

River pilots escape with slight injuries in ship crash at Sutton Bridge

Two river pilots escaped with slight injuries when a massive ship hit two boats and pontoons in the River Nene at Sutton Bridge on Tuesday night.

The 80m long cargo vessel, Lady Nora, was on its way from Wisbech to a port in The Netherlands when the accident happened at about 7.45 pm.

There were people on the pilot berth of the vessels and the ship nearly wiped them out.



The Maritime and Coastguard Agency said two casualties were taken to hospital.

A spokesman for Fenland District Council, which employs the pilots, said two of its marine staff were "slightly injured".

The council spokesman said today (Wednesday) one man was taken to hospital, where he was checked and discharged on Tuesday night.

He continued: "The other saw his GP for a check-up this morning. Both men have been told to rest for a few days."

The council hasn't commented on a report of a vessel hitting fendering at Cross Keys Bridge three weeks ago, but denied a claim there was a

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trainee pilot on board the Lady Nora at the time of Tuesday's crash.

A Sutton Bridge resident, who asked not to be named, told us: "A ship going out to sea from Wisbech collided with several moored vessels in Sutton Bridge.

"There were people on the pilot berth of the vessels and the ship nearly wiped them out."

Tuesday's collision is believed to be the first of its kind - at least in four decades - but sparked concern because the spot will soon be home to a near £900,000 commercial and pleasure boat marina.

Sutton Bridge Parish Council chairman John Grimwood said: "It's concerning if they (the pilot boats) get hit there as the marina will be a bit further out (towards the middle of the river).

"Having said that, that's the first time I can recall anything happening there."

Coun Grimwood said the accident hadn't affected navigation and wouldn't interrupt Port Sutton Bridge, which is on the seaward side.

He said: "It's basically pushed everything to one side."

Police attended the accident along with a Coastguard rescue team. Marine accident investigators have been informed. An investigation is under way and the Lady Nora will be inspected when she reaches the overseas port.

Reducing Emissions From the Shipping Sector

The EU is calling for a global approach to reducing greenhouse gas emissions from international shipping - a large and growing source of emissions.

As a first step, large ships using EU ports will be from 2018 required to report their verified annual emissions and other relevant information.

Maritime transport emits around 1000 million tonnes of CO2 annually and is responsible for about 2.5% of global greenhouse gas emissions.

Shipping emissions are predicted to increase between 50% and 250% by 2050 - depending on future economic and energy developments. This is not compatible with the internationally agreed goal of keeping global temperature increase to below 2°C compared to pre-industrial levels, which requires worldwide emissions to be at least halved from 1990 levels by 2050.

Ships' energy consumption and CO2 emissions could be reduced by up to 75% by applying operational measures and implementing existing technologies.

Many of these measures are cost-effective and offer net



benefits, as reduced fuel bills ensure the pay-back of any operational or investment costs.

Further reductions could be achieved by implementing new innovative technologies.

The EU and its Member States have a strong preference for a global approach led by the International Maritime Organization (IMO) as this will be most effective.

The MRV Regulation adopted on 29 April 2015 creates an EU-wide legal framework for the monitoring, reporting and verification of CO2 emissions from maritime transport. It also helps the EU generate momentum for the best possible outcome in the international discussions.

Cyber-security and why shipping needs to be worried

Cyber-security is fast becoming a hot-button issue in shipping, perhaps because it is one on the agenda everywhere.

On 1 April US president Barack Obama signed an executive order authorising sanctions against malicious overseas hackers as well as companies that knowingly benefit from cyber-espionage. "Cyber-threats pose one of the most serious economic and national security challenges to the United States," he warned.

Part of the problem is the lingering characterisation of hacking as the preserve of hobbyists and basement-daredevils, rather than the industrial-scale organised criminal operation it is becoming. In the words of Bimco head Angus Frew, speaking at the roundtable with ICS, Intercargo and Intertanko recently, shipping needs to "take cyber-security seriously". In a world so densely connected by technology, experts warn that everyone is at risk of cyber-attacks, and we would be extremely foolish to assume the industry handling 90% of world trade is any exception.

Indeed when it comes to the encroaching digitisation of everyday operations - the so called "internet of things" whereby machines talk to each other over IP - shipping certainly is not an exception. "Ships are

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From the Editor's Desk



YOU are alone: *The mediator is one who dives deep into aloneness, knowing that we are born alone, we will be dying alone, and deep down we are living alone. So why not experience what this aloneness is? It is our very nature, our very being.* – Osho

Free Yourself: *The search ends with the realization that there is no such thing as enlightenment. By searching, you want to be free from the self, but whatever you are doing to free yourself from the self is the self.* – U.G. Krishnamurti

You are DIVINE: *The Divine is present in everyone, in all beings, in everything. Like space it is every where, all pervading, all powerful, all knowing. The Divine is the principle of Life, the inner light of consciousness, and pure bliss-our very own Self.* – Mata Amritanandamayi

Birth & death: *There is nothing as fearful as death, and there is no suffering as great as birth. Be free from the fear of both birth and death, by doing away with attachment to the body.* – MAHAVIRA, Mulachara

It's opportunity: *The highest levels of performance come to people who are centered, intuitive, creative and reflective people, who know to see a problem as an opportunity. Always go with your passions. Never ask yourself if it's realistic or not.* – Deepak Chopra

Truly Educated: *The mark of the educated man is not in his boast that he has built his mountain of facts and stood on the top of it, but in his admission that there may be other peaks in the same range with men on top of them - that their views too are legitimate.* – E J Pratt

No Violence: *The essence of all knowledge consists in not committing violence. The doctrine of ahimsa is nothing but the observance of equality- the realization that just as I do not like misery, others also do not like it.* – Mahavira Sutrakrtanga

“Neglect ion and Discrimination” withbiased decisions, made by any of the three pillars of governance, in public services and / of the media, should consider for a re-think to existing administrative mechanism to consider , whether it's a right or wrong discretion made, in a given situation. Same needs to be under public scrutiny with open debate on humanity, to never allow an individual to continue suffering, which is deprivation of his basic rights and privileges, which should not be forgotten to die with him.

Ex-Serviceman, Corps of Signals, Indian Army, Chandran P K

“It is better that ten guilty persons escape than that one innocent suffer” – Sir William Blackstone

ON LEADERSHIP:

Engenders rigidity: *The pursuit of a fault-less ideal, creates strong mental beliefs about the "best way" to do things. Leaders get hooked to doing things the "right" way and stick to the "safe" and proven method. This often also blocks them from listening to alternative points of view and suggestions.*

Fosters risk aversion: *The ability to take calculated risks is an important skill for effective leaders and the fear of making mistakes often makes perfectionists severely risk-averse. Taking risks logically means they are prepared, that things might go wrong, something perfectionists would rather avoid. This makes them naturally avoid projects that have a chance of failure, and rarely allows them to make effective decisions in scenarios that involve accepting failure as a possible consequence.*

Kills productivity: *In a world where time is money, leaders don't always have the luxury of poring over every detail till they get it just right. The need to produce perfection can adversely affect productivity not only because it takes longer to finish every task, but also because it takes more mental effort to even get started. The increased workload as well as angst created in the quest for perfection can take the joy out of almost anything.*

Destroys ability to build trust: *Since perfectionists always produce a higher standard of precision, it might seem logical that they would attract trust. However, perfectionists rarely inspire trust in initial interactions. When meeting someone new, warmth and personal connect is more crucial than pure competence. Personal connect requires you to be human, to be vulnerable, not perfect. The aura of perfectionism can be a major trust turn-off in new associations. In addition, the perfectionist's demanding and often critical ways can further damage the trust quotient.*

Increases stress: *Studies have found stress levels to be significantly higher in perfectionists, for obvious reasons. The urge to reach a sometimes unattainable standard of excellence creates an incessant sense of dissatisfaction and inadequacy where nothing feels good enough.*

Severely damages personal relationships: *The relentless pursuit of a lofty ideal rarely leaves time to invest in healthy relationships. In addition, the unattainable standards leaders set for themselves soon begin to extend to others. And before*

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they know it, criticism and fault-finding become second nature, whether expressed or not.

The final nail in the coffin is the scathing self-talk: A nagging sense of dissatisfaction is natural to perfectionists. The constant race to master perfection, combined with the mental anguish of dealing with perceived failures, rarely allows them to love and accept themselves. The toll on personal relationships is inevitable. It is time to stop celebrating perfectionism. "Perfect" is not something that is possible to create every time and, honestly, it is not even desirable. In fact, it often covers up a latent fear of not being good enough, of not being better than the competition, of not living up to the hype we have created about ourselves.

The following suggestions will help to control the perfectionist urge and channelize the energy to create realistic excellence.

Identify your fears: What are you afraid might happen if you produce a terms of providing the necessary budgets, but also participation and support. Executive search firm Korn Ferry's 2015 Real World Leadership study, covering 7,500 respondents from 107 countries, cites the "lack of executive sponsorship" as the biggest barrier to successful leadership development.

"Leadership development is the outcome of an arduous and a protracted process," says Kaicker, "that yields results only over a medium- to long-term horizon. Moreover, even with the deployment of scientific and structured tools like leadership-style inventories, behavioral interviews, personality assessments and 360-degrees feedback, some degree of subjectivity cannot be ruled out, and the less-than-perfect outcome? Knowing the answer to this question is an important step to understanding and defeating perfectionism.

