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### The International Maritime Human Element Bulletin

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## Education, training & career development crucial for safe operations

Education, training

& development

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Once upon a time, the majority of those who went to sea did so because they wanted to be the master or chief engineer of a ship - others simply wanted to go to sea. Very few had aspirations towards a career ashore, at least not until after they had completed a few years at sea, and then they would have to retrain for that new career, and return to the bottom rung of the progression ladder.

They all served a predominantly seagoing 'apprenticeship', following a work-based programme of study, leading towards a certificate of competency. The emphasis was on practical ability and on nautical and engineering knowledge and skills. 'Career development' for many meant a gradual progression up the promotion ladder until they reached a level commensurate with their own ability; for others, it meant achieving the ultimate goal of becoming master or chief engineer, or moving into shore management.

Today, an increasing number of complex and technologically advanced ships and systems, coupled with a global maritime workforce comprising of many different nationalities and cultures, can present many challenges in terms of education, training and career development.

The STCW Code requires that all seafarers should be properly qualified for the position that they hold on board, and the ISM Code requires the Company to define the responsibility, authority and level of competence required of each crew member. And, instructors, supervisors and assessors are required to be 'appropriately qualified.' But these are minimum sets and are not sufficient to cope with the systems aboard many of today's ships.

It is therefore incumbent on the ship owner or ship manager to adopt best industry standards in respect of the recruitment and training of seafarers; and to ensure that they receive the training necessary for them to carry out their duties - including the operation and/or maintenance of technically complex and multidiscipline systems. They must also be regularly updated, tested and drilled, through programmes of on-job and continuation training.

Those who are involved in the front line of shipping operations ashore must also be properly trained, adequately experienced, skilled and competent, commensurate with the level of responsibility and accountability that they require to perform their duties. Of equal importance, is the need for maritime college lecturers to be properly qualified to teach those competencies for which they are employed to teach, and to have an up to date appreciation of modern day ship operations and of the new technology aboard ships.

There is also a need to assist and encourage today's seafarers in fulfilling their career aspirations, whether this be preparing them for promotion onboard or into shore management; or even directing them towards a programme of post-graduate education or advanced skills training to allow them to diversify into the wider maritime sector. In difficult fiscal times, such as exist today, it is all too easy to move education, training and career development down the list of priorities. But, if it happens, the maritime industry will surely suffer an acute shortage of properly trained, skilled, competent and experienced people, both afloat and ashore. This will undoubtedly lead towards an unacceptable decline in standards and an increase in accidents at sea.

Occupational

Standards

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Through the **Alert!** Project, we seek to represent the views of all sectors of the maritime industry – contributions for the Bulletin, letters to the editor and articles and papers for the website database are always welcome.

The Editor Alert! The International Maritime Human Element Bulletin

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# The cadet training experience

Deck Cadet Harsimar Kapoor, Engineer Cadet Gavi Coutinho, Anglo Eastern Ship Management (AESM)

**Harsimar Kapoor**: The 12 month pre-sea training programme at the Anglo Eastern Maritime Training Centre (AEMTC) was tough and disciplined, albeit necessary to prepare for life at sea, with plenty of practical training in the workshop, and outdoors. Later, I would come to observe that there was little application of subjects like maths, chemistry and physics on board ship.

Before joining my first ship, I underwent a 2-week induction programme, wherein I was briefed on activities involving safety and quality on board, and on value added human resource development topics like teamwork, motivation, etiquette, work ethics, personality building, officer-like qualities, etc.

For my 18 months of sea time, I sailed on 3 different types of vessel, applying my pre-sea training in a practical way. I was taught safe working practices, cargo work and tank/hold cleaning, and was given plenty of opportunity to assist in bridge watches. I played a part in various surveys and inspections, and learnt a lot. My seniors on board were excellent Mentors.

