

The Menace of Maritime Piracy and Somali Pirates - Is There a Solution?

Maritime piracy must have been in existence ever since the first ship set its sails on the high seas. Talk about sea pirates to your friends or relatives and the first thing that would come to their minds are the images of Capt. Jack Sparrow and Barbossa from the movie Pirates of the Caribbean.



For landlubbers it's hard to imagine that today a sea pirate looks no different from any of us. The only difference is that he is better trained, more fearless and perhaps a part of an organized crime or terrorist network. That is what our seafarers have to deal with in today's world at sea and live in constant fear of getting jacked or looted or even killed by the sea pirates when sailing on highly dangerous waters infested with such criminals.

In olden days, merchant ships were well armed and prepared with gallant sailors who carried guns and swords to protect themselves and their precious cargo. In comparison to older ships, today's maritime fleet is completely unarmed and banks on non-lethal anti-piracy weapons and armed guards to deter the sea pirates or rely on naval vessels or coast guard. Training ashore and on board deals strictly with methods to protect us from piracy but not to fight pirates. No seafarer in his right mind would want to fight pirates armed or otherwise.

Since specialized shore based training is already provided to seaman today for tackling maritime piracy issues, I would focus here more on the growing trends of piracy at sea worldwide and how it is affecting the seamen.

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— Editor: "Marine Waves"

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Earlier before socio economic and political issues redefined the whole meaning of maritime piracy, Piracy from Malacca strait to the West Coast of Africa and even India was confined more with looting of ship's property and crew's personal items. With changing political dynamics from year 2005 onwards, Somalia grabbed the world center stage in ship hijackings and the entire Arabian sea and the Gulf of Aden became virtually a "No Man's Land" for seafarers. The plight of captured seamen, their captivity for several months has only increased the presence of Naval Vessels in the area, but still there seems to be no lasting solution to this problem.

Hijacking of unarmed ships and kidnapping of seafarers near Nigeria and Somalia have become the most lucrative business for political rebels, organized criminals and agencies involved in the negotiation of ransom payments. Also, South China Sea/ Singapore strait have been reporting considerable number of hijackings of small ships in the past few years.

Is there a Solution to Curb Maritime Piracy?

If we check the history of piracy around USA, rarely one will read about cases of ship hijacking. The US coast guard is extremely alert and professional and the coast is well guarded. Can other countries with piracy activities along their coasts boast such firewall against pirates?

No doubt the coast guard of these countries are alert and their navies are excellent, but the lack of enforcing legislation on lines of USCG 96 hours (NOA) has made coastlines of countries such as India prone to alien vessels.

Many of these countries (e.g. India) do not have Vessel Traffic Services (VTS) and ships report to port authorities only when within VHF range. Comparatively, if the US coast guard does not receive the mandatory 96 hrs.' notice of arrival a ship cannot dock to any of its port and this system ensures each and every approaching vessel is tracked and monitored. A shipmaster before arriving US port must declare all particulars of his crew, cargo, past history of ports called by the ship etc. This is a great method to keep illegal activities away from the country.

Ship owners have started installing armed guards, created citadels and barbed wires on board for protection from piracy attacks, but these measures are focused mainly for ships transiting Gulf of Aden or pirated sensitive areas in the Arabian Sea and Indian ocean. The recent shooting case of Indian fisherman off Kerala coast by Italian armed guards has given good excuse to some ship-owners to remove armed guards quoting this incident and leaving their seafarers totally at the mercy of patrolling Naval vessels.

Several measures taken by NATO's Operation ocean shield, the EU's NAVFOR operation Atlanta and the Combined Task force 151 which have been helpful to deter the pirates from attacking ships off Somalia up to a certain extent, but not completely. The political situation in Somalia is too complex for any foreign government to interfere and to provide a lasting solution. Considering the easy money that the ransom brings to the pirates, the problem of somali pirates will not end very soon.

With piracy spreading its influence to many terrorist groups who eye easy money with the kidnapping and seajacking of ships, seafarers are one left at the receiving end and more

vulnerable to such piracy attacks.

What Seafarers Should Do To Tackle Maritime Piracy?

Seafarers should demand armed guards in all hostile waters where even a minutest risk exists for militants to settle scores with theirs or any foreign Govt. or to wage war on a foreign nation. For those who do not track IMB piracy reports, the following sea areas are prominent piracy prone areas as declared by IMB PRC and seafarers should be vigilant when passing through them.

1. Bangladesh
2. India
3. Indonesia
4. Singapore strait
5. Malacca strait
6. South china sea
7. Lagos
8. Cotonou (Benin)
9. Lome (Togo)
10. Abidjan (Ivory coast)
11. Gulf of Aden/Red sea
12. Somalia

UN Chief Urges Collective Action to Fight Piracy, Armed Robbery at Sea in Central Africa

Secretary-General Ban Ki-moon has called today on Central African leaders to collectively focus on conflict prevention in the subregion and to fight the threats of piracy and armed robbery at sea, as well as other security challenges.

"This meeting offers a unique opportunity to find concerted and innovative solutions to problems that threaten peace and security in the Central African sub-region," Mr. Ban said in a message to the 36th meeting of the UN Standing Advisory Committee on Security Questions in Central Africa (UNSAC), held in Kigali, Rwanda.



The Committee's mandate is to encourage arms limitation, disarmament, non-proliferation and development in the sub-region. It is grouping of eleven Member States comprised of Angola, Burundi, Cameroon, Central African Republic (CAR),

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From the Editor's Desk



I am delighted to take this opportunity to express the subject that is very close to my heart - "Corporate Social Responsibility" (CSR). Recently our Supreme Court Judge F. M. Ibrahim Kalifulla had asked to introduce "Corporate Social Responsibility", as a subject in School and College Syllabuses. Ref: Times of India, Chennai. Edn. Dated the 29th Sep.2013. This indicates as to how important it is, towards humanity and the general well-being of all the people. Hence, chosen to write my editorial this month on C.S.R., in the Maritime Sector of Indian Shipping, The imperative need to know of Social Environmental Accountability. Social Responsibility, Social Ethics, Business Ethics, Social- Enterprise and so on. "Corporate Social Responsibility (CSR), first, also called corporate conscience, corporate citizenship, social performance, or sustainable responsible business/ Responsible Business) is a form of corporate self-regulation integrated into a business model. C.S.R. policy functions as a built-in, self-regulating mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms. In some models, a firm's implementation of CSR goes beyond compliance and engages in "actions that appear to further some social good, beyond the interests of the firm and that which is required by law." C.S.R., is a process with the aim to embrace responsibility, for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere who may also be considered as stakeholders. Share with you my perception and conception of what sociology is drawing on my own experiences:- For centuries, men and women have lived in societies and interacted with one another in one way or the other. The process of interaction among the members of society is what constitutes the subject matter of sociology. I am more than convinced that sociology is all about interaction. This interaction may be at the individual, group and institutional level. We study society, basically because we want to understand the meaning of interactions. It is on the basis of meanings of these interactions that we are able to locate, diagnose the societal issues/problems and come up with what we may call remedies, solutions, conjectures, challenges. Having said earlier, that the study of interaction among the members of the society is the subject matter of sociology. The subject matter of sociology, we now understand, is so encompassing that there is hardly anything in the society that does not fall under its domain. There is a bit of sociology in everything that exists on earth. It is its challenge and therefore its strength. The subject matter of sociology is, as mentioned earlier, too vast and encompassing to come up with what we may term as 'The Definition'. This is not to mean that the subject matter of sociology have not been perceived and conceived by the founding fathers of the discipline. It had been and that too very comprehensively. Thanks to the pioneering works of the professional sociologists and social scientists. Yet, somewhere at the back of our mind we still have this nagging feeling that sociology goes beyond what has been perceived and conceived so far. The search for 'the definition' of sociology, elusive as it is, may continue, but, may in the long run, prove futile. 'Sociology', though as a non-professional, an engineer of 66 years, after a deep and wide thought observes, "Sociology is therefore everything and everything" in my personal opinion, couldn't agree with it, much more."

Sociology, as an academic discipline: I have been enchanted with the writings particularly of Karl Marx, Emile Durkheim and Max Weber. Of the four founding fathers of sociology, only Marx, Durkheim and Weber are considered as the most important classical theorists, whose writings have been most influential in shaping the subject matter of sociology. In India, teaching of sociology as an academic discipline started at University of Bombay, in 1919. I have had the fortune and privilege of meeting Prof.Sociologist Ghurye, a couple of times in 1981. Though he retired by then, was active as Professor Emeritus when I met him, who came back from Cambridge after obtaining his doctorate under W.H.R. River. 'Sociology in Bombay' for that matter in India, developed under the leadership of Ghurye. The range and sweep of Ghurye's scholarly interests and works has profound influence on the development of sociology in India. Ghurye's contribution to Indian sociology is legendary. Many of the pioneering and eminent sociologists of India such as M.N. Srinivas, I.P. Desai, A.R. Desai, Irawati Karve are, at one time or the other, all his colleagues and students. Today, there is hardly any college, university and Institute where sociology is not taught. Over the last fifty years or so, we have seen a growing number of departments of sociology in the Indian Universities. The Significance: Sociology is the study of social interaction, social relations and social actions. Sociology can explain, interpret different types of actions performed by individual members

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of the society. (For instance, emotional actions, rational/irrational actions, traditional actions, religious actions, social and economic actions, political actions and behavior). Sociology studies these aspects of different actions, establishes certain patterns, conjectures or conclusions. In social interactions, actions relations, many issues, problems, developments, conflicts will emerge and they can be explained/interpreted by sociology. Applied sociology can help in different fields of government and governance. For instance, in the field of planning and execution (planning is too important a policy, to be left with subjective seriousness, committed and responsible with the process know-how and economy). Government can take help of sociologists. Sociologists can suggest measures for good/proper implementation of policies. Sociologist can also monitor implementation/execution of plan schemes. All policies are not bad but they often failed because social aspects of social problems are not taken into account.

Sociology, can help in identifying the social problems, their root cause and give/offer remedies, solutions. Sociology can also help in the field of economic and political development by studying the political and economical behavior of people, leadership, consumer behavior, problems, governance, social advancement etc., All policies and schemes of government have impact on population and help its progress and development. Sociology can help policy makers, administrators in making people-friendly policies and implementations. The first quarter of the new millennium have thrown up some new concepts and terminologies like 'Social Business', 'Social Capital', 'Social Auditing', (not to forget 'Social Engineering' and 'Social Planning') 'Public-Private Partnership (PPP)', which other social science disciplines are ill-equipped to handle. It's sociology which can adequately handle these concepts, make optimal use for betterment of the society.

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Chad, Congo, Democratic Republic of Congo (DRC), Equatorial Guinea, Gabon, Rwanda, and Sao Tome and Principe.

In the message, delivered by Abou Moussa, his Special Representative and head of the UN Office for Central Africa, Mr. Ban commended the Committee for its "pioneering efforts to address" piracy and armed robbery through the active collaboration with Member States and the Secretariat of the Economic Community of West African States and the Gulf of Guinea Commission (GGC).

Most recently, Western African leaders met in June at the Summit of the Gulf of Guinea Heads of State and Government on maritime safety and security in Cameroon to establish an effective framework to combat piracy and armed robbery at sea.

At the Summit, participants adopted the 'Code of Conduct concerning the Prevention and Repression of Piracy, Armed Robbery against Ships, and Illegal Maritime Activities in West and Central Africa', which defines the regional maritime security strategy and paves the way for a legally binding instrument. Mr. Ban and the UN Security Council welcomed the move.

Mr. Ban also said that he was pleased that the Committee's agenda included the issue of elephant poaching.

"We must fight this illegal and intolerable activity vigorously, particularly given its alleged role in the illicit financing of some rebel groups," he noted.

In his statement, Mr. Ban noted the establishment of a network to contribute to the fight against terrorism held in the DRC in December 2012. He said the "time is ripe" for a mid-year review of its activities.

