Nautical Institute Log

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Could it happen to me?

What enables us to take something positive from an accident, or a mistake? This has become a rather topical subject among seafarers in recent years, as the public intolerance of any sort of accident has become apparent, especially if any oil is spilled in the process.

Is the very word 'accident' one that has become redundant or changed its meaning completely? To people such as seafarers, whose very occupation involves a certain amount of calculated risk taking, aboard a ship in a naturally hostile environment, these are very relevant questions.

Accidents beget consequences. Once, if you were involved in a navigational miscalculation, or an expensive re-interpretation of the Rule of the Road, professional disgrace was about the worse that would happen to you, at least in more benign administrations. Today the shadow of criminal proceedings hangs over the professional, even when, as we have seen, there is no doubt of the identity of the innocent party.

But do we learn most from accidents as a result of comprehensive investigation reports, or from the grim examples of people who have been prosecuted and punished for their neglect, or for the fact that the ship was moving through some discolouration of the sea surface when the pollution detecting aircraft happened by? There is no shortage of information to cause a sharp intake of breath and a 'there but for the grace of God go I' expostulation.

The publication role of the UK Marine Accident Investigation Branch (MAIB) is informative and accessible: many other countries offer the same sort of service, although many others don't. We have the excellent MARS reports available within these pages, regular issues of the Confidential Hazardous Incident Reporting Programme and the P&I clubs do a sterling job in ascertaining accident trends and publishing their conclusions. But is there time enough in the day to read it all as it cascades around us? And that must be a valid question, too.

'Learning from accidents' was the topic of another well-attended joint meeting of the NI London Branch, along with colleagues from the Institute of Marine Engineering, Science & Technology, the Royal Institute of Navigation and the Royal Institute of Naval Architects, held aboard the Honourable Company of Master Mariners' HQS *Wellington* in December.

Chaired by Commodore David Squire, this meeting featured three very different speakers, looking at the problem from the perspective of the accident investigator, the enforcement agency and the risk management consultant.

Les Chapman is the Chief Operating Officer of RTI, the largest commercial accident investigation company, which provides independent investigations into marine accidents for a wide selection of interests, including the world's largest flag state. He suggested that the world of the accident investigator was changing, that it required a range of new professional skills as it adjusted to modern circumstances of increased media pressures, public intolerance and far higher expectations. Old certainties were fading, and it was a positive change that saw an increased knowledge of the human element and its contribution to safe operation.

The arrival of data recording was an important element, along with a better understanding of risk management techniques. All of which, he suggested, pointed to the need for more skilled accident investigators. However, ship size was still increasing, and with it the potential for bigger problems, when allied to issues of competence, which was probably being spread thinner than hitherto. And while statistics from the European Maritime Safety Agency (EMSA) pointed to a positive direction in oil pollution accidents, loss of life had increased in recent years with 82 seafarers killed in 2008.

EMSA noted that there had been some 670 vessels involved in accidents in European waters in 2008, which compared favourably with the 715 in the previous year. Improvement was patchy, however, with a 12 per cent increase in accidents reported in Baltic waters. There clearly was no reason for either great satisfaction, or complacency.

Internationally, the background to marine casualty was changing with the IMO Code giving effect to its resolution of marine accident investigation coming into force on 1 January 2010. These, said Mr Chapman, were mandatory provisions, which required flag states to investigate every 'very serious marine casualty' with independent agencies, provisions to investigate less serious accidents and requirements for 'safety focused investigations' that would establish causation. There were additional requirements for properly qualified investigators, and a duty to publish and promulgate findings, and to report these to IMO.

These are important changes, bearing in mind the small minority of the 169 flag states which undertake this important work at present. One might also consider the very different approaches adopted by different flag states, ranging from those which clearly comply with the new provisions, to those who investigate through their criminal codes, and those which have neither the resources, nor the inclination to fulfil this important part of the Solas Convention.