Confront your limiting beliefs:

- Ask yourself, what makes you hold on to perfectionism. Are you using perfectionism as a shield to protect yourself from criticism that you can't handle?
- Do you find it difficult to accept competition?
- Are you subconsciously seeking external approval or validation?
- Have you convinced yourself that this is essential for your success?

The pursuit of quality and excellence is a desirable ideal. But the distress over every small flaw, the unrealistic standards and constant dissatisfaction can undermine you. Recognize and question your standards at every step. Make sure they are realistic and achievable.

Be realistic:

Love yourself and accept your flaws:

Mistakes are what make us human, and the quality of our mistakes and our ability to learn from them shapes who we are. It is your flaws that make you unique. Accepting not just your own but also others' flaws are a critical step in overcoming the negative effects of perfectionism.

While introspection is great, over-analyzing the past and agonizing over what you could have done better can be counterproductive. Take a moment to list the lessons and keep moving forward.

Yes, there are specialized roles and tasks that require a great level of precision, but as you rise to become a leader of people and business, the limitations far outweigh the advantages.

Look forward: Shweta HandaGupta is the founder of QuadraBrain Transformation Solutions. She works with board level, CxOs and potential leaders as a leadership coach, facilitator and change expert. process, therefore, may not generate perfect results. As a result, organizations need to have an appetite for some amount of risk," he says.

Skill gap: Leadership development initiatives undoubtedly call upon managers to play a key role in developing their high-potential employees by providing career-enhancing job rotation opportunities. This entails, besides a high degree of confidence, some critical skills like stakeholder management, coaching and influencing.

Managers may not necessarily be adept at all this. Kaicker says it has as much to do with the lack of skills as the lack of seriousness. He cites the example of an organization that sought to inculcate coaching skills by putting over 100 senior leaders through a coaching programme-a year down the line, not more than 50% of the participants had actually engaged in coaching conversations.

A successful leadership development strategy, therefore, calls for an eclectic blend of elements and, most of all, cultural readiness in terms of the will and skill of stakeholders in playing their roles effectively. Charu Sabnavis is a learning and organizational development facilitator and founder director of Delta Learning.

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increasingly computerised - they're getting integrated control systems and systems are developed from electro-mechanical type of controls into computer servo controls," says Lars Robert Pedersen, deputy secretary general and coo at Bimco. "That can affect the manoeuvrability of the ship - the actual ability to control the equipment on board.

"But also there are ENCs and ECDIS, which are becoming mandatory. These need to be updated on a regular basis - and of course the integrity of the chart system is one area of concern. We need to make sure that these systems are protected adequately - that we don't end up with a situation where the navigator on the bridge may see things on his chart which are not really there."

Peter Jackson, ceo at the Singapore arm of insurer Lockton Companies, tells Seatrade Global: "A ship could be run aground or diverted to a location that favours pirates. For theft, disabling a ship to enable piracy could conceivably happen as could diversion of cargo. Systems that control the ship's speed, the ability to shut down engines that would leave a ship stranded.

"Imagine a scenario where a cruise ship is left marooned and pirates systematically rob the passengers and crew, a latter day highway robbery. What would that do for sales of cruise holidays?"

But as Pedersen is eager to emphasise, any talk of what a cyber-criminal might do with a ship at sea is currently entirely speculative. Any known cyber-attacks on merchant ships so far were sponsored by the industry itself - such as the case of the cyber-security firm hacking ships' AIS to prove they could make entire ships disappear from tracking systems, make non-existent vessels appear, spell out insults in ship course information and generally wreak mayhem.

This is one of the main arguments against an unmanned ship, whereupon there is no navigator on the bridge to see, with his own eyes, that he is not in fact headed into the path of a super-typhoon and there is no 100,000 ton aircraft carrier about to collide with the starboard bow. But even with crew aboard, could hijackers really take control of a vessel remotely, Hollywood-thriller-style? "It's

theoretically possible in the same way that conceivably a hijacker could take control of an aeroplane," says Jackson. "Whilst this might seem far-fetched, what is widely acknowledged is the technology of hacking is outstripping the technology of prevention."

In fact, Cyber-security watchdog CyberKeel recently indicated that 90% of the top 20 container lines would be vulnerable to cyber-attack, whether land or ship-based. "We need to distinguish between an attack on shore-based company infrastructure and an attack on a ship," Pedersen argues. "An attack within a shipping company's offices would be directed at their business infrastructure, applications, and continuity. That can have severe commercial implications, but that that is not really what [Bimco] is addressing - we are looking at the issues which might arise from cyber-attacks on a ship."

Attacks on land-side operations, though, are already happening. A 2012 attack on national Arabian oil company Saudi Aramco by a self-replicating virus erased data on 30,000 computers, replacing it with an image of a burning US flag. More recently in 2013, hackers intercepted drug shipments at the Port of Antwerp, disappearing containers from its systems. "If cyber criminals can rob banks, moving physical goods is also possible. Theft would look to reroute cargo, but if they can take control of facilities and divert cargo then this might also support money laundering or extortion," says Jackson.

Earlier this month, Clearsky Cyber Security revealed that a shipping company from New Zealand had experienced so called "click-jacking", wherein criminals posted a fake website containing a copy of their own genuine website in the hope of obtaining login information and bank details. Indeed, an unpalatable truth is that the biggest cyber-threats to shipping operations may come from within. Jackson explains: "One scenario which has perhaps not been widely discussed is the potential of competitor attacks.

"The purpose may be to steal information rather than cause physical harm or disruption. Contract and pricing details, negotiation positions, client details - basically anything you wouldn't want another party to have. It is even possible competing ports and organisations could stage attacks to disrupt services. Shipowners and port operators need to consider scenarios where their systems are hacked and both how do they prevent this happening and how would they respond to such a crisis."

With cyber-attackers theoretically able to bring down an entire organisation in one fell swoop, cyber-security is one area in which companies cannot afford to wait for the horse to bolt before locking its doors.

**A Trans-Africa Inland Waterway System?
The confluence of the Kagera and Ruvubu rivers near Rusumo Falls, part of the Nile's upper reaches.**

The Nile River has been navigable since the time of the pharaohs some 4,000 years ago, as have sections of the Niger, Benue, Congo and Zambezi Rivers.

Boats today carry passengers and freight across Lake Malawi, Lake Victoria and Lake Tanzania while riverboats provide essential services along sections of the Niger, Benue, Congo and Nile Rivers.



There may be scope for future African leaders to borrow the European precedent of connecting navigable rivers to develop an inland, canal-based transportation network.

Inland waterway systems have also been successful outside Europe. In the U.S., inland waterway freight transportation can move bulk and container shipments of over 100 TEUs at lower cost per unit distance than either truck or railway transportation.

Such a system would benefit the African continent, which remains largely dependent on fragmented land transport systems. While Cecil John Rhodes sought to build a North - South, Cape-to-Cairo railway line, African railway networks remain regional with their own distinctive railway gauge. Paved road networks are to be found in major cities and in certain regions, but only a network of unpaved roads is available for most of the continent's long distance connections for the truck transport industry. Trucks carry most of Africa's long-distance freight.

The headwaters of several streams and rivers that empty into Lakes Tanzania and Victoria originate in the same geographic area between the lakes, in sufficiently close proximity to each other to perhaps warrant linking them by building navigable canals to transit shallow draft vessels.

Lake Victoria empties through a series of smaller lakes and waterfalls into the White Nile River, perhaps with the potential to build navigation locks to connect the Upper Nile River to Lake Victoria. Lake Tanzania empties into the headwaters of the Congo River that has several navigable sections. There may be scope to develop river

navigation between Lake Tanzania and the navigable sections of the Congo River, allowing access to Lake Victoria. It may also be possible to develop future canal navigation between navigable sections of the Congo River and its mouth at the Atlantic Ocean.

At the present time, Nigeria and Egypt have surpassed South Africa as Africa's leading economies. A navigable inland waterway system could offer a much shorter sailing distance than an ocean voyage through the Strait of Gibraltar. In southern Sudan and northeastern Congo, headwaters flow from the same region into the White Nile and Congo Rivers, allowing for possible evaluation of building a navigable canal to link the two rivers.

The development of a trans-Africa navigable inland waterway system would require political agreement and political cooperation between several national governments. While some regional governments operate and subsidize the operation of railways, they collect a tariff from the truck transportation sector and may be expected to do likewise on vessels that sail along waterways and through navigation locks located within their respective jurisdictions. Vessel operators would likely have to pay transit fees to pass through navigation locks along the future navigable waterway. It may be possible for inland water transportation to be competitive with trucks to transport freight.

During the time of the pharaohs, navigable canals were believed to connect the Nile River to the Red Sea. A redevelopment of such a waterway would connect a possible inland trans-Africa waterway to ports along the coast of Saudi Arabia and as far north as the Gulf of Aqaba.

The dredging precedent of the Suez Canal may be possible for some distance between the Red Sea and Nile River. Modern water-pumping technology can move massive volumes of water to higher elevations and facilitate canal navigation from the Red Sea close to the Nile River.

In the southeastern region, a section of the Zambezi River is navigable with the potential to develop canal navigation north to Lake Malawi. There may be a basis to construct a navigable canal between Lakes Malawi and Tanzania, using the beds of several rivers and streams that flow in the area between the lakes, in northeastern Zambia. It may further be possible to develop navigation between two large dams on the Zambezi River, Kariba and Cabora Bassa. Construction of special canals along a series of rapids could provide river navigation to the Indian Ocean.

To achieve a major revamp of Africa's transportation systems, engineering students attending colleges and universities across Africa could conduct research into the possibility of a modern trans-Africa inland waterway transportation network.