ECSA and ETF Call for Ambitious Gulf of Guinea Strategy to Curb Growing Piracy Threat:

On 11 of September 2013, President Barroso held his state of the union speech. He underlined the fact that the EU must be big on big issues and small on small issues. He stressed during his address that in his vision for the EU, one of the big issues is the EU's commitment to development and humanitarian aid and a strong security and defence policy. ECSA and ETF very much welcome this statement, particularly in light of the on-going efforts to curb maritime piracy and armed robbery at sea.



Operation ATALANTA and the EU's coordinated efforts in the Gulf of Aden is a prime example of what the EU can achieve. Over the last four years, the amount of successful attacks has been severely decreased and the amount of kidnapped seafarers reduced from 850 to 80. This is of course 80 too many, but nonetheless, it has proven that the EU truly possesses a unique toolbox for the fight against piracy. Indeed, combining the

European Union's military, trade, development, diplomatic and legal instruments has made a difference. The shipowners' commitment to reporting attacks, registering upon arrival in the zone, use of BMPs and in some cases of armed guards provided the other side of the pliers. Whilst currently under control, the situation in Somalia is of course reversible and we must not become complacent. This is why ECSA and ETF strongly call on the EU and Member States to prolong operation ATALANTA until 2016 and continue capacity building efforts undertaken on-shore.

Unfortunately, other piracy hot spots are developing and the situation in the Gulf of Guinea is particularly worrying. Indeed, attacks are now taking place far outside territorial waters and extreme violence is used. The problem is acute, complex and reaches beyond the seafarers and shipowners.

The poor security situation imposes additional, high costs on African imports and exports and thus jeopardises jobs and economic activity in African States.

Whilst the solution applied in the Gulf of Aden may not be suitable for the Gulf of Guinea, ECSA and ETF strongly believes that the European Union's toolbox will be key to solve this growing problem.

Long-term solutions must be found on shore, however, the security situation is such that action must be taken today. ECSA and ETF call for:

International military presence outside territorial waters

Whilst most of the attacks take place in territorial waters, increasingly attempts are made in international waters. The international community must protect the security of seafarers and vessels outside territorial waters in West Africa, limiting the scope of operation of pirates.

Proper protection from the local navy in territorial waters

Inside territorial waters, ECSA and ETF are calling for protection from the national navies, coast guards or police and ask the EU to encourage the States to take up their responsibility. The EU should contribute by funding capacity building to provide high quality local naval capabilities. EU financial aid must be

made available to local States to ensure regional cooperation, capacity building and governance issues. The EU's CRIMGO initiative (the Critical Maritime Routes in the Gulf of Guinea) should be a useful leverage in this context.

A well-functioning monitoring and reporting system

Reporting is hardly taking place as there is no reliable and trustworthy system to report into. The lack of overview and information leads to an underestimation of the situation on the ground. Therefore, a reporting and monitoring system must be developed which guarantees shipowners that the provided information is kept confidential and protected, goes to the right persons and flows into appropriate action.

Investigating the use of Private Armed Guards on board vessels

Armed guards may not necessarily be the solution in the Gulf of Guinea, but nonetheless, the reality forces shipowners to use a variety of self-protection measures, including the option to employ private armed guards on board their vessels. The EU and Member States should explore the possibility of bilateral discussions with the concerned African States to ensure that shipowners can use quality private armed guards on board their vessels when they decide it is necessary, and to clarify the legal framework applicable, in particular to officers and masters to avoid placing them in harm's way.

ECSA and ETF believe that the combination of these elements should be addressed in a comprehensive EU strategy for the Gulf of Guinea. Both organisations strongly urge all relevant Commission Directorate Generals and the European External Action Service to take the developments in West Africa very seriously and address this piracy hotspot before it has a chance to grow into such a high threat for seafarers and shipowners alike that trade patterns with West Africa are irremediably affected.

In parallel, ECSA and ETF will jointly work towards a set of best practices for navigating this region including guarantees that shipowners and seafarers are adequately prepared (psychologically, technically and in terms of necessary insurances as well as legally protected), that BMPs are applied and that reporting takes place.

W o r l d I n f o D e s k

European Union And Somalia Join Hands In Maritime Security Partnership:

On 4 September 2013, off the coast of Mogadishu, the EU Naval Force (EU NAVFOR) Atalanta hosted the President of Somalia, Hassan Sheikh Mohamud, on board the Dutch EU NAVFOR flagship, HNLMS Johan de Witt. The President, his Ministers and security commanders met with EU Special Envoy to Somalia, Michele Cervone d'Urso, the EU Naval Force Operation Commander, Rear Admiral Bob Tarrant and Head of Mission of EU Capacity Building Mission (EUCAP) Nestor, Etienne de Poncins. It was discussed how the different EU instruments can support the development of a comprehensive Somali Maritime Strategy.

The event built on the first meeting held on June 24 on a EU Naval Force flagship and aimed to further foster the partnership between Somalia and the European Union and constitutes a stepping stone towards the third international counter-piracy



conference in Dubai on 11-12 September 2013 and the "New Deal for Somalia" Conference in Brussels on 16 September 2013. The New Deal Conference will endorse a 'Compact'

between Somalia and the international community that identifies the key political, security and socio-economic priorities for the coming years.

President Hassan Sheikh Mohamud: "Somalia welcomes cooperation with the EU to improve maritime security as part of the broader engagement of the EU in Somalia. Maritime cooperation will have important effect on the stabilization and development of coastal areas in my country. I intend to present the outline of a comprehensive maritime strategy during the Brussels Conference".

EU Special Envoy to Somalia, Michele Cervone d'Urso said: "This event was yet another occasion to reiterate the EU's strong commitment to help Somalia on its path towards stability and security. During the upcoming "New deal for Somalia" Conference in Brussels, support to the Somali security sector will be high on the agenda, including maritime security".

In order to support the Somali authorities to increase their capabilities to fight piracy and other illegal activities off their coastline, the EU NAVFOR Dutch flagship also provided the platform for a EUCAP Nestor maritime crime seminar, including a practical exercise with delegates from Somalia. The delegates, comprising Somali prosecutors, judges and maritime police officers, observed a demonstration of how a suspect pirate vessel is intercepted, including boarding the vessel, detaining suspects, seizing evidence and investigation.

Speaking about the seminar Etienne de Poncins, Head of Mission of EUCAP Nestor, said "events which include practical exercises such as the one organised on board the Dutch flagship are an important means to demonstrate the broad engagement required from the Somali judiciary and police in order to effectively tackle counter piracy and other illegal activities as to improve maritime security in the Horn of Africa."

New EU Project Aims to Improve Efficiency of Maritime Regulations:

A new three year European Research Project, partly funded by the EU has been launched to help increase efficiencies in regulation compliance and enforcement for the maritime sector. e-Compliance will facilitate tighter integration and co-operation in the fragmented field of regulatory compliance. It will closely



align with the EU e-Maritime initiative of which a key priority is supporting authorities and shipping operators to collaborate electronically in regulatory information management.

The maritime sector is, by necessity, heavily regulated. International, EU and national authorities create large numbers of rules and regulations; the long lifetime of ships and the different phases of their operation add to the complexity. As a result, practitioners who need to enforce or comply with

regulations are often unsure as to which rules apply for a given vessel in a given situation.

Building on the success of other EU projects such as FLAGSHIP, e-Compliance will look at creating a model for managing maritime regulations digitally and thus help to harmonise these regulations. The project's consortium comprises representatives of the three main stakeholder groups involved: classification societies (who create class rules), port state control (who enforce regulations) and ships (who need to comply with regulations). This seamless co-operation between the different stakeholder groups will improve the effectiveness of regulations and reduce the burden on practitioners who work with maritime regulations on a daily basis.

Philipp Lohrmann, Project Manager for e-Compliance comments: "Presently, there are numerous disparate initiatives and projects that address specific aspects of the regulatory domain. The e-Compliance project will bring these different approaches together, using their most promising aspects in order to increase coherence and efficiency in the world of maritime regulations."

Specific activities within this three year R&D project will include:

" Establishment of a cooperation model between regulation setting and enforcement authorities, both for port state control and IMO regulations, for modelling and interpreting regulations and ensuring harmonisation across national and organisational boundaries.

- Demonstration of automated compliance management by:
 - Modelling and delivery of regulations in electronic format
 - Harmonised e-Services for more effective and co-ordinated enforcement controls and inspections
 - e-Services in support of class requirements, particularly on surveys and for ship risk management in upgraded e-Maritime applications
- Evaluation of the practical implementation of the above in representative networks and the provision of recommendations for e-Maritime policies.

e-Compliance consists of 10 partners, all of which bring their own areas of knowledge and experience of working in the maritime space. They include: BMT Group Ltd, Det Norske Veritas (DNV), Danaos Shipping Co Ltd, INLECOM Systems, The Netherlands Organisation for Applied Scientific Research (TNO), TEMIS, Acciona Infraestructuras, PORTIC Barcelona, Norsk Marinteknisk Forskningsinstitutt AS (MARINTEK) and the Maritime Administration of Latvia.

Wärtsilä Announces the Introduction of Next Generation Thruster Portfolio:

Wartsila, the marine industry's leading solutions and services provider, introduces a new series of both steerable and transverse thrusters that will further develop the current portfolio. The new Wärtsilä Steerable Thruster series (WST) is being introduced to replace the company's Modular Thruster and Compact Thruster series, while the new Wärtsilä Transverse Thruster series (WTT) is replacing the current range of transverse thrusters. The new products have been developed in response to changing market demands, requiring competitive thruster products which are more efficient and cover a wider power range.

This major product development project was launched by Wärtsilä's Propulsion R&D already in 2011. The latest insights

in thruster design were implemented using state-of-the-art numerical simulation tools. The first product to enter the pilot phase is a 4500 kW under water (de)-mountable steerable thruster, the WST-45-U, which began its pilot phase in summer 2013. Two more products, the WST-14 and the WTT-11, are scheduled to begin their pilot phase before the end of this year. Wärtsilä will continue the introduction of different sizes of thrusters in the coming years based on market requirements and customer priorities.



The new thrusters are available for various types of vessel depending on the size and features of the product. For example, the WST-45-U is designed mainly for the offshore drilling market; the WST-14 is intended for tugs up to 45tBP, inland waterway vessels, and for river/sea going cargo ships. This thruster is compatible with both medium speed and high speed (1800 rpm) diesel engines. The WTT-11 is a 1100 kW tunnel thruster designed mainly for merchant cargo vessels.

The new WST and WTT units come with several added features, such as an increased power range, an 8° tilted propeller gearbox, and a new Wärtsilä Thruster Nozzle for the thrusters designed for offshore drilling. The new thrusters intended for tug boat applications also have the new nozzle, which improves performance and has a high level of system integration as well. The new tunnel thrusters are more compact and efficient than earlier versions.

"The marine sector is undergoing a period of significant change and technological advancement, and this next generation Wärtsilä thruster portfolio has been developed in line with these trends by utilizing the latest calculation tools and model testing to secure the hydrodynamic leadership of the products. The new products are even more efficient and reliable than earlier, as well as being lighter and easier to install," says Mr Arto Lehtinen, Vice President Propulsion, Wärtsilä Ship Power.

Investigation into Duck Tour incident: The Marine Accident Investigation Branch and London Fire Brigade have an investigation into the incident on the Lond Duck Tours on Sunday.

Thirty people were rescued from the London Duck Tours (LDT) craft Cleopatra after one of its amphibious vessels caught fire. Since the fire the tourist boat firm has had its tours of the River



Thames suspended and a statement on the LDT's website said that they will be operating a land-only service for tourists.

The incident is similar to the vehicles that sunk at Liverpool's Albert Dock

A rescuer said one passenger told her people found it "difficult" to get the life jackets out of their packets. Three people were taken to hospital "as a precaution" following the fire.

In a statement on the London Duck Tours website, managing director John Bigos said: "The company acknowledges the distressing situation experienced by our passengers.

"However, we are pleased to report that all persons involved in the incident are safe and well.

