The network with NGO status at IMO

To promote, develop and support in the spirit of cooperation, the common interests of its members in all matters concerning the development and quality of maritime education and training.

NEWSLETTER

JUNE – 2013

ISSUE NO. | 22 |

TRAIN, TRAIN, RETRAIN, RETAIN!

GLOBALMET
MARITIME EDUCATION & TRAINING

www.globalmet.org

Inside this Issue

Editorial

The Future of Ship Safety

Participation in IMO's two-day Symposium on the Future of Ship Safety was an enjoyable, interesting experience and in many respects it was a privilege to be among the 400+ present and the additional 100+ participating online.

The following comments in the Secretary General's Opening Address set the stage: *The ships of the future must provide a continuous response to the needs of society, industry and global trade and be operated within a framework that encourages a safety culture beyond mere compliance with statutory requirements. The Symposium will also provide a good opportunity to consider future regimes and regulatory systems over ship safety; the future of SOLAS as well.*

Speakers made the most of the opportunities provided by the 23 presentations. In Session 5 *Dealing with the Human Element*, Prof Zhang Renping of Dalian Maritime University and former London based China representative at IMO, addressed MET and called for a review of the current situation, with recommendations on what is needed to ensure that MET is fit for future purpose. On behalf of GlobalMET the undersigned then reinforced this call and also briefly described the ADB project *Human Resource Development in the Maritime Sector in Asia and the Pacific*.

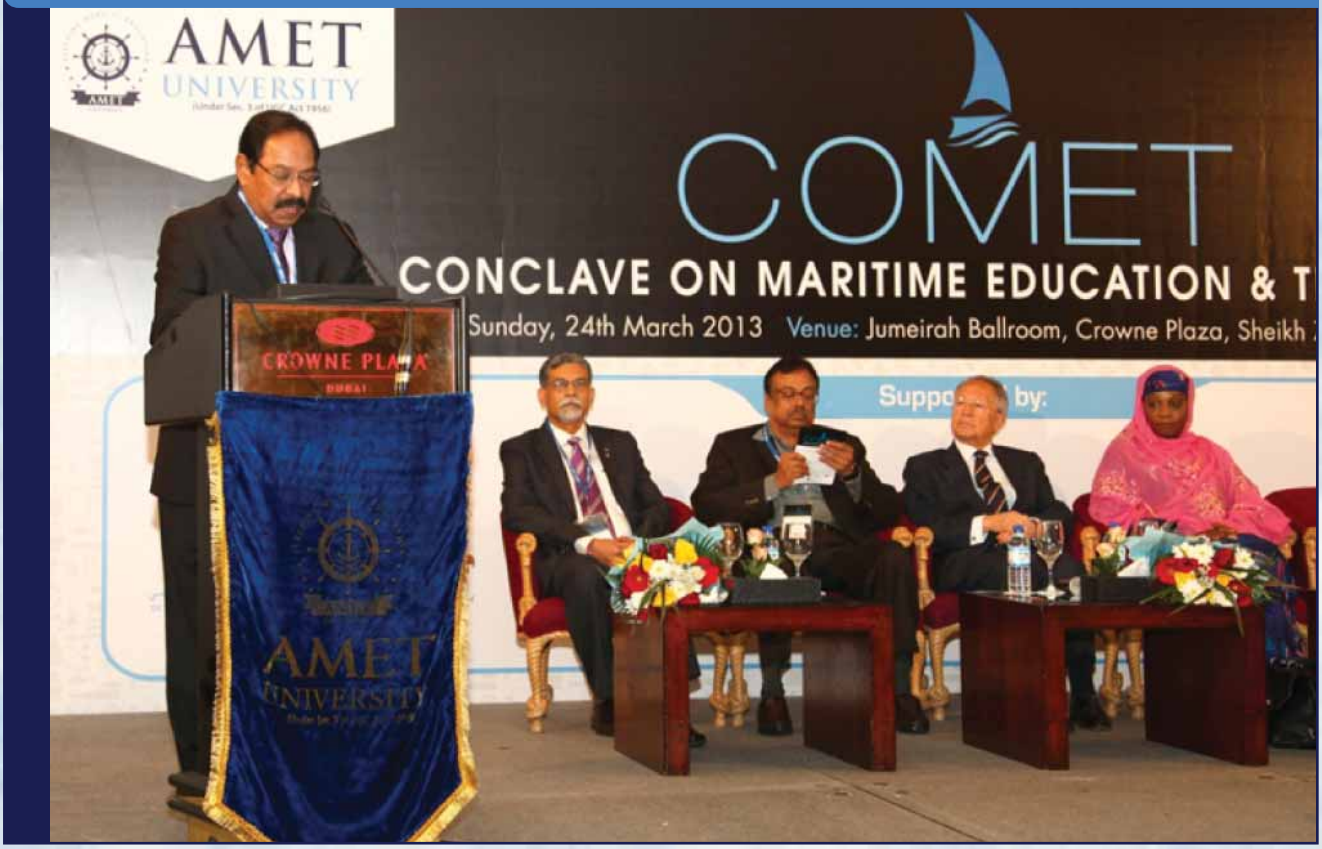
Prior to closing, the Symposium agreed to a draft statement which recommended that the Maritime Safety Committee consider:

1. how to improve data collection and availability to support monitoring and development of safety regulations;
2. how to better integrate risk-based methodologies and latest analytical techniques into the safety regulatory framework to provide a sound scientific basis for the development of future safety regulations;
3. ways of encouraging a safety culture beyond mere compliance with regulatory regimes;
4. undertaking a long-term comprehensive review of the existing safety regulatory framework with a view that it will meet future challenges associated with the application of new technologies, the human element, the needs of the maritime industry and the expectations of society, taking into account the ever-increasing pace of change and technological advancements made since the 1974 SOLAS and the International Load Lines conventions were adopted.

The undersigned is pleased to represent GlobalMET during the eight day MSC 92 meeting, which follows the Symposium.

Rod Short
Executive Secretary

COMET



Underlying economic growth for any region has to be an equally strong foundation of building the human capital. If a talent pipeline is not planned then one will suffer the shortages of skill and dexterity. No industry can create overnight a mass supply of human capital and we need to appreciate that human capital is the key feature in sustainability of a competitive advantage.

Maritime education and training (MET) is fundamental for creating cadres of informed and thinking young people to support the general economic development of the entire spectrum of the maritime industry verticals both on-board and ashore.

