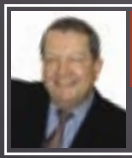
Competency

Evidence from recent maritime exams shows that standards have dropped. Will an increasing demand for officers to man the growing world fleet mean a dilution of the experience pool and less competence at sea?



By Andrew Lansdale

As the song says, things ain't what they used to be and nowhere is this more true than the qualifications seafarers require to proceed up the promotion ladder.

There has been a dumbing-down of seafarers over the last few decades. One seafarer who had proceeded from cadet to master and then to pilot gave his opinion to Fairplay. "What I see today is horrifying. The basics of watchkeeping, which can be as simple as looking out the window, are no more. Everything is interpreted by looking in a radar set. I never see anyone taking compass errors or compass bearings; in most cases the wing repeaters have a permanent canvas cover on them."

It also appears that more seafaring jobs are moving East and that the profession may fast be becoming a third-world service.

There is the perception that the quality of candidates presenting for examination has deteriorated and that standards have dropped. The bar has been lowered for examinations; pass-marks for Class 1, 2 and 3 certificates of competency – what used to be called Master's, Mate's and Second Mate's Certificates – have been reduced.

In the past, navigators were expected to be right more than 50% of the time. In parts of the syllabus, subjects such as practical navigation, principles of navigation and stability attracted a pass-mark of 70%.

Other subjects such as shipmaster's business, compass correction, meteorology and English were deemed less important and the pass-mark was 50%. The caveat was that the overall average

Photo: Joachim Affeldt

Case history 1: Box the compass

An Australian pilot boarded a ship about to sail from Townsville. He checked all the bridge equipment, a task usually carried out by the ship's officers before sailing, but more recently an undertaking for pilots and what turned out to be a prudent and essential one in this case.

The pilot looked up the compass periscope to check the magnetic compass and saw nothing, turned the dimmer switch up and still saw no compass card. He went up to the monkey island and took the helmet off the compass binnacle. Alas, no compass bowl.

Down on the bridge, he approached the chief mate.

"Hey, Chief, there is no compass bowl in the binnacle up top."

The officer replied, "I have only been on the ship four months, I haven't had time to find it yet."

Apparently the master and other officers hadn't had time to find it, either.

The pilot asked another ship's master whether the gyro compass had any errors. "Last month it was three degrees high." Last month?

had to be 70% or more. So a candidate could achieve the basic individual pass-mark for each subject but actually fail written exams for not achieving the overall 70% average.

Captain Roger Towner, chief examiner for the UK's Maritime and Coastguard Agency told *Fairplay*, as an example, that chief mate's navigation pass-mark is set at 65%, while chief mate's stability is 60%.

But it would be crass to suggest that the authorities consider it perfectly acceptable for a navigator to be wrong in 35% of his decisions. It would also be absurd to suggest that it is acceptable for a chief mate to put his vessel in danger of capsize or structural damage in 40% of his stability calculations for loading and discharging operations.

But correct and safe decisions come after years of experience and we are compromising the future if we allow the

Case history 2: Where's *Willy*?

THE CYPRIOT coastal chemical tanker *Willy* had a problem in the UK's Plymouth Sound on New Year's Day 2003. The vessel anchored off Cawsand, the officer of the watch took the ship's position and marked it on the chart. The actual position was that of the ship's GPS aerial. When the wind blew and the tide turned, the vessels' swinging circle was measured by opening up compasses to the amount of anchor cable let go. The point was put on the 'ship's position' and a circle drawn.

Of course, the circle should have been drawn around where the anchor had been dropped, because the ship swings around the anchor, not around the ship's bridge.

So the *Willy* grounded as the tide ebbed and with a previous cargo of gasoline and the risk of explosion, 100 houses had to be evacuated in the small hours of a winter's morning. Thanks *Willy*, thanks Mr Navigator.

The ship swings round the anchor, not vice-versa

experience pool to become so diluted that vital decisions do not have an element of experience fed into them.

Shipbuilders now fit every electronic marine device that has ever been invented into the bridge of a ship. Electronic charts are supposed to obviate the need for chart corrections. Three and 10cm radars are supposed to give the watchkeeper an accurate view of what is going on in the world outside the wheelhouse.

One retired master told *Fairplay* that a Croatian third mate altered course for what he thought was a fishing boat but was in fact an out-of-order racon (radar beacon) and narrowly avoided putting the ship aground.

A layman might feel that there is only a need to teach seafarers how to use the electronics. In some quarters there is a misconception that these instruments have now replaced the need to learn the principles of safely trading a sea-going vessel.