Indian Aircraft Carrier to Redeploy as Hotel:

Indian media have reported that the world's oldest aircraft carrier in active service, the INS Viraat, will be decommissioned at its next call at Mumbai, to begin its future as a floating hotel and conference center.



The Viraat on the occasion of her 50th anniversary

The chief minister of Andhra Pradesh, N. Chandrababu Naidu, recently told media that the defense ministry has proposed to turn the 60-year-old Viraat into a tourist center in a joint venture between the Indian Navy, the Visakhapatnam Urban Development Authority and an unnamed private partner. The ship would be docked at Visakhapatnam, home of the decommissioned Soviet-built submarine Kursura.

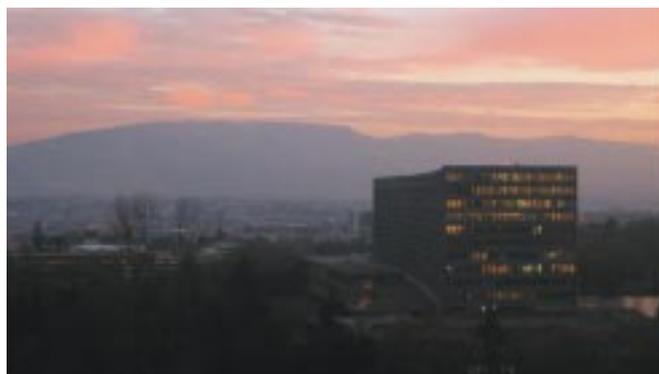
Floatels like the Amsterdam-Botel, near downtown Amsterdam, or the Hotel CPH, in Copenhagen, have been in operation for some time - but the Viraat's new mission in the hospitality industry appears likely to give her the title of world's first and only aircraft carrier open for overnight stays.

"It will have 500 rooms and a conference hall to seat 500 people. Since it is an aircraft carrier, helicopters can easily land on it. It will be convenient to hold conferences, apart from being a major tourist attraction," Naidu said. "It looks like a hotel [at] sea. You can pay around \$1,000 to \$2,000 and stay put in Commander Suite of INS Viraat."

The Viraat's history dates back to the Second World War: the keel of the 25,000 ton displacement carrier was laid down in 1944, but she was left incomplete until the late 1950s. She was commissioned as the British Royal Navy's HMS Hermes in 1959 and served until 1984, including duty as task force flagship during the Falklands conflict.

India purchased her in 1986, gave her a thorough refit, and recommissioned her as the Viraat. She has gone through five midlife shipyard periods since, and in 2014, the Indian Navy announced plans to retire her by the end of the decade.

MLC Certificate Harmonization Agreed: The International Chamber of Shipping, as the Secretariat for the Shipowner Group at the International Labour Organization, co-ordinated employers' representatives from over 20 national shipowners' associations at the second meeting of the Special Tripartite Committee (STC) for the Maritime Labour Convention, 2006, held in Geneva from February 8 to 10.



The ILO building in Geneva

The Special Tripartite Committee was established to keep the working of the Maritime Labour Convention (MLC) under continuous review and to consider proposals for amendments to the MLC where there is a compelling need to consider specific issues.

During this week's proceedings, the Committee agreed to a Shipowner Group proposal to harmonize provisions related to the renewal of Maritime Labour Certificates with similar certificate renewal provisions contained in other international maritime instruments.

Sarah Cerche, acting as spokesperson for the Shipowner Group, explained that: "Shipowners have clear and justified concerns about difficulties with port state control as a result of any delay in issuance of the renewed Maritime Labour Certificate. When it enters into force, this new amendment will crucially ensure that, where a ship has successfully undergone its renewal inspection and all the requirements of the convention are met, any administrative delay in issuing a new certificate will not unnecessarily impede the ship continuing with its work."

The Committee also agreed to amendments highlighting the importance of health and safety on board ships and proposing that Guidance on Eliminating Shipboard Harassment and Bullying, recently issued jointly by ICS and ITF, is taken into account by all concerned.

A new resolution agreed by the Committee also establishes a working group to examine issues related to the protection of seafarers' wages when a seafarer is held captive as a result of acts such as piracy.

Commenting on the outcome of the meeting, Peter Hinchliffe, ICS Secretary General, said: "The meeting has reaffirmed the strength of the tripartite system involving ILO member states and seafarers in debate with shipowner representatives. The effort to promote the widest possible ratification of this landmark maritime convention continues to be a core priority for ICS."

The new amendments to the MLC will now be considered for adoption by the next session of the ILO International Labour Conference, with the entry into force of the amendments anticipated in late 2018. Meanwhile, efforts to make the necessary preparations for the amendments adopted in 2014 (regarding financial security for crew claims and cases of abandonment) continue apace in view of their entry into force in January 2017.

Enclosed Spaces: Indian Ocean MoU

Detained Eight Ships: Eight ships were detained during last year's Concentrated Inspection Campaign (CIC) on Crew Familiarization for Enclosed Space Entry, reports the Indian Ocean MoU.

The MoU's port state members carried out the CIC between September 1 and November 30 last year in conjunction with the Tokyo MoU and the Paris MoU.

Preliminary results, released last week, show that the Indian Ocean MoU inspected 1,454 individual ships resulting in 83 detentions. Ships from 58 flags were given the CIC questionnaire, and the eight detentions represent a detention rate of 0.70 percent.

The highest number of CIC inspections were carried out on ships under the flag of Panama with 293 (25.76 percent) followed by Hong Kong with 141 (12.40 percent) inspections, Singapore with 108 (9.49 percent) and Liberia with 107 (9.41 percent) inspections.

Five flags had CIC-related detentions: Vietnam, Panama and Republic of Korea each had two, Japan and Saint Kitts & Nevis had one each. These flags cover 29.81 percent of the CIC inspections.

The type of ships detained for CIC-related deficiencies were four bulk carriers, two general cargo ships, one heavy load carrier and an offshore support vessel.



The most significant deficiencies found related to issues with:

1. Training in the use of the equipment by the crew members responsible for testing the atmosphere in enclosed spaces (four percent)
2. Crew members responsible for enclosed space emergency duties, familiar with those duties (four percent)
3. Availability of the training manual on board and its contents complete and customized to the ship (17 percent)
4. Participation of ship's crew in an enclosed space entry and rescue drill on board the ship at least once every two months in accordance with SOLAS Chapter III, Regulation 19.3.3 (four percent)
5. Outcome of the enclosed space entry and rescue drill and compliance with the requirements of SOLAS Chapter III, Regulation 19.3.6 (five percent).

The results of the campaign will be presented to the 19th meeting of the Port State Control Committee in September 2016, after which the report will be submitted to the International Maritime Organization.

The Paris MoU and the Tokyo MoU are yet to release their results on the CIC.

Indian Ocean MoU member states

- Australia
- Mozambique
- Djibouti
- Seychelles
- France (La Reunion)
- India
- Tanzania
- Maldives
- Mauritius
- Comoros
- Oman
- Ethiopia
- Sudan
- Kenya
- Bangladesh
- Myanmar
- Eritrea
- South Africa
- Sri Lanka
- Iran
- Yemen

India Seeks to Reduce Bulk Coal Shipments:

India is asking the country's big steelmakers to consider converting local medium-quality coal into premium coking coal to slash an annual import bill of more than \$4 billion for buying that grade from countries such as Australia and South Africa.



Resurgent local output of power-generating thermal coal has been one of Prime Minister Narendra Modi's successes, and the latest project could help India to partly make up for a shortage of coking reserves that forces companies like JSW Steel and Jindal Steel to import heavily.

Coal Secretary Anil Swarup - who has held talks with companies including Tata Steel and SAIL - said the government could ask state-run Coal India to sign long-term contracts with steel companies to supply medium-grade coking coal that currently goes into power plants.

The plan would require investment of a few hundred million dollars for specialised washeries and other equipment to improve the coal quality, but that could lead to savings of billions of dollars in imports, according to Swarup.

"We have raised the quantity of coal produced, the aim is now to improve the quality," Swarup told Reuters. "We are trying to formulate a policy."

This could aid in meeting Modi's goal of making the country self-sufficient in as many raw materials as possible, while at the same time exporting more value-added products like steel to boost local manufacturing and create jobs.

India, the world's third-largest steel producer and once an exporter to neighbouring countries, turned a net importer of the alloy in the past two years after China started to aggressively sell its excess steel across the world.

India is also the world's third-biggest importer of coal, and the surge in local output, mainly of thermal coal, is hurting suppliers of that grade in Indonesia. If India starts to boost coking coal output as well, there could also be a few losers in Australia and South Africa.

But India will be able to substitute only 5-10 percent of the total coking coal imports to begin with, according to Dipesh Dipu, a natural resources expert at Jenissi Management Consultants that advises companies like Jindal Steel.

That could mean annual savings of around \$500 million based on India's imports of about 44 million tonnes of coking coal last fiscal year. The country's total annual coking coal need is about 90 million tonnes.

India is in talks with companies in Poland and Australia for technical help in upgrading its coking coal quality.

It is also trying to douse underground mine fires that have burned for a century in Jharia, in the eastern state of Jharkhand, to better tap the only source of top quality coking coal in the country.

India's total coal imports have fallen for the last seven months, a big change for a country that has struggled to feed its expanding power plants despite having the world's fifth-biggest reserves of more than 300 billion tonnes of the fuel, almost 90 percent of that in thermal grades.

