

Applying reasonable perception

At what point should the Master challenge the pilot's decision and take over the conn of the ship?

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A lot has been written on the topic of master/pilot relations – most recently in *Seaways*, September 2013 – and yet it still remains a complex issue. It is generally accepted that the Master is in command of the vessel and her crew, while the pilot has the conn – that is, has the authority to direct the vessel. The pilot's authority can only be exercised in cooperation with the Master's power to command the crew, while the Master's power to move the ship can only be lawfully exercised in cooperation with the pilot's authority to direct and control the movement of the ship.

Although the responsibilities of both roles are clearly defined in legal terms, with the Master solely responsible for both their own and the pilot's actions even if the pilot is negligent, there are still many other things which are not so straightforward.

The Master's role during pilotage can be split into two distinct parts:

- **Interaction** Consists of master/pilot communication, cooperation, coordination, corrections and clarification.
- **Intervention** Master challenges pilot's conn of the ship and takes over the conn.

A complex situation

The situation is complex from the start. Two strangers navigate a vessel which is unfamiliar to the pilot, in an environment which is unfamiliar to the Master. These unfamiliarities should be, as far as possible, eliminated through an effective master-pilot exchange of information about the ship (on the part of the Master) and environment (the pilot). As part of this process, a comprehensive passage plan should be created in advance to familiarise the Master with the port or waterway in question, and with the risks that it contains.

It is the Master's obligation to monitor the pilot's conn of the vessel, gauging the pilot's judgement and ability is an action which can create confusion. The complexity of the Master's position is emphasised in The Nautical Institute's publication *Bridge Team Management*, which states that 'In any case the Master is in a poor position to question the pilot regarding the progress of the ship or its situation at any moment, unless he, the Master, knows what should be happening at that time.'

While having a pilot on board is compulsory, taking that pilot's advice is not obligatory. However, a significant proportion of Masters and OOWs have reported reluctance to question pilots' decisions. The most likely reason for this reluctance is an assumption that pilots have superior knowledge and skills regarding the vessel's movements in the local environment.

Although all Masters and pilots hold certificates of competence, it is a fact of life that there are some Masters who are more experienced/

skilled, and some who are less so – and the same goes for pilots. It is always a matter of concern for Masters that they are handing over the conn of the vessel for which they are still solely responsible. Generally speaking, it takes years to build a level of trust between people, yet the mutual evaluation of skills between pilot and Master must be carried out in minutes, and mostly on first impressions. Under such circumstances there is a great possibility that the Master's and pilot's perception of each other's skills could be incorrect. Incorrect perception of a pilot's skills can cause the Master to be over-reliant on the pilot, and may influence the Master's state of alertness, although this is not supposed to happen.

Over-reliance

There are many case studies in which the Master over-relied on the pilot's skills and vice versa. Counter-intuitively, it may be that the very lack of knowledge of the other person's skills that leads to this over-reliance; in a pilotage situation, team members do not know each other's strengths, but they do not know each other's weaknesses either. As Samuel Johnson put it: 'We are inclined to believe those who we do not know, because they have never deceived us.'

In *The Peerless* [1860], Dr Lushington states that 'There may be occasions on which the Master of a ship is justified in interfering with the pilot in charge but they are very rare. If we encourage such interfering, we should have a double authority on board, a *divisium imperium*, the parent of all confusion, from which many accidents and much mischief might most surely ensue.' This excessive interfering can obstruct the pilot's work, particularly at moments of high concentration.

Reasonable perception of risk and of the danger

While excessive interference is to be avoided, a Master not only can, but must, intervene in the pilot's action if he has a reasonable perception that the vessel is in danger. But what defines reasonable perception?

The mental representation of a problem, ie perception of a situation is central to the decision-making process. Perception is what we know about the problem, and all decisions and judgements are based on it. Experience helps to improve the quality of perception, as it allows us to use past situations to inform our perception of the present situation to experiences from the past.

However, perception is not always definite or unquestionable; it can be subject to mistakes or to errors of judgement. Is the risk – and the danger – that we perceive real, or is our perception mistaken, projecting a distorted image of reality? This can be caused by lack of information, lack of experience, or simply by misinterpretation of information received. Perception can also be by tiredness, sickness or the malfunction of our receptors or by use of alcohol or drugs.

If there is a possibility of our perception of risk or danger being mistaken, what can we use to justify our response? A rough test of the

reasonableness of our perception and decision can be found in the question: Would my colleagues who have knowledge in this field of activity (piloting) perceive and decide the same?

We can perceive both risk and danger. (Here, I am using risk in sense of 'the chance of something happening' and danger in the sense of 'catastrophe'.) The closer the vessel comes to danger – in both distance and time – the more the perceived danger is subject to the master's intervention. If two medium-sized vessels are on a collision course at 6 miles range in open sea we can say there is a risk of collision. If the same vessels are on a collision course at 1.5 miles range then there is a danger of collision.

