



OCTOBER – 2010 ISSUE NO. | 02 |

# TRAIN, TRAIN, RETRAIN, RETAIN:

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www.globalmet.org

# ExecSec's Comment



**Rod Short** 

## "...the data systems and the information moves onto the vessel and the crew move out."

A very interesting article by Dr Andy Norris on "The future of navigation" starts on page 76 of the September edition of Digital Ship. In looking at some of the potential advances in marine navigation, Dr Norris comments that we are currently in between traditional ship navigation and what could be termed the fully digital approach. He predicts that, as a result of IMO's e-Navigation programme, by 2020 this digital world will be in place and many ships can be expected to be using systems in a fundamentally different way to what is currently in use.

In a very telling final paragraph, Dr Norris comments that this different world of automation will lead to considerably improved navigational safety and the human will be taken 'out of the loop' even more. What then can be done if a problem occurs? "Are the skills available to take over? Is it better to ensure that the technology fails sufficiently rarely that the risks are considered acceptable, rather like the negligible probability of both engines failing on a cross-ocean flight?"

In the report on the round table discussion on "Seafarer safety and the role of technology", on pages 65 to 70 of the September issue of Digital Ship, in responding to the London P&I Club's pointing to cases it had seen involving out of date navigation charts, Kyle Hurst of Inmarsat in considering whether the next generation of communications and navigation technology can eliminate this problem, sees us at the pivotal moment where "I think they will start to combine and we will start to have this data coming through to vessels".

In expressing concern about the short sightedness of 'knobology" training, particularly with respect to ECDIS, David Patraiko of the Nautical Institute warns that as systems become more integrated it will be easier to "become absorbed in the operation of the integrated system without realising that it is that you are operating that system".

Dr Jonathon Earthy of Lloyd's Register comments "We are no longer talking about a ship and crew separately; we are talking about a system that safely navigates the ship, which, as David says, takes account of people skills and takes account of what technology can offer. That means people taking more management role, but understanding the trust they place in the systems that give it to them."

"There is huge potential for shifting responsibility, which could mean that ship functions get devolved on shore, or the ship becomes more autonomous because it is easier that way. Designs will have to change because we currently do not sufficiently match technologies with the skills of seafarers."

"We are starting to move into an environment where you could have a vast amount of automation, with minimum skilled crewing, that requires a huge amount of investment. The alternative is to have a lot of automation and huge amounts of crew capability, but you have very trained staff and decision makers of a class that we can probably no longer afford or attract in the marine industry, so there is an issue here."

Further on in the article Kyle Hurst makes the very interesting comment "With a lot of the things we have spoken about today we are moving towards a situation where the whole human element of the maritime industry becomes redundant. I am not saying that it is the way to go, and I am not advocating it, but I think it is always interesting to look at because it does give you a whole new playing field."

"Whether you like it or not, we could find ourselves moving towards this involving a whole new level of communication, information reliability, data systems. It is almost like the data systems and the information moves onto the vessel and the crew move out."

The trend is clear, but in MET we continue to teach 'boxing the compass', 'line of soundings' and 'error of perpendicularity'!

Rod Short Executive Secretary



s mentioned in GlobalMET Gen Memo 16/10 on 3 September, the editorial panel has been very pleased to receive a paper for inclusion in this issue from Associate Professor of Marine Engineering Rahul Magpul, of the Tolani Maritime Institute in Pune, India, a major institution that has been a long term Member and strong supporter of GlobalMET. Prof Magpul proposes environmental conservation and protection initiatives that can be taken by MET providers. When implemented these initiatives would accord with 'If you think in terms of a year, plant a seed; if in terms of 10 years, plant trees; if in terms of 100 years, teach the people' - Confucius.

In his covering memo, Prof Magpul makes the following very welcome comments:

The plan to invite contributions from the GlobalMET community to publish in the GlobalMET Gen Memos and Magazine is commendable.

This initiative in tapping the wide mosaic of talents and specializations that exist in the MET institutes/community has great potential, because a common platform (read global or international platform) or a formal discussion forum will be provided and be available, for addressing and finding solutions to the various challenges facing the MET institutes and the maritime industry, at present as well as in future.

Moreover, this will be an opportunity for all to learn from one another and improve, in skill enhancement, introduction of innovations and better development of existing systems. All of these will eventually be beneficial for the MET institutes and the maritime industry.

(Environmental 'Land ecosystems & atmosphere protection/LEAP' by Maritime education & training Institutes/MET providers)

#### Rahul Nagpaul

C Eng, MEO CI.1(m), DCE(o)II, BE(Mar.Eng), MIMarE(I), MIE(I), MISTE, MISCA. Associate Professor - Marine engineering (Engine room Simulator), Tolani Maritime institute, Pune (India).

Keywords: Maritime education & training (MET) institutes/providers, students, Marine environment protection (MEP), Environment protection on land, Society, Future environment ambassadors, Audits, QMS, Paper sheets, Trees, Carbon sinks, Afforestation, Countering climate change.

#### Objective

To protect, preserve and conserve our GAIA (Greek for Mother Earth/Mother Nature), slow down the climate change as well as counter the environmental degradation, damage, deterioration and destruction which is presently occurring all over the world.

"Civilization... wrecks the planet from sea floor to stratosphere" – Richard Bach

#### **Abstract**

This article describes three (3) methodologies in an environmental conservation and protection strategy, that can be initiated on land by the Maritime education & training (MET) providers/ institutes, members of Global maritime education & training association/GlobalMET (and is also applicable to other MET providers/institutes worldwide).

Marine students are familiar with marine environment protection (MEP) as a subject, they share and spread this knowledge in section of society on land they are in touch with, for environment protection and awareness on land. in addition, use of paper sheets (a4 types primarily) is reduced and eventually stopped in the audits of Quality management systems (QMS) and grading in many of the MET institutions. This prevents cutting of trees, which are one of the best 'Carbon sinks'. Lastly, the MET institutes carry out afforestation of plants and trees in proportion to the number of pre sea students being trained and allot one tree/plant to every student who shall see and monitor the growing up of this plant (funded, watered and nurtured by the met institutes) as she/he too grows up in the professional field. As some met institutes may find implementation of this practice difficult due to location/geographically, an alternative is proposed.