Faster environmental clearances and acquisition of land to expand mines have led to the turnaround, although Swarup acknowledged that India will not be able to produce all of its own coking coal.

"Indian coals can be beneficiated to substitute some amount of imported coals," Tata Steel head spokesman Chanakya Chaudhary said.

Still, India expects its private steel companies and state-controlled SAIL to nearly triple production capacity to 300 million tonnes by 2025, which will further raise demand for coking coal.

"These steps may affect prices a bit but would not have a major impact on imports," said Waseem Ahmad, head of New Delhi-based Sarah Sourcing, which trades in coal from Indonesia, Australia and South Africa.

"India has a bulk requirement and its steel industry will expand."

Paragon Offshore Announces Bankruptcy:

Rig operator Paragon Offshore has announced a pre-packaged bankruptcy deal to cut one billion dollars of debt from its balance sheet.

The firm skipped an interest payment in mid-January while continuing its discussions with its bondholders and lenders, and on Friday, Paragon said that they had reached an agreement. Most of its unsecured bondholders accepted payment of \$350 million in cash, plus 35 percent of the company after bankruptcy, in return for a modification of terms or reduction in principal on Paragon's debt. Additionally, the firm will pay down \$165 million on its revolving credit line in exchange for converting a remaining balance of \$630 million into a term loan, maturing in 2021.



Its current owners will retain a majority stake, but the firm will still have significant outstanding debt following the restructuring. It will still need approval for the deal from a majority of creditors, and if they agree, the firm expects to make its bankruptcy filing by Sunday.

"We . . . have reached agreements that will allow Paragon to significantly reduce its debt while preserving majority ownership for existing equity holders . . . the transaction, once implemented, will allow Paragon to eliminate more than \$1.1 billion of debt and reduce annual cash interest payments by nearly \$60 million," said Randall D. Stilley, president and CEO of Paragon. "Importantly, Paragon will continue to operate as usual, paying our employees and vendors in the normal course while providing the same high level of service to our customers."

In addition, the firm's previous parent company, Noble Corporation, will give Paragon some assistance with preexisting tax liabilities, including assuming half of Paragon's liabilities in Mexico. Noble spun off Paragon in 2014. "For Paragon, the agreement [with Noble] eliminates a potentially significant capital requirement as we defend against these tax claims in Mexico and reduces our ultimate exposure to such claims," Mr. Stilley said.

Like other offshore rig and offshore service firms, Paragon has been hit hard by the decline in oil prices, as state-owned and independent oil companies have pushed to slash overhead, and, in many cases, to terminate drilling rig contracts.

Paragon listed 15 of its 40 rigs as stacked as of its latest January rig status report.

NGO Criticizes Maersk's Ship Recycling

Plan: Ship recycling advocacy organization NGO Shipbreaking Platform issued a statement Friday strongly criticizing Maersk Group's plan to send its vessels to Alang, India's beaching shipbreakers, and to work with Alang's yards to improve conditions.

"Today, the majority of ships are dismantled and recycled at facilities on beaches. Here, the standards and practices often do not adequately protect the people working at the facilities and the natural environment. We have decided to play a role in changing this situation. Alone and in partnership with others, we will work to upgrade conditions at recycling facilities on the beaches in the Alang area, India," said CEO Nils Andersen in the firm's 2015 CSR report.

The new policy is a reversal for the firm. Jacob Sterling, at the time the head of sustainability for Maersk Line, wrote an editorial in 2013 criticizing practices at Alang and other



beaching yards, describing their hazards and the reasons why Maersk would not work with them. "There is something quite wrong with [beaching]," he said. "People on beaches wearing flip flops and no safety gear while taking apart massive cargo ships with hand tools is simply wrong . . . NGOs argue that beaching must end now. We agree. In Maersk Line we have a policy on responsible ship recycling. Since 2006, we have recycled 23 ships responsibly, and we have sent none to the beach."

Most of Maersk's ships are sold to third parties as they are replaced by newbuilds, and relatively few were affected by the no-beaching policy; however, the firm has a large number of vessels reaching the end of their service life in the next five years, and current methods of responsible ship recycling would add more than \$150 million to their disposal costs.

To meet this future need without incurring the added expense, the company intends to help low-cost Alang shipbreakers improve their facilities to meet E.U. and Hong Kong Convention recycling standards, it says, and will send its outmoded ships to Alang instead of the non-beaching yards it has used historically. Maersk Group "will engage with [Alang] facilities as they receive our ships for recycling by having Maersk Group-employed staff on-site to ensure upgrading of standards and conditions are made," the firm said.

NGO Shipbreaking Platform criticized the decision in no uncertain terms. "The fact is that they are already selling ships now to facilities that operate under conditions that would not be allowed in Europe - they admit themselves that the decision to go to India is primarily taken to make their financial report look better," said Patrizia Heidegger, executive director of NGO Shipbreaking Platform.

"In times of low freight rates, Maersk intends to boost its profits by selling to yards that do not comply with European standards. All yards in Alang dismantle vessels in the intertidal zone . . . Environmental concerns remain linked to the abrasion of toxic paints during the beaching process and when cut-off blocks and hulls are winched further up the beach, oil spills and the release of slag and paints chips into the water, and the debris created by the gravity method when blocks crash down on the intertidal zone," the group added in a statement.

As of Friday, Maersk Group had not yet responded to a request for comment regarding NGO Shipbreaking Platform's views.

Maersk Drilling Posts Record Profit: Maersk Group has announced a sharp drop in profit for 2015, down 85 percent from 2014, with losses in the billions at its Maersk Oil subsidiary.

But its rig operator, Maersk Drilling, bucked a weak offshore market to post a profit of \$750 million, its best ever, up from \$480 million in 2014.



The fourth quarter yielded especially positive results, with profits of \$180 million.

Given the state of the offshore market, the announcement is unusual. As of January 2016, Baker Hughes' worldwide offshore rig count was at 242, down by more than one fifth from a year ago, and analysts at Fitch suggest that recovery could be as far off as the second half of 2018.

Maersk Drilling's success reflects high rig uptime, high utilization and a successful cost reduction program, the firm says. Additionally, in 2015 it won 12 contracts worth a combined \$2 billion. These are at lower day rates than in prior years, but they bring total backlog to \$5.4 billion, with high contract coverage through 2018.

Among these was a \$44 million contract with Total's consortium for Block 14 offshore Uruguay, which, at 3,400 meters, may be the deepest-water offshore drilling project in history.

The recycling of the Maersk Endurer and increased idle time had a negative impact on profitability, however, and the firm expects that more rigs will come off contract next year. "Maersk Drilling expects a significantly lower underlying result in 2016 than in 2015 mainly due to lower day rates on new contracts and more idle days," the firm said.

First U.S. LNG Fueling Terminal Opens: Harvey Gulf has opened the first marine LNG fueling terminal in North America.

The move comes less than a year after the delivery of the Harvey Energy, America's first LNG-powered vessel. Harvey Gulf completed a successful LNG bunkering of the Harvey Energy from the newly constructed LNG terminal facility at its operational base in Port Fourchon, Louisiana. The bunkering included the transfer of 43,000 gallons of LNG in approximately 2.25 hours without incident.

The terminal is designed to meet the requirements of 33 CFR part 127 NFPA 59A and able to deliver LNG at a pumping rate of 550 GMP. The total on site storage is approximately 270,000 gallons contained in three 90,000 USG type "C" vacuum insulated tanks.



Shane Guidry, Chairman and CEO of Harvey Gulf, commented: "This is a testament to Harvey Gulf's commitment to promoting the use of LNG, a clean, abundant, and cost-effective alternative marine fuel. With the completion of our LNG terminal at Port Fourchon, we are able to provide a LNG bunkering point at the epicenter of marine operations for the Gulf of Mexico, which is vital to continuing the shift to LNG as a marine fuel."

The Harvey Energy and her sister ship the Harvey Power, both LNG powered offshore supply vessels (OSVs), are under charter to Shell and support Shell's Gulf of Mexico assets.

Harvey Power is the second of six LNG OSVs being built for Harvey Gulf International Marine by Gulf Coast Shipyard Group, and like its sister ship, Harvey Energy, Harvey Power is capable of operating on LNG or diesel fuel.

The vessel also meets the criteria of the ABS Enviro+ Green Passport notation. When operating on LNG, these vessels exceed the new Tier IV emissions regulations requiring lower sulfur oxides and nitrogen oxides emissions as part of the North American Emission Control Area. Operating on LNG, the Harvey Power can operate in excess of 19 days in normal Gulf of Mexico rig supply mode between refueling.

Anthem of the Seas Suffered Propulsion Damage in Storm:

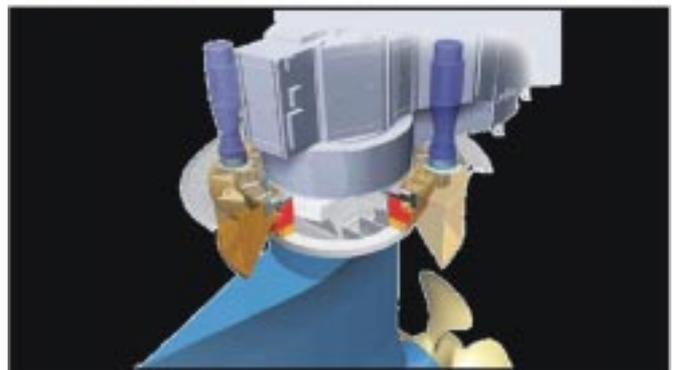
Anthem of the Seas, the Royal Caribbean cruise ship caught in a storm off Cape Hatteras on Sunday, has undergone a series of inspections administered by the U.S. Coast Guard and other agencies since her return to port. Officials announced Friday that her propulsion system was damaged in the heavy weather.