There are three main risks to be considered in pilotage: collision, contact and grounding.

I consider there to be a reasonable perception of danger under pilotage when there is an obvious and imminent likelihood that one or more of these will occur under the present dynamic status of all danger participants (position, course, speed and drift) if no action (alteration of position, course, speed and drift) is taken by any of danger participants.

When risk is reasonably perceived, it is our duty, and consequently our right to act in order to mitigate or avoid the reasonably perceived risk.

The intervention

A reasonably prudent Master is entitled to rely on pilot's guidance. The Master can only intervene when a situation of danger appears to be clear or obvious. Court decisions have developed guidance for these situations, such as that the Master has a duty to intervene if the safety of the ship is in jeopardy.

The UK Pilotage Act 1987 can help Masters when trying to determine in which cases they can intervene. According to section 21 of the Act, the pilot is liable for any action or omission to act which cause damage or injury. As the Master is also liable for the pilot's actions too, it is natural that the Master must act to avoid his own liability ie must exercise intervention.

There are two preconditions for the Master's intervention:

1. The Master reasonably perceives that there is a danger of collision, contact or grounding.
2. The Master recognises that the pilot's action or omission to act in his conn could cause damage or injury.

As the pilot is defined as an authority, the intervention must be well supported to justify rejection of this authority. The statute and the authority can be disregarded if doing so is proven to be reasonable.

If the Master reasonably perceives there to be a danger, as defined above, and if they consider the pilot's status to be affecting that danger, then he/she is in a good position to justify intervention to the pilot, to the Port Authority and to other stakeholders involved in the maritime adventure.

Assertiveness

Masters should be assertive in both interaction and intervention. They should not feel uncomfortable in expressing and explaining the reasons for their concerns. At the same time, they should not forget the role and the position of the pilot. Masters should explain the elements on which their perception of risk or danger is based.

The well known assertiveness strategy checklist P.A.C.E. could be used in the process, with the added stage of intervention if necessary;

1. *Probing* – Master perceives environment and risks. Master acquires Situational Awareness.
2. *Alerting* – Master perceives risk which at material time does not have an avoiding strategy known to him, and assertively communicates his concern to the pilot.
3. *Challenging* – Master, unsatisfied with pilot's solution or actions, challenges the pilot's decision and action. The Master's challenge is based on his reasonable perception of the risk.

4. *Emergency* – The risk develops to the point of danger. Master warns the pilot about his reasonably perceived clear and obvious danger.

5. *Intervention* – With reasonably perceived danger and with pilot's action or omission to act which lead to collision, contact or grounding, the Master takes over the conn of the vessel.

There is an optimum timing for intervention. Intervening too early would create confusion, and would mean opposing authority without solid grounds, which can damage the master/pilot relationship. Intervention too late would be followed with damage or injury. The right moment for intervention coincides with the moment when preconditions 1 and 2 are met, above.

The challenge

Everybody on board has a responsibility to alert their superiors if they believe their situational awareness becomes compromised. It may be that the person raising this concern has a false perception of the risk, but they should still verify with their superiors whether the risk is actual or mistaken. More participants and more challenges mean more solutions and options, more creativity, more corrections – and, unfortunately, sometimes more confusion and bad ideas.

Despite this, I still believe that having plurality of opinions produces the best quality of opinions. A two-way process of evaluating and challenging decisions between the pilot and the Master should not be discouraged or ruled out. In theory, every casualty happens because the decision leading to the casualty was not reconsidered or challenged. To address this issue, we need to create an environment where all members of bridge team feel free to question assumptions and actions. This 'challenging culture' should be introduced throughout the industry.

A grey area?

Acquiring and identifying a reasonable perception of danger is not enough to result in an effective intervention. There must also be an assertive challenge that is able to enforce this perception.

It is very easy to assume that effective interaction and intervention are simply a matter of the Master's skills, competence and self-reliance. However the problem is not that simple, as accidents happen all the time, even to highly skilled and experienced personnel. It takes years of practice and education to develop those qualities. An understanding of concepts of reasonable perception, assertive behaviour and challenging culture might enhance that process.

Masters and pilots share the riskiest moments of maritime adventure – this is why master/pilot issues deserve the highest level of education and training. The issue is recognised as so important within the industry that Intertanko recommended to IMO that pilotage should be brought within the scope of the Standard of Training, Certification and Watchkeeping Convention.

The question with which this article opened leads to one of the grey areas within the maritime industry, one which will never be elucidated or clarified with mathematical precision. The problem is systemic and it is open to debate and to improvements only. There is no single solution. It is important that this debate and any suggested improvements come from both perspectives; from pilots as well as from Masters. 🌐

This article deals with the problem from the Master's perspective only and it is not the author's intention to place the pilot as the opposing party to the Master. To have a comprehensive picture of the problem, we also need to see the pilot's perspective.