A shore based maritime professional? sounds like an oxymoron! but dramatic technological and regulatory developments in the maritime sector have created a growing demand for adequately trained maritime personnel in the shore side segment of the maritime industry. The shore side jobs have become more demanding and there is an emerging need for a new breed of professionals with specific skill sets to operate in multicultural and diverse environment.

As the first maritime university of India, AMET (Maritime) University located in Chennai India has emerged to be the most preferred destination for all maritime related courses in the regions of SE Asia, Middle-East and Africa. With the shipping industry in itself being a trailblazer in globalizing employment and allowing many advantages in recruitment and employment flexibilities, AMET university attunes and grooms the varying culture, attitudes, attributes, work ethics to meet common, industry wide competence and attitudinal requirements for safe, efficient and clean operations and be job-fit for the entire maritime industry in all its verticals, globally. Riding on its 20 years of success story with seafaring, which as a profession has seen extinction of historical sources of manpower and emergence of newer areas with the biggest burden being shared by Asia alone and now increasingly pushing Africa, at the operational and management levels on ships and ashore, AMET has helped India emerge as the most preferred nation for sourcing of skilled and competent manpower. Today it is a center of excellence for in addition to on-board competencies, on-shore competencies in Commercial Shipping including Port and Logistics, Harbor Engineering, Naval Architecture and Offshore Engineering, Petroleum Engineering, Marine Biotechnology as well as Maritime Research.

AMET University now brought to Dubai its eminent International Board of Advisors for a Conclave on Maritime Education & Training on Sunday the 24th March 2013 at Crown Plaza, Dubai. Joining this illustrious panel were the elite maritime leaders of the shipping industry in the Middle East and Africa.

Presiding over the conclave was The Chancellor of AMET University, the revered Sir Efthimios E. Mitropoulos, the former Secretary General of IMO. He was joined in the inaugural session by Senator Zynabe Kure, head of the Senators Committee that oversees Maritime Affairs of the Federal Republic of Nigeria.

Sir Efthimios Mitropoulos delivered the Keynote address on the "Role of MET in fulfilling IMO's vision on 'Human Element' at Sea". He acknowledged the special contribution of the World Maritime University and the International Maritime Law Institute to the attainment of the objectives of the Organization, He however recognized that crew endurance, defined as "the ability to maintain performance within safety limits", is a function of many complex and interacting variables, including individual capabilities, management policies, cultural factors, experience, training, job skills and the work environment.

The first technical session was devoted to "MET Response to challenges of 'on-board' competencies' which was moderated

by the session chair Capt. S. Bhardwaj, Professor Emeritus of AMET University. The Panelists included Dr. Ipalibo Harry, Hon. Commissioner of the River States of Nigeria in-charge for Employment Generation and Empowerment. He stated that the reality at the moment was that offshore exploration activities in Africa were experiencing a serious logistical set back. Manpower with the right skills to man the vessels that were needed to run the economy was lacking. He invited AMET University to set up and run a maritime training institute in his state in Nigeria. Dr. Ms Cecilia Osterman, a former marine engineer and now a human factors engineer from Sweden spoke on meeting the challenges of new technologies onboard. She emphasized the need for ergonomics requirement analysis in basic and conceptual design and evaluation of design proposals through crew participation in as much as design of 'usable' documentation, which was currently inadequately addressed.

Capt. Ali Jassim, the Fleet Personnel and Training Manager of United Arab Shipping Company (UASC) advocated the need for young generation of officers as the younger employee were more technologically savvy and receptive to new trends They would be ready for new challenges which can be achieved through a proper & effective cadets training program. Mr. John P. Gray, a marine engineer and COO of Fairdeal Marine Services, Fujairah; and Capt. Ade Olopoenia, CEO of Matral Maritime Training Center in Nigeria.

The second session was a panel discussion among the industry leaders who formed the International Board of Advisors of AMET University. They included Capt. Rajesh Tandon, Operations Director of V-Manpower, Monaco, Capt. Navin Passey, Managing Director of Wallem Ship Management (India), Mr. Lars Modin, Managing Director, ITM Dubai, Capt. Omoteso from Nigeria and Capt. Ramaswamy, CEO of Seateam Ship management India.

The final session was on 'MET Response to Challenges of off- shore and on-shore competencies' and was chaired by Mr Krishna Prasad, Managing Director, Aster Marine, Dubai. The panelists were Capt. S R Patnaik, CEO, International Shipping and Logistics, Dubai who elucidated the development of talent pipeline for commercial shipping. Ms Barbara Noothoven, HR Manager of Radio Holland stressed on integration of human capacity with technology in the design and development of technological solutions. Capt. Anshuman Singh of Fitch & Co. elaborated on need of developing talent for the vital supporting sector of legal and insurance sector. Mr. David Short, Chairman of IMarEST UAE branch presented the frightening consequences of lack of adequate training in this safety critical sector. Finally Ms Jean Wong Lee, the Technical Programs Chair of Society of Petroleum Engineers, UAE gave an overview of the offshore oil and gas sector, the expected qualities of personnel and how to best groom them.

The event winded up with networking cocktails and dinner.

Environship

The first *Rolls-Royce Environship – the Eidsvaag Pioner* - based on the company's award-winning, highly efficient "Environship" design has been delivered to its Norwegian owner by the Vard Aukra shipyard (former STX OSV).


Photo credit: Rolls-Royce

Key facts about the Environship:

- Earlier this year Environship won the Green Ship Technology Award in Germany, and two years ago received the Next Generation Ship Award at the Nor-Shipping event in Oslo.
- The first of two larger cargo ships, from the Rolls-Royce Environship range, are currently under construction in China for the Norwegian company Nor Lines. Passenger ship designs are also under development.
- The Rolls-Royce Bergen B-Series lean burn gas engines, as used in the Environship, emit around 17 percent less CO_2 (per unit of power) than a diesel engine.
- The use of gas fuelled engines means that Nitrogen Oxide (NOx) emissions are reduced by about 90 percent while Sulphur Oxide (SOx) emissions are negligible.
- These emissions are already within the limits of IMO (International Maritime Organisation) Tier III environmental legislation, due to come into force in 2016.
- The Rolls-Royce Promas propulsion system is an integrated rudder and propeller, which alone improves efficiency of the vessel by 5 to 8 per cent.
- The new innovative bow shape and hull form, designed by Rolls-Royce, also reduce resistance by up to 8 percent, therefore reducing fuel burn and emissions further.
- The vertical bow shape enables the vessel to maintain speed even in rough seas enabling operators to achieve demanding shipping schedules without the need to burn additional fuel to make up lost time.

