

- There are about 50,000 ships trading worldwide.
- These ships are operated by 1.2m seafarers;
- Of these 50,000 ships about 0.30% on average are lost every year;
- This percentage accounts for about 700 lives lost per year, which is a rate totally unacceptable in any other transport system;

We live the era of television and television, from politicians to Hollywood and from stock markets to the mid-air explosion of the Challenger space shuttle, is about images and image-making.

As a matter of fact the images we are capable of producing in this industry are very powerful by their very nature as they contain two life-threatening ingredients: Ecological Disaster and Human Error. They are both open to very diverse interpretations and they both offer excellent grounds to witch-hunting and finger-pointing at scapegoats.

This is the way our society thinks and acts from the birth of human kind and this will very likely never change.

So, thanks to the efforts of restless reporters and news agencies worldwide we have allowed to create for ourselves an ugly image of polluters. And while we all know that, when comparisons are made with say other industries, this picture is not exactly telling the truth, not only there is very little we have done to reverse it we have on the contrary contributed in its development with our attitude.

On the issue of pollution, according to ITOPF data, 63% of all pollution incidents between 1974 and 2006 came as a result of 1,141 recorded cases of Collisions and Groundings that involved tankers.

We all know of course what's happening in our backyard.

These incidents that cover the period between 1978 and 2003 are mainly the ones we are time and again called upon defending ourselves against.

Let us take a quick look at them:

- ✓ AMOCO CADIZ, 16 March 1978 spilling 227,000 MT Crude off Portsall Brittany France;
- ✓ ATLANTIC EMPRESS colliding on 19 July 1979 with the AEGEAN CAPTAIN resulting in 26 dead and a total spill of 287,000 MT of crude oil;
- ✓ BRAER on 5 January 1983 spilling 85,000 MT at Shetland Islands;
- ✓ HERALD OF FREE ENTERPRISE on 6 March 1986 at Zeebrugge Belgium with 193 dead;
- ✓ DONA PAZ / VECTOR collision on 20 December 1987 at Tablas strait Philippines resulting in 4,341 counted dead;
- ✓ EXXON VALDEZ grounding on 24 March 1989 in Alaska spilling 53,094,510 gallons of crude oil;
- ✓ HAVEN on 11 April 1991 off Genoa, spilling 114,000 MT of Crude Oil and leaving 5 dead while also involving charges with manslaughter to the owner and his son that were not acquitted before 3 retrials;
- ✓ SEA EMPRESS on 15 February 1996 spilling 72,000 MT in Milford Haven Wales.

- ✓ ERIKA on 12/12/99 carrying 31,000 MT FO;
- ✓ PRESTIGE that was denied a port of refuge and sank off Spanish coast on 19/11/02;
- ✓ TASMAN SPIRIT on 28 July 2003 that grounded 1.5 nm off Karachi resulting in 12,000 MT of crude oil spilled through the leak and involved 8 arrested persons (7 crew + 1 salvage) who remained in prison for months until the Pakistani government demands for 1 bn \$ compensation were satisfied.

All these ships had at least one thing in common: they were all manned by appropriately certified and licensed seafarers while most of the involved ship management companies had one or another screening process in place.

The question I often ask myself is how much the selection practices we use in our industry have changed since 1978. How much have these very incidents contributed towards redesigning or even reviewing the way we conduct our screening.

What is it exactly that we screen? What sort of competencies do we look for? How do we do it? And most important: what is it that we feel compelled to do with the findings of our screening?

The need for screening is a totally dynamic one and changes with the evolution of every industry. Industries actually make a long way in developing and refining their screening processes.

I will give you a few examples from the evolution of screening in the aviation industry: When the first airplanes were set to go to war, the army did not have the slightest clue about the required qualities of the would-be airmen. The first airplanes were considered as the cavalry of the air. The primary qualification for selection of pilots for the Royal Naval Air Service in Great Britain during the first war was their ability to ride a horse. As the years went by the principal selection criterion for the RAF in the 2nd War became their ability to ascend to an equivalent of 20,000 ft, yet everyone requires Oxygen above 10,000 ft. This not only did not make sense but gave the pilots the false belief that they could actually fly at such heights and this way resulted in numerous totally unnecessary accidents in an unintentional massacre of youth that could have been prevented if only those responsible for the screening were not improvising but rather knew what they were looking for.

The French fired a revolver next to the ear of the would-be pilots examining their reactions and ability to withstand the nervous shock.

The Americans placed the candidate on a piano stool and spin him. If he vomited he was rejected. It was not until after the war that they discovered they were rejecting the normal.

With the fast pace of changes in the aviation industry they soon recognized the need to change the way pilots are being selected, their performance measured and their career path monitored and developed.

Now, unlike the airliners who obviously took some pretty drastic measures in the development and tightening of their selection and screening process, a typical approach in our industry is that competence matters are traditionally taken more “lightly”.

In a pilot’s logbook one can easily spot details of flights, day and night time landings, aircraft types and tasks while the pilot’s license reflects acquired skills that are type-specific. The legal framework requires 6-monthly and annual simulator training,

transition training (aircraft checkout) every time a new aircraft type is to be flown and regular detailed accurate and objective evaluations by senior pilots to verify that certain required skills continue to be current.

At a glance, our industry seems to be on the other side:

- ✓ We perceive Competence as a fixed indisputable constant while in fact is a dynamic variable;
- ✓ We have widely adopted a “Once Certified, Always Competent” concept that just cannot be right; and
- ✓ We find it customary not to be able to distinct between a navigation officer who was in the last two years sailing on a tanker through Singapore straits every other week and one working on a sister ship that was laid up in the same period.