Adopting this sustainable strategy consisting of the three methodologies, causes a small, measurable and very positive environmental effect of slowing down and countering the climate change to occur.





## Introduction

he students (taught and trained in Marine environment protection/MEP) are utilized as environmentally aware human resources to create awareness and increase knowledge in the land based society about hazards to environment.

## 1. Student as an environment ambassador of future

The pre sea students in MET providers/institutes in all countries come from a wide cross section of the land based human society. Their family members, friend circle, colleagues, associates and peer groups are connected with many Trade companies, corporations, work groups, association/organization/institutions and establishments.

If you think in terms of a year, plant a seed; if in terms of ten years, plant trees; if in terms of 100 years, teach the people – **Confucius** 

The Nautical & Marine Engineering students (at different levels) are educated in marine environment protection (MEP) among other subjects, in handing the different Pollutants (Annexures I to VI, MARPOL). They share and spread knowledge about the *Green* practices and taking care of the atmosphere, for adaptation and utilization on land.



Figure 1 An Ocean going Bulk carrier

As a budding environment ambassador of future, resource utilization of students has two (2) important advantages:

- 1. She/he is made aware, sensitized and *Primed* for the future life at sea.
- 2. Awareness of environment and correct pollution handling methods in land society is achieved universally.

S.No.	Governing Administration/ Authority/Organization	Constituents (As on 28 <sup>th</sup> August, 2010)
1.	Directorate General of Shipping (DGS), India.	122 no's approved Maritime Education & Training (MET) providers/institutes in India.
2.	Global Maritime Education and Training Association (GlobalMET), Australia.	105 no's (in 35 economies), including many of the Maritime providers in Asia Pacific.
3.	International association of Maritime Universities (IAMU), Japan.	53 no's of Maritime Universities worldwide.
4.	Compendium of Maritime training institutes (CMTI), International Maritime Organization (IMO), United Kingdom.	222 no's of nation (though many countries without any MET Institute/ providers as there is no requirement).

Table 1 The worldwide distribution of MET institutes/organizations/providers (many MET institutes/providers are common to more than one Governing administration).



Optimum resource mobilization and utilization of students as an environment ambassador of future can take place when they visit and interact with the above mentioned section of society while on mid/end term/semester leave/vacation or when they corresponds via letters, e-mails and on telephone. Albeit, any excessive propagation is to be avoided.

Distribution of MET providers/institutes is shown in Table 1.For instance, over 1300+ students in Tolani maritime institute, Pune (India), 122 approved MET providers/institutes in India and 105 nos MET institutes in GlobalMET (in 35 countries) equal to several thousands of students. Number of these future environment ambassadors increase to Tens of thousands of students by including the numerous MET providers/institutes in the relevant 222 countries listed in CMTI, IMO (UK).

## Reduction and cessation of paper sheet use in Audits, QMS and Grading

Many of the MET institutes/providers, members of GlobalMET, approved MET institutes in India and those listed in CMTI, UK maintain high standards of education & training by functioning as per QMS/other Global standards (Presently the ISO 9001:2008 QMS Standard). These are audited and validated periodically by grading agencies under the National maritime authority. High consumption and waste of paper sheets occur as these are cheap commodity. The endeavor is to make QMS more environment friendly and save paper sheets by using ICT & computers.

#### Rome was not built in a day - Ancient Proverb

This is a step towards a *Paperless Office* and can be introduced in phases as many MET institutes already use (partially or fully) ICT, computers and *soft copies* of Quality documents in audits and QMS. The surveyors of audit companies/classification societies accept on-line and *soft Copies* of records. Use of paper sheets in the absolute sense cannot be replaced in MET institutes, as notes and text books are invaluable and should not be mixed with the Environment management standards (EMS)/ISO 14001.



Figure 2 A paper machine headbox in a modern paper making mill

History: Initially symbols were etched on rock slabs and painted on dried leaves. The first paper was created 2000 years ago in China from recycled materials. Modern paper are the writing, corrugated and Glossy paper types and paper making is a highly technical industry (It is made from pulp of old, re-cycled paper and wood fiber).



Figure 3 A ream of A4 size paper (contains 500 sheets)



In the audits (internal or external), QMS/grading, validated paper sheets on A4 size ie. 8.27"x11.69" are prepared as it is easy to file, carry and store. 1 ream of paper is (Figure 3) contains 500 sheets and 1 ream uses 6% of a tree or 1 tree makes 16.67 reams of copy paper or 8, 333.3 sheets (calculated based on a mixture of softwoods and hardwoods tress, which are 40 feet tall and 6-8 inches in diameter. Reference Conservatree Paper Company). The MET providers/institutes can contribute by reducing and stopping paper use in audits and QMS.

S.No	Audit Type/Discription	
1.	Internal Quality auditing	
2.		a. Renewal/Revision audits b. Certification audit c. Surveillance audit
3.		<ul><li>a. Investigative audits/reviews</li><li>b. Operational audits</li><li>c. Integrated audits</li><li>d. Follow-up audits</li><li>e. Financial/account audit</li></ul>

Table 2 Types of audits

## 3. Afforestation & tree plantation in/by MET institutes

Carbon is found in all living things – plants, animals, humans and nearly everywhere on the Earth. It is found in the atmosphere in the gas carbon dioxide, and dissolved in water in oceans and lakes.

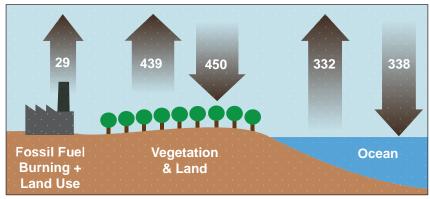


Figure 4 The Global Carbon cycle

Due to pollution, rapid industrialization and civilization expansion, Earth has 54% lesser trees and plants today and atmospheric  $CO_2$  is at its highest level in 15 to 20 million years, particularly increase has occurred in the last 120 years. Trees have been given a central role in the Kyoto protocol as the world's forests are nature's most efficient *Carbon sinks & stores*. Each year,  $CO_2$  emissions from human activity pour over 6 billion tonnes of carbon into the atmosphere, around a third is absorbed by the forests.