A ruler should be slow to punish and swift to reward.
Ovid

Environmental Shipping and the Global Climate Change Challenges

By

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Abstract

Climate change is one of the greatest challenges facing our societies, economic structures and environmental systems. A significant risk multiplier, climate change undermines the objectives of sustainable development by exacerbating other interconnected global problems, including poverty, food shortages, water scarcity, energy insecurity and environmental degradation. Within the transport sector, the special case of seaports calls for particular attention. With over 80 per cent of world trade by volume being carried by sea, ports fulfil a critical function as links of global supply chains and constitute engines of economic growth. At the same time, these key infrastructural assets are vulnerable to climate change impacts and associated risks, given their location in coastal zones, low-lying areas and deltas.

Though mitigation action in maritime transport is critical, it is not sufficient to effectively address climate change and its related impacts. Adaptation action based, as a prerequisite, on a good understanding of risks and vulnerabilities is fundamental to help minimize the effects of unmitigated climate change on maritime transport and trade. While adaptation action in maritime transport is increasingly recognized as important, it should be noted that it is a newcomer to the climate change policy debate and has so far attracted much less interest than mitigation.

Environmental Shipping

Transportation and the greenhouse gas (GHG) emissions generated are at the centre stage of the current climate change debate. While the entire sector needs to reduce its carbon footprint, international shipping, in particular, has attracted attention because the GHG emissions generated by this sector are not covered under the United Nations Framework Convention on Climate Change (UNFCCC). Another reason for this heightened interest is the renewed opportunity provided by the current climate negotiations under UNFCCC and IMO to adopt, for the first time, a binding international regime. Some regulatory measures focusing on technical and operational aspects of international shipping have recently been adopted by IMO while other measures, such as market-based instruments, are still being considered. Mitigation action is also gathering momentum among the shipping and port industries with a number of measures already implemented or planned.

Maritime Transportation and Environmental Risks

Risks for maritime transport include accelerated coastal erosion, port and coastal road inundation or submersion, increased runoff and siltation requiring increased dredging, restrictions on access to docks, deterioration of conditions and problems with the structural integrity of pavements and railway tracks within port areas and related hinterland connections. In addition to these impacts on physical infrastructure, climate change also affects shipping volumes and costs, cargo loading and capacity, sailing and/or loading schedules, storage and warehousing. These impacts are likely to impose costs that will be correlated to the degree of exposure and vulnerability, as well as constraints on the adaptive capacity. Furthermore, greater global interconnectedness and economic integration with supply chains acting as transmission channels entail additional costs. A localized impact on ports can have ripple effects that extend beyond borders to affect industries, stakeholders and economies in distant locations. Although not necessarily driven by climate change, supply chain disruptions resulting from damage to ports caused by natural disasters in Japan and Thailand in 2011 provide a poignant illustration.

The implications of any damage or disruption to transport networks, including ports, can be particularly challenging for the transport and trade of developing countries such as Small Island Developing States (SIDS). The challenge for SIDS is of greater magnitude given their high economic, geographic and climatic vulnerabilities and their generally limited adaptive capacity. In this context, building the capacities of developing countries, including SIDS, with a view to reducing their vulnerability and managing disaster risks is crucial and should be pursued as a matter of priority.

Assessing with any certainty the costs for ports and their hinterland connections associated with the impacts of climate change is difficult. There is no doubt, however, that these impacts can reach extreme proportions in ports and port cities. A study by OECD assessed the exposure of the world's largest port cities to coastal flooding in 2005 and has estimated the total value of assets exposed across all 136 port cities examined to be $3 trillion. A more recent study examining the same 136 port megacities has found that, assuming a sea-level rise of 0.5 metres by 2050, the value of exposed assets may be as high as $28 trillion. These costs are rising in tandem with ever increasing urbanization, population growth, investment in port and transport infrastructure, and wealth expansion around coastal areas.

Current Scenario on Adopted Strategies

Against this background, the case for designing and implementing appropriate adaptation strategies to address climate-change impacts on transport, and more specifically on ports, is a strong one. Given the long lifetime of transport infrastructure, adaptation has to happen now to avoid high retrofitting costs. However, a review of the available literature reveals that adaptation action in ports appears to be scarce.

Over recent years, various studies have addressed the impacts of climate change on transportation infrastructure generally, for example in the case of the United States, Canada, Australia and the United Kingdom. Most of these studies, however, are not mode-specific and very few specifically focus on ports. Within the existing literature available in the public domain, the United States report, *Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase I*, is of particular relevance for ports and their hinterland connections. Other studies worth noting include the report commissioned by the International Finance Corporation (IFC), which focuses on the case of the Terminal Maritimo Muelles el Bosque (MEB), in Cartagena, Colombia. The aim of this study was to help develop knowledge, tools and methods for analysing climate-related risks and opportunities, and for evaluating adaptation responses. Equally relevant is the study commissioned by the International Association of Ports and Harbours (IAPH), *Seaports and Climate Change - An Analysis of Adaptation Measures.*

While adaptation strategies in ports may vary (for example, retreat/relocate, protect, and/or accommodate), the ultimate objective is to enhance the resilience of facilities and systems. This may be achieved by, for example, changes in operations, management practices, planning activities, design specifications and standards. This may involve integrating climate change considerations into transport and port investment and planning decisions, as well as into broader transport and port design and development plans. A number of factors could, nevertheless, potentially delay or pose challenges to adaptation action. Firstly, as ports involve multiple players in the decision-making process, it may be difficult to proceed effectively with adaptation plans and strategies. Secondly, factors such as a high perception of uncertainty, limited information about the cost-effectiveness of adaption options and about the cost of inaction, the need for realistic predictions of impacts and for science-based policy formulation that takes into consideration the specifics of the region, and resource intensiveness and costs could all, either individually or in combination, hamper adaptation action in ports.

More specifically, costs and the constraints of financial resources could pose a great challenge to adaptation action. Existing studies on adaptation costs provide only a wide range of estimates and have many information gaps. Much more knowledge is required regarding the impacts of climate change and how they interact, and regarding information on relevant adaptation options. Although not specific to transport or ports, a study produced by the World Bank estimates that, for developing countries, the cost of adapting to an increase in temperature by approximately 2° C by 2050 would be, for the period 2010-2050, in the range of $75 billion - $100 billion annually.