Her port azipod burnt through "all four clutches" during the storm, and was shut down during her return trip as a precaution, the Coast Guard said in a statement.

Coast Guard Sector New York public affairs officer Charles Rowe told Maritime Executive that he was unable to comment on the nature of the clutch failure or what effect it had on operability of the azipod. A Royal Caribbean spokesperson was not immediately available to confirm which components were affected.

Royal Caribbean said in an update post that it had informed the USCG of the clutch failure before the Anthem's return to Cape Liberty, and that a USCG spokesman had "indicated the ship can safely maneuver with a single azipod."

Royal Caribbean publicly reported superficial damage to the



vessel on February 8. "The ship has sustained some damage to the public areas and guest staterooms, which in no way affect the sea-worthiness of the ship," said Royal Caribbean spokeswoman Cynthia Martinez on Monday.

Later that day, the firm announced that it had diverted the ship back to Cape Liberty and canceled the remainder of her voyage, citing a bad weather forecast ahead and the poor passenger experience during Sunday's storm. Martinez reiterated that "while the weather was unpleasant, the ship remained seaworthy at all times." The firm did not make public mention of the damage to the azipod at that time.

Work continues on repairs and testing, the USCG said, with technicians working to replace the clutches on both the port and starboard side azipods.

The USCG is also supervising testing of all SOLAS equipment. The ship's lifeboats sustained minor damage, the agency says, and it will be repaired and the boats thoroughly tested by the manufacturer.

The inspection and service appears to be on schedule for the Anthem's next sailing, but the USCG says that the Captain of the Port will not permit the vessel to leave until both port state and flag state (Bahamian) authorities are satisfied with its condition.

National Transportation Safety Board officials are also participating in an investigation of the circumstances of the Anthem incident, the USCG says. The NTSB has been asked to open a formal inquiry into the Anthem's presence off Cape Hatteras at the time of the storm.

According to cruiseschedule.com, the Anthem's next

scheduled sailing is set for Saturday, February 13 at 1500 hours local time, and Royal Caribbean's customer service staff.

Australian Seafarers: Bullying or Decisive Action?:

The debate over Australia's sacked seafarers escalated on Friday with complaints made in both national and international forums. Union representatives have talked of conspiracy, bullying and harassment, but the other side of the story is one of a shipowner taking decisive action after being "extremely tolerant" in the face of prolonged illegal industrial action.

In the latest developments of the saga, the Seafarers' Group strongly criticized the Australian government's role in undermining Australian workers in maritime cabotage trades during a meeting at the International Labour Organization (ILO) in Geneva this week.

The Seafarers' Group represents workers in the maritime sector in ILO forums. It includes the International Transport Workers' Federation (ITF) as well as Chinese seafarers' unions.

The criticism comes after five sacked Australian crewmen refusing to leave the MV Portland were removed from their beds in the early hours of January 13, marched from the vessel and abandoned on the wharf.

They were replaced by an Indian crew, and questions still remain about the type of visas these workers were on and the customs clearance they had received, says the ITF.

Australia has cabotage laws which cover trade through domestic ports and the use of both Australian-flagged and Australian-crewed vessels.

The Australian senate voted in November to retain these laws, yet the government has twice pushed ahead with the issuing of a temporary license. In the second case, the sacked crew was forced from the CSL Melbourne by police officers early on February 5.

CSL Melbourne Community Assembly Brisbane February 6: Parliament Hears of Conspiracy:

Back in Australia, the ITF has been voicing its complaints to the Australian Parliament. A parliamentary committee heard this week that the Australian Maritime Safety Authority (AMSA) was aware an Australian crew would be removed from the MV Portland three weeks before it happened.

It heard that the government did not question whether shipowner Alcoa had a genuine commercial reason for needing a temporary license to lower costs, because the relevant legislation doesn't act in that way.

ITF president Paddy Crumlin said the Australian government and its agencies had deliberately not told the workers and their union that they were to be replaced.

"The Australian government has been identified as being part of an organized conspiracy of harassment and bullying including against the Indian seafarers who were denied their rights," Crumlin said.

"This action has brought Australia into serious disrepute in the international maritime and labor movement, while the Australian government appears to have failed its duty of care as a port state operator under the Maritime Labour Convention."

Dave Heindel, chair of the ITF seafarers' section, said: "The Australian government's behavior has now been raised at the heart of the ILO. That government's apparent disregard for its seafarers, national shipping industry and even its own laws, has been exposed at this important international forum. The recent raids on the vessels Portland and Melbourne call out for censure."

Support from India

Abdulgani Serang, general secretary-cum-treasurer of the National Union of Seafarers of India said: "India has cabotage. We have Indian-flagged ships and those are totally manned by Indian seafarers. Likewise we support seafarers working on the national-flagged ships of their countries.

"The Australian flag has to be for Australian seafarers. In this case our Australian brothers were taken off the ship and replaced by deceit. They were replaced by Indian seafarers, our members, who were deceived and not made aware of what was really going on - that they were replacing Australian seafarers on an Australian-flagged ship in an Australian port.

"My union has condemned this fraud. We are all for Australian jobs on Australian-flagged vessels. We support the Australian seafarers."

ITF Makes Official Complaint about Third Vessel

As part of on-going action relating to temporary licenses, the ITF has now made a formal complaint to the Fair Work Ombudsman over a Hong Kong registered bulk ship working on the Australian coast since December last year without a temporary license.

During an ITF inspection of Friday, the master of the Shanghai Spirit revealed he had no idea what a temporary license was. ITF inspectors boarded the ship at its berth in Port Kembla.

ITF National Coordinator Dean Summers said the ITF is also calculating a big back pay for Chinese seafarers on a sister ship in Melbourne, Asia Pearl 6, which is expected to reach US\$100,000.

"What is most extraordinary, however, is that a third ugly sister of the fleet, Asia Spirit, involved in the vicious Alcoa coastal dispute, has refused access to the ITF in Portland," Summers said. "The refusal to allow ITF inspectors on board the Portland's replacement flag of convenience ship is an admission of guilt."

The owners of the three ships Asia Maritime Pacific have an office in Hong Kong but are based in Shanghai.

At the time of the removal of the MV Portland crew, Alcoa issued a statement saying it had taken decisive action. "Alcoa has been extremely tolerant and given the Maritime Union of Australia (MUA) and its members every opportunity to stop their illegal industrial action," said Alcoa of Australia

Managing Director Michael Parker.

"Instead, the MUA has held our ship hostage for two months; disrupting the lives of other crew members, disrupting operations at the Port of Portland, and threatening the Portland community with the loss of cruise ship visits.

"The MUA acted as if it was above the law, defying Fair Work Commission and Federal Court rulings; leaving the ship managers with no option but to replace the MUA crew - with the full support of Alcoa."

The MV Portland is owned by Alcoa Portland Aluminium Pty Ltd which holds a contract with ASP Ship Management Pty Ltd (ASP) to operate the vessel. The crew of the MV Portland are employees of ASP Ship Management.

With the price of aluminium at levels not seen since the global financial crisis, the global aluminium industry, and in particular aluminium smelters, are under considerable pressure, with many running at a loss, said Alcoa in the statement.

In Australia, Alcoa's focus is on reducing operating costs and improving productivity to help all our facilities remain internationally competitive, both now and into the future. Alcoa Inc announced on November 2, 2015, it would idle three smelters in the United States, and on Thursday January 7, 2016, that another smelter in the U.S. will be closed.

One of the many cost saving measures being taken at Portland Aluminium smelter is to sell the 27 year old MV Portland in an attempt to help protect approximately 700 direct jobs and many more indirect jobs associated with the smelter.

The savings to the smelter are not insignificant - more than \$6 million per year.

The MV Portland is near the end of its operating life and is scheduled for a statutory dry-dock in mid-January 2017. The cost to keep it operational is expected to be in the \$millions.

Alcoa chose to sell the vessel and replace it with a more cost efficient method of delivery of alumina from Western Australia to the Portland Aluminium smelter.

The MV Portland is crewed by ASP. There are approximately 40 people in the total crew pool, with 19 on the vessel at any one time, including seven MUA members. Alcoa has been advised that two of the MUA crew members live in Portland.

Amazon Registers as a Freight Forwarder in China: Amazon.com is aggressively expanding its logistics operations in China as part of a broader effort to control the rising cost of shipping billions of packages.

Its plans in China, outlined in filings there, include handling cargo and customs for goods headed to ports in Japan, Europe and the United States.

Some analysts say the move could help position Amazon to offer shipping services to other companies, eventually competing with the likes of United Parcel Service and DHL



Worldwide Express.

That would mirror the strategy of Amazon's cloud computing arm, Amazon Web Services, which is now the company's fastest growing unit. The service was launched to serve Amazon's own retail operations but now hosts data for other companies.

Seattle-based Amazon faces increasing pressure from Wall Street to drive down shipping costs, which rose 37 percent in the most recent quarter compared to the same period a year ago.

A spokeswoman for Amazon declined comment.

The company revealed its China plans in documents filed with regulators there.

Amazon registered its Chinese subsidiary, Beijing Century Joyo Courier Service, as a freight forwarder - a type of broker that does not own ships but handles customs and other documentation - with China's transport ministry last year, allowing it to export cargo out of the country.