I can't change the direction of the wind, but I can adjust my sails to always reach my destination – **Jimmy Dean** 

MET providers can contribute by *adjusting their sails* and undertaking afforestation in their own premises (by funding and nurturing), in a quantity directly proportionate to the number of students that enroll every term/semester. One tree/plant or more can be allotted to every student who shall see and monitor the growing up of this plant as She/he too grows up in the professional field (MET providers will bear the maintenance & cost).



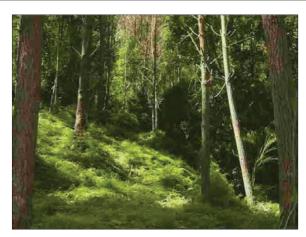


Figure 5 A Forest

In MET providers/institutes, where the afforestation activity is constricted due to architectural design, location or geographical constraints, a compensatory sapling/tree plantation can be carried out at:

- 1. Another location on leased plots,
- 2. In flower pots or
- 3. As roof/balcony garden.

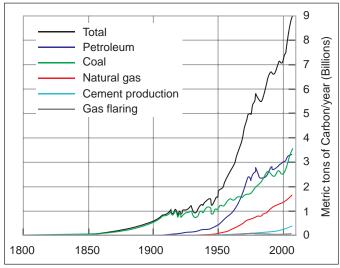


Figure 6 Global carbon dioxide emissions from human activities 1800–2007

This can be treated as a Pilot project for reducing the  $\mathrm{CO}_2$  emissions (Figure 6) and by extension, can be utilized for other Maritime/non Maritime organizations viz. Ship ownership/Management, charterers, chandlers, catering, repair workshops, spare, ship yards and store suppliers (having accreditation with Global similar standards but not having paperless audits etc).

## **Conclusion**

"One small step for man, one giant leap for mankind." - so said Commander Neil Armstrong on July 20, 1969 as the first man on the moon and then it was never anticipated that in the next century ie. in March 2010 water-ice near the moon's north pole will be found in excess of Great lakes that hold 20 percent of the Earth's water (ISRO's Chandrayaan-1 with NASA's moon Mineralogy Mapper and scientists, Carnegie laboratory, USA).

The day man respects environment, stops overexploiting nature and deals seriously with climate change, half of the battle would be won.



# World Vote to End Piracy Presented on World Maritime Day

n action group representing stakeholders from the entire shipping industry, from crews to owners, present a 920,000 strong vote for real action to end Somali piracy to the International Maritime Organization on 23 September. The group, an unprecedented coalition of seafarers' unions, ship operators, welfare organisations and more, unveiled the massive response to their End Piracy Now petition at IMO, at the same time as it was presented to governments worldwide.

The petition (www.endpiracypetition.org) was launched just four months ago as the centrepiece of a campaign to persuade all governments to commit the resources necessary to end the increasing problem of Somalia-based piracy. Originally intended to achieve half a million signatures, it has far exceeded that figure and definitively proves that immediate action is needed.

At a time when 354 seafarers and 16 ships are being held hostage in Somalia, pirates are being released unprosecuted to kidnap, loot and maybe kill again, when it is impossible to use routes via the Suez Canal between Asia/the Middle East and Europe/North America without passing through a high risk area, the campaign calls on governments to:

- Dedicate significant resources and work to find real solutions to the growing piracy problem.
- Take immediate steps to secure the release and safe return of kidnapped seafarers to their families.
- Work within the international community to secure a stable and peaceful future for Somalia and its people.

The campaign is led by BIMCO, ICS, IFSMA, IMEC, IPTA, Intercargo, InterManager, International Group of P&I Clubs, INTERTANKO, ISF, ITF, IUMI and SIGTTO\*. It is being actively supported by national shipowners' associations and trade unions worldwide and by the ASF, ECSA, ICMA and ICSW and GlobalMET. David Cockroft, ITF (International Transport Workers' Federation) General Secretary commented: "Thousands of seafarers are being put at risk daily by fewer than a thousand AK-47-toting bandits, and world trade is literally being held hostage. The response of nations – and every country in the world is affected – has varied from near-heroic to hand-washing indifference."

He continued: "At a time when some countries are actively escorting merchant ships and pursuing pirates and a few – too few – are prosecuting them when caught, the majority, including many of those who make the most from shipping, are doing little or nothing. For us, this campaign is about making everyone step up and shoulder their responsibilities." Speaking on behalf of all the signatory associations, ISF (International Shipping Federation) President, Spyros M Polemis, commented: "Since the crisis began over 1, 500 seafarers have so far been taken hostage, often for months at a time and in truly awful conditions; a situation which is simply unacceptable. Our primary concern is humanitarian. While we greatly appreciate the efforts of governments and their navies to protect merchant shipping, we need a new strategy and additional military resources. Governments must really wake up to the enormity of the problem, as the number of pirates continues to increase in the knowledge they can act with virtual impunity, potentially closing a large section of the Indian Ocean to the movement of global trade, almost all of which is carried by sea. The international community can no longer afford to sit on its hands and cede control of its vital seaways to criminals."

The coalition partners have also explained the reasons for the campaign – which has been supported by signatories in 185 countries – in a letter sent today to United Nations Secretary General Ban Ki-moon. It explains:

"The implications of piracy for maritime safety are considerable. Since the escalation of the piracy crisis in 2008, hundreds of ships have been attacked with gunfire and rocket-propelled grenades and over 1,500 seafarers have been taken



# World Vote to End Piracy Presented on World Maritime Day

hostage, usually for months at a time, in terrible conditions. As we write, 16 ships and 354 seafarers are being held in Somalia. There is a real and growing anxiety among seafarers and their families about being attacked and hijacked. We are very concerned about the effects that piracy is already having on the shortage of skilled seafarers, particularly senior officers, with some deciding they would prefer not to take the risk of being kidnapped for ransom.

Well over 25,000 vessels on international shipping routes pass through the area at high risk of piracy each year, in addition to the substantial Indian Ocean tuna fishing fleet and local fishing and cargo vessels. Ships are regularly fired upon and damaged."