It was notable that Mr Chapman, who

presumably has a good handle on these matters, seemed to suggest that many flag states would find it somewhat difficult to build sufficient resources to meet the IMO deadline (only three weeks away when he was speaking).

There were, he said, many types of casualty investigation, many of which were attempting to discover and establish legal liability, blame or guilt, rather than causation. What was really important, he emphasised, was not *what* happened, but *why*. It was also something of a myth, which tended to be propagated by lawyers and insurers, that '80 per cent of all accidents involved the human element'. The human element was indeed the starting point, but a close study of the local environment and circumstances were more relevant in establishing causation.

This question of 'why' an accident happened needed to be answered if recurrence of the accident was to be prevented. The answers needed to be promulgated and acted upon.

All too often, he suggested, investigations did not adequately conduct root cause analysis, and findings were retained 'in-house'. Less than half of all accidents, he estimated, were reported to the IMO, pointing to a need for a dramatic increase in transparency. Why do people keep these lessons to themselves? Clearly there is fear about, chiefly that blame will be attached, and spread, and this inhibition does nothing to encourage open discourse and help other people to learn the lessons which could prevent their own accidents.

The marine casualty investigator of today, he said, needed all his traditional marine skills to be supplemented by a knowledge of human factors, management systems, and the ability to extract, analyse, and interpret electronically stored data. He needed to understand systems, and should learn the lessons from other high-risk industries.

A different approach came from Captain Jeremy Smart, Head of Enforcement at the Maritime and Coastguard Agency (MCA). His department, he suggested was 'the end game of the compliance process', dealing not with accidents but 'preventative incidents', and helping, through enforcement, to compliance with safety and pollution legislation.

While the UK MCA detains about 100 ships every year, the enforcement department looks at about 120 breaches annually, of which some 12-15 cases go forward to prosecution. Such prosecution, says Captain Smart, is undertaken as a deterrent, firstly telling the world of the breach and identifying the transgressor, and secondly to punish the guilty, which reflects 'the considered will of the people'. Publicity matters, it is important, and it hurts people and organisations in an age when corporate social responsibility was more widely recognised.

Enforcement weapon

Enforcement also provides the MCA surveyor with an important weapon for generating a safer culture, offering considerable authority. It provides the surveyor with a sanction. 'Fix it', the surveyor tells a recalcitrant operator 'or bad things happen.' And it is owners and operators, rather than individuals who tend to be prosecuted, with individuals only ever finding themselves in the dock if they are judged to be personally culpable.

If some accident has occurred because some exhausted officer has fallen asleep on the bridge, it will be the operator, and not the officer, who will be the subject of inquiries. It is important, emphasised Captain Smart, not to charge the wrong person, if the charge is to stand up in court. 'To get prosecuted,' he suggests, 'you have to work pretty hard at it' and prosecution is never undertaken lightly. It is a very serious business indeed, and people faced with Captain Smart's case officers are left in no doubt that this is so. 'People take time to talk to us,' he says and will be made aware of the consequences of not being honest.

After such an investigation, where all available sources of information are part of the toolkit, comes the decision whether or not to prosecute. It will be the case officer who will make the recommendation, and if this is to go ahead, it is referred to Captain Smart, who, if he concurs, will refer upwards to the MCA's Director of finance and governance.

In this process the various officers will weigh up the chance of a successful prosecution, and whether such is in the public interest. Only if both boxes are ticked, will the case go forward. Captain Smart was at pains to point out that in no way is the decision governed by resource availability, even though a big, contested case – with all its attendant expenses – does not come cheap.

The enforcement department does have a secondary weapon, in that even though it is not decided to prosecute, a formal caution of an offender, similar to those which are issued by police forces, can be issued. This too involves a very public sanction, and is viewed as an effective deterrent.

Is this very public means of enforcement an important vehicle for learning about accidents? 'Publicity is what hurts people,' observed Captain Smart, and in a commercial world increasingly aware of its responsibilities and the glare of public scrutiny, the big stick wielded by the enforcement department might assume greater power.