"Until the cause is established, the company will not be operating on the river and should technical or safety modifications be required to our fleet, these will be introduced prior to the service recommencing."

Comments have been made to suggest that the incident is very similarly to the two amphibious vehicles, which sunk in Liverpool's Albert Dock in June. But Mr Bigos says this should not be the case as his company's procedures were of a "higher standard".

"London Duck Tours operates a fully modernised fleet of nine vehicles that have been completely rebuilt and refurbished between 2002 and 2012.

The Mistress Quickly also caught fire in 2008

"This includes new, purpose built hulls, new engines, computerised systems and steering equipment," he added.

However, this isn't a one off event, in 2008 another London Duck Tours craft, Mistress Quickly, caught fire.

A mechanical breakdown led to an electrical fire in the engine. The nine passengers were evacuated to a fire launch.

The Chief Inspector of Marine Accidents' recommendations included making sure fire extinguishers were checked regularly and instructions were placed next to them.

A spokesman for the Maritime and Coastguard Agency, which looks after the implementation of the maritime safety policy in the UK, said: "We are investigating the incident to determine the cause of the fire and what, if any, appropriate further action needs to be taken.

"We have also taken formal action to ensure that the company's other DUKW vessels don't operate while the investigation takes place."

London Duck tours is yet to respond to the claims about life jackets.

Govt opens maritime hotline for seafarers' rights: Seafarers, ship owners and maritime stakeholders now have a hotline that will provide information on the Maritime Labor Convention of 2006, the Department of Labor and Employment (DOLE) said Monday.

DOLE-NCR Regional Director Alex Avila said the public can call the number (02) 440-3918 to know more about the convention, which is considered as a bill of rights of seafarers.

In a statement, Avila said the hotline will help ensure that the rules and regulations issued by the DOLE, including certification requirements and measures to be observed by ship owners, "are understood by the public."

He added the MLC hotline was established as part of the procedure in the issuance of the Maritime Labor Certificate.

DOLE Secretary Rosalinda Baldoz said the hotline is "very important in communicating the DOLE's policies, programs, and services on the MLC, 2006."

"It will facilitate maritime stakeholders' access to valuable information on our efforts to comply with the MLC, 2006," she said.

Baldoz presided over the start of the DOLE and International Labor Convention's joint advocacy and consultation workshop on the implementation of the MLC 2006 and the DOLE's new Labor Law Compliance System in Manila.

4th pillar

Baldoz said the MLC 2006's entry into force makes it the "fourth pillar" of the international regulatory regime for quality shipping.

"The MLC, 2006, complements the key conventions of the International Maritime Organization (IMO), such as the Convention for the Safety of Life at Sea, 1974, as amended (SOLAS); Convention on Standards of Training, Certification and Watchkeeping, 1978, as amended (STCW); and Convention for the Prevention of Pollution from Ships, 73/78 (MARPOL)," she said.

Baldoz also said that in compliance with the MLC 2006, the DOLE authorized nine Recognized Organizations (ROs) to inspect and certify Philippine-registered ships (PRVs) engaged in international voyages.

"As of today, 103 ships, out of the 135 listed PRVs in the MARINA, have already been issued the DMLC Part I, and two vessels have already been issued the Maritime Labour Certificate by Bureau Veritas, one of the nine ROs," she said.

She added the ROs are the government and the maritime sector's partners in implementing five tripartite process issuances on the MLC, 2006, including:

- Department Order No. 129, the "Rules and Regulations Governing the Employment and Working Conditions of Seafarers Onboard Ships Engaged in Domestic Shipping"
- D.O. No. 130, the "Rules and Regulations on the Employment of Filipino Seafarers Onboard Philippine-registered Ships Engaged in International Voyage"
- D.O. No. 130-A or "Guidelines on the Authorization of Recognized Organizations to Conduct Inspection and Certification of Philippine-registered Ships Engaged in International Voyages"
- Labor Advisory No. 02-2013, the "Requirements for Compliance with MLC, 2006"
- D.O. No. 132, the "Guidelines on Maritime Occupational Safety and Health"

Baldoz said the consultation workshop is part of the DOLE's efforts to get inputs to the new Labor Laws Compliance System (LLCS), and to generate support for the proposed Magna Carta for seafarers.

"As the world's premier and preferred source of quality seafarers, the government is committed to exhaust best efforts to protect them and promote their welfare and interest," she said.

The Wärtsilä14RT-flex96C - The World's Most Powerful Diesel Engine:

For all sizes of large, fast, container ships of from around 3000 to more than 10,000 TEU capacity, at service speeds of around 25 knots, the Wärtsilä RT-flex96C and RTA96C low-speed engines provide a comprehensive engine programme.



Available in 6-cylinder up to 14-cylinder configuration, the Wärtsilä RT-flex96C and RTA96C low-speed engines cover a power range from 24,000 to 80,080 kW at 92 to 102 rpm.

The Wärtsilä RT-flex96C and RTA96C engines are fully compliant with the IMO Tier II exhaust emissions regulations set out in Annex VI of the MARPOL 73/78 convention.

The World's Largest Container Ship is Powered by Wärtsilä:

When the 'Marco Polo' entered service in November 2012, it became the largest container ship in the world measured by capacity. It has a maximum TEU capacity in excess of 16,000, in other words, 97 km of containers in line. It is 396 metres long and nearly 54 metres wide. Just to give an idea of what these dimensions mean in day-to-day terms, the ship is larger than a US Navy aircraft carrier, and longer than four football pitches.

The 'Marco Polo' is owned by CMA CGM, a French container transportation and shipping company, and was built at the Daewoo shipyard in Okpo, Korea. It is the first of a series of three based on an extrapolated design slightly larger than that used for CMA CGM's Christopher Columbus class. All of these giants are powered by the 14-cylinder, Wärtsilä RT-flex96C low speed diesel engine, the proven solution for large and ultra large container ships.

The development of these mammoth sized vessels is a fairly recent phenomenon. For instance, 30 years ago container ships were typically in the order of 4000 TEU in size. Ten years ago, they had grown to around 10,000 TEU and more, and today we are exceeding even that capacity by 60 per cent. The reason behind this rapidly evolving trend is simply that of economies of scale. Global trade expansion has occurred simultaneously



with a hefty jump in fuel and other operating costs; a development that has caused owners and operators to reach the logical conclusion that one very big ship makes more economic sense than two or more smaller ships.

Efficiency, economy, environment

There are also environmental benefits to this trend, since the fuel consumption per TEU is somewhat lower than for smaller container vessels. But the greater sustainability benefits are brought about by the choice of the Wärtsilä RT-flex96C engine. This electronically controlled, 2-stroke diesel engine has particularly high efficiency, which naturally results in less fuel being burned and correspondingly fewer exhaust emissions. Furthermore, the engine provides different tuning capabilities to achieve the optimal fuel consumption at different load profiles, such as part and low load.

This retention of fuel efficiency at different speeds is a huge advantage in today's container shipping sector. Driven by over capacity in the market, and by the necessity to reduce fuel costs, owners and charterers have had to adjust not only their services, but also the speeds at which the ships are operated. Lower speeds reduce fuel consumption and, therefore, costs, and this is likely to be a continuing trend in this sector. However, the engine must be capable of the flexibility needed to retain efficiency while adapting to running at slower speeds, which is why the RT-flex96C engine is ideal.

Currently, more than 220 RT-flex96C engines are in service or on order, which is in itself a clear indication of the trust that owners and operators have in the reliability and technological advantages of this propulsion solution. The operating excellence and lifecycle cost efficiencies that it offers, are among the key reasons for it being the engine of preference for this shipping sector.

Martin Wernli, Managing Director of Wärtsilä Switzerland and Vice President, Ship Power 2-stroke, explains as follows: "The RT-flex96C is today the most powerful diesel engine in the world. It has proven to be the most efficient and flexible main propulsion engine for large and very large container vessels, and the experience gained from its operational success has formed the design basis for the new Wärtsilä X92 engine, which will be available from mid-2014."

The launching of the 'Marco Polo' did indeed set a new benchmark in the size of modern day container ships. The widening of the Panama Canal, which is scheduled for completion in 2014, allows access to bigger vessels. The maximum breadth of ship that the widened canal will be able to accommodate is increased from 32.3 metres to 48.8 metres, and this triggered a new class of vessels known as the 'New Panamax' class. The 'Marco Polo' exceeds even this. But it is clear that the move towards these ultra large ships is likely to

continue, and it is only a question of time before a new benchmark in container vessel size is set.

Environmental legislation, such as the Energy Efficient Design Index (EEDI) which is now mandatory for new ships, together with high fuel prices and fluctuating market conditions, has created the need for highly efficient solutions that offer the added value of operational flexibility. The new Wärtsilä X92, the soon-to-be successor to the RT-flex96C engine, will be delivered as from mid 2014 and is designed to provide optimum propulsion power to this new generation of large and ultra large container vessels. Savings in fuel consumption will be in the order of 10 per cent compared to previous solutions.

Carriage of firearms on board merchant ships:

o Masters, shipowners and companies should be aware that ships entering the territorial sea and/or ports of a State are subject to that State's legislation. It should be borne in mind that importation of firearms is subject to port and coastal State regulations. It should also be borne in mind that carrying firearms may pose an even greater danger if the ship is carrying flammable cargo or similar types of dangerous goods.

Non-arming of seafarers:

o The carrying and use of firearms by seafarers for personal protection or for the protection of a ship is strongly discouraged;

o Carriage of arms on board ship may encourage attackers to carry firearms or even more dangerous weapons, thereby escalating an already dangerous situation. Any firearm on board may itself become an attractive target for an attacker;

o It should also be borne in mind that shooting at suspected pirates may impose a legal risk for the master, shipowner or company, such as collateral damages. In some jurisdictions, killing a national may have unforeseen consequences even for a person who believes he or she has acted in self defence. Also the differing customs or security requirements for the carriage and importation of firearms should be considered, as taking a small handgun into the territory of some countries may be considered an offence.



Use of unarmed security personnel:

o The use of unarmed security personnel is a matter for individual shipowners, companies, and ship operators to decide;

o The use of unarmed security personnel to provide security advice and an enhanced lookout capability could be considered.

Use of privately contracted armed security personnel:

o The use of privately contracted armed security personnel

(PCASP) on board merchant ships and fishing vessels is a matter for a flag State to determine in consultation with shipowners, operators and companies. Masters, shipowners, operators and companies should contact the flag State and seek clarity of the national policy with respect to the carriage of armed security personnel.

o All legal requirements of flag, port and coastal States should be met.

o If armed security personnel are allowed on board, the master, shipowner, operator and company should take into account the possible escalation of violence and other risks.

Interim Guidance and Recommendations on use of Privately Contracted Armed Security Personnel (PCASP)

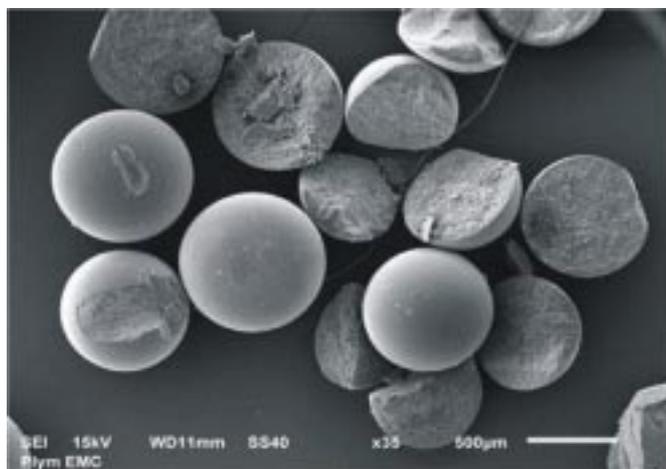
o New interim recommendations and guidance (MSC.1/Circs. 1405 and 1406) do not change IMO's position on the use of armed personnel - seafarers should not be armed and the carriage of PCASP remains a matter of decision for the ship owner, after a thorough risk assessment, to request and the Flag State to decide. Flag States should have a policy in place on whether or not the use of PCASP will be authorized and, if so, under what conditions.

o While providing guidance as to under which conditions PCASP can be contracted to prevent ships falling in the hands of pirates, IMO has clarified that it neither endorses nor institutionalizes the practice or the carriage of firearms on board merchant ships.