Prior to joining each vessel I had to



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demonstrate my knowledge and understanding of various topics thus ensuring that I was up to date and had not become nonchalant about my studies and practical work. The final 'sea time clearance' was more stringent but it enabled me to appear for my first Certificate of Competency.

After my first ship, I attended a 3-week training programme at AEMTC covering key practical tasks. It improved my understanding of 'why' a job was done in a particular manner. It was much more beneficial than the 12-month pre-sea course, and my 'learning graph' shot up steeply. I strongly feel that pre-sea training could be reduced to 6 months and on-board training increased to 24 months, as this profession is more practical-oriented rather than subjective and theoretical.

I will cherish my apprenticeship and experience with AESM, and am looking forward to sailing as 3rd officer.

**Gavi Coutinho**: I was selected for Graduate Mechanical Engineer training after obtaining my degree in Mechanical Engineering.

Pre-sea training was an exciting experience wherein I learnt about the ship, different machineries, their operational aspects, safety constraints, and environmental hazards. The engineering knowledge helped me to understand the working of main engines and the vast ancillary machinery. The hands-on practical training was really useful in that I became confident in carrying out my shipboard tasks.

Before I joined the ship, I underwent Junior Engineer induction training at AEMTC, and Engine Operational Level training on a full mission engine room simulator. This further enhanced my understanding of what was expected on board ship, with added emphasis on the Safety Management Systems.

My 'first ship' experience was initially a little strange but then I came to understand my responsibilities and started fulfilling them religiously. The Training and Record book tasks helped me to understand what exactly I needed to know about the running and maintenance of machinery.

My seniors were excellent Mentors; they helped me carry out different tasks and guided me very well. As a result, I completed most of my onboard tasks ready for my Class IV Certificate.

A longer version of this article is downloadable from: www.he-alert.org/ filemanager/root/site\_assets/ standalone article pdfs 0605-/he00780.pdf

## **Post-Graduate Certificates** in Maritime Education and Training

Jane Japitana, Maritime Academy of Asia and the Pacific

We have been very lucky in the Philippines, to receive sponsorship from the International Maritime Training Trust (IMTT) for a Post-Graduate Certificate in Maritime Education and Training. The course was developed by Warsash Maritime Academy (WMA) as a year-long, part-time programme, which is accredited by Southampton Solent University.

14 professional lecturers of nautical studies, engineering and general education completed the first course in November 2008, with another 16 participants currently undergoing training.

The course comprises of 3 different modules on theory of teaching and learning, professional development and teaching practice. This Post-Graduate Certificate in Maritime Education and Training is instrumental in raising the standards of quality teaching in higher education in the formal baccalaureate degree or in the short courses.

The lecturers learn further different approaches on teaching, which equips them with the theory-based strategies. The participants benefit from the programme in terms of professional advancement.

Sharing teaching experiences with one's cohorts provides a good insight and an avenue for discussions and exchanging views on good teaching practice, assessment and lesson planning, from all the different participants. Personal reflection is highly used on the activities and assignments which helps the participants to be reflective and critically evaluative. The course helps each participant-lecturer to broaden one's perspective in teaching and to achieve the greater objective of quality education and training through quality teaching - leading to better and more competent seafarers.

# Are your seafarers competent?

John Douglas, DNV SeaSkill

Competence is strategically important in meeting corporate business goals whilst also being a key driver to being more responsive to current and future labour markets. In DNV we adopt some basic principles:

• The management of competence is seen as a system that can be measured and audited;

• Competence needs to be linked to corporate business goals;

 Standards are an essential 'yardstick' for measurement whether for management systems, simulators, courses, training performance or competence standards for seafarers in specified operations;

• Measurement of competence through reliable assessment procedures and methods is a way to ensure competence standards are attained and retained;

• The outcome of training actions should be evaluated against business goals.

The value of adopting a systematic approach based on standards is clear. It becomes a differentiator in the market place and enables ship-owners to respond clearly to vetting agencies and charterers on competence issues. Adopting standards of competence harmonises the quality of training actions so that seafarer competence becomes uniform and efficient.