# IMO Secretary-General commends launch of seafarers' rights centre, piracy petition presented

IMO Secretary-General Efthimios E. Mitropoulos today (23 September 2010) welcomed the launch of the Seafarers' Rights International Centre, an independent forum dedicated to advancing seafarers interests, describing it as an important development on World Maritime Day, the theme of which is 2010: Year of the Seafarer.

The new Centre will be located at the International Transport Workers Federation (ITF)s London offices, with initial funding coming from the ITFs Seafarers Trust. An international Advisory Board, currently 10-strong, has already been established and the Centres stakeholders will include seafarers, lawyers and other advisers, non-governmental organizations, trade unions, welfare organizations and campaigners, students and academics, shipowners and other major actors in the shipping industry, as well as Governments.

During the launch of the Centre, which took place at IMO Headquarters in London, Mr. Mitropoulos took the opportunity to stress IMOs long-standing commitment to seafarers and said it was fitting that the new Centre should be launched at IMO Headquarters on a World Maritime Day exclusively dedicated to them.

He said, "When 2010 was first proposed as the Year of the Seafarer, I remarked upon the particular hazards that confront the 1.5 million seafarers in the world. As well as the natural hazards of the sea and the elements, which they have to deal with as a matter of course, they also face exceptional hazards, such as pirate attacks, unwarranted detention and abandonment".

"The launch of Seafarers Rights International today will undoubtedly help those seafarers that are caught up in such circumstances, through no fault of their own, he continued, by providing a centre dedicated to advancing seafarers interests through research, education and legal training concerning seafarers issues."

The launch of the Centre was also attended by, Ms Deirdre Fitzpatrick, Executive Director, Seafarers Rights International, and members of the Centre's Advisory Board.





## New Singapore Maritime Institute

t the 25th Anniversary Dinner of the Singapore Shipping Association on 30 Sept., Deputy Prime Minister and Minister of Defence Teo Chee Hean announced the establishment of the Singapore Maritime Institute, a virtual institute, sitting under the Maritime & Port Authority and which will start working with the National University of Singapore, Nanyang Technological University and the Singapore Maritime Academy at Singapore Polytechnic.

Mr Teo explained that "the Singapore Maritime Institute will drive research and development in key areas such as green shipping, maritime logistics and operations, as well as marine and offshore engineering." The existing Maritime Cluster Fund is to be expanded to allow for a broader scope of training and development activities to qualify for funding, which would include in-house training, established training facilities and the taking up of approved certification programmes.

The Maritime & Port Authority of Singapore will commit up to SGD 200 million over the next 10 years to fund the Institute. Further co-funding will come from the Agency for Science, Technology and Research and the Economic Development Board.

Prominent industry figure S S Teo, Managing Director of Pacific International Lines and President of the Singapore Shipping Association will be the first chairman of the Institute's governing council. Mr Teo commented on the need to develop "the knowledge side" of maritime activity in Singapore and that SMI will bring together under the one umbrella the various programmes already running, formalise the funding and the coordination to enhance the knowledge base.

Mr Andreas Sohmen-Pao, Chief Executive, BW Group said: "This increases the potential to have trained individuals in the maritime industry. It has been challenging to create effective combinations between the academic side and the private sector. But having a focal point like this will significantly increase the possibility of doing that successfully."

## **SMA and Dubai Maritime City Authority MoU**

Also, on 1 October, Singapore Maritime Academy, a founding member and consistently strong supporter of GlobalMET, and Dubai Maritime City Authority signed a Memorandum of Understanding to collaborate in the area of maritime education and training for mutual benefit and in particular in:

- the exchange of expertise;
- the exchange of students;
- research and development.

Each party is to appoint a liaison officer to propose specific activities, with a view to the signing of a Memorandum of Agreement in the future.

It will be recalled that GlobalMET collaborated with the Emirates International Maritime Academy in organising and holding the "Review of the IMO STCW Convention" one-day conference in Dubai on 25 April. This well attended conference attracted participants from 16 countries and raised awareness of the proposed amendments to the STCW Convention at the forthcoming STCW Diplomatic Conference in Manila in June, as well as of the recently formed EIMA and of GlobalMET's activities.





## DNV Approves Asia's First TOTS Accredited

# DNV approves Asia's first TOTS Accredited "Applied Research International's (ARI) Simulation Product Training Centre"

RI's Simulation Product Training Centre announces the commencement of INTERTANKO's "Element 4 Tanker Officers Training Standards (TOTS)" training and verification programs for Product, Crude Oil and Chemical Tankers", approved by DNV, the world's only classification society to offer a full suite of services supporting ship owners and managers in competency benchmarking. Heralded as an initiative to ensure tanker officer's competence, these programs form an integral part of tanker operators' strategy for training and assessment of their personnel.



Initially these courses will be offered at ARI's Simulation Product Training Centre at New Delhi, India. The facility utilizes a state of the art DNV 2007 standards certified Class "A" Full Mission Liquid Cargo Handling Simulator. The facility and training programs are also DNV approved for TOTS training.

INTERTANKO's Marine Director, Capt. Howard Snaith commented that "We are absolutely delighted that ARI's Simulation Product Training Centre has achieved accreditation to run the TOTS simulator courses. This is the first TOTS accredited centre in Asia and we encourage our members to avail themselves of this world class facility."

ARI's MD Shravan Rewari said that "we are extremely privileged to be associated with this INTERTANKO initiative."

Mr. Rewari added that "ARI's Liquid Cargo Handling Simulator comes with a library of TOTS compliant training and verification exercises and presents the opportunity for INTERTANKO member companies and maritime institutes to rapidly deploy approved effective tanker competency assessment and enhancement solutions."

The DNV performance validation team comprising of Captain Sanjeev Soni, Principal Consultant, DNV Seaskill-Singapore and Capt. Vernon Sequeira, Manager, Seaskill-India and Sri Lanka, endorsed that "ARI's bundled solution framework comprises of DNV approved Liquid Cargo Handling Simulator and TOTS compliant training and verification exercises. Additionally, the accompanying training material developed can be extended to other training establishments worldwide."