Experts forge ahead in the global assessment of micro-plastics in the marine environment:

International experts have met in London to review the growing problems in the marine environment caused by micro-plastics - tiny pieces of plastic or fibres which may act as a pathway for persistent, bio-accumulating and toxic substances entering the food chain.

The experts form a key working group (WG-40) under the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), an advisory body that advises the United Nations (UN) system on the scientific aspects of marine environmental protection. The International Maritime Organization (IMO) is the Administrative Secretariat of GESAMP, which has, to date, produced more than 85 reports, including numerous in-depth technical studies contributing to the



Microscopy image of microplastics extracted from shower gel. Photo Credit A. Bakir and RC Thompson Plymouth University

assessment on the state of the global marine environment.

The working group, which was meeting for its second session (from 23 to 25 July), completed a draft assessment report, covering the inputs of plastics and micro-plastics into the ocean, from land- and sea-based human activities; the mechanisms and rates of particle degradation and fragmentation; the processes controlling particle transport and accumulation; the interaction of micro-plastics with organisms, and potential physical and chemical impacts; and public perceptions about marine litter in general and micro-plastics in particular.

Further meetings will be held in 2013 and 2014, with a view to presenting the final global assessment report on micro plastics in the ocean at the 2nd International Ocean Research Conference in Barcelona, Spain, in November 2014.

The principal audience for the assessment consists of the five UN Agencies supporting the work (IMO, United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Programme (UNEP), the International Atomic Energy Agency (IAEA) and Intergovernmental Oceanographic Commission of UNESCO (UNESCO-IOC), as the lead Agency). The group recognized that the results will also be of interest to many other stakeholders, including intergovernmental bodies, regional seas organizations, maritime and relevant land-based sectors, industry, conservation bodies, scientists and the general public.

The workshop brought together experts in chemistry, ecology, eco-toxicology, human toxicology, materials science, physical oceanography, psychology, science-policy interface, social media and waste management, from nine countries on five continents, and observers from PlasticsEurope and the American Chemistry Council.

Plastic debris comes in a wide variety of sizes and compositions and has been found throughout the world's oceans, carried by ocean currents and biological vectors, such as in the stomach contents of fish, mammals and birds. Plastics degrade extremely slowly in the open ocean, partly due to UV absorption by seawater and relatively low temperatures. The dumping of plastics into the sea from ships is prohibited under international treaties.

The potential problems of micro-plastics in the marine environment were brought to the attention of GESAMP in 2010.

Micro-plastics are one of the degradation products of all plastics and may be small to very small, including just fibres or strands, with a range of compositions. They tend to fall into one of two categories: "primary" micro-plastic resin pellets used in the plastics industry, and in certain applications such as industrial abrasives and skin-care products; and "secondary" micro-plastics resulting from the degradation and breakdown of larger items, including so-called biodegradable plastics.

While micro-plastics may not pose an obvious risk to marine life - such as entanglement - due to the small size, nonetheless they may pose chemical or physical risks, especially on micro-fauna. Micro-plastics may also contribute to the transfer of pollutants from seawater to marine life.

Seminar helps to strengthen maritime security in west and central Africa:

More than 60 participants from the 20 coastal Member States of the Port Management Association of West and Central Africa (PMAWCA) joined international experts for a seminar on maritime and port

security, held in Cotonou, Benin, from 22 to 25 July, organized by the International Maritime Organization (IMO), in conjunction with PMAWCA.

Experts from France, the United States Coast Guard, the United Nations Regional Office for Central Africa (UNOCA), the United Nations Office on Drugs and Crime (UNODC), the United Nations High Commissioner for Refugees (UNHCR) and the international police organization, Interpol, shared their knowledge and respective areas of expertise on a range of issues, including the practical implementation of security measure in ports, the facilitation of maritime traffic, the suppression of piracy and armed robbery against ships, dealing with illicit maritime trafficking and countering transnational organised crime.

IMO welcomed the opportunity to collaborate closely with PMAWCA as part of IMO's continuing technical co-operation programme in the region.

"Going forward, PMAWCA will build on the issues raised in this seminar to create a network for sharing port and maritime security information, intelligence gathering and information sharing as the Association seeks to contribute towards the wider effort to strengthen maritime security," said Mr. Michael Luguje, PMAWCA Secretary-General.

This seminar complements the maritime security assistance programme conducted by the Organization in the region, including the integrated coast guard function network project and the recent series of national table top exercises. The seminar is also an example of the spirit of cooperation outlined in the recently-signed Code of Conduct concerning the prevention of piracy, armed robbery against ships and illicit maritime activity in west and central Africa, which aims to build capacity in west and central Africa to counter piracy, armed robbery and other illicit acts at sea (See IMO Briefing 2013/23).

Successful implementation of the Code of Conduct is expected to stimulate economic development in the member states, develop sustainable fisheries and promote the development of the maritime sector.

IMO Secretary-General Koji Sekimizu has announced the creation of a multi donor trust fund for west and central Africa to support maritime security capacity-building activities in the region.

IMO Secretary-General Emeritus Dr. C.P. Srivastava, KCMG, remembered:



IMO Secretary-General Emeritus Dr. C.P. Srivastava, KCMG, Secretary-General Emeritus of the International Maritime Organization (IMO), has died in Italy, aged 93.

IMO Secretary-General Koji Sekimizu expressed his sincere

condolences to the Indian Government and Dr. C.P. Srivastava's remaining family, and also the condolences of the entire IMO membership and staff.

"It is with great sadness that we have learned of the passing of Dr. C.P. Srivastava, the longest-serving Secretary-General of the Organization," Mr. Sekimizu said. "Dr. C.P. Srivastava was a truly great Secretary-General who established the World Maritime University and placed IMO's work on technical co-operation in a central position in the work of the Organization, in order to promote the implementation of IMO conventions on a truly global scale."

Mr. Sekimizu added: "I met C.P. in Tokyo in 1981 and I was inspired by him to explore my career in the Japanese Government in the field of international co-operation dealing with shipping and I was really fortunate to have been recruited by him as an officer of IMO in 1989. I have been contacting him this year and I was pleased to deliver his congratulatory messages on his behalf at the Commemorative Event, held at IMO headquarters to celebrate 30 years of the World Maritime University, on 10th July. The last time I spoke to him was when I telephoned him just after the WMU 30th celebration reception, to immediately report to him about the successful holding of the event. He was delighted with the information that the event was successful and he was pleased with the current state of developments at the University, strengthening its activities with the vision established by him 30 years' ago."

During Dr. Srivastava's tenure as Secretary-General, from 1974 until his retirement on 31 December 1989, IMO increased its membership considerably. Dr. Srivastava was well known for his relentless efforts to make IMO known to the developing world and for encouraging developing countries to join the "rich men's club", as IMO was often referred to at the time. This shaped the structure of the Organization's membership to its present status, whereby two-thirds of the 170-strong membership (and three Associate Members) is represented by developing countries, making a significant contribution to IMO.

Dr. Srivastava's leadership of IMO is associated with the success of the 1978 Tanker Safety and Pollution Prevention (TSPP) Conference, and the development and adoption of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, the International Convention on Maritime Search and Rescue (SAR), 1979, the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA), 1988, and related Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms located on the Continental Shelf, and many other treaties and Codes.

During his tenure, a comprehensive, pragmatic and co-ordinated programme of technical co-operation was conceived and developed and effective steps were taken to promote its continuing implementation.

Dr. Srivastava will be remembered for his visionary and pioneering role and his ceaseless efforts in the establishment of IMO's global educational institutions, including the World Maritime University (WMU), in Malmö, Sweden, and the International Maritime Law Institute (IMLI), in Malta.

Earlier this month, Dr. Srivastava had sent a message of support to be read out during celebrations marking the 30th anniversary of the founding of WMU, which were held at IMO Headquarters in London. Reading out his message, IMO Secretary-General Koji Sekimizu described him as the "founding father" of WMU, which has become IMO's centre of excellence for postgraduate maritime education.

Next-Generation Livestock Carrier Galloway Express Delivered:

Vroon, a Netherlands based company announced they have taken delivery of MV Galloway Express, the first of the four livestock carriers being constructed at the Cosco Shipyard in Guangdong. The remaining three vessels are scheduled for delivery later this year and early in 2014.



These livestock carriers are "next generation" livestock vessels, boasting a cargo capacity of approximately 4,500 sqm and a cruising range of around 18,000 NM.

They are fitted with animal-welfare facilities exceeding Australian (AMSA) regulations and incorporate a revolutionary bow design that will ensure fuel savings while maintaining high speeds and maximum comfort for cargo and crew.

Galloway Express will leave the shipyard later this week. She will operate for one of the major Australian livestock exporters under a tailor-made charter agreement.

The Ship That Waves Won't Rock: This ship concept makes it easier to find one's sea legs, thanks to opposing waves created in specially-designed tanks fitted in the hull. The ship will house personnel working on offshore installations, and is optimized to provide the best possible comfort when moored adjacent to a platform.

"This concept provides an alternative to the semi-submersible platforms commonly used at present. The aim is to create a more mobile hotel unit which can be leased by oil companies which operate in several parts of the world. Our job has been to give the ship characteristics which make it more comfortable to live on at sea," explains Sverre Anders Alterskjær at MARINTEK.

The hotel ship, designed by the Stord-based maritime design company SALT, is being built under contract for ship owner Østensjø.

Built-in waves: The integrated system designed to reduce rolling of the vessel has been developed by Hoppe Marine and thoroughly tested by Alterskjær and his research colleagues at MARINTEK. They are specialists in investigating new ship and hull concepts using the unique test basins in their laboratories.

The roll damping is achieved using tanks integrated into the bottom and sides of the hull - called "U-tanks" because of their shape.

"The tanks are filled with water which is set in motion in opposing phase to the wave forces acting on the hull," Alterskjær explains.

- The tanks are fitted with air valves at the top which partially control the water motion in the tanks.



- Valve opening can be adjusted depending on the ships roll period

- The result is reduced rolling and improved comfort for those on board.

The researchers investigated the optimal opening of the valves at the top of the U-tanks and the correct water level relative to the ship design, as well as measurement of the motion of the ship during voyages and in hotel mode.

Dynamic positioning: In addition to the special hull design, the ship is equipped with six so-called "azimuth thrusters" - propeller drives with directional control used to keep the ship in the same position when in hotel mode. The thrusters oppose the external forces from waves, currents and wind, and can also be used to provide forward propulsion. In hotel mode, the direction and speed of each thruster are determined by a control system receiving continuous input from GPS position measurements, among other things (DP - system). The control system was developed by Kongsberg Maritime.

"We have also carried out a range of tests of the system by creating waves, wind and currents of different intensities in our Ocean Basin. During the model tests, Kongsberg's DP system was linked to MARINTEK's physical modelling and measurement systems. This enabled control of the model as if it were a full-scale ship.

"Many specialized tests were also performed to investigate the interaction between the hull and the thrusters, and between

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the thrusters themselves. This gives Kongsberg more possibilities to tune and develop the control system," says Alterskjær.

Innovative hull design: "The wide-ranging tests have also revealed that the hull design functions optimally and that the ship has the characteristics necessary to handle this type of operation," says Johannes Eldøy, a marine designer at SALT. "We are competing with an established platform concept, and documentation is very important for the oil companies, which place high priority on safety."

Eldøy is responsible for the design of the vessel, a very important element of which is the gangway, attached at the bow.

"The most important thing has been to improve the efficiency and safety of the connection between the offshore installation and the gangway, which is as much as 55 metres long. This is a critical point because the vessel must display the least possible vertical motion in response to the waves while at the same time maintaining its position," the designer explains.

The challenge has been met by incorporating features such as providing the vessel with a special hull shape, so that it looks almost the same at both bow and stern. Whatever direction the waves come from, the motions of the vessel must be as small as possible.