Special Report on Emissions Scenarios (SRES) and Climate Change Initiatives

Estimates for Barbados that are more specific for transportation, based on the Intergovernmental Panel on Climate Change (IPCC) emission projection scenarios SRES B2 and SRES A2, indicate that by 2050 the total impact of climate change on international transport expenditures could range from $12.7 billion (scenario SRES B2) to $14.9 billion (scenario SRES A2). The costs for maritime transportation alone range between $2 billion (SRES B2) and $2.6 billion (SRES A2). Another study has estimated the total costs of climate change for international transportation in Montserrat to be between $839 million and $1.1 billion under scenarios SRES B2 and SRES A2, respectively, while, for maritime transport, estimates amounted to between $209 million (SRES B2) and $347 million (SRES A2).

Nevertheless, the benefits of adaptation in terms of the effects on frictions to international trade and development are expected to outweigh the costs. One study which compared the cost of adaptation with the cost of inaction at the European Union level finds that by 2020, the net benefit of adaption will range between €3.8 billion (low sea-level-rise scenario) and €4.2 billion (high sea-level-rise scenario). These benefits are expected to increase further by 2080.

Adoption of Scenario Families

A1
The A1 scenarios are of a more integrated world characterized by:

- Rapid economic growth.
- A global population that reaches 9 billion in 2050 and then gradually declines.
- The quick spread of new and efficient technologies.
- A convergent world - income and way of life converge between regions. Extensive social and cultural interactions worldwide.

There are subsets to the A1 family based on their technological emphasis:

- A1FI - An emphasis on fossil-fuels (Fossil Intensive).
- A1B - A balanced emphasis on all energy sources.
- A1T - Emphasis on non-fossil energy sources.

A2
The A2 scenarios are of a more divided world characterized by:

- A world of independently operating, self-reliant nations.
- Continuously increasing population.
- Regionally oriented economic development.

B1
The B1 scenarios are of a more integrated, more ecologically friendly world characterized by:

- Rapid economic growth as in A1, but with rapid changes towards a service and information economy.
- Population rising to 9 billion in 2050 and then declining as in A1.
- Reductions in material intensity and the introduction of clean and resource efficient technologies.
- An emphasis on global solutions to economic, social and environmental stability.

B2
The B2 scenarios are of a more divided, but more ecologically friendlyworld characterized by:

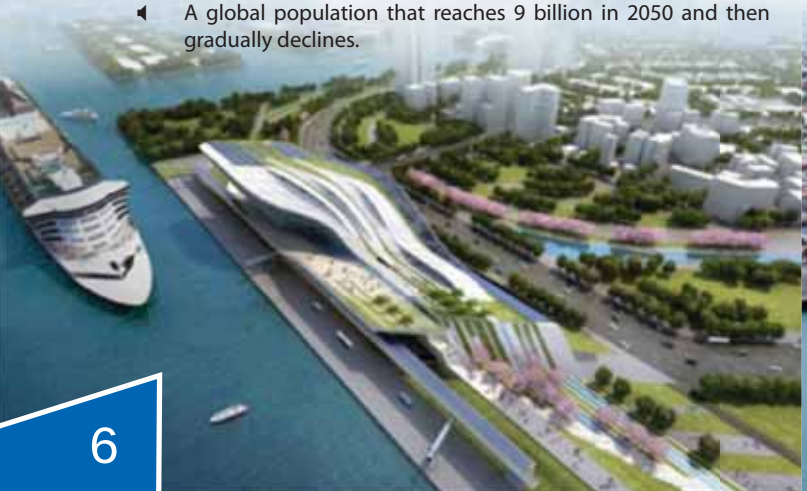
- Continuously increasing population, but at a slower rate than in A2.
- Emphasis on local rather than global solutions to economic, social and environmental stability.
- Intermediate levels of economic development.
- Less rapid and more fragmented technological change than in A1 and B1.

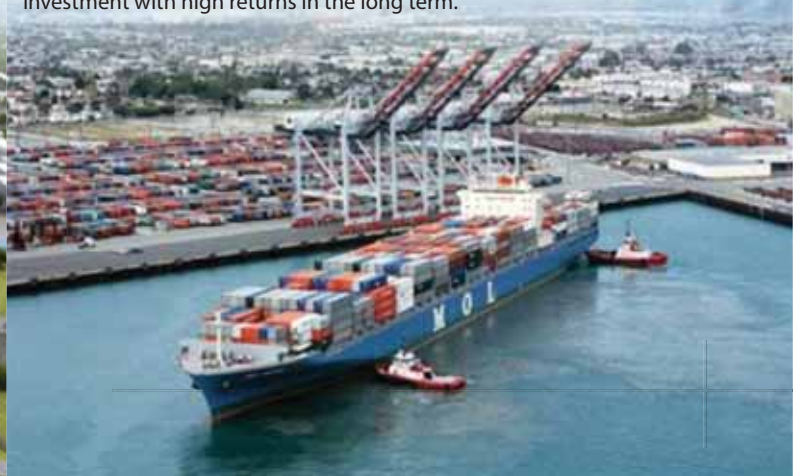
The Four SRES Scenario Families of the Fourth Assessment Report vs. Projected Global Average Surface Warming Until 2100

AR4	More economic focus	More environmental focus
Globalization	**A1** Rapid Economic Growth (groups: A1T; A1B; A1FI) **1.4 - 6.4 °C**	**B1** Global Environmental Sustainability **1.1 - 2.9 °C**
Regionalization	**A2** Regionally Oriented Economic Development **2.0 - 5.4 °C**	**B2** Local Environmental Sustainability **1.4 - 3.8 °C**

Summary

To sum up, climate change impacts on ports and their hinterland connections and related adaptation requirements are major development challenges with direct implications for trade and growth. While more work is needed to help advance understanding of the various issues at stake in environmental shipping and better assess their full implications, adaptation action in transport generally and, especially, in ports, is an imperative and a sound investment with high returns in the long term.