For more information please contact: info@arisimulation.com, visit at: ww.arisimulation.com





## Maritime Safety

# New EU Rules to "Name and Shame" Shipping Companies with Poor Safety Records

Waves Newsletter for Seafarers - this entry was posted on Tuesday, September 14th, 2010

ew rules to enhance and improve the safety performance of ships were adopted today by the European Commission. The rules will introduce, from January 1st 2011, a new online register to "to name and shame" shipping companies which are performing poorly on vital safety inspections (port state controls), while those with strong safety records will be given good public visibility. Port state controls are crucial for preventing shipping disasters and the tragic loss of life and huge environmental damage that can result. Companies and states which show up as poorly performing will be subject to more intensive, co-ordinated inspections in EU ports. Manufacturers or other industries will be able to choose the shipping companies they use for freight or passengers in full knowledge of their safety record.

Vice-president Sim Kallas, responsible for Transport, said: "Safety is the first priority for EU. We have seen the devastating effects of maritime disasters like the sinking of the ferry Estonia or the Erika or Prestige in terms of tragic loss of life and massive environmental damage. As ever I am strongly convinced about the power of transparency. We want to shine a light on the safety records of shipping companies, flag states and certification organisations. More transparency in this sector will showcase companies with a strong safety records giving them a competitive advantage. The register will also put poor performers in their spotlight so that with tougher inspection regimes and public pressure there is every incentive for them to raise their game rather than face a ban from EU waters."

### The New Rules

On 1 January 2011, the port state control regime (technical safety inspections in ports) in the European Union will change significantly under EU Directive 2009/16/EC on port state control. Under the new regime there will not only be EU wide harmonisation of port state control inspection standards, as currently exists, there will also be for the first time a fully co-ordinated system of all the port state safety inspections carried out in the EU.

The new EU wide system will rely on an advanced information tool known as "THETIS" (operated by the European Maritime Safety Agency (EMSA). THETIS will track all safety inspections on ships carried out in ports in the EU and provide a risk analysis which will determine the frequency and priorities for inspections by the competent authorities of Member States. The regulations adopted today by the Commission specify the criteria for assessing the risk profile of ships using company performance and the flag state performance as appears in THETIS.

The pan-European system of co-ordination and analysis will allow for a more effective use of inspection resources in ports and in particular the more effective targeting of high risk ships and companies with low safety performance. The online register will list companies whose safety performance has been low or very low for a period of three months or more. Ships on the register which are operated by companies with bad safety records of deficiencies and detentions will be subject to very frequent inspections while ships operated by companies with good records will benefit of less inspections.

#### Background – The Current Rules on Port Safety Inspections

Every year more than 80,000 individual ship call in European ports. The safety inspections of ships carried out at ports (port state control) are of crucial importance to prevent maritime accidents. Under current EU rules there are harmonised standards for inspections and Member States are obliged to inspect 25% of ships that call at their ports. Ships with serious deficiencies and detentions can be blacklisted under EU law – and banned from operation in EU waters.

However, the current regime still operates with a "national logic" i.e. the selection of the 25% of ships for inspection in national ports is determined by different national authorities. There is some but limited EU wide co-ordination between different national authorities. The results of all the different national inspections are currently not systematically analysed on a pan European basis or published on an EU wide basis.



# Wärtsilä Publishes Shipping Scenarios 2030

September 8, 2010

ärtsilä has pioneered in the creation of the Shipping Scenarios 2030, which describe what shipping could look like in twenty years. Scenarios help companies, governments and shipping linked organisations in long-term strategic thinking in a fast changing world. The Shipping Scenario work yielded three alternative futures, which are Rough Seas, Yellow River and Open Oceans.

Scenarios are a method of making sense of a complex environment. The modern shipping business is a global puzzle made from many pieces, enabling collaboration around the world. Shipping has a huge daily impact on people's lives as 90 per cent of global trade is carried by sea. Shipping is also the most efficient and cleanest way of transporting goods over long distances.

The future of shipping is determined by economics, technological development, geopolitical trends, energy resources, social values, environmental aspects, as well as by the shipping industry itself. The past few years alone have brought about fundamental change. The effect on companies, governments and people's everyday life will be significant.

"Currently shipping is the most efficient and cleanest way of transporting goods over long distances and Wärtsilä wants to contribute to ensuring that this remains the case," says Jaakko Eskola, Group Vice President of Wärtsilä Ship Power. "As the leading marine solution provider, Wärtsilä wants to share the scenarios with stakeholders for mutual generation of new strategies and modes of cooperation. What the future will look like in reality depends on the decisions we all make, together and individually."

## Wärtsilä Shipping Scenarios 2030 in Summary

The Wärtsilä Shipping Scenarios 2030 were produced by combining extensive expert input, quality research, hard work, dedication and a bit of imagination. Analysis of massive amount of information yielded three plausible scenarios and how they might come about:

## **Rough Seas**

In the world of Rough Seas, scarcity of resources is predominant. Wealth is divided unequally among nations, resulting in tension. Climate change adds further stress. New trade routes have emerged as a result of two key developments: an increase in bilateral agreements and industries moving to resource-rich areas. The entire logistics chain is optimised regionally and national governments control ports. The volumes of water and agricultural products being transported have increased significantly. The global tension has increased the need for armed escorts, also at sea.

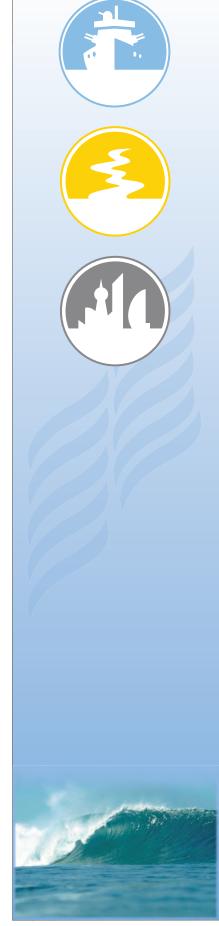
## **Yellow River**

In Yellow River, China dominates the global arena economically, geopolitically and in shipping. China is no longer the world's cheapest manufacturer. Instead, labour and resource-intensive manufacturing has moved to Africa and other Asian countries. Economic growth is significantly slower in the West and climate change is tackled only on a regional level. Most of the big shipping companies are Chinese-owned, and trade routes have shifted according to Chinese trade interests. New ports are being built in Africa, Eastern Russia and India, and Chinese ports have grown into sophisticated, integrated logistics centres.

