example

Let us take the river Scheldt as an example. The river has numerous bends, sandbanks and bars, and fairways. A

prudent master will have the plan in place beforehand, at a time when he or she will probably not have an exact idea of ETA or, for that matter, whether the berth will be available and when the vessel will be proceeding up the river. The state of the tide will play an important role. There may be passages where the current could be at right angles to the fairway at certain stages of the tide, but in line with the fairway at other times.

The tidal current coming out of a secondary channel may require considerable counteraction or positioning to one side of the fairway so that the heading ordered by the pilot could cause confusion in the master or the OOW when they compare it with their own passage plan. In most passage plans prepared by the ship's crew, the intended track will be mid-channel. Inland traffic exiting locks or small harbours along the river may require a departure from the planned track as well.

Let's say, for a moment, that there is time for a proper master/pilot exchange; and the pilot orders a different course from that in the vessel's passage plan because there are local conditions which simply could not be known by the master beforehand.

Can you imagine the delay and confusion that could occur when this difference comes to light and there is really no time to discuss it? The pilot would have to explain to the master why he has a different plan, while the master would have to have his plan re-arranged en route to allow for the deviations.

But that's when there is enough time to discuss the plan properly. If there is no time, the master might just as well not have a passage plan and all the energy put into the compilation of the plan would be wasted. Very frustrating to the ship's staff.

Approaches to Antwerp

The vessel will be attended by two or three different pilots. First the sea pilot boards

at the Wandelaar or Steenbank pilot stations from a pilot cutter which transfers the pilots by means of a small tender. There can be dense traffic, several vessels moving in and out of the precautionary area and manoeuvring, making lee or waiting for the pilot launch at the same time in a small area. Once the pilot is on board, the ship must clear the area for the other traffic as quickly as possible. There is simply no time to discuss a passage plan; probably scarcely enough time to hand over a pilot boarding card. The sea pilot has no passage plan for the river passage, just as the river pilot has no passage plan for the passage from the river to the outer pilot station.

Two or three hours later, there is a pilot exchange at Flushing roads, at one or two cables from the shore and again it is likely that there will be several vessels in short succession being served by the same pilot tender (outward bound vessels often arrive in 'packs' having left the port together through the same lock). There are currents of up to three, even four knots; vessels have to make a lee to exchange pilots and quite often this puts them on a heading across or at an angle to the fairway. As soon as the pilot arrives on the bridge, his full concentration must be on getting the vessel back on the right heading for proceeding up river or out to sea by one of the two fairways arriving at Flushing roads. Even in good visibility, no time for lengthy discussions about the passage plan for the 36 miles on the river, let alone in poor visibility...

So the OOW may be monitoring a pilot on the basis of the vessel's passage plan, which may be completely erroneous due to local customs, temporary circumstances and so on. When the pilot wishes to take an action other than expected from the vessel's P2B plan, will the OOW challenge the pilot's actions/advice?

Tugs have their own specific methods of assisting vessels, depending on local tug types and conditions. Then, as at the port of Antwerp for example, there is a difference in modus operandi of the tugs operating on the river and those operating in the docks. The river tugs will all be using their own steel tow wire, whereas the tugs in the port may be using either a steel tow wire or ship's lines (although the latter method is gradually becoming obsolete by the introduction of new tugs).

In my opinion, the master/pilot exchange should include that kind of information as well, in order to prepare the vessel's crew properly for the tug operations. If this kind of information is

not properly conveyed, delays or unsafe situations, even accidents, could occur during the tug operations.

In other ports, the pilot launch will not come out to sea in bad weather and the pilot will board just outside, or even inside the breakwater. At that moment there is certainly no time for a nice chat about the passage plan. And reduced visibility makes things even worse.

On approaching the Antwerp locks, except for the really large vessels one is never sure which lock the vessel will be sent to, and when it will be ready for docking the vessel. This may again cause confusion with a passage plan, which may have to be discussed under difficult conditions where both master and pilot need to direct all their attention to navigation.

Such situations occur daily, and I dare say that in practice the passage plan is seldom discussed with the pilot upon boarding, whatever may be written down in ships' deck logs, checklists or pilot cards in order to satisfy ISM auditors or port state control. Thus, the energy put into the preparation of the passage plan amounts to a waste of human resources, and it is repeated every day on every ship that calls at port, all over the world.

The alternative

Now let's look at the alternative. The pilot services or harbour masters have the most practical, up-to-date, correct and detailed information on local conditions. They have the experience of manoeuvring all kinds of vessels and now, most importantly, they have email.

It may be a quite extensive one-time job to prepare a complete passage plan for different types/sizes of vessels and draughts, but once this is done, keeping it up to date and distributing it to the vessels is a relatively minor task.

This plan can be sent to the vessel well in advance of the arrival at the pilot station, so that the ship's staff will have the time to study it and revert with questions or remarks, when relevant. The master can be sure that he receives the latest, information and a passage plan that's suited for his vessel.

In the other direction, the pilot boarding card, giving the ship's manoeuvring characteristics and any other relevant ship- or voyage-specific information, can be sent to the pilots in advance, so the pilot will be prepared on what to expect when he boards the vessel.

The bridge team can now approach the pilot station and already be familiar with the pilot's passage plan and have the radar

parallel index lines ready, for example. This would leave only minor technicalities, if any, to be discussed or confirmed at the time of boarding, and will ensure that bridge team's full attention can immediately be directed towards navigation. Further, the passage plan could provide extensive information on tug (safety) procedures and rendezvous points, making it possible for the master to ensure that the ship's crew will be ready on time at the mooring stations and aware of the local tug procedures.

There is nothing in the ISM Code that prevents such a course of action. It is just that the parties concerned need to be convinced that such a modus operandi for the P2B passage plan will greatly enhance safety of navigation, not only by improving circumstances of the master-pilot exchange, allowing for the full attention to be directed towards navigation at the time it is most needed, but also by reducing the paper fatigue on the navigation officers.

When no passage plan can be offered by the pilot station, the master will, of course, have to fall back on his own plan.

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© 2010 The Nautical Institute
ISSN 0144-1019.

Printed in England by O'Sullivan
Communications, Southall.

Typeset by Tradeset Ltd, Eastcote, Pinner

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