Entry into Enclosed Spaces

It has been reported that the incidents/fatalities consequent to unsupervised or inadequately assessed atmosphere present in such spaces have been on the rise inspite of the checklists being filled in onboard. The vulnerable areas may be:

1. Bow thruster room bilges where a person normally goes alone to check the oil level and the bilge alarm. Some times he bends to fix a rope to the float to lift it up to check alarm and at this time exposes himself to the risk.
2. Going into the duct keel to repair some leak or to inspect bilges and duct keel not adequately ventilated. In some duct keels you have a trolley which you can push by hand to gain entry into the middle (many of us do it for fun or to show off) and the localized atmospheric content at such a place may be deficient in oxygen or present with more than 20 ppm of H_2S (short term exposure limit).
3. Checking or clearing car deck bilges. Many times the crew feel that simply because the space is not bound by steel structure and therefore not coming in the definition (erroneously supposed) of "space", there is no need to consult others and this belief is held by a new or overzealous crew member.
4. Entry into and remaining present for long in a non air-conditioned dry provision room. This room should be kept air-conditioned to about 20 deg C.
5. Entry into forward windlass hydraulic room especially in hot climates.
6. Entry into sewage treatment plant located in an enclosed deck house. In the EVAC system, many times we go behind some pipes and valves for the purpose of blowing air and even behind our cabin toilet space (by removing a panel) to fix some leak (for restoring vacuum) or to collect the stuck up soil in a plastic bag for disposal.

There can be many such spaces depending upon the type and construction of the vessel but point to be noted is that the risky areas are those where we do not go often. Going into a tank or areas under traditional maintenance, we always take precaution and do fill up check list and issue permit with reasonable care hence no lack of diligence is intended to be attributed to our good ship staff but we get stumped in venturing into areas which we mistakenly assume that they are not hazardous. H_2S even in low concentration is very toxic and quickly impairs a person's sense of smell hence the sense of smell is not the way to assess it's presence and we must use portable gas monitors and keep them calibrated. Working in enclosed spaces must always be supervised by another person stationed close to the entry point and the worker should come out periodically to have fresh air and drink water and may be replaced by another worker as the situation demands (situational awareness). Even a meat or fish room can become a vulnerable space in case of breaking of a Freon liquid line pipe and that is why a notice of caution should be posted at the entry door. The Master and Chief Engineers should keep a track of where the personnel are working and remain concerned till they are back safely. At the end of the day's work, before coming in, it is always beneficial to inhale and exhale fresh air into your lungs for about 10-15 minutes and the same also holds good for engine crew prior to entering the engine room (at this time you can also check the funnel) and after knocking off.

New IMO Exhibition

PSSA

IMO (the International Maritime Organisation) has unveiled a new, permanent exhibition display, which was designed and developed by our learning and development specialists here at Coracle for IMO's Headquarters in London.

The multi-faceted exhibit showcases the wonders of Particularly Sensitive Sea Areas (PSSAs) - areas that need special protection because they are deemed vulnerable to damage by international maritime activities or are of significance for recognised ecological, socio-economic or scientific reasons.

The aim of the display is to educate IMO's audience about the issues and challenges facing sea areas and to highlight the significant contribution that has been made to environmental protection through IMO's PSSA scheme.

The display combines physical exhibition stands with engaging digital content for people to browse on interactive, touch screens. It is supported by a website at: http://pssa.imo.org/#/intro

James Tweed of Coracle

Poem of the Week

From Bow Wave Issue 670

The Assessment of Maritime Risk

If once you send a boy to do the duty of a man,
Immediately, there is a risk of fouling up the plan,
Which risk did not exist before you gave control to youth.
Experience has substance. That's the bald and simple truth.

And when the risk is life or death, this is no matter light,
When everything is vital, in the middle of the night:
The man has seen the dangers not apparent to the boy.
Who was not fooled, and badly, by the wooden horse at Troy?

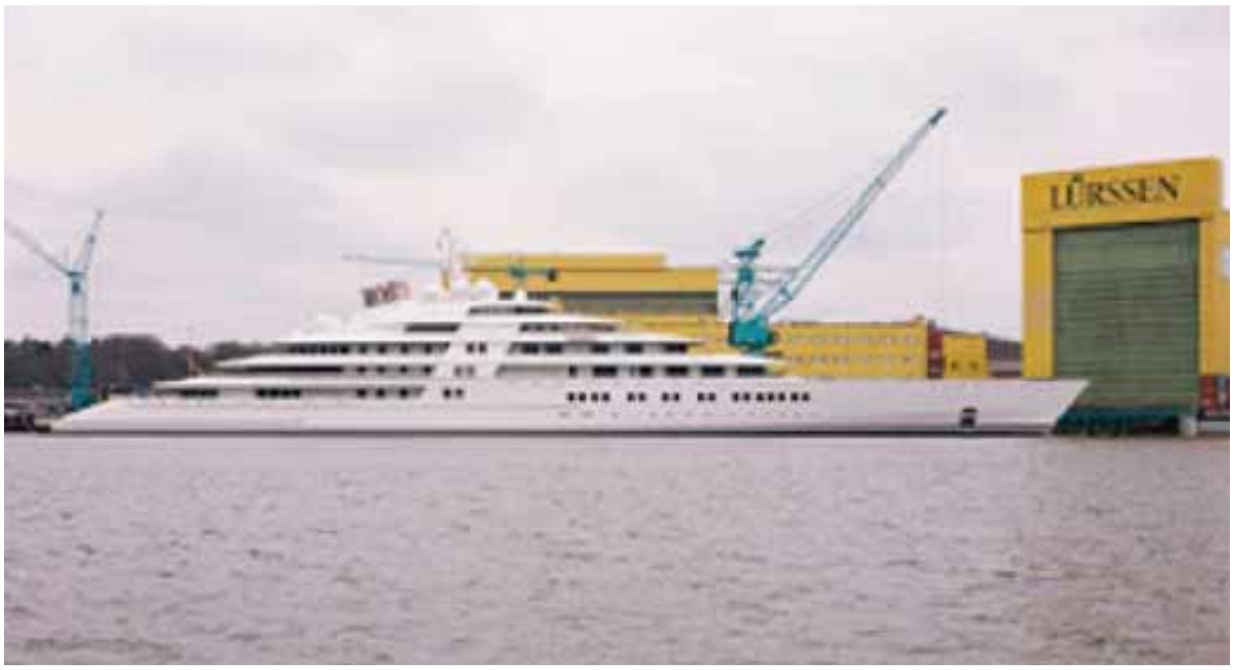
The older man sees far more risk. Or so he clearly should.
There's no fool like an old fool. That is clearly understood.
And if you run the risk of trusting life to youthful princes,
Most foolishly you chance your arm. All evidence convinces.