## **Open Oceans**

The world of Open Oceans is a strongly globalised one. Global mega-corporations and megacities have gained power over the nation states. Governments cooperate on the governance of climate issues and free trade protocols. Climate change is perceived as an opportunity, and innovating green solutions is a lifestyle. In this world, logistics is king. Most goods are transported between megacities and areas rich in resources, such as clean water, food and energy. Environmental challenges have led to the development of new types of vessels; desalination, waste management and recycling ships are anchored outside megacities. Sustainable cruise vacations are a growing trend.

More at Wartsila.com <a href="http://www.wartsila.com/shippingscenarios">http://www.wartsila.com/shippingscenarios</a>



# Simulator Training Research to Investigate Human Factors

September 3, 2010

ongsberg Maritime has reached an agreement with the Research Council of Norway, whereby the organisations will cooperate in the development of a user-directed research programme called SIMAR - Simulation of Demanding Maritime Operations - aimed at improving simulation training by enhancing focus on human factors.

The main goal of the research project is to obtain new and improved knowledge of human factors in a learning environment based on simulated complex maritime operations, in order to develop a new generation of research based, maritime simulators for demanding and risky operations.

The aim is to be able to assess and measure the effect of the simulator training - both in the simulator (based on the specific learning objectives) and during actual maritime operations (such as reduced risk, reduced number of accidents, reduced costs related to loss of equipment and more efficient operations).

To achieve this, the project has defined 4 sub goals: Defining and developing human learning objectives based on relevant parameters available in the simulator; Designing and controlling the exercise/scenario; Increasing the knowledge of how simulator training affects human learning; Strategies for implementing knowledge of human factors.

It is hoped that the SIMAR project could help to improve simulator training by enhancing the education process, through extensive testing on new and efficient education methods.

Through the SIMAR project, Kongsberg Maritime says that it wants to develop a simulator that combines the latest in simulator technology with the latest in human factors knowledge.

"We have used our market and operational competence in combination with our simulator hardware and software expertise to provide high quality training for seafarers since the seventies," said Terje Heierstad, product and technology manager, Kongsberg Maritime, Simulation & Training.

"Technology has developed fast and we are now offering incredible degrees of realism so we are keen to develop the learning aspects and human factors in simulation training further. There is currently very little research in this field, so SIMAR is exploring new ground for the maritime industry."

"We are convinced that the cooperation with the Research Council of Norway and our R&D partners will contribute to the development of the best tool for the future training on demanding operations."

The task of defining and developing human learning objectives based on relevant parameters available in a simulator will primarily be carried out by Chalmers University of Technology, as Margareta Lützhöft, Docent at Chalmers University of Technology, Institution for Shipping and Marine Technology, department for vessel work environment and safety, Gothenburg, explains.

"At the institution for Shipping and Marine Technology and in the competence centre, Lighthouse, we have developed competence for research and development within many maritime fields," she said.

"SIMAR gives us a unique possibility to practice our knowledge - both employees and students to improve maritime education and safety at sea." Universities in Vestfold and Oslo will work in cooperation on the project, and will be responsible for performing research on the education process in the simulator based on knowledge of mechanism and methods in education.

Testing of new training exercises, based on competence of educational mechanism, will be executed at the simulator centre at Vestfold University College, as noted by Marius Imset, Institute leader at the Faculty of Technology and Maritime Science at the University College in Vestfold.

"Knowledge on how new information technology and instrumentation can contribute to increased safety and efficiency within the maritime sector is a priority area for us at Vestfold University College," he said.

"We perform research on how human factors work together with technology and organisation, and the use of advanced simulators provides new and exciting possibilities."

"Our cooperation with Kongsberg, the University of Oslo and Chalmers is unique, as it brings together different world-leading communities on complex and demanding maritime operations. We are proud to contribute to the SIMAR project, which will bring out new knowledge with the purpose to increase safety, efficiency and improve the use of energy."

More at http://www.thedigitalship.com/conferences/2006/displaynews.asp?NewsID=1261



# Maersk Agrees 200-Vessel FleetBroadband Deal

September 16, 2010

hipping giant AP Moller-Maersk is to extend its usage of the Inmarsat FleetBroadband system following the agreement of a mammoth deal that will see the systems installed aboard an additional 200 vessels across its fleet.

This extension of its current agreement with Marlink, already providing airtime sevices under a contract agreed in 2008, will increase the total number of AP Moller-Maersk vessels sailing with FleetBroadband to 370.

Marlink's parent company Vizada will also be offering additional value-added services from its Vizada Solutions range under the deal, such as web compression and filtering.

"The cost effective and reliable communications provided by Marlink and its partners, Vizada and Inmarsat, will enable Maersk Line to deliver significant operational efficiencies resulting in fuel savings and emission reductions that will help Maersk Line reach our ambitious environmental targets," said Niels Bruus, director, energy efficiency, Maersk Line.

"Further, it has been of utmost importance to Maersk Line that the solution has focus on crew welfare by offering facilities for our crews to stay in touch with family and friends 24/7. Our latest agreement with Marlink will enable us to offer these services to crew onboard our fleet."

Marlink and Inmarsat have also been keen to express their delight at securing such a huge contract, with 200 vessels representing the largest number of ships ever to be signed to a retrofit satellite communications deal.

"Our renewed agreement with AP Moller-Maersk is testament to our strong understanding of the company's communications requirements," said Tore Morten Olsen, CEO, Marlink.

"Marlink prides itself on being able to provide customers like AP Moller-Maersk with exceptional support, globally, 24/7, guaranteeing AP Moller-Maersk access to the highest quality and most reliable satellite communications. This is fundamental to AP Moller-Maersk's operations for both business-critical and crew applications."

