FOCUS ON SAFETY CULTURE

Regulators, classification societies, the maritime press and IMO constantly refer to the need for ship operators to practise a safety culture. But what precisely do they mean?

Everyone agrees with the objectives of a safety culture - the reduction and elimination of accidents which involve injuries to ships’ personnel and damage to property and the environment — but there can be some confusion as to what a safety culture really represents.

Experts commonly describe it as the values and practices that management and personnel share to ensure that risks are minimised and mitigated to the greatest degree possible. In short, this means that safety is always the first priority.

With a true safety culture, every crew member - whether a rating or a master - thinks about safety, and new ways of improving it, as matter of course. The cause of practically every unsafe incident can be traced to some form of human or organisational error. If people think about safety continuously, many accidents simply will not happen because virtually all so called “accidents” are in fact preventable.

The development of a safety culture does not lend itself to prescriptive rules, and the purpose of this leaflet is simply to encourage key people in shipping to consider how even more might be done to improve levels of maritime safety.

Although experts on the subject may talk in terms of psychology or behavioural change, the key to achieving a safety culture is:

- Recognising that all “accidents” are preventable and normally only occur following unsafe actions or a failure to follow correct procedures
- Constantly thinking safety and
- Always setting targets for continuous improvement.

How can a safety culture save money?

The following benefits have been derived by shipping companies from the conscious attempt to practise a safety culture:

- Reduction in lost employee hours
- Reduction in hospital costs
- Reduction in sick leave
- Reduction in pollution costs
- Reduction in cargo damage
- Reduction in insurance premiums

“The indirect costs of maritime accidents are estimated to be around 3 times the direct costs associated with injuries, deaths, property damage and oil spills.”
SO WHAT IS A SAFETY CULTURE?

There is nothing inherently new about the concept of a safety culture. The term simply embraces what the majority of reputable ship operators have recognised for years - that safety is a priority and that it has to be managed efficiently and systematically like any other part of the business.

As long ago as 1981, and with no claims to originality, ICS and ISF published their Code of Good Management Practice which advocated a "culture of self-regulation of safety". The ISM Code is to a large extent derived from the ICS/ISF Code of Practice, reflecting the development of the industry's understanding of safety management, in line with the emphasis in safety culture on continuous improvement.

Safety management is a complex subject and shipping companies can always benefit from the continuing research that has been undertaken in this area. But it is important to recognise that safety culture should not necessarily be seen as something radically different from what many shipping companies are doing already.

Safety in shipping: the industry's improving record

Merchant shipping is arguably the safest and most environmentally benign form of transport. Perhaps uniquely among industries involving physical risk, commitment to safety has long pervaded virtually all deep sea shipping operations. As long ago as 1981, and with no claims to originality, the concept of safety was embraced by the industry.

The improved safety record of shipping is further supported by the number of third party liability claims resulting from accidents, such as those involving damage to the deck or damage to containers. In the latter case, as shown in figures 1 and 2, the number of claims has been reduced. The goal of a true safety culture is to reduce the LTA rate to zero, and companies regarded as being at the cutting edge of safety culture claim to achieve negligible LTA rates.

There are a number of other means of monitoring safety performance which may include making distinctions between serious injuries and minor ones, or which may be derived from statutory reporting requirements contained in national legislation. The key point, however, is that companies employ some means of monitoring their safety performance over time.

Many companies find it useful to compare their safety records with those of other companies or industries. The

INSURANCE DOES NOT BLIND SAFETY CONSCIOUS SHIPPING COMPANIES TO THE TRUE COST OF ACCIDENTS

Example

A container is dropped on deck during loading. Due to failure to follow an agreed procedure an incident is not reported because the officer thinks no damage has been done to the container. It is subsequently found that a fuel tank beneath the deck has been ruptured spoiling the contents of 30 boxes. The total cost to the ship owner of this incident (unrecoverable from insurance) could typically be $200,000 - repairs $50,000, 30 containers $30,000, delay $55,000, rescheduling $50,000, management time $15,000.