The boy, of course has merit. He is learning, all the way.
And sure enough, the youngster, he will be a man, one day.
Not yet though, whilst the ink is hardly dry upon his papers:
To trust him with the burden is the riskiest of capers.

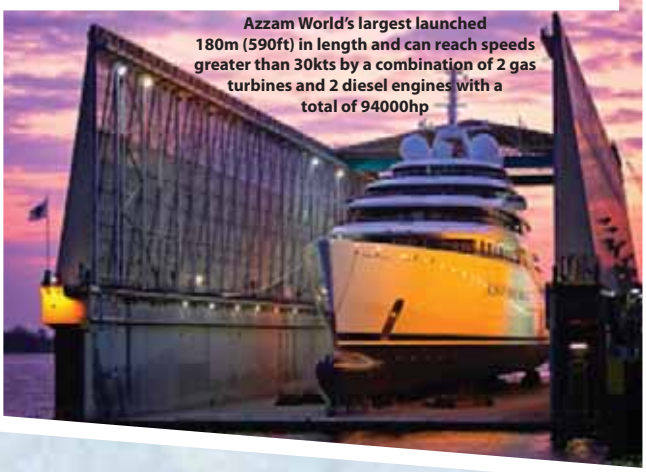
What burden? Caring for the public? Shielding public life?
The inexperienced princeling – for your family and wife?
Such trust therein is madness. It is hopelessly misplaced:
The public office doing so is publicly disgraced.

If once you send a boy to do the duty of a man,
Immediately there is a risk of fouling up the plan,
Which risk did not exist before you first approved the youth.
Experience has substance. That's the bald and simple truth.

Barrie Youde 22th May 2013



Largest Megayacht LaunchedMegaYacht Global April



Azzam World's largest launched 180m (590ft) in length and can reach speeds greater than 30kts by a combination of 2 gas turbines and 2 diesel engines with a total of 94000hp

IDESS

First established in Norway, IDESS has been providing specialized training services to the shipping and offshore oil and gas industries for more than 20 years.

IDESS has become a renowned brand name associated with quality and high standards in all aspects of training and assessment. The organization has earned a reputation for excellence that is recognized around the world, backed by a proven track record in transferring knowledge and skill through cost effective learning programs that deliver measurable results.

IDESS has modern facilities and systems to deliver instructor led, hands on training as well as online E-Learning, providing exceptional value and competency assurance for their customers.

IDESS MENA is a new venture in the Middle East. A state of the art training facility will be built in Saudi Arabia during the next 18 months. IDESS MENA will have the same quality standards but far larger portfolio of courses, focusing on the Oil & Gas as well as the Offshore sectors.

The biggest players in the shipping industries have chosen IDESS for their crew to assure proper qualification and skills in their demanding and dynamic workplace. Most of these companies based internationally obviously have trusted IDESS to become their partner because her roster of training courses, programs and facilities are high standard, recognised and certified by many respected agencies such as OPITO, DNV, IMO, and STCW to name a few.

Cooperation with MAERSK Training was initiated some months ago, and IDESS has twice had instructors from MAERSK Training conducting courses at IDESS.

More and more international students are training at IDESS in Subic. As far away as Nigeria, crew has travelled to train at IDESS. Nigerian mess-men and cooks were upgraded in their skills, and now lately Nigerian officers had training in LNG Cargo Operation, refreshing their knowledge in Free Fall Lifeboat handling, AMOS Windows, Maintenance courses for life and fire fighting equipment and Passage Planning with ECDIS. More than 60 crew from Nigeria will be trained at IDESS this year.

This week IDESS has trained 16 officers from China in Fire Fighting courses. A new cooperation with a Chinese LNG company will see over 100 Chinese officers trained at IDESS Subic. IDESS instructors and assessors will train more than 160 ratings in a training centre in China later this year.

Advanced Fire Fighting

BW Gas trainees on the IDESS-Maersk "Maintenance of Life Saving and Fire Fighting Equipment" Course

China LNG Shipping (International) trainees preparing for Advanced Fire Fighting Training

Australian Transport Safety Bureau Report on the Foundering of Tycoon

What Happened

On the morning of 8 January 2012, one of the permanent mooring lines holding the general cargo ship Tycoon in position in the inner moorings at Flying Fish Cove, Christmas Island, came free from its anchor. As a result, the ship moved forward and closer to the nearby terminal rock face, eventually making contact with the rock face as the weather and sea conditions deteriorated.

Despite attempts to move it away, Tycoon continued to pound against the rock face. Eventually, the ship's engine room began to flood through a tear in the hull. Shortly afterwards, the crew safely abandoned the ship.

At about 1100 on 9 January, Tycoon suffered a catastrophic failure of its hull and the contents of the ship's number two cargo hold, about 260 tonnes of bagged phosphate, were exposed to the sea. The ship continued to be pounded by the sea and swell and, over the following months, it broke up under the action of the waves. On 14 May, salvors were appointed and by 26 July the wreck had been removed from Flying Fish Cove.

What the ATSB Found

The ATSB found that the shackle connecting the port's cantilever mooring line to its anchor chain failed and that Tycoon's master did not advise shore authorities of his concern regarding the deteriorating conditions or that the cantilever mooring line had come free. He also did not make proper use of the ship's main engine or mooring lines to attempt to keep the ship in position after the mooring line came free.

In addition, it was found that there had been no risk assessment undertaken by successive port managers with regard to the use of the inner moorings and that there was little guidance provided to the masters of ships intending to moor in Flying Fish Cove. Furthermore, the managers of the port had not implemented an effective inspection and maintenance program and therefore were not aware of the deteriorated condition of the aft mooring line shackle.

What's Been Done as a Result

The port operator has started to fly diving contractors into Christmas Island to complete the annual dive inspection and has commenced replacing and upgrading the mooring equipment. They are also developing a Port Handbook which will be provided to the master of each ship and are facilitating safety training workshops that will be a forum through which the risks posed to the port and its operations can be assessed.