Amazon's Chinese subsidiary also made a similar application with the U.S. Federal Maritime Commission in November.

Amazon also filed an application with the Shanghai Shipping Exchange to serve as a shipping broker for 12 trade routes, including Shanghai to Los Angeles and Shanghai to Hamburg, Germany.

"These are major gateway ports," said John Manners-Bell, who heads Transport Intelligence, a logistics analysis firm. "They appear to be laying the foundation for a large forwarding operation."

In documents Beijing Century Joyo submitted to the exchange, the company said it plans to charge customers between \$530 and \$2,530 to transport a 40-foot dry van container from Shanghai to Hamburg. The rate is comparable to those charged by other forwarders, and the wide range gives it flexibility to adjust its prices based on volume.

Forwarders typically negotiate rates with shipping lines and pass them on to the owners of cargo.

Last November, Beijing Century Joyo updated its Beijing business registration. The company offers a suite of logistics services such as domestic delivery and handling the import and export of goods.

Brian Xue, vice president of operations for Amazon in China, signed the government filings. Xue, who joined Amazon in

2014, has emerged as a champion for its logistics build-out in China.

Analysts expect Amazon to use its new freight forwarder license to make it easier for Chinese merchants and manufacturers to transport their goods to major hubs where Amazon has warehouses that ship goods to customers.

Amazon would handle paperwork and select the shipping line that will transport the goods and make sure there are trucks on the other end to take shipments to its fulfillment facilities. Merchants will deal only with Amazon rather than multiple companies for trucking, warehousing and shipping.

The license also would allow Amazon to cut shipping costs by bundling products from small and medium-sized companies to fill up containers, analysts said.

Amazon rival Alibaba Group Holding has been asserting greater control over its logistics network in China, spending billions on buying stakes in package delivery companies and launching a logistics arm that has been investing in warehouses.

Amazon directly imported about 10,000 20-foot containers into the U.S. last year and received an additional 20,000 containers from merchants as part of the company's Fulfillment by Amazon program, according to an analysis by Ocean Audit, a freight auditing consultancy.

The program allows merchants to store their products in Amazon warehouses and makes them eligible for Prime, which promises consumers two-day shipping for \$99-a-year for goods from merchants who sign up for the program.

Some 90 percent of the shipments originated in China, according to Ocean Audit.

It's not clear how many merchants have signed up to use Amazon's freight services. Amazon China announced a new, cross-border logistics service to cater to Chinese merchants last October, and ocean freight appears to be part of its offering.

But freight forwarders already handling Amazon's suppliers stand to lose business. Amazon could dictate that merchants use its forwarding service, said Cliff Sullivan, chairman of the Hong Kong Association of Freight Forwarding and Logistics.

"We may get cut out," he said.

Amazon tried to tamp down concerns about its ambitions in the logistics industry on a recent earnings call, saying it did not plan to "replace" carriers like UPS but to handle more of its own deliveries at peak times.

But for the first time, the company noted in a recent filing with the U.S. Securities and Exchange Commission that it views companies that provide "fulfillment and logistics services for themselves or third parties" as competitors.

The retailer operates more than 120 fulfillment centers worldwide that hold millions of products supplied by third party merchants and Amazon's own vendors and where warehouse workers pick and pack items for shipment.

Amazon rolled out thousands of its own trailers and launched

an Uber-like delivery service last year to handle the so-called last mile of delivery, taking packages from distribution centers to customers' homes.

"At the very least, Amazon will begin handling their own freight," said Zvi Schreiber, the chief executive of Freightos, a start-up that provides an online marketplace linking forwarders and logistics vendors.

"The next stage would be to offer the service to third party clients."

Some in the industry warn companies like Amazon against straying from their original business model.

"They're moving into something that could be potentially very treacherous," said Andreas Krueger, head of ocean freight for DHL Global Forwarding in the Americas, speaking generally about new entrants into the logistics industry.

DHL Global Forwarding, one of the biggest players in air and ocean freight, handles customized logistics programs.

"The worst that would happen is we get another competitor in our midst, but I'm not concerned," he said. "We've been in the business since 1815."

New AUV Center for Antarctic Technology:

A new autonomous underwater vehicle (AUV) facility will be built at the University of Tasmania's Australian Maritime College specializing in polar technology.

"This facility will be a hub for world-class AUV research and technology. Through local and international collaborations, we aim to develop new data collection capabilities, improve reliability and increase autonomy of underwater vehicles," AUV Facility Coordinator Peter King said.

"One of these projects, the Antarctic Gateway Partnership, will see us acquire and develop an AUV that tackles the great engineering challenges of venturing far beneath ice-covered waters to further our understanding of the Antarctic's role in the world's climate."

The facility's fleet of autonomous robots includes UBC-Gavia, Mullaya and the soon-to-be-procured Antarctic Gateway Partnership AUV.

The \$24 million Antarctic Gateway Partnership is a Special Research Initiative of the Australian Research Council bringing together the University of Tasmania, CSIRO and the Australian Antarctic Division to build further polar research capability in Tasmania as a gateway for Antarctic research, education, innovation and logistics.

Key objectives of the Partnership include:

- Developing a next-generation, hybrid, polar AUV/ROV to acquire high resolution data under sea ice and ice shelves;
- Providing a near real-time sea ice charting service to vessels operating in the East Antarctic and conducting research to support sea ice forecasting;
- Advancing understanding of how the oceans melt Antarctic ice shelves, and quantifying present and future Antarctic Ice Sheet mass loss and its contribution to sea-level rise;



- Building understanding of environmental controls on marine life, ranging from pelagic microbes to benthic communities using various sampling platforms, lab-based microbial culture experiments, habitat and life history assessments of mesopelagics, and regional process studies; and

- Assessing the contribution of the Antarctic Ice Sheet to sea level since the Last Glacial Maximum (~20,000 years ago) via geophysical observations and modelling.

The Antarctic Gateway Partnership has contributed \$3.6 million in funding for the new AUV and four of the new staff positions, with a further \$3.75 million and one staff position contributed by the Australian Maritime College.

Launceston firm Artas Architects were tasked with designing a facility big enough to accommodate the Antarctic Gateway Partnership AUV, which will measure up to eight meters (26-foot) long, weigh three tons and be capable of transiting more than 100 kilometers (62 miles) while collecting data from the sea floor at depths of about 4000-5000m (three miles), and beneath ice shelves and sea ice.

Building works are expected to be completed in late 2016.

Maersk, MSC, Others Offer to Settle Pricing Probe: Leading shipping container groups Maersk, MSC and 13 other firms have offered to change their pricing practices to settle an E.U. antitrust probe and stave off any fines, three people familiar with the matter said on Wednesday.

The case is being closely watched by other sectors such as supermarkets and chemical firms which use similar methods to announce future price hikes to enable customers to choose the best rates and are keen to get some regulatory guidance.

The European Commission opened an investigation into the companies, among the world's 18 largest shipping liners, in November 2013 following dawn raids in May 2011.

The E.U. competition enforcer said the shipping companies may have been illegally orchestrating price hikes since 2009 via public announcements of rate increase plans on their websites and in the specialized trade press.

The companies have offered to publish binding actual rates a month before they go into effect, the people said. In some circumstances, the figures may act as a price cap. A third source said the offer applies only for short-term prices, not

long-term ones or annual contracts.

The Commission is expected to seek feedback from third parties this week or next before deciding whether to accept the pledge and close the investigation, the people said.

A finding of wrongdoing could have exposed the firms to fines of as much as 10 percent of their global turnover.

Maersk and its rivals have been hit by low rates for container freight.

The other companies involved are number three player CMA CGM, Taiwan's Evergreen Marine, Germany's Hapag Lloyd, China Ocean Shipping (Group) Company (COSCO), China Shipping, Hamburg Sud, South Korean firm Hanjin, OOCL (Orient Overseas Container Line), Japan's Mitsui OSK Lines (MOL), United Arab Shipping Company, Nippon Yusen Kaisha, Hyundai Merchant Marine and Israeli peer Zim, the sources said.

Commission spokesman Ricardo Cardoso, Maersk, Hapag Lloyd and Zim declined to comment. CMA CGM did not immediately respond to a request for comment. COSCO, China Shipping, Hyundai Merchant Marine, United Arab Shipping Company and Hamburg Sud had no immediate comment.

Nippon Yusen and Mitsui OSK were not immediately available to comment outside office hours.

BP Energy Outlook: Demand to Increase by Thirty-Four Percent: Despite current weakness in global energy markets and the slowdown in China's growth, demand for energy will continue to grow over the next 20 years and beyond as the world economy expands and more energy is required to power the higher level of activity.



According to the 2016 edition of the BP Energy Outlook, published this week, global demand for energy is expected to increase by 34 percent between 2014 and 2035, or by an average of 1.4 percent per year. This growth in overall demand includes significant changes in the energy mix, with lower-carbon fuels growing faster than carbon-intensive fuels as the world begins to transition to a lower-carbon future.

"In the middle of a downturn in oil and gas prices, it is important not only to adapt to the current tough conditions, but also to prepare for the next set of challenges. Energy is a long-wavelength industry and we need a long term perspective of how the energy landscape we operate in is likely to evolve," said Bob Dudley, Group Chief Executive.

"As this year's Outlook demonstrates, the world is going to continue to demand growing supplies of energy but the mix of those supplies is changing and becoming less carbon-intensive. However, further policy action may be necessary to meet international targets to limit carbon emissions."