We usually complain that after a new disaster, a new piece of legislation is being introduced and soon imposed. Some of this legislation is maybe useful while some other is maybe concerning.

Such legislative measures are reactive to these incidents and we all know they are often hastily taken, they are occasionally related with political decisions and as such they are totally unable to offer a long or a short-term solution.

Such a reactive approach will very likely continue for as long as we don't adopt a proactive attitude and prove that we do learn from our mistakes.

After the Herald of Free Enterprise in '86 and the consequent adoption of the ISM code we did alright make clear statements in our objectives about “Safety Culture” and about “Trained and Competent Workforce”. How is it however that with the best of intentions from our end we plan to measure and monitor?

How do we effectively monitor?

We live in a complex environment where ship designs, cargoes, charterers' requirements, company needs; port state control interpretations, flag administration and legal framework are continuously changing.

In this environment our challenge is to: mitigate risks; maintain a safe working place; and provide opportunities for our seafarers' development in a consistent manner.

Without good record keeping and the use of information technology to help us keep track, the task to navigate in this complexity becomes almost impossible.

It goes without saying of course that we cannot monitor or measure anything at the first place unless we have clearly defined it. We know what ingredients make up Competence: Knowledge, Skills, Experience and Attitudes.

Competence covers all aspects of workplace performance of different tasks from Watchkeeping to maintenance, ability to respond to contingencies, dealing with the responsibilities of the workplace (including of course working with others).

Competence requirements in the STCW context are quite generic rather than specific and as such they leave room for different interpretations.

Because there are no rules that can satisfy all or recipes to suit every need, I will outline today our approach in the hope that a shared experience may contribute in developing new ideas.

As mentioned before we took advantage of available new technologies to draft a roadmap for employment and career development.

This roadmap whereas job skills can be demonstrated and recorded, takes into account the STCW minimum certification and competence requirements for each rank per ship type and in addition contains company-specific needs along with guidance for onboard job learning and assessment.

Knowledge and skills gap

Once an inventory of important competencies is finalized we come to decide how actual skills and knowledge can be verified as well as the timeframe for closing the gap between existing and required.

We have adopted a three-tier inventory comprising Functions, Competence Units and Elements of Competence .

A unit of competency is a stand alone task. When several tasks are grouped together they form a job.

Performance Criteria

To achieve competence means that you can do the task safely, without direct supervision.

For every listed element of competence it is absolutely necessary that we provide detailed guidance through a set of outlined performance criteria.

On a case by case basis this guidance should make direct and precise reference to the company's MS, STCW, the Code of Safe Working Practices etc.

Unless we do this, for every vaguely described requirement we will inevitably get different interpretations by different individuals. Then of course all our intentions and efforts to improve consistency and standardize assessments onboard will consequently go down the drain.

This approach actually encompasses the very essence of dissociating between certification and competence.

One of the direct benefits is that assessment and training are provided to an agreed standard. High levels of consistency are introduced and we can easily focus on identified

weaknesses of specific individuals rather than waste company funds and people's time in sending everyone in the same rank to take courses they may well not need.

Through the developed reporting system we can tell at a glance so we can take corrective action:

Who has not been assessed; What parts of the promotion criteria are being satisfied and therefore what parts are not yet; Who has not undergone training; Whose familiarization with a certain task is lagging behind; Who is suitable for deployment on specific ship types.

The essence of this system is the collection of objective and reliable evidence about a person's competence to do the job safely and the making of consistently objective decisions about his career progress in the company.

To ensure objectivity we do not rely in one person's opinion but require at least two from subsequent ships or different assessors making appraisals for the same job.

These opinions we verify against past evaluation reports made by superintendents or other evidence coming from performance during training courses, tests etc..

The verification of competencies is recorded in individual electronic training record books and the updated data is submitted through a central server to and from the ship to the office and vice versa at agreed intervals as well as during sign on and sign offs.

Every time a seafarer disembarks, his electronic Training Record Book is submitted to the central server, is updated and made available to company managers On-Line where it can be accessed and reviewed.

The next time he joins another company ship, the same updated TRB is submitted onboard and made available to the Ship's Master and/or Chief Engineer.

The company management has On Line access to individual training record books.

In this way one is able to monitor the progress of individual seafarers, the volume of training conducted onboard specific ships for specific periods as well as the pace at which progress is made and recorded.

Being able to access these records On-Line means that there is no need to send messages or attachments back and forth but the information is available and accessible real-time in offices at very distant locations.

Of course by Onboard Training we do not necessarily mean the watching of a CBT and afterwards taking a test of some kind although this may be part of it.

The term is about primarily recording On The Job conducted training by the seniors to the juniors while a passage plan is designed and executed or a specific machinery or

equipment being overhauled and its maintenance supervised with the supervisor taking the active role of trainer and appraiser of his staff.

That, briefly concludes the description of the way we have decided to manage these competence-related pieces of information.

I want to close by saying this:

Mistakes are part of human experience

They say, an early description of human error is Adam's eating the apple in the Garden of Eden. Having committed the error, Adam, like his present-day descendants, knew he had to find a scapegoat - Eve.

For a number of reasons, that we cannot analyze today, the tide of public opinion is running against our industry.

It is not that we have not contributed a lot in the development of our negative image. No. As if this was not enough though, Shipping, like many aspects of life and human activity is subject to irrational public perceptions and these perceptions very often guide government decisions.

We have apparently entered an era where very often perceptions rather than facts guide public policy.

So, let us not forget this: The finger will always point at our industry. Like Eve, we are a very suitable and convenient scapegoat.

I have only one thing to suggest: Let us all try and turn our business into a proactive workplace where we learn from the mistakes of others and get ahead of things rather than every time having to follow what policy makers dictate upon us.

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