Stop Fouling of Heat Exchanger by Automatic Cleaning the Heat Exchanger:

The fouling of Heat Exchangers and the resultant cleaning of Heat Exchangers is a common task in many companies. Unfavourable water, high temperatures and impurities in the water are the main reasons for fouling in Heat Exchangers. Fouling in a Heat Exchanger causes less performance in the



heating or cooling process. As more fouling is found, as worse the internal heat transfer will get. In tubular Heat Exchangers the fouling happens as well on the tube side as on the shell side of the Heat Exchanger. In a water/water Heat Exchanger the fouling happens on the tube and the shell side in the same way. But in most cases there is water on one side of the Heat Exchanger and product on the other side, either to be cooled or heated. Depending on the kind of product often the fouling in the Heat Exchanger is on the product side worse than on the water side.

Mostly responsible for fouling on the water side of a heat exchanger are scaling, corrosion and often also micro organism

causing biofouling. The scale is formed mostly by salts solved or solids carried in the water, the corrosion is caused by aggressive water and the bio fouling is caused by algae or bacteria in the water which are forming a biofilm at the surfaces of the Heat Exchanger.

So in a lot of cases where heavy fouling happens in the Heat Exchanger, these have to be cleaned regularly. In order to clean a heat exchanger, the production has to be stopped, the heat exchanger has to be disassembled, and cleaned either manually or by the use of chemicals. To clean such a big heat exchanger, as shown on the picture, easily 2 or 3 days are required.

Merus is either able to lower the fouling in the Heat Exchanger significant or stop the fouling totally. This is done by installing a Merus Ring at the inlet line of the Heat Exchanger, where the the problem is found. If there is fouling on both side of the Heat Exchanger at both fins a Merus Ring has to be installed. In the case several heat exchangers has to be taken care off and also the cooling loop has to be treated, it is most times not required to install a Merus ring at each feed line of the Heat Exchanger, in such cases there will be several ring installed in the loop, and only on very critical Heat Exchangers there is a Merus RIng required direct ahead the single Heat Exchanger.

Merus is able to improve all cases of fouling, where the material which causes the scale is soluble in the liquid. In the case of water this is for instance lime scale, which is soluble in water. This solubility Merus is increasing, in some cases up to more than 5 times its former value. In the case of product, e.g. chemicals or crude oil, same thing is possible, but to what extend, we cant tell without a trial.

Actually Merus is doing automatic cleaning of Heat Exchangers. This we have shown in a lot of cases, where almost fully blocked Heat Exchangers got clean after some time by itself. The fouling of the Heat Exchanger is stopped and at the same time, existing scale is removed. For further information you can check the case studies, how it is done in refineries with scale or corrosion, withbiofouling, in HVAC, at chemical plants or in hot water boilers in public swimming pool in Munich

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World Maritime Day 2013: "Sustainable Development: IMO's Contribution Beyond Rio+20": 26 September 2013 marks the 36th celebration of World Maritime Day. This year's theme is: "Sustainable Development: IMO's contribution beyond Rio+20".

In his World Maritime Day message, IMO Secretary-General Koji



SUSTAINABLE DEVELOPMENT: IMO'S CONTRIBUTION BEYOND RIO+20

Sekimizu said that maritime transport was central to sustainable development, as the world's only really reliable, global, cost-effective and energy-efficient mass transportation method for energy, materials, foods and industrial products.

"The maritime transportation system itself must, therefore, ensure that its development is also sustainable," Mr. Sekimizu said, adding that this blanket term included not just the operation of ships, but all the activities that are vital to support shipping, such as the operation of maritime traffic management systems and global communication systems, ports and multi-modal connections are all components of this multi-faceted sector.

"Shipbuilding and classification, ship registry and administration, ship finance, ship repairing, ship recycling, the education and training of seafarers, are all part of the system - as, indeed, are search and rescue services, maritime security agencies, coast guards and maritime law enforcement agencies and many others, too. They all have a part to play in defining and achieving a sustainable Maritime Transportation System," Mr. Sekimizu said.

"Because the Maritime Transportation System is so essential to the continued development and future growth of the world economy, IMO will continue to take the lead in supporting it with the appropriate global standards and by helping to promote, through technical co-operation, the necessary national maritime transportation policies and institutional frameworks for a sustainable Maritime Transportation System," Mr. Sekimizu said.

The concept of a Sustainable Maritime Transportation System will be discussed at a symposium to be held on World Maritime Day at IMO Headquarters in London (see Briefing 39/2013).

United Nations Secretary-General Ban Ki-moon also issued a message for World Maritime Day, in which he noted that this year's World Maritime Day fell at an important time, as the United Nations was leading the final stretch of its global campaign to address human suffering through the Millennium Development Goals while shaping a vision for the post-2015 period.

"In this effort, we value maritime transport as a cost-effective and energy-efficient link in the global supply chain. Let us use this occasion to reaffirm our commitment to optimize the management of maritime transport to support sustainable development," Mr. Ban said.

Construction Begins On Atlantic Container Line's "First of its kind" G4 RORO/ Container Ships:

The official steel cutting ceremony took place this week in Shanghai for Atlantic Container Line's five, G4 (Generation 4) RORO/Container ships, marking the start of actual construction. Since signing a contract with ACL in July 2012 for the construction of these vessels, Hudong Zhonghua



Shipbuilding (HZS) has been busy with the detailed design work and tank testing.

ACL's President & CEO, Andrew J. Abbott and Henrik Karle, (Vice-President of Marine Operations) participated in the event together with Grimaldi Group's, Paolo Satariano (Grimaldi Corporate Technical Director) and Pierluigi Marmo (Grimaldi Group New Buildings Project Manager) at Hudong Zhonghua's new ship construction facility on Chungxing Island near Shanghai.

"We are excited to celebrate this milestone for our first G4 CONRO (Container/Roll-on Roll-off). After five years of planning, this is the first step of the construction. ACL and our Parent Company, the Grimaldi Group of Naples, Italy, look forward to the progress in the upcoming months," said Andrew J. Abbott. "We are most happy that construction of our ships will take place at Hudong Zhonghua's newest shipyard, where they employ the latest technology."

ACL has appointed Registro Italiano Navale (RINA Services S.p.A.) and the American Bureau of Shipping (ABS) to provide statutory classification services for the G4 ship construction which provides periodic survey activities, certification, testing and inspection during the vessel's assembly. ABS will also be the site manager, overseeing construction activities and ensuring quality control on behalf of ACL.

ACL's new G4 vessels will be the first of their type ever built. They will be bigger, faster, greener and more efficient than their predecessors. They will have a container capacity of 3800 TEUs plus 28,900 square meters of RORO space, with a car capacity of 1,307 vehicles. Speed will be increased by 10%, yet fuel consumption per TEU will be reduced by 50%. All five vessels will be delivered in 2015, with the first to be delivered at the end of January 2015.

A Master's Guide to Container Securing:

A lot has been written by us already regarding the container lashing and securing on container ships. Cargo containers safety on board ships is one of the most important tasks that has to be carried out by the master and chief officer. From preparing a ship from loading cargo containers totaking care of the cargo while the ship is at sea, every aspect of container transportation has to be handled with the finest skills and knowledge.

Cargo is loaded onto a ship when she is floating steadily in the water, upright, or with a practical trim astern. When the ship sails out to sea, it encounters external forces which result in to six forms of motions acting on the ship. These motions are a threat especially for those ships which require cargo lashing and securing it on the open deck (Container ships).

If the storage of cargo is not secure enough then there is no escape from the behavior of the seas and the wind once they show their rage. This in result takes a toll on the loaded cargo, causing damage to other cargo in the vicinity or to the vessel's structures and fittings and even throwing the cargo overboard. Improper cargo lashing and failure to adhere to the procedures required for cargo stowage on ships is dangerous to property, life and environment at sea.



To avoid getting into situations like these the responsible personnel on board should be competent enough to plan and uphold safe carriage of the cargo at all times. This is done by proper planning of container lashing and securing.

Let's have a look at a few components that are vital for understanding the importance of proper cargo lashing.

Basic Reasons of Loss or Damage to the Cargo

1. Severe and adverse weather conditions and lack of appreciation of the various forces implicated - Various conditions of the Beaufort wind scale not taken into account as the vessel encounters the worst at any given moment. Responsible personnel looking after the carriage of the cargo sometimes fail to foresee the ship's characteristics and bad weather behavior
2. Lack of knowledge of relevant rules and guiding recommendations - Failure to follow the guidelines or the regulations for cargo lashing and securing may spell catastrophe
3. Cost control pressures - The economy downfall leads to cost cutting procedures which in turn means less quality cargo securing work
4. Inadequate time and personnel to complete the securing cargo before departure - Due to excessive paperwork and short port turn-around, basics of cargo lashing and handling on ships are sometimes overseen.
5. Basic seamanship techniques not applied adequately for total immobility of the cargo - Dunnage not utilized in an effective manner or for that matter taking lashing materials around sharp edges which causes them to part or even insufficient force, steadiness and/or number of lashings
6. Improper usage of the cargo securing gear - Wire loops and eyes made up wrongly. Lack of knowledge in the use of bull dog grips, bottleneck screws, wire slings/strops, etc.
7. Lack of continuity in strength between the various securing components - Ship's overall characteristics and age of construction play a major role in effective cargo work
8. Incorrect of unbalanced stowage and inadequate weight distribution - Inadequate stability and control measures taken

Points to remember while securing cargo

1. A good tight stowage of cargo containers on ships may avoid the need to totally secure it, provided the cargo is adequately packaged and there are no heavy components
2. Bulky and heavy units may still be required to be secured

even if the space around them is filled with other cargo. Particular attention should be paid to the chances of such units sliding or tripping

3. A number of units can be secured or lashed together into one block
4. Permanent securing points on the cargo should be used, but it must be remembered that these securing points are intended for inland transport and may not necessarily be suitable for securing other items onboard ships
5. Independent lashings must only be secured properly to suitable strong points of the ships fittings and structure, preferably onto the designated lashing points



6. Cargo lashings must be taut and as short as possible for a better hold
7. If possible the multiple lashings to one item of cargo should be kept under equal tension. The integration of different material components having different strengths and elasticity should be completely avoided
8. Cargo lashings must be able of being checked and tightened when on a passage
9. Lashings should be enough so as to prevent the loads from moving when the ship rolls through 30 degrees with 13 second duration
10. Tightening the cargo down to the ship will add to a great deal in securing it completely before it shifts

Commonly used Cargo Securing Arrangements for Dry Cargo

1. Lashing is a general term that is used to on behalf of all the securing arrangements onboard: It includes ropes, wires, webbings, bandings, strapping or chains, bottle screws and other patent tensioning devices mostly used on container ships
2. Tomming: Construction of a support of square section softwood framework, which chocks off the cargo against ship's structure or other cargo

3. Filling: Use of air bags, empty pallets, old tyres, etc. to fill the voids and broken stowage between items of cargo and between cargo and ship's structures.

4. Anti skid: Flat-boards are used to increase frictional capabilities of the cargoes

5. Binding: Even out a stow with dunnage to make several units into one block. Also stowing bags or cartons in different directions in each layer forms a self-locking slab which is a tight stow for shifting cargoes

6. Structural Modifications: Very heavy and uncomfortably shaped cargo may be secured by welding the unit directly to the ship's structure or by fabricating a steel framework or other support or chock which is permanently attached to the ship's structure



Basics of Safe Slings

1. When loads are lifted on a sling the general idea is to get the load to be as secured in the air as it was on ground

2. The loads must be satisfactorily secured by the slings

(a) Loads are completely contained by the slings (e.g. Bags in nets)

(b) Use fixed lifting pendants or lugs if available

(c) Ropes or wire slings must be completely wrapped around



the loads - no loads should be left resting in loose bights of the line

(d) When using specialized components, they must be properly attached to the cargo, and the manufacturer's instructions should be followed.