James Collett, head of maritime business at Inmarsat, said that Maersk's decision to press ahead with commercial shipping's largest ever commitment to Inmarsat maritime services was facilitated by its installation experiences following the initial 170-ship roll-out.

"One of the many attractions of FleetBroadband for AP Moller-Maersk is the speed at which the company has been able to roll it out across its fleet – it is extremely proud of its '100 installations in 100 days' record," he said.

"AP Moller-Maersk is one of the world's largest, most established and highly respected shipping companies. We are delighted that our fastest-growing maritime service has been selected to revolutionise crew and operational communications in Maersk's liner fleet."

"A commitment of this magnitude and duration - the largest ever for Inmarsat services by a commercial shipping line - confirms beyond doubt that FleetBroadband is the market-leading maritime satellite communications technology."

More at www/thedigitalship.com





# Alarm Bells should ve been Ringing for Years

September 3, 2010

# "Alarm bells should've been ringing for years" "The peculiar arithmetic of training, competence, certifications and such, still an unsolved equation"

Ryan Skinner http://5956n.typepad.com

"Consider the steady adding of new rules and requirements an unstoppable force, Consider the pool of available seafarers the immovable object. What happens the two meet."

Corners get cut, that's what happens. A captain recently told me in an email that 'in fact, 10-15 percent of seafarers are not up to their task.' Thomas Jacobsen of DNV Seaskill relates to me a quote he heard from an executive in a major shipping company: 'We're promoting captains far too early'.

Both Jacobsen and my captain source conclude on a pessimistic note. Jacobsen feels little will really shake up the industry until the ephemeral 'big accident'. The captains fears a stricter training regime, in line with heightened demands, would dry up the pool of potential seafarers.

I have a radical suggestion: Why not associate higher training standards with greater status? It may be unreasonable, but why aim to just clear the low bar instead of reaching for the high one?

Also from Ryan Skinner 59 56'N

"That's right, I can totally get Pandora.com on this bad boy. Let's rock!"

Since early this year, ships running at least one make of ECDIS can download navigational charts and chart updates at sea, via Internet download. OK, last year's wreck won't show up on ENC updates from hydrographic offices for another two or three years yet anyway, but this is progress, damnit. Don't question it.

DNV's OK'd it, as well. They will type-approve an ECDIS that uses Internet connections for updates, provided a) there is a firewall, b) there is an anti-virus strategy, and c) there is an electrical Internet kill switch. Of course, all of this assumes that the greatest threat is from outside.

I've heard from more than one source that this is not the case. One major shipping company had an ECDIS crash because the officers were using it to surf the Internet while en route (perhaps they were studying the company's HSE policy online). The fuming manager said that they would fix this by allowing the machine to access only one url, that of the chart update provider.

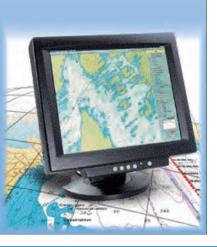
Is it a shock to imagine an officer bored out of his mind jimmying the ECDIS to serve him YouTube videos? To me it wouldn't even be a shock to hear that the flight crew of an airliner overflew their destination because they were tweeting about Justin Bieber. Better that than arguing about airline policy.

There's a fear of technology at work here. It's the same kind of thing that led employers ten years ago to hesitate to give their office workers Internet access. It's alive today when they cut off access to YouTube, Facebook or Skype (I was told by one executive that his company wouldn't let him use the last one because "it's free and it works, unlike our enterprise solution.")

Hell, give seafarers Internet connections broader than the New Jersey turnpike, if they want. If they can't pull it up on the ECDIS, you can be sure they're going to pipe it into their iPhones or Androids. The fact is this: They might be looking at porn and strike a bridge. They might also access countless tools to make them even better and more accountable officers. The Internet doesn't kill people (OK, sometimes it does).

The fellow running the IMO's e-Navigation working groups told me they're putting the focus on what they call a "single window". Let's not split hairs here; that's the ECDIS. This window's going to be full of good stuff, and soon. And it'll be up to every mariner to use it as he likes. In fact, I hope that seafarers come equipped with their own system in the future (like Norwegian pilots).

Imagine when a master can just show up with her ECDIS under her arm, plug into any ship and she has everything in the digital and physical world she needs, right there. A reality, you think?



# INTERTANKO Horrified at ECHR Decision

September 30, 2010

n the case of Captain Mangouras of the Prestige v Kingdom of Spain, the Grand Chamber of the European Court of Human Rights (ECHR) has decided by a 10/7 majority that there has been no violation of Article 5 & 3 (right to liberty and security) of the European Convention on Human Rights in setting bail at Euros 3m for the release of the captain of a ship which caused pollution.

INTERTANKO is horrified at the outrageous majority finding that it is legitimate to set bail at a 'pirate's ransom' for a responsible ship's master involved in accidental pollution. The potential for politically motivated decisions empowered by the level of public outcry is obvious, as are the fearful implications for every seafarer, who by this decision, loses his right to natural justice.

The ECHR says, "New realities had to be taken into consideration in interpreting the requirements of Article 5 & 3, namely the growing and legitimate concern both in Europe and internationally in relation to environmental offenses and the tendency to use criminal law as a means of enforcing the environmental obligations imposed by European and international law."

This is a terrifying conclusion for the maritime industry, suggesting that basic issues of liberty will be overridden by concerns over pollution. The ECHR goes on to say:

"Given the exceptional nature of the applicant's case and the huge environmental damage caused by the marine pollution, which had seldom been seen on such a scale, it was hardly surprising that the judicial authorities should have adjusted the amount required by way of bail in line with the level of liability incurred, so as to ensure that those responsible had no incentive to evade justice and forfeit the security."

In this way, the majority judges lose themselves in the environmental disaster and its financial consequences. They overlook the fact that the case before them concerns the liberty of an ordinary man for whom bail should be set to reflect his actions not the consequences of his actions, and his personal means not those assumed of a third party.

