

Captain's column

Graded assertiveness: Captain, I have a concern...

Last year, I was inbound to a port-that-will-remain-nameless, with the local pilot at the con as we manoeuvred up a winding channel. The channel curved to port, yet the pilot ordered starboard rudder as we approached the next turn.

Our third officer, who had been on board for over two months already and was well drilled in bridge resource management theory, piped up and said, 'Mr Pilot – the channel goes to port, why are you using starboard rudder?' The pilot responded by glancing at the rudder angle indicator and out of the window. He then turned and told the helmsman, 'Midships', followed shortly by, 'Port 20'.

The pilot then turned, smiled at the third officer and said, 'Thanks'.

The PACE model

The third officer had effectively implemented the first step of the PACE model for 'graded assertiveness'. Originating in the medical field, graded assertiveness and the PACE (Probe-Alert-Challenge-Emergency) model were necessary to overcome the power dynamic between nurses and doctors. Much like the power dynamic between the pilot and the third officer, the power dynamic between doctors and nurses is such that nurses are frequently hesitant to question a doctor, even when a patient is at risk of harm.

Probe – 'Mr Pilot – the channel goes to port, why are you using starboard rudder?'

Alert – 'Mr Pilot – the channel goes to port. We will ground if we continue to turn to starboard.'

Challenge – 'Mr Pilot – we will ground if we turn to starboard. I recommend turning to port immediately.'

Emergency – 'Hard to port!' (or other appropriate order).

Despite the experience and knowledge of maritime pilots, captains and officers on vessels, they are not infallible. The bridge team (including the helmsman, lookout, cadet, deck officers and captain) are all there to assist in error trapping. Unfortunately, this safety net sometimes fails entirely, such as in the 'heavy contact' of *CMA CGM Centaurus* with the berth (and gantry cranes!) in Jebel Ali in May 2017.

The UK Marine Accident Investigation Branch (MAIB) report detailed the failures in bridge resource management that contributed to this incident. Shortly afterwards, the vessel's parent company, CMA CGM, issued guidance to its fleet, which included the instruction, 'Once pilot decision looks unsafe to you, challenge and be ready to take over command.' In the manoeuvre to the berth, utilising the PACE model might have avoided or mitigated this incident.

The Five Step Assertive Statement Process

The PACE model is effective in acute situations where immediate actions need to be taken to correct the situation, such as the rudder order or speed directed by the pilot. When a concern needs to be raised in a less immediate situation, a less aggressive, but equally effective, method is the Five Step Assertive Statement Process.

The Five Step Assertive Statement Process comes out of the aviation industry. The aviation sector leads the transport industry in human factors studies. It had experienced multiple serious incidents

where a problem had been identified by the co-pilot or first officer. Yet, these concerns had not been properly communicated to, or had been ignored by, the pilot due to the power dynamic between pilot and co-pilot. Much like aviation, the maritime industry has its fair share of egos, where the senior officers or advisers (marine pilots) feel themselves to be above reproach or beyond questioning.

The five steps are :

1. Start with the person's formal title (eg Captain/Pilot). Starting with anything else can diminish the importance of the message.
2. State, 'I have a concern.' This is a trigger statement. Within the aviation sector, policy determines that this statement requires the captain to acknowledge and consider the concerns of the crew member. Shipping companies might consider adding such a policy to their safety management system (SMS).
3. State your concern and provide details.
4. Suggest an alternative plan.
5. Seek permission to implement the alternative plan.

In practice, this statement might sound something like:

'Captain, I have a concern. There appears to be a crack between 1 port bunker tank and 3 port water ballast tank. The level on 1 port has gone down while 3 port has gone up with no ballast or fuel transfer operations taking place. I recommend we treat 3 port ballast tank as contaminated and do not discharge it as planned in the next port. Does that sound like a plan?'

Reality

In reality, neither of these systems will be effective without buy-in from all parties. There are plenty of captains, chief engineers, pilots and other senior officers still out there who will reprimand a subordinate for questioning their decisions. There are probably just as many junior officers and ratings who are unwilling to voice their concerns due to lack of training or because they have previously had negative responses. The combination of these two groups often prevents adequate communication, which then becomes a causal factor in incident investigations.

The solution? A strong first step is the institution of a 'just culture' within an organisation and on its vessels. A just culture provides the safe space within which concerns and safety issues can be discussed without fear of repercussions. Implementation of such a culture first requires policies, then actions that support those policies. Plus, it is critical to have policies and training in place to support the concept of graded assertiveness at all levels. If junior officers and ratings are never encouraged to voice their concerns, are they likely to do so? Even worse, what about the captain that won't question the pilot when he is concerned? What can you improve on your vessel? 🌐

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