3. The slings must be sufficiently attached to the lifting appliances

4. The loads must be slung so that they will not collapse or change form when they are lifted

5. The load must not damage the sling, possibly causing the slings to part. Use stuffing or padding at susceptible points or sharp edges

6. Ensure that the loads are not to be damaged by the sling

7. All lifting parts should have their pivoting points as near to the vertical as possible for a clean lift by the crane

There is a lot to safety of container ships when it comes to lashing.

Political turmoil more likely to block Suez Canal than ship attack: It may be high on every terrorist agenda, but getting close enough to sink a vessel in the critical east-west waterway will not be easy.

Egypt rakes in around US\$5 billion a year from shipping passing through the Suez Canal. That is a great incentive for keeping the vital Asia-Europe waterway open, but it may be a big ask for a military already stretched in imposing a state of emergency.

For most of its 193 kilometres, ships sail in single file up and down the canal that is just 202 metres wide. For a ship to be sunk at almost any point along the canal would block the route and create massive disruption to the world's busiest sea trade.

Security in the Gulf or Aden and the Red Sea has been a priority for shipping since pirates began harassing cargo ships in the last decade, but the Suez was relatively peaceful until the weekend. Panamanian-registered container ship Cosco Asia came under fire in a northern section of the canal on Saturday, with the Suez Canal Authority saying a rocket propelled grenade had been used in the attack along with assault rifles.

Three people were arrested but no one knows if they were acting alone or as part of a terrorist group. Authorities regard that as an import distinction, but it is hard to see why. Any terrorist group leader with half a brain would have sinking a ship in the Suez Canal at the top of his list of priorities.

It would seem to be a relatively simple task with a targeted vessel just 100 metres away with nowhere to hide. So why has there been no real attack up to now, beyond Saturday's minor adventure?

Hitting a giant cargo ship hard enough to sink it would require a suicide boat attack, floating mines or at least a missile or two. A small boat attack is out, as are dropping mines, and a rocket attack would mean setting up a battery on the banks of the canal.

With long, sandy stretches of wide open nothing, finding a spot would not be too difficult. But the difficulty will lie in staying undetected from spy satellites, drones and other electronic surveillance devices that make the area one of the most monitored in the world. A quick glance at Google Earth will also

reveal that there are several military airfields in the Sinai Desert within easy striking distance of any Suez target.

So a terrorist attack in the Suez Canal serious enough to sink a ship and close the waterway may be an ever-present danger, but it will be extremely difficult to pull off.

A bigger threat is more likely to come from the political turmoil in Egypt. If it spills out of control, one faction or another could decide to blockade the canal to make a point or force some kind of action.

Ships will have to sail around Africa, and while the port of Durban may benefit from the increase in passing trade, the extra voyage costs will make it an expensive detour for cargo owners.

Prison Ship Martyrs' Monument: A memorial to the thousands of Americans who died in British prison ships during the Revolutionary War.

During the American Revolutionary War, British forces captured thousands of "rebels". Those in uniform were accorded treatment somewhat akin to prisoner of war status. Those not in uniform, particularly the maritime privateers, were subjected to harsher conditions. More than 18,000 American prisoners were held in captivity between 1776 and 1783 on old ships of the Royal Navy anchored in Wallabout Bay in New York harbor. Wallabout Bay has been largely filled in over the years, becoming the site of the Brooklyn Navy Yard. Over 11,000 of the American prisoners died in captivity. Some corpses were buried in shallow graves, while many just thrown overboard. Local women collected the remains when they became exposed or washed ashore. Many more were discovered after the war as the area became developed. A small vault was erected on the site in 1808 to hold the remains that had been preserved. After some years of neglect, the remains were moved to Washington Park (since renamed Fort Greene Park) in Brooklyn, where a small monument was erected. Following the discovery of additional remains in the Brooklyn Navy Yard, funds were raised from public and private sources for a larger crypt and memorial. The architect Stanford White was commissioned to design the project. Over a large crypt built on the highest elevation in Fort Greene Park was erected a 149-foot tall Doric column (the world's tallest at the time) with an eight-ton bronze funeral urn at the top. The column had an "eternal" flame at the top. The flame went out in 1921 and was replaced in 1997 by a solar-powered beacon that comes on during hours of darkness. There are a series of stone coffins in the crypt containing the remaining bones of the American prisoners. President-elect William Howard Taft was the keynote speaker at the dedication ceremony for the new monument on 15 November 1908. More than 20,000 persons attended. Over the following century, the monument has suffered from neglect and lack of funding. Recently, bills were introduced in Congress to study whether the monument should be incorporated into the National Park System.

Talking With the Experts About Maritime Safety Culture - What is it And How to Improve It? by Murray Goldberg

"Safety Culture" is one of those terms that is used a lot in the maritime industry. We all think it is important, and every operator wants a "good" safety culture. But how many of us can define it? What exactly is it? How do you know if you have it? How does one get it, and keep it once it is there? This is

the first of a pair of articles looking at safety culture in the maritime industry.

This first article begins with an overview of safety culture and then concludes by introducing Captain John Wright, an award-winning maritime safety culture expert.

What is Safety Culture?

The IMO tells us "An organization with a 'safety culture' is one that gives appropriate priority to safety and realizes that safety has to be managed like other areas of the business. ... The key to achieving that safety culture is in:

- Recognizing that accidents are preventable through following correct procedure and established best practice,
- Constantly thinking about safety, and
- Seeking continuous improvement."

This is a fair way of beginning to look at safety culture, but is arguably limited. Despite the way it is often spoken about, safety culture is not something that a vessel operator either has or does not have. All operators have *some* safety culture. Or, put another way, all operators have a company culture, and their culture (whatever form it takes) impacts safety of operations. I say it this way because it is important to understand that all aspects of a company's culture are related. It is very difficult, if not impossible, to have an excellent and effective safety culture but a poor culture (for example) in terms of workplace cleanliness, employee communication or employee engagement. The question therefore involves both the quality of the company's overall culture in general and of their safety culture in particular; how does the existing culture affect the activities of company management and employees (from the top to the bottom)? Is it a culture that enables, promotes and rewards safe acts?

We will look at safety culture requirements and indicators shortly. However, when discussing safety culture transformation, the first concern often heard is that it is difficult and slow to change a company culture. Let's address the "slow" part right now.

But Cultures Are Slow to Change - Aren't They?

Before looking at some of the basics of a high-quality safety culture and then moving on to the interview with John Wright, let's first address this issue of the speed of culture change. The truth is that cultures of any kind in the workplace are slow to change. This does not mean they can't be changed - they most certainly can (and I have seen it first hand at BC Ferries and elsewhere - more on that below). But it takes time and real commitment. Having said that, the return on investment is enormous.

The fact that it takes some time is both a drawback and a benefit. In the way that a company culture represents "the way we do things around here", we know that existing operations and procedures influence subsequent operations and procedures. People behave in the way they are taught to behave by their peers and by what seems to be socially acceptable in their environment. In the same way that graffiti begets more graffiti (and clean walls beget more clean walls), unsafe practices beget further unsafe practices, and attention to safety begets further attention to safety. So the job of culture change is to get the ball rolling. At first, you will be fighting to establish a "new normal", and that takes real effort because you are going against the established cultural norm. But once you are

over the initial period, safe operations and a safe culture feed on themselves. Safety becomes "just the way we do things around here".

So what are the requirements for a high quality safety culture?

Some Basics About Safety Culture

One of the best one-line definitions I have seen on safety culture is the following:

"Doing things safely even when no one is looking".

Perhaps calling this a definition is incorrect - it is better described as the result of a high quality safety culture - what every operator is looking to achieve. So how do we get to this desired result? What are the accepted characteristics, or necessary components, of a quality safety culture? I will list some of the most important below, but will cover these in more depth in the discussion with John Wright that follows. Briefly, the necessary components of a quality safety culture include the following.

Management Leadership: It is generally agreed that safety must start at the top. In fact, some organizational culture experts go so far as to say that "... the only real thing of importance that leaders do is to create and manage culture" (Organizational Culture and Leadership, Schien, 2004). Management must view safety as a long-term investment in their company, not a cost. It is their role to consistently and visibly inspire and enable a culture of safety. It is also their role to be safety cultural champions, to identify other champions, and to steward the process of cultural transformation. This usually means going well beyond compliance and always means considering safety as a part of all decisions while allocating sufficient resources to safety considerations.

Building an effective safety culture is not a switch that can be "turned on", but rather a sea change, or broad transformation that takes time to nurture. And even if management commits themselves to establishing a high quality safety culture, it still takes time to implement the necessary changes, and even more time for employees to be convinced that this is a real, lasting change and not a fad soon to be abandoned. This management commitment takes real effort, but pays incredible dividends. Without strong, consistent and long-term leadership from the top, it is not possible to improve the quality of an organization's safety culture.

Training: Clearly, safe operations require that all operational personnel are competent, understand & are skilled in safe procedures, and are aware of potential hazards & how to avoid them. This is the job of initial and ongoing training. Attention to training not only guarantees the above, but it also sends a strong message that management values safety and, consequently, values its employees. An employee who feels valued and values him or herself is one who *will* do the right thing - even when no one is looking.

Fortunately, we are in a time of great opportunity for implementation of new, effective and visible training programs. If training is not already top-notch at an organization then it can be made so using a breadth of new educational content and techniques. And while a large budget never hurts, it does not have to be expensive (see "The Human Element on a Budget" here, here and here). Twenty years of conclusive research and experience have shown that blended (on-line and in-person) instructor-led and independent training yields better results than traditional training. Given the importance of

training, the benefits of investing in it, and the visible nature of its effects, attention to training is almost universally considered to be a necessary component of safety culture transformation.

Measurement and Continuous Improvement: As I have written several times in earlier articles, "If you don't measure it, you can't manage it". A high quality safety culture is one that requires measurement of safety performance. It uses those measurements as markers (key performance indicators or KPIs) to inform a process of continuous improvement. Without a system of measurement there is no way to learn from mistakes, nor any way to celebrate or build on successes. Measurements (and ongoing communication of those measurements) are a key form of employee communication and a powerful demonstration of management leadership in the area of safety.

A Focus on Learning, Not Blame: Every day there are "close calls" or "near misses" that represent incredible learning opportunities. An accident is a very expensive way to learn a lesson. A close call is a practically free way - but only if the close call is reported, analysed, turned into a learning opportunity, and made public. The problem, of course, is that near-misses are almost never reported, especially in the absence of more than a few witnesses, because those at fault fear repercussions. The way around this problem is to have a policy ensuring that employees are not punished for these near misses.

Many refer to this as a "blame-free" culture, but I have been taught by my work with BC Ferries that perhaps a better goal is a "Just" or "Fair" culture when it comes to blame - not one that is blame-free. Paraphrasing the BC Ferries approach, an employee will never be blamed for an honest mistake or error in judgement. They will be held responsible however should they come to work intoxicated, or should they wilfully cause damage, for example. At BC Ferries this policy, as part of their huge cultural shift, has created an environment where an employee has no reason to conceal a near miss. This has yielded thousands of documented learning opportunities through their so-called "A.L.E.R.T" (All Learning Events Reported Today) incident reporting process. At the same time serious injuries have been reduced by two-thirds and continue to decrease. After speaking with front-line BC Ferries employees, it is fair to say that many view documenting their own near-misses as a point of pride; knowing the report will help avoid a future accident, injury or even fatality. The key to this success is that employees trust (highlighted because this is a very important word here) that the company is going to adhere to the "just" culture they have set up in terms of blame. This trust is powerful and takes time to build - but it is ultimately possible for any company.

Continuous Reflection and Focus on Safety Culture: Although somewhat covered above, this is worthy of its own mention. Safety and safe procedures must always be top of mind for the entire organization. This means measurement and continuous improvement, as well as a focus on learning - both mentioned above. But it also means highly visible, meaningful and continuous evidence of commitment.

