

WrightWay Article

DPOA MAGAZINE

The Manila Conference of last year examined a number of revisions to SCTW, not least of which was a notable shift in emphasis, in placing Crew Resource Management and training in the 'essential' rather than its previous 'desirable' category.

The descriptor for this training is leadership and management and there is presently a huge amount of work underway by licensing bodies, the IMO and training organisations to establish the precise scope and range of this training and at what skill and professional levels it should be focussed.

Crew Resource Management Training has its origins in the aviation industry and has been a mandated part of an aviator's training for some thirty years. Accident investigations revealed that it was no longer a mechanical breakdown or structural failure that was to blame for a disaster or accident but rather a failure of the individual and that over 70% of these accidents were attributable to Human Factors.

The training is designed to mitigate the effects of simply being human and has attracted a number of different labels depending on the industry and environment. However, in essence the training encourages individuals to examine their relationship with fellow professionals and their working environment to identify areas of potential risk and establish both individual and collective procedures and processes to mitigate that risk.

In the Marine industry, the absence of a mandated obligation to conduct such training has hindered its widespread adoption. However, some enlightened companies have identified that the final cost of a simple preventable human error can far exceed the resources expended in ensuring the error does not arise in the first place.

In common with many industries, DP operations place a heavy reliance on the ability of well-trained professionals to work together in hostile operating environments, often with conflicting areas of concern. For example, marrying the essential needs of a saturation diver working many fathoms beneath the vessel, with the multi faceted operations taking place onboard,

requires co-operation, communication and mutual understanding of the highest order.

Developing the high levels of cohesiveness required in these situations is not easy and investigations of incidents and accidents often highlight that Human Factors, including ineffective communication and poor training, are significant influences on a potentially catastrophic outcome.

For example, in 2007 the 300 metre long container vessel 'Cosco Busan' collided with the San Francisco Bay Bridge whilst leaving harbour in fog. The subsequent repairs, fines, compensation for environmental damage and closure of fishing grounds came to \$100m. The financial consequences of just a simple lapse by a fatigued or overworked operator are potentially ruinous to a company, let alone the risks to the individuals working alongside him.

In all industries, those companies who have introduced Human Factors training programmes have seen accident rates drop and in a historically sceptical and conservative industry, Human Factors training has been well received by companies, crew managers and the individuals themselves.

The pattern of training is broadly similar irrespective of which training provider is chosen, stemming as it does from the aviation example. However, there can and should be shifts in emphasis to meet a client's or section of the industry's particular needs or aims and to accommodate different vessels or operating procedures. So for example, a DP diving operation close to an installation, involving subsea construction and the use of the vessel crane, can involve no less than nine separate centres of communication. For this reason it is likely that the training would concentrate heavily on things like closed loop communications, situational awareness and management style. In all cases, close liaison and communication beforehand, ensures that the training provider produces what the client both expects and requires.

The increasing availability of high quality simulators around the world now provides far greater opportunities for crews to put the classroom theory into operational practice.

Initially most delegates, being experienced seafarers, view the course with some cynicism but once they become confident in the non-assessed learning environment, where sharing experiences, success and failures with fellow delegates is expected and encouraged, they soon relax and derive maximum benefit.

However, all delegates face a far greater challenge when returning to sea in that it is reasonably easy to display appropriate behaviours in the relative comfort of a simulator but far harder to maintain these skills in the demanding environment at sea.

Shore based training is just one part of the whole picture and must be reinforced in word and deed by superintendents, managers and other, predominantly shore based, personnel. To do this they must also be equipped to recognise, integrate and mentor appropriate Human Factors related activity in the workplace. Maintaining the requisite high levels of integration required in DP operations is a constant process and continuation training that is relevant to the operation is essential.

It is here that the companies' own procedures and management systems can support their crews in maintaining high standards of non-technical skills. Human Factors training focuses on personal awareness and the ability to recognise individual errors and failings that could have hazardous consequences. It is also incumbent on the individual to share potential pitfalls with others so that they can take preventative action. However, this requires an environment where being open and honest about mistakes made is actively encouraged.

The Just Culture, as espoused by industrial psychologists, is based on the premise that no one starts a shift with the deliberate intention of making a mistake and that blaming an individual for simply being human will not prevent another similar occurrence. Energies should be expended on examining what structural, procedural and environmental factors exposed the human frailties that led to the incident or accident.

This is especially important in high workload environments, such as DP diving operations, where greater reliance is placed on technologies. Consistently more reliable, efficient and therefore cheaper, lean-manned ships may not have procedures and processes that double-check the accuracy of technologically driven decisions. As a consequence there have been groundings, collisions and catastrophes that have been technologically assisted. Sharing 'near misses' with others raises awareness of some of these inherent perils and a Just Culture ensures timely dissemination of lessons learned without undue censure to the individuals concerned.

Eventually a mutually supportive climate evolves whereby an individual is empowered to suggest changes, ideas and innovations to the management team in the confidence that they and their ideas will be treated with respect. Success can be measured by the degree these ideas and innovations are accepted and embraced by the senior management team and recognised by them to be great opportunities to improve the safety and business performance of the company. When this is the case, and the submitting of such ideas is no longer viewed as a slight on the senior management team's abilities, it is possible to develop a shared vision of the enterprise. The ultimate aim should be for the workforce to own and implement the solutions for themselves and achieving 'One Team, One Goal', not only in individual departments and vessels, but also in the wider context of the entire company.

One company that has taken huge steps in this regard is BC Ferries of Canada. By taking the principles of Human Factors training to a corporate level they were able to draw on the experiences and insights of the entire workforce. This process of workforce involvement has yielded significant improvement to the bottom line, as well as generating benefits to the wellbeing of the workforce itself. In one year alone there was a saving of \$7m on the annual fuel bill and in addition a 26% drop in days off due to injury, with the consequent reduction in overtime payments and roster disruption. This example provides support for the findings of the July 2009 McLeod report to the UK Government which concluded that companies achieving high levels of workforce involvement had a 27% higher profitability and a 19.2% improvement in operating income. Equally the reductions in staff turnover and associated training costs cannot be underestimated.

So, although the changes to SCTW may, on initial examination, appear to be another example of excessive beaurocratic interference or “elf and safety” gone mad; even if it is only integrated at its lowest mandated level, it will still prevent accidents and save money. However, if Human Factors derived processes and culture are embraced in its fullest evolution of workforce involvement, the opportunity to ensure all members of the workforce return home to their loved ones in one piece while simultaneously generating significant savings and boosting profitability, for a relatively small financial investment, cannot be easily ignored.

Perhaps viewing the rewrite to SCTW as the portal to world class safety and business excellence will be the first step in your organisation’s journey.