So the young second and third mates are great whizz-kids with computers and with pressing buttons on electronic charts and GPS units.

One master described to *Fairplay* his second mates using paper charts. Three separate Filipino second officers in a row, laid off courses on the chart the wrong way up a traffic separation zone. "Why did you do that?" was the question.

"Because that's the way we came in."

At the entrance to a Chinese port, one of the navigators laid off the course the wrong side of a port-hand buoy. Apparently he thought that the harbour authorities had placed the buoy wrongly.

Pilots are a good source of information on the subject of training and competency and of course there is an element of nostalgia for the 'good old days' in some of these reports.

One retired River Tees pilot told *Fairplay* that he once took an unplanned passage on a Greek ship from Middlesborough to Dover; the weather was too bad to allow him to disembark. It taught him a lot, however.

The ship was none too clean and there were no uniforms on show, or evidence of much shaving. The food was pretty basic and there was a lot of shouting between the sea-staff.

But on the bridge they were totally professional. The navigation equipment was first-class with the charts corrected and fully up-to-date. The watchkeeping and chartwork were excellent. So you can't tell a book by its cover.

A British Colombia pilot with experience of both foreign and local officers told *Fairplay* that some officers of the watch on Canadian ships lost all interest once the pilot had boarded. They would ask the pilot to mark the ship's position on the chart at the change of each watch. When he did so, the pilot was amazed that seldom were any courses laid off on the chart. The voyage might be one from Prince Rupert to Vancouver, a distance of more than 400 miles. This is an area where the ferry *Queen of the North* sank after striking rocks three months ago. Results of the inquiry are still awaited.

If the pilot boards for such a long pilotage, it is an opportune time to get up-to-date with the never-ending stream of paperwork.

Every task performed on a ship is governed by paperwork, the famous ISM Code; a piece of paper with boxes to be ticked for everything.

And so as not to run foul of the auditors, every box ticked has to be an affirmative. In effect, passing the paperwork audit is the only requirement for the safe running of a ship.

With modern communication, more and more tasks are taken out of the ship's hands and handled by the office. Therefore the more experienced seagoing staff are enticed ashore into

> 'How many proponents of computer systems have experienced complete ship blackouts?'
>
> *Australian master*

ship management. This results in the age-profile of ship's masters becoming ever younger. Leaving aside the issue of officer shortages, if you add to this the enormous numbers of newbuildings entering service, there is obviously a shortage of the more experienced personnel to man them.

Then there is the language problem. English has traditionally been the international language for maritime affairs. One Sydney pilot told *Fairplay* that on one ship he boarded only the master among the officers spoke English; and that was because he *was* English. The other officers only spoke Cantonese. The Chief Steward spoke some English and was used as an interpreter when necessary.

Deliberate sabotage of GPS

In an emergency, the captain is held responsible, but if there is no immediate communication possible between master and officers, a recipe for disaster looms large.

On reflection, a big danger is a malfunction or deliberate sabotage of the GPS system. During the Gulf War, the US military created GPS errors which put one ship's position halfway up the Shat al Arab River rather than off Bahrain Island where the captain knew he was. And if it was ever disabled, there would be chaos, with crews without the experience of the 'principles of navigation' to assist them.

One master from South Australia suggested to *Fairplay* that decision-makers with no experience of the marine environment liken the navigation of ships to a computer game. This could lead to the removal of lighthouses and navigation aids.

To restore a bit sanity to the debate, he adds, "I wonder how many of the proponents of these systems have ever experienced complete blackouts of ships while under pilotage, or engines failing to respond. Where will the electronic pilot be left, if his laptop goes down? These skills have been acquired after many years of hands-on experience."

He adds, "Have the ship owners' decision-makers ever been searching for a dim navigation light on a threatening coast or a lee shore, after the radars have thrown a 'wobbler'?"

It has often been said that if the Americans ever turned off the GPS system, 40,000 ships would find themselves lost; some on rocky coasts and areas of outstanding natural beauty, some on world heritage sites. F

Case history 3: Lighthouse? What lighthouse?

In November 1999, the refrigerated cargo ship *Dole America* headed out up the Channel from the UK port of Portsmouth.

At 0400hrs – after dropping the pilot and while the watch was being handed over – the vessel struck the 27m lighthouse and prominent navigation mark, the Nab Tower.

At the court case, the MCA prosecuting officer Mark Capon noted the full co-operation the master, Captain Aas, and said the latter had admitted to misjudging a manoeuvre to avoid other vessels near the lighthouse.

Reefer ship *Dole America* after hitting a piece of little ol' England