Oil and gas remain a key source of growth

Despite the rapid growth of other sources, the Outlook projects that fossil fuels will remain the dominant form of energy over the period to 2035, meeting 60 percent of the projected increase in demand and accounting for almost 80 percent of the world's total energy supplies in 2035.

Gas will be the fastest growing fossil fuel, increasing 1.8 percent a year and oil will grow steadily at 0.9 percent a year, although its share of the energy mix continues to decline. Growth of coal is projected to slow sharply, such that by 2035 its share in the energy mix is at an all-time low, with gas replacing it as the second-largest fuel source.

Non-fossil fuels are projected to grow even faster than anticipated in last year's Outlook. Renewables, including biofuels, are projected to grow at around 6.6 percent per year, and as a result their share in the energy mix increases from three percent today to nine percent by 2035.

Drivers of demand

"The outlook for the next 20 years is for continuing growth of energy demand as the world economy expands and more energy is required to power higher levels of activity," said Spencer Dale, Group Chief Economist.

Income and population are the key drivers behind the growing demand for energy. By 2035 the world's population is expected to reach nearly 8.8 billion, meaning an additional 1.5 billion people will need energy. Over that same period, GDP is expected to more than double, with China and India accounting for half of the projected increase.

"The continuing reform of China's economy towards a more sustainable pattern of growth causes growth in its energy demand to slow sharply - weighing most heavily on global coal, which grows at less than a fifth of the rate seen over the past 20 years," explained Dale. "The world is fundamentally changing and we see evidence of this in how and what type of energy is consumed."

More than half of the increase in global energy is used for power generation, with much of that increase taking place

in regions where a large part of the population have limited access to electricity.

Power generation is a sector where all fuels compete and it will play a major role in the evolution of the fuel mix as renewables and gas replace coal-fired power stations. Renewables account for over a third of the expected growth in power generation.

Strong growth in emerging economies will drive the demand for oil, with China and India accounting for over half of the increase in world demand, as the number of vehicles on the planet more than doubles.

Increases in supply

The supply of natural gas grows robustly, underpinned by strong increases in shale gas production around the world - this is projected to grow at 5.6 percent a year. The share of shale gas in total gas production rises from 10 percent in 2014 to nearly 25 percent by 2035.

Global liquids supply will expand by nearly 19 million barrels a day by 2035, led by growth in non-OPEC supply, particularly U.S. shale oil. OPEC is likely to act to maintain its market share of around 40 percent.

Carbon emissions growth halves over the next 20 years

The growth rate of carbon emissions over the period of the Outlook is expected to more than halve relative to the past 20 years - growing by 0.9 percent a year, compared to 2.1 percent a year. The sharp reduction in the rate of emissions growth reflects, in almost equal parts, faster improvements in energy efficiency and a reduction in the carbon intensity of energy.

Predictions from the report

Renewables account for a quarter of global primary energy growth out to 2035 and over a third of the growth in global power generation.

E.U. energy demand in 2035 is back to where it was 50 years earlier, despite the economy being almost 150 percent bigger.

The U.S. achieves overall energy self-sufficiency by 2021 and oil self-sufficiency by 2030.

China surpasses the U.S. as the world's leading oil consumer by 2035, but per capita oil consumption will remain just 27 percent of the U.S.

The growth of global gas consumption from 2014 to 2035 is more than the current gas production of U.S. and Russia combined.

By 2035, coal accounts for less than 25 percent of primary energy, its lowest share since the industrial revolution.

China adds more renewable power over the Outlook than the E.U. and U.S. combined.

Spare refining capacity plus planned additions over the next five years is enough to meet the growth in crude supplies over the Outlook.

Britain Deploys Ships to NATO Naval Groups Once More:

The British government has announced that it is deploying five warships to join NATO's standing maritime forces in the North Atlantic, North Sea, the Baltic and the Mediterranean, as part of a counterweight to a growing Russian presence.

The assets deployed will include a destroyer, the frigate Iron Duke and three minesweepers. They will be the nation's first naval contribution to NATO standing forces in six years.

Secretary of State for Defence Michael Fallon described the mission as "a strong message to our enemies."

"2016 will see a particular focus on the Baltic region with our ships sent there as part of the Maritime Group, the Mine Counter Measure Group and the Baltops exercise," he said.



The Royal Navy's flagship vessel, the amphibious assault ship HMS Ocean, will also participate in the NATO Baltops exercise later in the year, and two British frigates will join in a NATO anti-submarine warfare (ASW) exercise.

Russian naval forces - especially submarines - have become a concern to NATO defense officials in recent months. Vice Admiral Clive Johnstone, Commander of NATO's Maritime Command, said that his servicemembers were reporting "more activity from Russian submarines than we've seen since the days of the Cold War . . . [with] a level of Russian capability that we haven't seen before."

Britain has recently had to call in airborne ASW assistance from Canada and from France in the North Atlantic following reported sightings of Russian submarines. Additionally, a Russian naval group transited close to Britain in November and again in December.

News of the British NATO deployment comes as American and European forces conduct a series of drills and exercises as part of Operation Atlantic Resolve. The U.S. Department of Defense describes the ongoing operation as a "demonstration of our continued commitment to the collective security of NATO.... in light of the Russian intervention in Ukraine specifically."

In addition to exercises in Poland, Latvia, Romania and other eastern European nations, the DoD has deployed the so-called European Activity Set, war materiel comprising some 12,000 pieces of military equipment, which will be stored in Romania, Bulgaria and Lithuania.

The Obama administration has proposed to increase

American spending on European military activities by a factor of four in 2017, to \$3.4 billion, and to send an additional 3,000 troops to bases in Europe.

Russia Formalizes New Arctic Shelf Claim:

Russia formally presented its latest claim to the Arctic seabed to the United Nations on Tuesday.

The claim is part of a long-term effort to claim territory and mineral rights under the polar ice cap. Russia presented an earlier claim in August last year after its 2001 claim was rejected on technical grounds.

The latest claim was presented by minister for natural resources Sergei Donskoy who said his claim sets out Russia's arguments based on scientific evidence that the continental shelf extends north from the Eurasian land mass far under the ice cap.

"The new application is for the same area, but features an update in light of new evidence that proves Russia's claim is correct," Donskoi said.



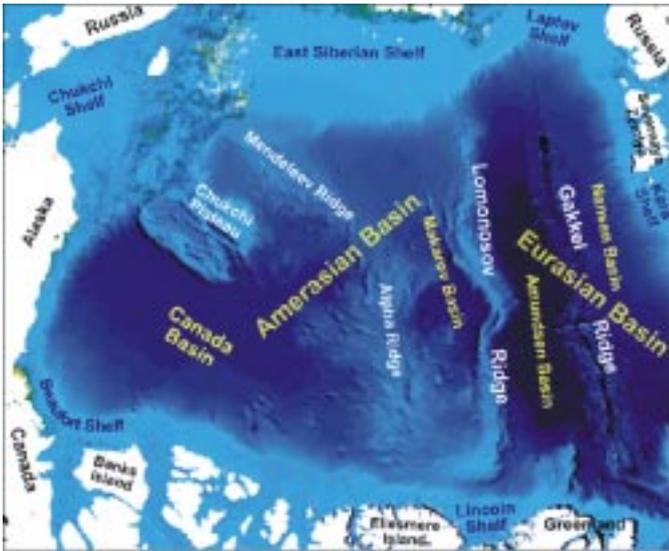
Russia claims areas beyond the 200-mile exclusive economic zone that cover the shelf of the Russian Arctic marginal seas, part of the Eurasian Basin (the Nansen, Amundsen basins and the Gakkel Ridge), and the Central Amerasian Basin, which includes the Makarov Basin and the Central Arctic Submarine Elevations. Research has shown that the main parts of the Central Amerasian Basin are of continental origin and belong to submarine elevations that are natural components of the continental margin.

Russia believes the data proves the continental origin of the Lomonosov Ridge, the Mendeleev-Alpha Rise, the Chukchi Plateau and the fact that they are extensions of the shallow-water Eurasian shelf.

According to UNCLOS, a nation can claim an exclusive economic zone over the continental shelf abutting its shores. This would mean in Russia's case that the seabed under the North Pole would be subject to its oversight for mining and drilling.

Russia is not the only country to lay claim to a part of the Arctic shelf. Both Russia and Denmark have contested parts of the Amundsen Basin, Lomonosov Ridge, Makarov and Podvodnikov basins and the Mendeleev Rise. A part of the Makarov Basin and the Mendeleev Rise is contested by both Russia and Canada.

Denmark's application significantly overlaps with Russia's, in particular around the Lomonosov Ridge. Last year the



country made a submission, which is expected to be considered at the current U.N. session.

Speaking at the session, Donskoi mentioned consultations that Russia had with Denmark and Canada. He stressed that the parties had reached an understanding concerning the consideration of applications and added that the commission had received three verbal notes from Canada, Denmark and the U.S. "None contained an objection to the partially revised Russian application."

"Taking into account the quality of evidence supporting the claim and the past experience in working with the U.N. commission, we are expecting the decision to be positive," Donskoi told RIA Novosti.

In 2007, Russian Arctic explorer Artur Chilingarov, at the Kremlin's behest, piloted a miniature submarine to the sea floor directly below the North Pole, scooped up a soil sample and planted a Russian flag made of titanium.

Russia's aspirations to control the Arctic go back as far as Joseph Stalin's rule last century, when the Kremlin claimed a pie-shaped section of the Arctic Ocean extending from its eastern and western borders to the North Pole.