It is essential that the competencies required to meet business goals and Key Performance Indicators (KPIs) are identified. Shortfalls in meeting KPIs are often related to lack of competence, and accident/incident reports may indicate where lack of competence is conspicuous. A standard of competence is the basis for performance criteria to assess the competency of seafarers and staff. As 'sea-time' will always be insufficient, objective testing of competence in an environment as realistic as possible appears more viable - keeping in mind that testing competence against standards can be accomplished both at sea and in simulated environments.

A comprehensive programme of assessment onboard ship by qualified assessors can identify where there are competence gaps when measured against the standard. To conduct such an assessment requires that the assessor is trained to conduct the testing. Utilising personal competence record books derived from the standards has many advantages here. Training need is then highly focused on the identified competence gaps derived from the standards of competence which in turn are related to business goals and KPIs.

A training strategy sets the way training will be conducted. It needs to be flexible enough to cope with the competence demands of the market yet reliable enough to produce consistent quality learning outcomes. In the present economic climate would an emphasis on the leverage of technology and alternative training modes reduce costs and retain quality?

The importance of assessment in the learning process needs to be realised. Whilst measurement of processes against standards such as simulators and courses is important it is the assessment of competence after learning that is crucial.

The only way to ensure that training has resulted in performance improvement is to measure the business effect. Changes in KPIs that can be attributed to improved performance of the seafarer through training and coaching then demonstrate the value of a systematic approach to competence management and finally safe and efficient operation of ships.

www.dnvgl.com/maritime/competencecertification.html

# The value of onboard training

Capt Ajay Varma, Auditing & Training Superintendent, Kline Ship Management (Singapore) Pte Ltd

Once a seafarer has undergone a rigorous selection process, the onus of continuous training and upgrading of skills is incumbent upon the company. A gap exists between 'available skill levels' and 'company requirement' from its seafarers, hence the need for the company to step in with training.

So, with a strong focus on training, all our ships going for dry docking have undergone an increase in the number of berths and lifeboat capacity to accommodate additional trainees. While shore based training is provided at in-house Institutes and during annual Seminars, onboard training is conducted in a number of ways:

On Job Training (OJT) is conducted by auditing and training superintendents, who ensure that any shortcomings observed are rectified through education and training. Each officer is quizzed about his job, and any shortcomings identified form the basis of OJT.

Training modules for passage planning,

GMDSS operations, chart corrections, ECDIS, safe launching and recovery of lifeboats, starting and maintenance of important machinery etc. are exhibited. Accidents and near misses within the fleet are discussed. A couple of hours each day are set aside for this training. General value-added training is conducted to supplement shore based training, and various drills are conducted and best practices shared during de-briefing.

We also have a training ship with more than 10 additional berths; 'on board trainers' board together with a group of trainees, and for periods of up to 3 months the trainees have the exclusive attention of the trainers.

Deck cadets and trainee engineers are given competency based weekly assignments; seven questions are put up each week, one from each subject area, starting from their first week on board. On board books and equipment manuals are consulted and they email their answers weekly, to be corrected by shore staff. Care is taken in the selection of questions which are not theoretical but based on actual usage and comprehension. The aim is to make the trainee ready for his next rank. This 'Mentoring' process ensures that we have skilled future officers, and the project has been so successful that trainee seamen and wipers have volunteered to join the program.

Prior to promotion, each officer has to undergo 'pre-promotion training'. This is a set of competency based jobs which are undertaken under guidance of a senior officer to help smooth change to the next rank. The response has been quite encouraging. Uniform competency levels are being achieved and the new promotees are confident and 'in sync' with company requirements.

There has been a significant reduction in the number of accidents, and in flag and port state vetting observations and deficiencies. Feedback received from seafarers has been quite positive, and there is a sense of belonging which has been evident in higher than industry average retention rates.