* Assuming P&I deductibles: hull and machinery $160,000, containers $1,000 per box

Research has shown that for approximately every 330 unsafe acts, 30 are likely to result in minor injury. Of these 30 minor injuries, one is likely to be an LTA with a cost in the range $10,000 to $30,000. If unsafe acts are prevented an LTA is likely to be prevented. More to the point, if 90 LTAs per year are prevented, no one will be killed in the next 330 years.

The Safety Triangle

If 30 LTAs are prevented a life will probably be saved!

1. Major Injury (LTA) 30 Minor Injuries

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The introduction of a genuine safety culture based on the concept of continual improvement, and personal commitment and responsibility on the part of everyone in the company, is a long term process and involves a lot of hard work. To a certain extent, experience gained through the introduction of Safety Management Systems required by the ISM Code will result in a change in behaviour. It should be recognised, however, that companies can take additional steps to encourage employees to move from a culture of compliance with regulations to that of a culture based on individual commitment to safety.

A starting point is making sure that employees fully understand why they are following the procedures required by the ISM safety management system. They need to understand that conditions existing in different trades cannot be readily compared, but it can be productive to conclude informal arrangements to exchange information and experience with companies operating in broadly similar circumstances.

3. Changing behaviour

The key aspect of a safety culture is changing the behaviour of seafarers and shore based managers so that they believe in safety, think safety and always seek further improvements.

Implementing a Safety Culture

There are perhaps three components to introducing a genuine safety culture:

1. Commitment from the top
2. Measuring the scale of the problem

1. Commitment from the top

If company personnel are to act safely at all times, commitment from the highest level of the company is vital. Regardless of the ability and motivation of the operational managers with day to day responsibility for safety, if commitment from top-ranking decision makers is lacking then the efforts of everyone else will invariably be wasted. However, in order to develop this commitment at the senior level, it is necessary for senior decision makers to have a proper understanding of the true costs of accidents.

Accountants may be prone to question why safety should be the first priority if compensation for accidents is met by insurance, but insurance is only a mask for lack of reliability, and a lack of reliability will soon lose customers. A safety conscious company is an efficient company and efficiency brings its own rewards. To foster a safety culture is a matter of enlightened self-interest.

2. Measuring the scale of the problem

Crucial to achieving a genuine safety culture is having the means to monitor the company's current performance in order to identify ways in which safety can be continuously improved. Across all industries, the most widely used form of monitoring the effectiveness of current policies is the use of the Lost Time Accident (LTA) rate. An LTA is an incident which results in absence from work beyond the day or shift when it occurred. An LTA rate is usually calculated as the number of LTAs that occur during 100,000 working hours.

Research has demonstrated that the number of personnel accidents is reduced when the number of other accidents, such as those involving damage to property, will also be reduced. The goal of a true safety culture is to reduce the LTA rate to zero, and companies regarded as being at the cutting edge of safety culture claim to achieve negligible LTA rates.

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Using safety culture to get the best from ISM

Safety culture, of course, is closely linked to the philosophy underlying the IMO International Safety Management (ISM) Code.

If a company successfully implements ISM this should encourage positive changes of behaviour with regard to safety management. Indeed, the proper implementation of the ISM Code should result in a safety culture.

But there can be a difference between complying with the letter of the ISM Code and fulfilling its spirit, i.e. the conscious practice of an attitude to safety in which all accidents are seen as preventable, and everything reasonably possible is done to ensure that accidents are actually prevented.

The achievement of a total safety culture goes beyond compliance with the ISM Code since it can provide a means of maximising the benefits and cost savings that can be derived from the systems which ISM requires companies to implement.

Seafarers and their managers may be compelled, by legislation, to follow certain procedures. But people cannot be compelled to believe in these procedures or to think about the safety implications of everything that they are doing.

The public focus of the ISM Code has been on the need for companies to comply with it within specified deadlines, and to be issued with Documents of Compliance and Safety Management Certificates. However, the underlying purpose of the ISM Code is to move shipping away from a culture of “unthinking” compliance with external rules towards a culture of “thinking” self regulation of safety.

Following the spirit of the ISM Code involves, not least, a commitment to continuous improvement of the company’s safety record. However, safety culture involves moving beyond compliance with external rules to a culture of self regulation, with every individual - from the top to the bottom - feeling responsible for actions taken to improve safety, rather than seeing them as being imposed from the outside.

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