Safety Message

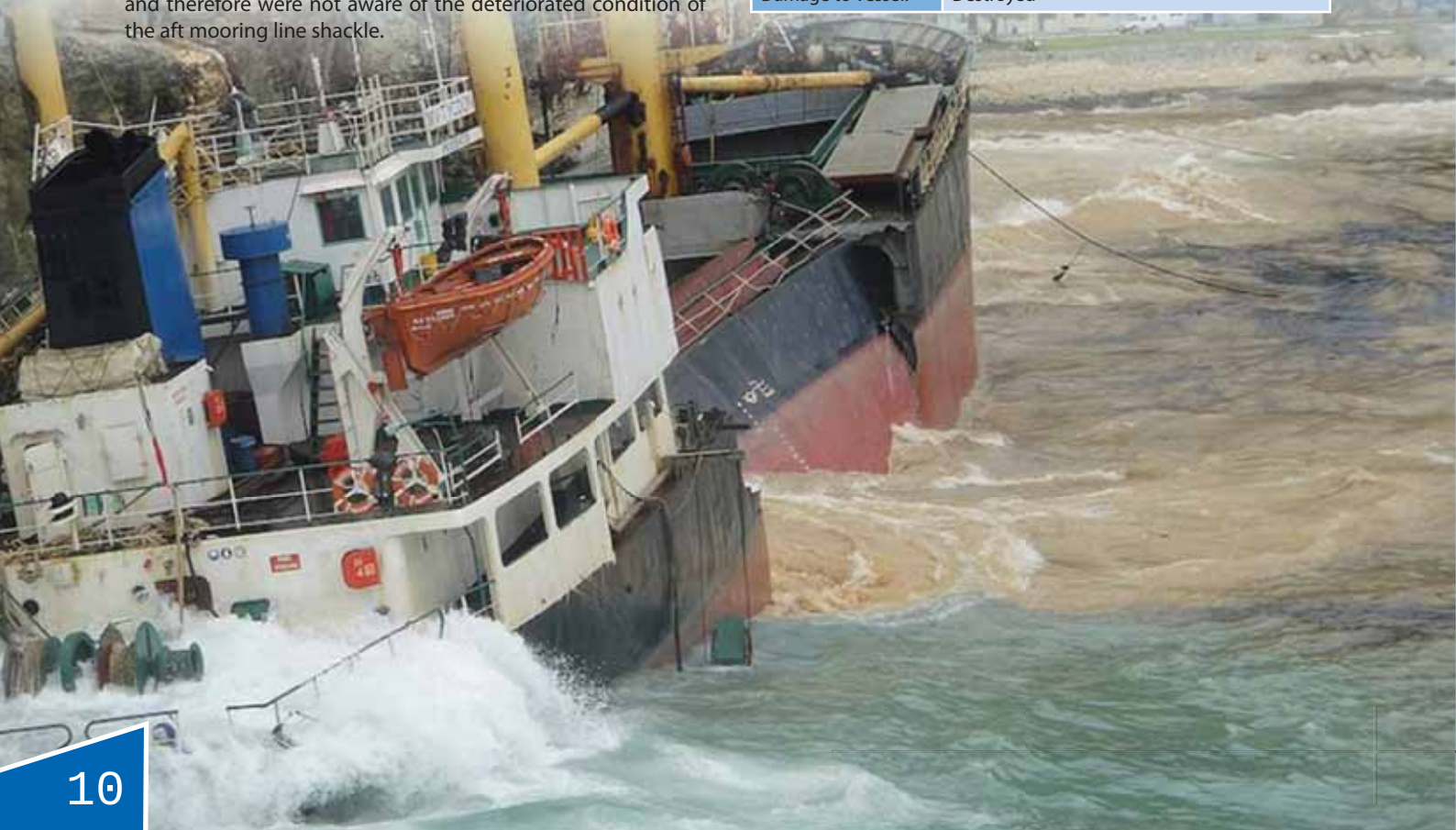
Those responsible for the management and operation of a port should consider all the risks associated with the operations carried out within the port. As a result, there should be appropriate procedures and contingency plans in place to deal with foreseeable emergencies and effective maintenance and inspection regimes that ensure the good order of equipment and facilities.

General Details

Date:	08 Jan 2012	Investigation status:	Completed
Time:	0620 (UTC+7)	Investigation type:	Occurrence Investigation
Location (show map):	Christmas Island	Occurrence type:	Foundered
State:	External Territory		
Release date:	23 May 2013	Occurrence category:	Incident
Report status:	Final	Highest injury level:	None

Vessel Details

Vessel:	Tycoon
Flag:	Panama
IMO:	8304220
Type of Operation:	General cargo ship
Damage to Vessel:	Destroyed



NZ Strandings

By Andrew Guest

On the bridge of the bulk carrier the Master was talking on the telephone to the Chief Engineer while the pilot was wondering why the ship was losing speed.

The New Zealand pilot and two Indonesian bridge team members were not "in the loop" as the discussion between the Master and Chief Engineer was conducted in their own language of Korean, despite the fact the ship's working language was supposed to be English.

The conversation between the two had been caused by a malfunctioning valve in the engine's cooling system that had triggered an automatic slowdown followed shortly afterwards by shutdown just as the *Hanjin Bombay*, outbound from the port of Tauranga on New Zealand's Bay of Plenty, was executing a turn.

The loss of speed through water reduced steerage and lead to the grounding in June 2010. Fortunately, there was no pollution, although the ship, which was freed two hours later on a rising tide, suffered enough hull damage to require dry-docking.

The report into the incident has only just been published by the New Zealand Transport Accident Investigation Commission (TAIC). In the intervening period, another grounding occurred in the same area after an engine shutdown and, with far greater consequences, the containership *Rena* grounded on a reef in the Bay of Plenty, although the latter did not involve any mechanical failure.

The *Hanjin Bombay* report says if the pilot had known in time there was a problem he could have ordered tugs that had earlier escorted the ship, laden with a full cargo of logs, out of port to return and try to prevent the grounding.

It also questions why the Master had not manually over-ridden the automatic shutdown, although it acknowledges doing so would have probably damaged the engine.

The TAIC report also suggests greater involvement of engineering staff in navigational matters might prevent similar incidents. "Engine-room crew can become 'immersed' in their own environment, focused solely on the performance of the machinery and unaware of the overall situation," the report says.

In this particular case, if the Chief Engineer had known the ship's passage had reached a critical stage as it turned to starboard out of a channel, the report suggests, he might have warned the bridge earlier.

The Chief Engineer had four staff at his disposal, it points out, but none were dedicated to communicating with the bridge. It puts forward as a safety initiative the installation of duplicate chart plotter screens in engine control rooms "to help crew maintain awareness of the vessel's location".