# Education, training & development - a route m



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# **Occupational standards** for shore-based ship management

Captain Nigel Palmer, Chairman, Merchant Navy Training Board (UK)



he Merchant Navy Training Board (MNTB) has recently reviewed its training programmes for seagoing Officer Trainees. The introduction of Foundation Degrees (Professional Diplomas in Scotland) in 2006 and, from Sept 2009, revamped Higher National Certificate and Higher National Diploma courses has ensured that a comprehensive range of programmes up to full Honours Degree are available.

One area that has been neglected in the past has been shore-based ship management. The MNTB has therefore developed a suite of National Occupational Standards (NOS) covering shore-based ship management occupations.

Occupational standards describe the skills, knowledge and understanding needed to undertake a particular task or job to a nationally recognised level of competence. The shore-based ship management standards cover the activities carried out by marine, technical and engineering superintendents, fleet managers, and operational staff.

The suite covers: employing and managing marine personnel for vessel activities; ensuring vessels are procured, maintained, supplied and equipped for service; establishing and administering systems to ensure quality and continuity of service; safety and security of operations; and personal and professional management skills to support shipping services.

Once formally approved, the standards will be available to inform existing or new qualifications and for a whole range of workforce development purposes. This may involve the development of degree courses to provide development and progression opportunities for existing staff as well as a career pathway for those looking to come directly into this area of the shipping industry. In addition, organisations currently offering qualifications covering ship management activities will be encouraged to use the NOS as reference points to update their awards.

of bodies that may be interested in developing their gualifications in line with the occupational standards. In addition, we are looking at providing a means to formally recognise awards of this nature through an endorsement process that will support the validity of the awards to the industry and to those seeking a career within it.

In addition to their use in gualifications, occupational standards provide excellent workforce development tools such as: providing clear and concise information in recruitment adverts; developing job descriptions; defining training needs; identifying training gaps; informing appraisal processes, and defining progression routes and requirements.

We will eventually have in place standards to enable the industry as a whole to recruit, train and provide defined and recognised career progression routes, linked to relevant qualifications, for all those who wish to make the shipping industry their chosen profession.

Downloadable from: www.mntb.org.uk/ en-GB/National-Occupational-Standards

The MNTB is currently talking to a number

## **Continuing Professional Development** a notion of lifelong learning Captain Martin Burley MNI, Group Training Director, V Ships

What do we mean by Continuing Professional Development (CPD)? How can it empower individuals within the context of their learning? And, how can we capture the concept to provide more capable maritime professionals?

In the maritime context, CPD can be defined as:

The systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for execution of professional and technical duties throughout the individual's working life, at sea and ashore.

Clearly, development of the individual is the key output, but this definition also includes the notion of lifelong learning. Opportunities within the industry are vast, but many maritime professionals are poorly informed, and do not have role models or access to information to research their options and identify their aspirations.

Many companies have Competence Management Systems (CMS) that look at the matrix of learning requirement for their employees and determine their collective capability. A CMS manages the competency of individuals to ensure they can fulfil their duties within their current job; but often it does not enable employees to identify and manage their own development, aligned to their own needs. A CPD system, such as the new web based system recently launched by The Nautical Institute, should complement a CMS: The former enables individuals to manage their learning against their goals, while the latter manages the collective capability of a company's employees to ensure that they can fulfil assigned duties.

For most maritime professionals, CPD is very much part of their lives - they attend learning events and programmes, but more as a matter of itinerant opportunity or chance, and not as part of a structured plan to develop in alignment with their career aims.

But how is CPD managed? Do individuals research and identify their aspirations with a structured and focused approach? Is their learning tailored actively to their aims and objectives? Do they take time to reflect upon their learning activity to support and refine future research into their CPD needs?

Certainly they may have researched their

options for career development. They may well have decided to pursue a specific qualification in support of a chosen career path such as a Masters degree or a surveyor or harbour master's diploma. Some are successful, and some fall by the wayside and then end up in another maritime sector.