Apostolos Ioannis Mangouras was the captain of the ship Prestige which in November 2002 broke up in the Bay of Biscay in a severe storm after being refused refuge in Spanish waters, releasing the 70,000 tonnes of fuel oil it was carrying into the sea, causing serious damage to the environment.

Faced with Spain's refusal to give the ship refuge, Capt Mangouras courageously did everything he could to save his crew and his ship and its cargo and protect the environment by minimizing pollution, ending up forced by the Spanish authorities against his better judgement to take the ship out to sea in a storm.

For these actions, described as 'exemplary' in the flag state's investigation, he has been treated like a criminal.

- He was jailed by the Spanish authorities for 83 days until the ship owner's insurers voluntarily paid Euros 3m bail, a sum which was not justified by the Spanish authorities at any stage and could not bear any relation to his personal circumstances.
- Two years later, he was allowed to return to Greece only on condition that the Greek authorities enforced compliance with the periodic supervision to which he had been subject in Spain.
- Still today, he reports every two weeks to a police station. Only recently has the criminal court in Spain concluded its investigation and indicated it will bring criminal proceedings against Capt Mangouras.
- The criminal proceedings are still pending, with the enraged locals call for 9 a nine year jail sentence.
  - INTERTANKO concurs with the good sense of the 7 eminent dissenting judges for their robust and focused opinion, finding that Capt Mangouras' rights were clearly violated by the Spanish. They find that the Spanish approach in setting bail at such an exorbitant level 'renders illusory the applicant ability to secure his release from custody' recognizing that bail should be set with reference to the accused and his assets'.

"It is simply unacceptable that ships' officers, having committed no fault, be treated as common criminals because of the consequences of their actions, when the actions themselves are above reproach," says INTERTANKO's Managing Director Dr Peter Swift, continuing, "and in addition it is also completely unacceptable that they should now face being held to ransom as scapegoats for the environmental lobby. Had the P & I Club insurers not acted with compassion, Capt Mangouras, now 75, would likely still be in jail in Spain awaiting trial. Eight years on, can that be fair or just?"

Photos courtesy of elpais.com, The Guardian



Capt Mangouras' Bail is Set at Euros 3 Million, ECHR Finds the Amount to be In No Violation of the Human Right to Liberty and Security



# London Club Warning on Over-Reliance on GPS

October 05, 2010



he London P&I Club says a recent casualty involving a containership serves as a timely reminder of the consequences of failing to check navigation charts for information about corrections that need to be applied to satellite-derived positions.

In the latest issue of its 'StopLoss Bulletin', the Club refers to an incident in which a containership grounded as a result of total reliance on GPS, coupled with a failure to recognise that a significant correction had to be applied to GPS positions before they were plotted on the chart. During a coastal passage, the ship ran aground after a navigating officer commenced a significant alteration of course about half a mile before he reached the intended alter-course position.

Investigations suggested that the officer was using no means other than GPS to navigate and, even though the ship was on a regular schedule, he was wholly unaware that a significant correction had to be applied before GPS positions could be plotted onto many of the charts used in the service. The Club says a more detailed passage plan would have alerted the inexperienced officer to the danger and required him to cross-check his position by more than one method.

The Club emphasises that seafarers must be aware that, on many charts still in use, a correction has to be applied to satellite-derived positions before the position is plotted on the chart. It adds that navigating officers should always check the charts for information about corrections that need to be applied to satellite-derived positions when preparing a passage plan and alert the navigators to any existing corrections which are required before positions are plotted on the individual charts.

Source: Motor Ship

#### **Q-CADDE**

It will be recalled that the August issue of 'TRAIN, TRAIN, RETRAIN, RETAIN' carried an article about Mr Subir Mukerji, the first Individual Member of GlobalMET. Subir has developed a 3-module, 5-day course to assist in bridging the gap between curriculum and assessment, design, development and evaluation, which he refers to as Q-CADDE. GlobalMET is pleased to respond to his request that information about the course be distributed throughout the membership as this course addresses a serious need in MET overall.

Information about the course is on the next page.





# Subir Mukerji's Q-CADDE

## Subir Mukerji – GlobalMET's 1st IM offers:

A comprehensive 3 module, 5-day course on: Bridging the GAP between Curriculum & Assessment, Design, Development & Evaluation



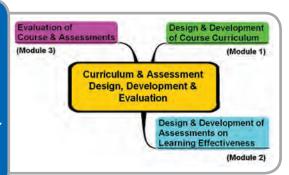
## **Q-CADDE** Course

The novice teacher will learn:

How to design assessments on learning effectiveness to match a given curriculum and then how to evaluate the course as a whole, and

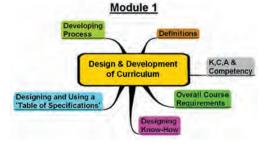
The experienced teacher will learn:

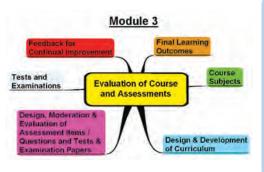
How to identify gaps in the course design, between course objectives, curricula and assessments used, and then eliminate them to further improve the course

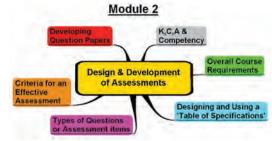




Subir Mukerji



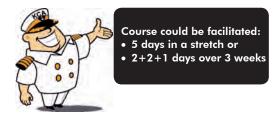




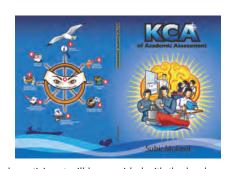
#### Benefits of attending the course

Participants will be able to:

- Design a curriculum showing how Graduates would meet the Course Objectives
- Design & develop technically sound questions & assessment items
- Design & develop question papers to match the Table of Specifications
- Design & develop better teaching-learning materials
- Judge the need & adequacy of a well designed course
- Help students to learn 'How to Learn' using the syllabus provided



For further information write to: subirmukerji@gmail.com



Each participant will be provided with the book :  ${\rm 'K,C,A} \ of \ Academic \ Assessment' \ as \ a \ working \ manual$ 



To assist the building of an effective MET community of practice, Members are again urged to send in contributions for the magazine, the next issue of which will be published in mid-December.



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