Perhaps the fact that it is used so sparingly gives it added potency in the encouragement of a safety culture. And without a doubt, there are some individuals, or even operators, who will only respond to such harsh treatment. It is the way of the world.

Peter Mason was an import from the non-marine world, although his consultant company, Lloydmasters, has provided safety culture and risk management advice to such as the oil company BP and warship builder VT. His approach was to explore the very philosophy of accident prevention, examining the difference between 'no-blame' culture and that of a 'just' culture in a company. You needed to get to the roots of such issues, if you were to have any positive effect upon safety.

The 'unintended consequences' of accidents needed identification, if adverse ones were to be avoided. If the precautions hurriedly put in place after an accident have other negative effects, then it is a very bad result.

There are, he said, certain common factors about virtually all accidents, and marine accidents were in no way different from those in other industries. Common characteristics were that an accident demonstrated a latent condition, and showed that there had been a degradation of norms. There may well have been flawed thinking and decision making, while cultural problems or a lack of real leadership might have made the situation worse. Often, there was an inability to listen to, or react appropriately to the 'soft signals' coming from the shop floor, or those at the front, who had recognised the symptoms of trouble.

What, asked Mr Mason is your reaction to somebody who comes aboard brandishing 'yet another checklist'? It probably is not one of unalloyed joy, as it may well be thought self-defeating and unhelpful. The recipient, he infers, needs to buy into what the safety improver is trying to sell and imposing rules from the top down does not show much respect for the ideas of the person attempting to do the job.

We tend to blame individuals for accidents, he suggested, when it is the system that is at fault. You brandish a bit of paper telling somebody they 'have to' comply, when what is needed is for the recipient to 'want to' do what is right.

Safety culture

If you are looking for the definition of 'safety culture' it is 'the way we do things around here, when nobody else is looking'. A person operating in an effective safety culture will not be the person who wears his mandatory hard hat only when the boss heaves into view. In contrast, he buys into the system that he respects, and which respects him. If behaviour is about choice (I choose to work according to the rules), personal leadership influences that choice. Slack management engenders a culture of poor safety.

There are certain attributes of a positive

safety culture, according to Mr Mason. It should be 'mindful', with the management aware of the realities. It should be 'informed' with managers listening and acting on the shop-floor mutterings, which could be the first indications of rough waters ahead. The culture should include 'learning', a social activity requiring a human touch, and not merely 'sending stuff around' – (Oh God, yet another check list…). It is one thing to read a report, or even to attend a seminar – but did you dig any deeper?

An effective safety culture requires 'fairness', which needs to show balance and should not be heavy handed or insensitive, and requires to be 'respectful' of those who are expected to carry it out. A good test, to the person who says 'my door is always open', is whether somebody is prepared to enter it bearing bad news.

There are other items of self-examination, suggested Mr Mason. Are you aware of unacceptable practices going on in the organisation – are blind eyes being turned? Do you actively discourage or encourage short cuts around procedures? Are you really confident in your definitions of what constitutes an 'acceptable' risk? What is your attitude to the frequency of accidents? Do you learn about one and conclude 'it couldn't happen to me'?

There is a need, he said, to make your culture work for you. Involvement of the widest number of people helps, so that sections of the workforce do not feel disenfranchised. He suggests that the participation of workers' representatives or trade unions in conversations about safety systems can be very helpful. If it is faulty systems that cause accidents, or widespread ignorance, how is this deficiency to be remedied?

Meetings such as this seem designed to encourage participation and there was plenty to be said after the speakers had had their say. Because this is a subject that touches everyone, and about which most of us have views about what works, and what doesn't. There genuinely is such a thing as a safety 'culture' and it is, in a manner of speaking, a 'way of life', and something that needs to be worked at, and improved. You can learn a lot from accidents, if you take the trouble to ask 'why', rather than 'what' happened, dig a little deeper, and ask yourself , hand on heart, if it could have possibly happened to you.