The part of the CPD wheel that encourages a more structured and farsighted approach is Reflection. Clearly, individuals will reflect upon their learning events, but busy people often do not have the time to do this in a disciplined way. CPD encourages more regular reflection on the overall development programme so that individuals can assess whether their current strategy is right for them or whether they should adjust their plan to follow a different course.

Not only does this save time and money, but it is a positive approach which leads away from de-motivation when aims appear to be distant, and helps to spur the individual into setting new and achievable goals.

Further information on the Nautical Institute's CPD portal can be found at: www.nautinst.org/en/CPD/

# Investing in training

Captain David L Watkins, Fleet Safety, Security and Environmental Manager, The China Navigation Co Lta

The China Navigation Co Ltd is part of the Swire Group, responsible for the technical management of 19 owned and 45 charteredin container, multipurpose, general cargo and dry bulk ships, employing some 700 officers and ratings. Captain Watkins reflects on some important human element issues.

Hitherto, the senior officers on most of our ships would come from the Commonwealth countries but we are now seeing some good masters emerging particularly from the Peoples' Republic of China (PRC), the Ukraine and the Philippines. We have never in our history recruited our masters and chief engineers from outside - they have always come from within the company and we are very proud of that. As a result, we have people that have come through from second officer/third engineer, to master/chief engineer - they have absorbed the company's culture and policies, and in particular our Safety Management System and are able to deliver and administer these when they become master or chief engineer. We also want to send the signal out that we are working to promote from within.

We have just employed 17 deck cadets - far more than ever before - primarily from the Philippines and the PRC, and we sponsor them through college. We are also looking for engineer cadets, but there is a tremendous shortage of skilled engineers.

Retention is an issue that is facing everyone in shipping at the moment, and we have to ask ourselves: 'What can we do to differentiate ourselves to make us a company of choice?' We do not treat people as 'numbers'; we treat them as part of the family. Indeed, the Chairman and the General Manager are extremely keen wherever they can to push the message that the welfare of our seafarers is of importance. It is part of the job of the ship management team to deliver that message through our ship visits - to listen to what the seafarers have to say and to explain what is going on, so that they do not feel isolated. If they are needed at home, because of a family problem, we will do our utmost to get them off the ship.

Some 45 to 55 officers visit our office each month, for briefings from the ship management team. We tell them what is going on; there are no secrets - there must be transparency here.

For those who are due for promotion to chief officer or second engineer, we remind them that their responsibilities are about to change, not least that they will be managing people. For some it is difficult but others rise to the occasion. It

is important to get the message across that, if they have any issues, they should not keep them to themselves and that they should discuss them with the master or chief engineer and keep us, the management, in the picture. This could be seen as a move towards centralised control, and we often question whether we give the senior officers onboard enough freedom to make their own decisions. However, we also feel that because there is a lack of experience across the ranks, management has to provide a little more quidance for ships staff nowadays. They are, after all, under tremendous commercial and security pressures.

We also conduct one day seminars for ships crews, taking them away from the ship for a day, when it is in drydock. On these occasions, we encourage feedback, but also we see it is an occasion for social interaction.

In 2005, we introduced a 'train the trainer' programme. We now have 20 trainers - at master, chief engineer and chief officer levels - who go out to the ships and conduct briefing sessions and training onboard. Their own training is important, to give them the confidence to stand in front of the crew and deliver a presentation and then conduct onboard drills.

Onboard training includes talking the crew through the basics of housekeeping, conducting walkthroughs both on deck and in the engine room, and live drills. They will be briefed on, for example, the use of the oily water separator, the proper use of 'out of service' labels, and on tank entry and hot work. The trainers will conduct live drills and then have a debriefing afterwards. It can be quite eventful, it can get quite heated, and if it doesn't work out, it will be done again.