One example that helps demonstrate company commitment to safety is regular visitation from top-level management (preferably the CEO) discussing the company's actions around safety, providing evidence on safety KPIs, and listening to feedback. I have seen the effect of this kind of top-to-bottom transparency at BC Ferries and it is nothing short of impressive. Other examples include employee safety focus groups,

consistent safety messaging in the workplace, the celebration of "jobs done right" alongside the dissemination of near-miss information, and more. For safety to be top of mind, it must be continuously messaged and reflected upon in meaningful ways - and I stress the "meaningful" part of that. A sign on the wall reminding people of their role in safe operations will be respected if employees believe in management's commitment to safety, and a sad joke otherwise.

Talking With The Expert: One person who has not only seen safety culture shifts, but has also been the architect of the same, is Captain John Wright of WrightWay Training Services in the UK. He is the recent recipient of an IHS Safety at Sea training award. I had the very good fortune of meeting Captain Wright because of his involvement with the BC Ferries SailSafe project - a multi-phased project aimed at improving safety (and one that the company I work for, Marine Learning Systems, is fortunate and proud to be a part of).

Captain Wright teamed with Force Technology in 2007 to assist BC Ferries with the design and implementation of their SailSafe cultural safety transformation. SailSafe has been an incredible success in terms of reducing accidents, days lost through injury, and insurance premiums. In fact, as the article linked to above shows, time loss injuries have been cut in half, serious injuries have been reduced by two-thirds, and annual insurance claims costs have been reduced by over three-quarters. And since writing that article, I have received an update for the beginning of 2013 indicating that after nine weeks, time loss injuries are down an additional 47 percent compared to last year. Captain Wright is in the business of helping vessel operators achieve similar results.

Dirty shipping business takes place prior to recycling:

Prior to tankers being sold for recycling, migrant workers are duped into removing dangerous sludge and slop from tankers with bare hands and without protective gear.

The hue and cry about casualties taking place at ship breaking yards may have died down after intense hostile protests by Greenpeace and other NGOs against the methods employed in ship breaking yards. They may have got measures in place to curb pollution and prevent accidents and deaths taking place in most recycling yards. But what has actually happened is that while the sharks have got away the minnows have been trapped.

The more horrendous aspect of this whole ship disposal activity is before the oil tanker is to be sold to the cash buyer (who in turn resells it to the ship recycler). Before the vessel can be brought to the recycling yard it has to be free of all hazardous material. The normal process of removing the sludge from oil tanker takes care of only 80% of the sludge and slop. The tanker has also to be gas free before it goes to the ship recycling yard.

"The ship owners or their contractors engage unwary laborers, who get employed as deck hands, to enter the tank and clean the sludge off the tank by hand," informed Tony Fernandez, a leading average adjuster who is also a Foreign Associate Member of the Association of Average Adjusters of the US and is a globally renowned marine consultant. "Such laborers are from India, Bangladesh, etc., and who are taken illegally and returned back. What these laborers do not know is that the crude oil sludge contains toxic material including arsenic, mercury and sometimes radioactive substances. This poses a huge safety risk to both humans and the environment with

which it comes into contact. Many workers are forced to remove the sludge with their bare hands, put it in gunny bags and dump the toxic materials over board. They are invariably made to work without being provided any protective clothing or proper breathing apparatus. As a result they are oblivious of being exposed to toxic vapors and other harmful materials."

Giving inputs Capt DK Singh who was in command of several tankers but is now sailing occasionally since he devotes much of his time to assisting seafarers as consultant with Forward Seamen's Union of India (FSUI) states, "Dubai, Sharjah and Singapore are considered "paradise" for this activity. Duped into believing they are being taken abroad for lucrative jobs, thousands of young Indians mostly migrant laborers, become easy prey and fall into the trap of such operators engaged by ship owners who are interested in selling their vessels. They are flown down to the places where these vessels are berthed for de-sludging operations and often forced into undertaking such tasks of removing the sludge and slop."

Many cash buyers aware of this activity say that they are not involved and the task of de-sludging and cleaning is given to third party contractors. A few allege that it is the ship owners who arrange their temporary CDC for laborers and get them on-board as crew members. Temporary CDCs can be obtained from flag of convenience such as the Korean registry for a few cents. Once they land in the foreign country they are forced to do the work of removing the sludge by hand with the contractor not concerned about the risk to their lives. As a result they are in permanent danger and the work fetches them a mere 1 or 2 dollars a day. These men are largely migrant workers. Hundreds of lives are lost or workers get inflicted with life threatening illnesses.

The extent of injuries and deaths that occur may go into hundreds but neither Greenpeace nor any other such organizations have taken the matter seriously as most of these operations take place in the confines of the ship far from land and without much notice from prying eyes.

Transparent, efficient, cost-effective - new dry-docking solution is what ship repair has been waiting:

Wilhelmsen Ships Service (WSS) has today announced the launch of a new service for the ship repair market. The offer aims to streamline dry-docking operations by allowing customers to take advantage of integrated ships agency, safety and equipment services from a single source.



Paul Rogers, WSS Commercial Director for North East Asia, says the service has been developed to create added value in the dry docking process by enabling owners to take advantage of trusted business relationships during dry-dock planning and execution.

This improves transparency and efficiency for the owner, whilst at the same time giving WSS customers the security of working with an agent they already know and trust. He says, "Dry-docking is a critical component of a vessel's lifecycle, but is one that is also expensive, complex, highly technical and prone to unforeseen complications. Planning for dry-docking can take months and the process itself needs close day to day management. It therefore seems surprising that a shipowner will still hand over care of the vessel during dry-docking to an agent they may not have worked with before."

As well as providing dedicated ships agency during the dry-dock, WSS can co-ordinate supply of marine chemicals and safety services, handling of crew and personnel and management of any specialist services that may be beyond the yard's capability.

WSS can also arrange all agency services necessary for the vessel's departure, including administering the departure of the site team and crew, with all services provided through a single point of contact.

The offer leverages WSS's existing relationships with shipowners and its established contacts with in-house technical departments, built up through the provision of shipboard chemicals, equipment and safety products to customers worldwide.

Rogers continues, "For an owner preparing to dry-dock, using an agent that they deal with every day makes a lot of sense from a commercial and operational point of view. Since the business relationship already exists, lines of communication, as well as administration and finance requirements are already in place. In addition, the ship owner can leverage synergies in terms of service supply."

The offer has been developed following a period of intensive research by WSS and is the only dry-docking service that offers customer access to a complete spectrum of agency, safety and maintenance services.

WSS safety products are always aligned with local regulations and Rogers points out that the WSS global network means owners can rely on consistent quality, availability and pricing; "Ultimately, we are creating the conditions for a step-change, one that makes dry-docking agency services more efficient and protects our owners; eliminating conflict of interest and enabling them to work with a partner they already know and trust."

8 Common Mistakes While Operating Deck Machinery Systems:

Working on ship's deck involves carrying out routine procedures such as painting and chipping, operating deck machinery, or handling cargo. Most of these jobs involve handling one or more types of deck tools and equipment while performing them.

Though a variety of mistakes can occur while operating deck machinery systems, there are a few errors which are very common on all types of ships. Deck officers must take extra precautions with eight of the most common mistakes involved with deck machinery operations that are mentioned below:

1. Bow Thruster: The deck officers operating the bow thruster joy-stick must never increase the pitch from minimum to



maximum in one go. It can lead to sudden increase in current and damage the motor as the BT system involves using high voltage and current. Also, maximum given pitch should never exceed 90% and operation at higher pitch must not be continued for long duration of time.

2. Mooring Winch: When ship is berthed in the jetty, the berthing/securing operation of the ship is performed by using mooring winches. Avoid using the brakes of the winches in place of using reduction gear to reduce or control the speed or else it will damage the brake lining of the drum.

3. Anchor Winch: Always use chain stopper when no operation is being performed and while greasing the ship's anchor parts. Never grease friction washer or brake lining as this will lead to slippage of the anchor chain while stopping.

4. Deck Crane: All cranes comes with maximum safe working load capacity which is stenciled on the crane body for ready reference. Still it's observed that many deck crew members lift loads without even checking the load of the lifting structure/body/ item.

5. Ballast system: Never start the ballast pump from the cargo control room without checking the system valves and pump conditions from the local position in the engine room.

6. Hydro blaster: For the safety of ship's personnel, a safety switch is provided on the hydro blaster. This "Dead man's switch/trigger" must never be taped, tied, or otherwise altered so that the equipment stays in the "ON" position. Also, if the high pressure pipe is not handled properly, If the lance is dropped it will whip about wildly, causing serious injuries.

7. Welding/ Gas cutting: The deck maintenance commonly involves "hot work" which requires using welding machinery. Do check the insulation of welding cable and condition of the gas cables before using them. Check the surrounding of the hot work area (near fuel tank vent, oil tank sounding pipe etc.) before starting the job. Also ensure that the gas cutting piping system is equipped with flash back arrester in the line before the gas bottles.

8. Fire System: The fire system of the ship is supplied with high capacity fire pumps which provide water to the hydrants present in deck and engine room. These pumps are used for emergency situations and thus should not be isolated at any time. However, don't forget to isolate the fire pump and the system when carrying out any kind of maintenance in the line. Also, after maintenance don't forget to close the drain of the fire line.

Panama Ruling Transgresses International Convention:

There is much concern amongst unions of late regarding the employment of staff under conditions specifically designed to circumvent current legislation, such as the 'zero hours' contracts so favoured by many large institutions. Now the maritime professionals' union Nautilus International has expressed concern about a move by Panama to exclude merchant navy cadets from the provisions of the Maritime Labour Convention 2006 (MLC).

The MLC, known widely as the seafarers' bill of rights, defines seafarer as 'any person, including the master, who is employed or engaged or works in any capacity on board a ship'. The MLC was adopted by the International Labour Organization (ILO) in 2006 but only came into effect last month. This was because ILO Conventions become law a year after ratification and not until August 2012 had the demanding entry conditions been met, ensuring that all the states concerned had the capacity to inspect and certify ships and employment conditions.

Panama, the world's largest vessel registry, recently stated that it does not classify many personnel working at sea as seafarers. This list includes cadets, superintendents, armed guards, specialist offshore technicians and 'any other person or category of persons as indicated by the Administration' and Nautilus disagrees vehemently with this viewpoint with General Secretary Mark Dickinson, saying:

"We don't accept that cadets should be excluded from the MLC and we are appalled that Panama is seeking to argue that they are not considered seafarers. The convention was drawn up with the specific intention of ensuring that anyone working at sea is covered by the protection it provides - and the definition of seafarer was agreed on the clear basis of including hotel staff, entertainers and riding gangs, indeed, anyone working on board for any significant period.

"It is very disappointing that the world's biggest ship registry is already seeking to undermine the agreed aims and ambition of the MLC and we are actively challenging Panama's interpretation. We have requested the International Transport Workers' Federation to raise this matter formally with the International Labour Organisation."

The Harbor Maintenance Tax comes in for more ire: Congress inches closer to change:

Those two intensely pro-maritime senators from Washington State will be jumping up and down with glee or rage, depending on what view you take, at the latest traffic figures for Port MetroVancouver. (The two have introduced the Maritime Goods Movement Act to replace the Harbor Maintenance Tax).

Records are being broken all round at MetroVancouver. Container traffic was up 3 per cent to 1.34 million TEU in the first six months compared with 2012, of which 670,000 were imports, up 1.2 per cent from 2012. Overall, total tonnage was up 6.3 percent, largely because of bulk and breakbulk, particularly coal.

In the proposed legislation, the Maritime Goods Movement User Fee will be available to Congress for port activities and maintenance, supposedly doubling the money for ports. Commerce and industry will be forced to pay the fee and be unable to avoid it by going through Mexico and Canada. A novel feature will be special funds for smaller and remote ports (which of course has nothing to do with trawling for votes).

Gas and oil companies are also targeted in the form of the elimination of loopholes that, reportedly, net them billions in taxpayer subsidies.

The senators make no bones about where their hearts lie. "This legislation will change the Harbor Maintenance Tax to give shippers new incentives to move their goods through American ports - particularly those in the Pacific Northwest," says one.