"Had [the Chief Engineer] been aware, at a glance, where the ship was in the channel he could have surmised it was not a good time have main engine problems, warned the bridge team early enough for them to alter their plans and prevented the grounding," says the TAIC report.

The incident was not an isolated case of engine failure in New Zealand waters. The report notes that in a 30-month period (starting before the *Hanjin Bombay* grounding) there had been 30 reported instances of machinery or equipment failures on ships in New Zealand pilotage waters.

Indeed, nearly a year and a half after the *Hanjin Bombay* incident the containership *Schelde Trader* grounded in almost the same spot as the bulk carrier after it too lost power when the oil-mist detector was activated, triggering an automatic shutdown. Again, the incident caused no pollution and the ship was quickly refloated.

"The number of defects that are causing accidents and incidents in New Zealand pilotage waters is of concern," the report says. That concern is shared worldwide and has been heightened by problems encountered in switching fuel as ships enter an Emissions Control Area (ECA), although this was not an issue in this or other incidents in New Zealand waters.

An analysis of more than 700 claims related to engine failures lead the UK P&I club last year to point out ships that were "effectively out of control" had caused extensive damage to, among others, berths, bridges, cranes and moored ships. Claims had also been made after "costly" collisions and groundings.

It too suggested there should be better communications between engineers and deck officers, with each keeping the other better informed of their plans and actions.

In New Zealand the port of Tauranga now requires ships to inform it in advance of any planned in-port maintenance work on main engines or critical auxiliary systems. This enables its pilots to make risk assessments and ships could be asked to take risk-mitigating measures, such as having tugs act as passive or active escorts.

The port also maintains a database of ships that have experienced technical malfunctions during port transits, while pilots and ports share on a routine but informal basis information about ships with both technical and "crew performance" problems.

The report, which rates the crew performance on the *Hanjin Bombay* as well below best industry practice (nobody on the bridge except the Master, it says, had taken part in the pre-departure briefing with the pilot), recommends this gathering and sharing of information should be placed on a more formal and national level.

Maritime New Zealand (MNZ), the government agency responsible for shipping safety, already publishes a monthly list of accidents and incidents on its website, with that for April including two unnamed foreign-flag ships – one in transit and one leaving its berth – that suffered blackouts, although power was quickly restored in both cases.

While the TAIC report criticises the way in which the emergency was managed by those on the ship, it also points out that the port's risk assessment under its safety management system had not fully addressed the risk of outbound vessels suffering propulsion or manoeuvring failure at critical locations in the entrance channel.

If the risks of ships losing power through engine failure and of crews being unable to respond adequately to emergencies are perceived to be too high, countries like New Zealand might be more likely to take measures into their own hands. Loss of control could then prove even more costly.

Editor's Note: Andrew Guest is a freelance journalist.

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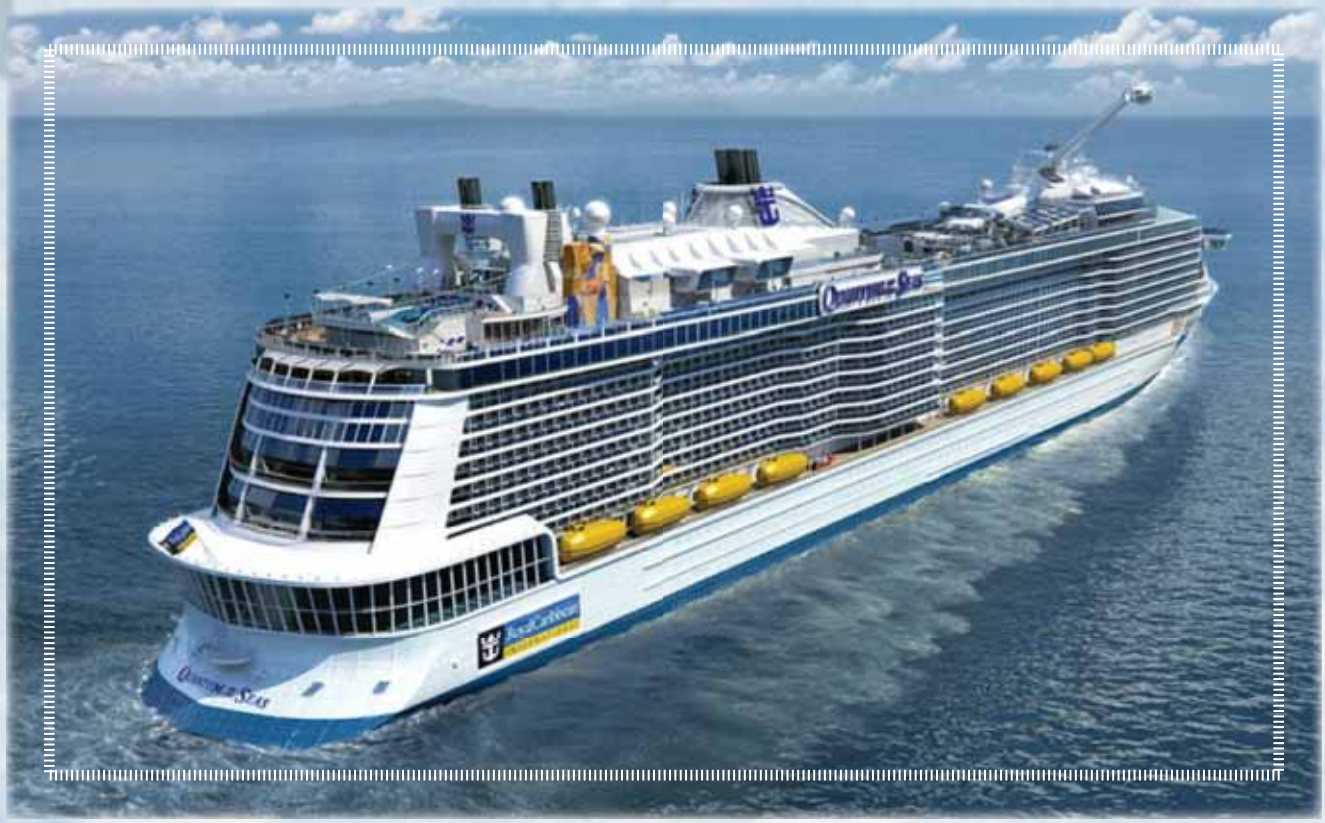

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