If someone is new to the ship, there is a requirement that they should be allowed at least half a day for familiarisation, being shown around the ship by the person that they are relieving. In many cases, crews stay with the same ship; it helps for them to be familiar with the trading pattern and operation of a particular ship. Indeed, we have a 'retainer' system for some of our masters and chief engineers because we feel that it is not only important for them to be familiar with the trade and the commercial aspects of the ship but it is also vital to ensure that they properly manage the whole ship. If they do not have to worry about the trade and the commercial aspects of the ship because they are used to it, then they will spend a lot more time considering the operational issues onboard and looking after the crew. Generally, the basic education of officers and ratings is OK, but I am concerned at the lack of emphasis on mathematics and physics, because physics underpins everything. There is, perhaps, too much focus on subjects such as 'logistics' and 'supply chain management', but these subjects are not really of much value for a deck officer working on deck, who should be considering the forces that are affecting the derricks, the cranes, the hatch lids and the hull, and should be aware of the effects of placing and removing weights, of squat, dynamics, turning circles etc - all of which require a good knowledge of physics.

We are currently putting together a professional career development programme for our officers, to ensure that they are properly prepared for promotion, at each stage. It is a programme that takes time, energy, resources and commitment but it is nonetheless important. We also run Marine Resource Management Courses, to test assertiveness, crowd control, power, distance and communication. We ensure that all our bridge officers work to the principle of 'challenge and respond' with the master and of the master responding in the appropriate manner. It is all about teamwork, but it is not easy, given that there are some cultures where there are barriers to this type of approach. Although we have conducted a couple of engine room resource management courses, we are still developing this.

We do not involve crews, as such, in the design of new construction, but we do incorporate their feedback - it is very important. We have a new build coming out in 2 years time - it is our own design and the design team has consulted widely. All the ship managers from all disciplines have been very involved, and we very much value the feedback of ships' staff. Some sea staff will standby about 9 months before delivery. We consider it a good way to train future senior officers and ship managers, because all the senior managers in this office have, in the past, stood by the construction of new ships. As a company, we have control over the design and construction of our ships; indeed, we have paid a lot of money for this.

Do we consider our people an investment or a cost? Of course, they are an investment. With our professional career development programme, with all that we do to try to retain them, we want to keep them - we do not want them to leave. So, we must invest in time, money and training for everyone that we employ - albeit to varying degrees, depending on the rank.

In the longer term, it will be money well spent.

# **Grounding of** a Ro-Ro passenger ferry

his report of the grounding of a 30,635 grt Ro-Ro passenger ferry on a charted wreck while sheltering from heavy weather in an area which is used as a holding station, highlights a number of human element issues relating to training, bridge resource management, and communication.

Approaching a turn at the northern extremity of the geographical limits set by the master, the bridge team were distracted by a fire alarm and a number of telephone calls; the ship overshot before the turn was started. During the turn, the master noticed a nearby shallow patch on the Voyage Management System (VMS), but the turn was allowed to continue. Shortly afterwards the ship struck the submerged wreck.

Navigation was carried out almost entirely with reference to the Voyage Management System (VMS) - which was type approved to be a fully functional ECDIS - and by eye. Although the paper chart for that area was available, positions had only been plotted on it sporadically and it was not referred to at the crucial time. The officer of the watch became aware that the vessel was passing close to a charted shoal, but he was unaware of the wreck because it would not have been displayed on the electronic chart due to the user settings in use at the time.

The owner's policy was for the VMS to be used as an aid to navigation only, with the ship's paper charts being utilised as the primary means for navigation. Despite this, the bridge officers were using the VMS for navigation, even though many of them were not fully trained in its use. The report comments that, where an electronic chart system is fitted as an aid to navigation, proper generic and/or type specific training in its use should be provided to all navigating officers to ensure a thorough understanding of its display and functionality.