Michael Grey MBE, FNI

Solent

Maritime education and training

Members of the Solent Branch gathered at the Warsash Maritime Academy for a presentation by Captain Quentin Cox on maritime education and training.

Captain Cox, a senior lecturer at the Academy, highlighted the challenges facing the maritime education and training (MET) institutions, in balancing the provision of education and training with the needs of the shipping industry.

The needs of the industry are, he suggests, 'safety balanced with commercial success' and this is provided by a trained and educated 'holistic seafarer'.

The 'holistic seafarer' should possess the required technical skills for his/her position and be aware of his/her role, both aboard and within the company structure, as well as being fully integrated into the operation of the ship. Additional qualities such as decision making, analytical problem solving, self awareness and self discipline, social skills, leadership and self-motivated learning, are also required. However, challenges exist for the MET institutions in providing such education and training.

The global shipping industry still has recruitment and retention problems for skilled officers with many potential trainees put off by the image of the industry, and perversely, some companies are imposing severe cost constraints on seafarer training, which could easily lead to 'lower quality' training provision.

The views of stakeholders such as other MET institutions, charterers and P&I clubs (who recognise human factors) need to be encompassed to ensure the best training is provided.

MET providers are responding with a number of solutions such as sophisticated simulator training with powerful effective debriefing, and encouraging employers to recognise the importance of non-technical skills through maritime resource management training. Captain Cox recognised the positive role played by various champions of timely education within the industry.

In summary, the speaker felt that educators must support the industry and any change should come from within.

Matt Winter FNI

NE England

Annual General Meeting and programme

The NE England Branch held its AGM in Newcastle upon Tyne on 24 September 2009. It was well supported with an encouraging turnout of members.

The Chairman, Captain Paul Armitage, took the opportunity to record appreciation for the good work done in organising the Institute's very successful international Annual General Meeting.

The Honorary Secretary unveiled an exciting programme for the forthcoming year. Due to speaker priorities, several calendar dates remain open to change, however. The next presentation was due to be on 29 October at the Newcastle Trinity House on the latest developments in ballast water treatment, presented by Dr Simone Lamont-Black, a senior lecturer at the University of Northumbria.

Dr Lamont-Black also invited any members interested in an organised tour of the recently completed Law School facilities that include specially designed courtrooms that enable students to gain a real life exposure to what they can expect in a courtroom scenario. Those mariners wishing to pursue legal qualifications may be interested to know that the university offers a master's degree in international trade law and is exploring the future expansion of marine related subjects.

Draft papers on the proposed revised branch constitution and educational foundation and the charitable foundation were tabled. Comments were invited on or before the next committee meeting on 9 December 2009.

Members unable to attend could obtain copies from the Secretary and all were invited to provide constructive comments as early as possible so they could be incorporated into a revised document which will be circulated to members prior to the next AGM.

The biennial international seminar series: 'The Mariner and Maritime Law – Manning the Future' last organised in 2008, successfully hosted about 130 delegates from diverse marine professional backgrounds and geographical locations. The next is due in November 2010. Sub-committee chairman Robert Tym MNI reported progress with preparations. The Treasurer's report indicated that the branch accounts including the annual returns to the Charity Commission for the education trust were in a healthy state, and these were duly submitted.

There were no new nominations received to fill branch office posts and those in place agreed to stand again for another term of office. They are: chairman, Captain Paul Armitage MNI; Vice chairman (seagoing); Captain Philip Jameson MNI; Vice chairman (ashore) Captain Colin Pratt FNI; Secretary David Bryne MNI; Treasurer Steven Healy MNI; Press Secretary, Captain Sunil Perera FNI.

Committee Members are Dr Phil Anderson FNI, Thomas Brown MNI, Captain Peter Johnson MNI, Captain John Murray FNI and Captain John Perry MNI.

There are more places on the Branch committee. Members are invited to volunteer their nominations to fill positions, which will give it an increased strength in depth.

Captain S V Perera FNI