The American Association of Port Authorities has been on Congress' back for years to get some change to the HMT. The association reckons that most of the money is siphoned off for other government budget uses and blames the worsening dredging situation (particularly to get ports ready for the 50 foot draft vessels) on this.

The Journal of Commerce reckons that "while Seattle and Tacoma have lost no market share relative to U.S. West Coast ports, their market share in the Pacific Northwest, a region that includes the Canadian ports of Vancouver and Prince Rupert, has slipped significantly in recent years.

"Seattle and Tacoma's combined container market share of the region - which includes Seattle, Tacoma, Vancouver and Prince Rupert - slipped from 62.7 percent in 2007 to 52.2 percent in 2012," says the JOC. "However, Seattle and Tacoma's combined market share in relation just to U.S. West Coast ports - including Seattle, Tacoma, Portland, Oakland, Los Angeles and Long Beach - was relatively steady, indeed actually growing slightly from 17.5 to 17.7 percent during the period from 2007 to 2012.

"That shows how the Canadian ports, particularly Prince Rupert, where 70 percent of imports are bound for U.S. destinations, are making significant inroads into the Pacific Northwest container import market."

Focus on Shipping, Ship Building & Finance at Naval Architects Meet:

The third technical session of the Institution of Naval Architect held on 24th August 2013 brought into focus three key issues - "Shipping, Ship Building and Finance". The topic on 'Shipbuilding scenario - Present and Future Prospects' presented by Arun K Gupta, Director (Technical & Offshore), the Shipping Corporation of India (SCI), turned out to be the main highlight of the session as his realistic forecast about the industry caught the attention of the large number of naval architects present resulting in lengthy discussions.

According to Mr. Gupta ship building in India which saw its sunshine days from 2004 to 2008 started feeling the pinch from 2011 onwards. By then the indiscriminate ordering of vessels almost came to a standstill around this time with the shipping having dropped to the lowest level. Orders for tanker dropped drastically so also with the case with bulkers. While orders for ships slowed down, the recycling of ships began to soar spectacularly.

He pointed out that China became the largest ship builder having overtaken Korea. Today it has over 1000 ship yards holding around 50% of the global share. South Korea is 34%; Japan holds 17% of the world share of ship building and India lags very much behind at 0.3% with only 27 ship yards; yet India ranks 8th in the world. India held the initiatives for several decades from the beginning of the last century but because of several factors the ship building industry ended up missing the bus.

It is commonly observed that when it comes to ship building

India is better placed than most others. For one it has good resources, manpower and professional availability and besides enjoys a long coast line that extends to 7517 km. But the ship building history is depressing. Unfortunately, not a single dredger has been built in the country nor have they been able to build a container vessel. It is any ones guess when the first LPG carrier will ever get built.

"But our costing is high besides lacking capacity," points out Mr. Gupta. "The Shipping Corporation of India decided on giving a leg up to the Indian ship builders and so planned to place orders with them on nomination basis. But it turned out that the cost was \$ 20 million for the vessel whereas at other overseas ship building facilities the cost came to \$ 15 million. Quality has never been an issue with Indian shipyards.

Shipping being a capital intensive industry is drastically in need of loans and unless they get the required soft loans it cannot be possible to compete with others worldwide. What is also important, besides finance, is relaxation on the taxation front to some extent. Mr. Gupta observed that there is plenty of labor but productivity is lacking and advocated the need for importing raw material. For shipyards to be successful it is essential to operate on a system which ensures that deliveries are made on time.

Arun K Gupta, Director (T & OS) SCI contended that prices have been falling since 2010 but the perception is that the vessels have bottomed out and now it is time to place orders for new buildings. "Buy vessels now and sell them in the next two years" he advocates. He contended that challenges will have to be faced by all stakeholders. "Since energy plays an important role, LPG would likely to benefit the most. But then nothing drastic is going to happen until 2017."

Sumathi Sundarajan, Vice President of SCI gave an insight into how one can go about getting ship finance, the prerequisites, the liabilities and the best way to go about procuring this finance. Capt K P Rajagopal spoke about Project development and Finance. He gave an analytical presentation on port development, the various business models that are popularly preferred and their advantages.

Real Life Incident: Crew Washed Overboard and Not Recovered: An accident on board a ship during rough weather threw the crew overboard while they were attempting to secure the nylon mooring lines at the aft deck. Despite the best efforts of the vessel and search and rescue (SAR) services, the two men could not be recovered.

Accident: As the vessel encountered force 9 winds with a 6 meter head sea, it was discovered that nylon mooring lines on the aft deck were becoming unsecured. These lines represented a danger to the ship if they were to be washed overboard since nylon lines will sink and could entangle the propeller.

The plan was for two crew to access the aft deck, each wearing a lifejacket and a safety harness. One end of a fire-fighter's lifeline was attached to the safety harness securing ring and the other secured to a handrail on the external stairway platforms. It was intended that any slack in the lifelines would be manually taken up by other crew positioned on these stairway platforms.

As the two crew began their work on the aft mooring deck a large wave was shipped, the force of which washed them overboard and caused the safety crew to release their grip on



the lifelines. As the two crew were washed away, their lifelines parted.

The same wave crossed the first deck stairway platform, forcing one crew member to the deck and causing another's lifejacket to inflate. Despite the best efforts of the vessel and search and rescue (SAR) services, the two men could not be recovered.

Lessons learned

- 1 No heavy weather checklist was available and none was required to be completed as part of the vessel's safety management system.
- 2 Previous occurrences of the aft mooring ropes coming loose had not been formally recorded, possibly because there had been no adverse consequences.
- 3 The loose nylon mooring rope presented a significant risk of it fouling the vessel's propeller owing to its inherent tendency to sink.
- 4 The need for a designated enclosed means for stowing the coiled aft mooring ropes had not been recognised.
- 5 The vessel's safety management system contained no detailed requirements with regard to sending crew on deck in heavy weather.
- 6 The crew possibly underestimated the potential wave height that could have been expected in the prevailing weather conditions.
- 7 No designated lifelines were provided on board for use in sending crew on deck in heavy weather.
- 8 The crew overestimated the strength of the fire-fighter's lifelines and their ability to manually control their loading in the prevailing conditions.
- 9 The strength of the fire-fighter's lifelines was insufficient to withstand the loading exerted on them by the large wave that washed the crew members overboard.
- 10 Although both men had been wearing lifejackets that had inflated, neither was able to survive their exposure to the heavy weather conditions.

How a Ship is Berthed Using An Anchor?

Mariners consider anchoring a ship to be an art. In fact, it's also a form of science for it involves a sense of pivot, around which, a ship turns and imparts the stalling force to the ship.

While berthing a ship alongside a jetty or a pier in tidal or windy conditions, the role of the ship's anchor is extremely vital.

Preferably, a ship must always approach the berth or a jetty stemming the tide (reduce the effect of the tide by cutting it) to ensure better control of the vessel. If the opposite is done when the ship is berthed, i.e. if the ship approaches the berth or jetty with the tide at its stern, the rudder effect is minimized as the tide plays with the stern.

To turn the vessel, which is coming up the tidal estuary along with the tide, the anchor is dropped on the side towards which the vessel has to be turned. If the vessel is planned to turn on the starboard wheel, the starboard anchor is dropped. Likewise, if it's planned to turn on the port wheel the port anchor is dropped. This is done to avoid the anchor chain going across the stern of the



vessel after the swing.

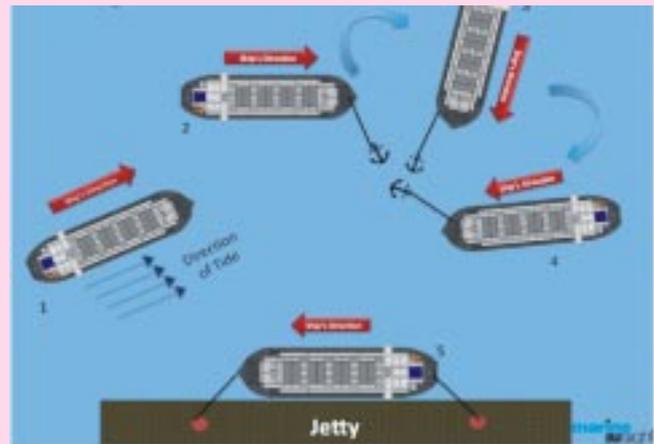
But before dropping the anchor, the ship's speed is reduced to around 3 knots or less to minimize the chances of chain damage or damage to the ship's equipment and hull.

The Starboard anchor dropped and by pivoting it the vessel has started to swing.

For a ship having a normal right-handed propeller, which comes up with the tide, the starboard anchor is dropped so as to take the advantage of the canting, i.e., swinging of the stern due to transverse thrust (which is essentially a sideways force acting on the stern of the vessel moving forward or astern). The ship is brought up with the help of the anchor (i.e. her way has stopped and the vessel is riding only on her anchor).

Generally for obtaining maximum holding power of the ship's anchor, the total anchor rode (The vessel is attached to the anchor by the rode, which is made of chain, cable, rope, or a combination of these) should be 4 to 7 times the depth of the water the ship will be anchoring in.

If the anchor is designed to hold on the horizontal pull (like fluke or claw type anchors), more chain is paid out to give a lower angle of pull and the sag of the chain will give enough catenary effect to hold the ship. The final position of the vessel is assessed beforehand so as to keep enough leverage of the swing.



The ship is swinging with the help of the tide which pushes it at the starboard quarter.

Once the drag has stopped, the helm is kept hard over to the starboard and the tide starts pushing to the starboard quarter, turning the ship 180° to the starboard facing the tide. Once turned, the anchor is slowly weighed up. Then, by stemming the tide the ship is brought close to the jetty at an angle of 20° - 25° and the head rope is passed.

If a tug is available to assist the berthing, it is placed on the stern side at the quarter of the opposite end to the ship's side that is coming alongside. Pivoting the bow with the head-rope, which has now gone ashore and is 'bar-tight', the ship is brought alongside the jetty with the tug gently pushing the stern till the time the stern-line is safely ashore and the second officer has started heaving in.

If the head rope becomes too tight, minor slack or adjustments are given from the shore to prevent it from parting. If there is no tug in the vicinity, a jollyboat takes the line ashore from the stern. If the jollyboat is also unavailable, the ship's stern is brought closer to the jetty with the help of the engines, with repeated slow kicks while pivoting the bow with the head-rope.

A pilot feels blessed if the ship has a bow and stern thrusters in such cases. These equipment tools make the job of a pilot much more easier.

World Maritime University (WMU): WMU was established by IMO in Malmö, Sweden, in 1983 and has become an outstanding institution, bringing together young people with various educational, cultural and social backgrounds to study and live together for two years.

WMU is a centre of excellence for maritime post-graduate education and research, promoting the highest standards in teaching maritime affairs, including maritime law and policy, maritime safety and environmental administration and management, maritime education and training, shipping management, port management, marine environment and ocean management, and international maritime transport and logistics.

From its Malmö campus, outreach teaching locations in Shanghai and Dalian, and via professional development

courses, WMU promotes international exchange and transfer of maritime ideas and knowledge.

International Maritime Law Institute (IMLI): IMLI was established by IMO in 1988, in Malta, to help ensure that sufficient maritime law experts would be available to assist in the implementation and enforcement of international maritime law and, more particularly, the vast body of rules and regulations developed under the aegis of IMO, especially within developing countries.

The Institute provides suitably qualified candidates, particularly from developing countries, with high-level facilities for advanced training, study and research in international maritime law. Special emphasis is given to the international regulations adopted by IMO.

"Maritime Group" knows as to what we are, not forgetting that we are here to share our valued flow of thoughts, inter-changed with quality of expression exchanged, is to arrive at a QUALITY consensus, since "MARINE NEEDS A MULTI-DISCIPLINARY APPROACH - Do something instead of killing time or else, time will be killing you."

For all practical purposes, my e-mail ID would be:- chandranpeechulli@gmail.com, OR chandran.peechulli@yahoo.com



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