Bridge team management was deemed ineffective, not least because there was no contingency plan for the vessel to wait in that area; there was no formal passage planning for the navigation of the vessel while waiting in the area; the information exchange at watch handovers was not performed in a systematic way; and the vessel's position was not systematically plotted on the paper chart. And, although the officer of the watch nominally had the con, the master occasionally countermanded his orders, but did not formally take back control of the ship. This provided the potential for confusion among the bridge team as to which officer was responsible for the safe navigation of the vessel.

The company's programme of Bridge Team Management (BTM) training had been suspended four years previously, because it was felt that standards of BTM had been raised to very high levels across the fleet, and any new entrants would quickly assimilate the company requirements during their induction period.

The ship's owner has since reviewed its training programme and implemented a number of measures to prevent a re-occurrence of the accident. The UK Marine Accident Investigation Branch has issued a Safety Flyer highlighting the lessons learned from this accident for promulgation to ship owners.

https://assets.digital.cabinet-office.gov.uk/ media/547c700ded915d4c0d000071/ PrideofCanterburyReport.pdf

# **Reports Studies**

#### **TECHNOLOGY AND THE HUMAN** ELEMENT

Captain I Kharbanda, MNI Chairman, North and East India Branch The Nautical Institute

In his opening speech to the international conference on modern watchkeeping and the human element, in December 2008, Captain Kharbanda suggests that putting the emphasis on the human element is a relatively new departure for the international maritime community. And while being compatible with the more traditional approach, in which engineering and technological solutions were sought to foster the cause of safety and minimise the consequences of marine casualties, a different approach is now required. Downloadable from: www.he-alert.org/ filemanager/root/site\_assets/

standalone\_article\_pdfs\_0605-/he00790.pdf

## w: www.he-alert.org e: editor@he-alert.org

#### TANKER OFFICER TRAINING **STANDARD (TOTS) - FREQUENTLY ASKED "TOTS" QUESTIONS INTERTANKO**

TOTS aims to establish a set of voluntary standards which, when complied with, will ensure tanker officers' competence for general shipboard operations, as well as those for specific tanker types such as crude, product and chemical tankers. This comprehensive set of FAQs, produced by INTERTANKO, explains the rationale behind the development, and the scope, of TOTS. Downloadable from: www.he-alert.org/ filemanager/root/site assets/

standalone\_article\_pdfs\_0605-/he00785.pdf

#### **UNDERSTANDING HUMAN FACTORS - A GUIDE FOR THE RAILWAY INDUSTRY**

#### Rail Safety & Standards Board (UK)

The main purpose of this Guide is to answer the question 'what practical advice can a human factors approach offer to railway staff without requiring them to be experts in the subject?' It uses a Frequently Asked Questions (FAQ) format; the answers are in sufficient detail to tell what a human factors approach

involves, why it is important and what can be done. Although it is a Guide for designers, suppliers, managers, supervisors, trainers and Health & Safety (H&S) staff who work in the industry, there are railwav many of this Guide that can be aspects applied to the maritime industry. www.rssb.co.uk/library/improving-industryperformance/2008-guide-understanding-humanfactors-a-quide-for-the-railway-industry.pdf

#### **MONITORING & ENFORCEMENT OF** THE MARITIME LABOUR CONVENTION Scott R. Bergeron

Chief Operating Officer Liberian Registry

A presentation on how the Liberian Registry is preparing for the Maritime Labour Convention - which is likely to come into effect in 2012. It covers, such areas as: implementation; training of Auditors; onboard audit focus points; standards and best practices; overlapping requirements of ISM & Annual Safety Inspections; crew manager compliance; employment agreements; complaint procedure. Downloadable from: www.he-alert.org/ filemanager/root/site\_assets/ standalone\_article\_pdfs\_0605-/he00795.pdf

Global Maritime Education & Training Association (GlobalMET); International Federation of Shipmasters' Associations (IFSMA); International Institute of Marine Surveying (IIMS); Institute of Marine Engineering, Science and Technology (IMarEST); International Maritime Pilots' Association (IMPA); NewsLink; Royal Institute of Navigation (RIN); Royal Institution of Naval Architects(RINA)