Russian President Vladimir Putin has declared the Arctic an area of "special interest." According to the Bellona Foundation, he has bolstered naval presence there to such an extent that he's spent more money building new nuclear submarines than was cooperatively spent by the US and Russia to dismantle Russia's ballistic missile submarines after the fall of the Soviet Union.

In Down Market, More Offshore Firms Look to Wind: Norwegian offshore supply operator Eidesvik Offshore has become the latest offshore oil and gas services firm to diversify into offshore wind contracts.

The company has recently chartered its Bahamas-flagged subsea construction and support vessel Acergy Viking to Siemens Wind Power on a nine-month contract. She will be used as an accommodation and service ship for offshore wind services in German waters, Eidesvik says.

The Viking has a 100-ton crane, an ROV-ready back deck,

and accommodations for 20 crewmembers and 40 project staff. She will deploy later this year following a mobilization program, including the installation of a gangway system.

The contract is Eidesvik's first in the wind market, though the firm has been looking at diversifying in this direction for some time.

"I am pleased . . . that we now will enter a new business segment with one of our existing Subsea vessels," said Eidesvik CEO Jan Fredrik Meling.

The OSV market has contracted dramatically with falling oil prices and rig counts, and other offshore oil and gas supply and construction companies have begun competing for offshore wind contracts in recent months. Pressure to find new revenue is high: Clarksons recently estimated that some 500 offshore vessels are laid up worldwide, and marine brokerage M3 Marine estimates that OSV day rates are down by about 40 to 60 percent. Rig forecasts are also down, suggesting low demand for an extended period. For a small but growing number of operators, offshore wind offers a way to pull idle vessels out of layup and put highly-trained crews back to work - or to diversify by ordering purpose-built wind farm service ships in a depressed shipbuilding market.

Other offshore firms with a new presence in the wind industry include Ocean Installer, Østensjø Rederi and Bibby Marine Services. And some - such as Singapore's EMAS - have included both subsea oil and gas and offshore wind projects in their portfolios for some time, giving them a diverse income stream in a time of economic uncertainty.

USCG Will Inspect Anthem of the Seas For Storm Damage: The U.S. Coast Guard has announced that it will inspect the cruise ship Anthem of the Seas when she returns to Cape Liberty, New Jersey on Wednesday evening. The agency said that a team of inspectors will examine the ship to "verify the extent of damages and ensure repairs are satisfactorily completed" before the Anthem is allowed to leave port again.

The USCG has the authority to inspect vessels for purposes of Port State Control, but "Anthem of the Seas is a Bahamian-flagged vessel and Bahamian investigators will take the lead in the investigation," the USCG said.

The Coast Guard added that the vessel was still maneuverable and seaworthy.

The Anthem of the Seas suffered damage to her interior



on Sunday in a storm off Cape Hatteras, when she experienced seas in the range of 30 feet and wind gusts of over 100 knots, according to on-board meteorological instruments. Her 4,500 passengers were confined to their cabins during the worst of the storm; only minor injuries were reported. Royal Caribbean chose to divert the Anthem back to her home port, Cape Liberty, instead of continuing her planned seven day voyage to the Bahamas.

The Anthem's presence off Cape Hatteras at the time of the storm has attracted scrutiny from elected officials like Senator Bill Nelson, Democrat of Florida, who has called for an investigation. "The thing about this storm was that it was forecast for days. So why in the world would a cruise ship with thousands of passengers go sailing right into it?" the senator said Monday.

The National Transportation Safety Board told media that Senator Nelson had asked the agency to fold an investigation of the Anthem into its inquiry into the loss of the ro/ro El Faro. "[The El Faro] investigation includes a weather group that is investigating TOTE Maritime's decision-making processes regarding vessel operations in hurricanes and other heavy weather occurrences. The Anthem of the Seas incident may provide us an additional opportunity to learn best practices that cruise line operators employ for operating in heavy weather," said the NTSB.

Anthem Captain Claus Andersen filmed a discussion of the storm, widely available on video as of yesterday. "We were supposed to have around four to five meter seas, which is 12-15 feet," he said, with winds of 40-50 knots. "It developed so quickly. That was the special thing. In eight or nine hours it goes from being nothing to a full-blown storm."

However, Ryan Maue, a digital meteorologist for WeatherBell Analytics, disagreed with Captain Andersen's assessment that the conditions off Cape Hatteras were worse than predicted. He told NJ.com that "the storm was well forecast by many different weather models from every agency. This was not a surprise to anyone watching the weather on a daily basis."

NOAA spokeswoman Susan Buchanan told media that alerts regarding the storm were issued beginning Friday, with an official warning product issued Saturday.

Ballast Water Management: Time for a New Generation: The IMO has confirmed that conditions have not yet been met for the Ballast Water Management Convention to enter into force, giving



shipowners, equipment manufacturers and engineering service providers time to embrace what are now considered as third generation technological solutions. Will there be time to consider a fourth generation?

"The third generation of systems are being tested for U.S. Coast Guard approval at this moment," says ballast water management consultant Jad Mouawad. "However, a fourth generation of UV-based treatment systems are now being forced to be developed. This is due to the new ruling by the U.S. Coast Guard not to accept the most probably number method as a valid method for evaluation of efficacy under Coast Guard Regulations.

"To add to the generation trend, we have the new ruling against the U.S. EPA whereby they are required to look into a more stringent standard than the IMO D-2 standard that they adopted. If this is not handled properly, we will end up with yet another generation of systems trying to meet this more stringent standard that no one yet knows anything about."

Installation Errors: Mouawad says that there are a large but unknown number of systems that have been installed on board ships incorrectly. "We can make as many generations as we want, but if we don't manage to install them correctly and then operate them correctly, nothing will help.

"For us at Mouawad Consulting, this is the single area in our services that is increasing dramatically. Many shipyards, many designers are making mistakes during installation and shipowners are calling us to inspect, identify and correct mistakes.

"When even the best shipyards and well-known engineering firms cannot install a treatment system properly, how can we expect the industry to meet the deadlines of the Convention and really do ballast water management, not just on paper?"

Day-to-Day Operations: Invasive species consultant Dr Robert Hilliard of Intermarine Consulting agrees many of the already type approved systems are now essentially third generation technology. "Most will continue to get tweaked and provided with improved control, self-monitoring, auto-reporting features etc. However, until the various types of treatment start getting regular ship-board use, it's difficult to predict which will prove the most reliable and cost-efficient regarding day-to-day performance and maintenance needs.

"For the UV systems, I expect relatively few will get fitted

to the smaller ships that must deliver containers, break-bulk, scrap, timber, chemicals, veg. oil, fuel, cement or asphalt in the silt-laden berth pockets of shallow estuaries, where navigation is restricted to the high tide. These could face transmittance losses below 45 percent from sucking high levels of suspended silts, clays and colloidal organics whenever a full cargo is delivered.

"Avoiding this by restricting ballasting to the clearer high tide period could delay unloading and/or the departure time. Ships must be ready to depart on the high tide in order to escape the berth pocket and approach channel, but with sufficient ballast on board to provide a sufficiently level trim with at least 90 percent or 95 percent of the propeller immersed, depending on the port's rules."

A Case in Point: Equipment manufacturers continue to announce their success in developing their technologies and winning new orders. Cathelco's announcement this week of an order for a new offshore vessel built by Eastern Shipbuilding Group for Harvey Gulf International Marine, provides an example of the growing sophistication of UV systems.

The Cathelco system is based on a combination of filtration and UV technology and has a capacity of 150m³/hr. It received IMO Type Approval in May 2014 and went on to gain AMS Acceptance from the U.S. Coast Guard a few months later.

"We are one of the few ballast water treatment system manufacturers using UV technology that has no restrictions on the salinities in which ships can operate in U.S. waters. Our system has been approved and accepted to work in marine, brackish and fresh water, allowing vessels to enter the Great Lakes and other inland waterways," says Peter Smith, sales director of Cathelco.

As one of the new generation of systems, it can operate effectively in the most challenging water conditions, he says. The AMS approval recognizes that the system will continue to disinfect heavily silted seawater where UV light transmittance values are as low as 45 percent (75 percent being the value for normal seawater.)

"All of these factors, combined with the stringent IMO test procedures, demonstrate our commitment to future proofing the system, so that owners can have confidence in their ballast water treatment system selection," Smith says.

Cathelco's systems are available with capacities from 34m³/hr to 1,200m³/hr in a single unit. In order to maintain its effectiveness, the system automatically adjusts to different sea water qualities. Unlike some systems which simply measure turbidity (amount of suspended sediment), the Cathelco system uses a UVT sensor to measure UV light transmittance - the amount of UV radiation actually passing through the seawater. The company says this is a far more reliable parameter for calculating the UV dose as well as ensuring that power is used economically. Another important factor is the use of stepless power control, again ensuring that power is used as economically as possible.

The UV chambers are some of the smallest on the market. Each unit is a twin chamber with only two lamps (100m³/



hr per lamp) and is designed to make the sea water flow along one side and then the other - doubling UV exposure. In addition, the manifolds make the water flow in a helix, ensuring that the maximum surface area is exposed to the UV light source.

A cleaning system using special cleaning balls is used to remove residue from the quartz sleeves and internal surfaces of the chamber. This means that the system does not use chemicals, and there are no mechanical parts to scratch the surface of the sleeves.

In the Market from the Beginning: Despite the generational turnover in technology, some manufacturers have maintained their place in the market from the early days. One such company is Ecochlor. The company announced this week that SCF Novoship Technical Management has selected its system to be retrofitted on three Aframax oil tankers and one product carrier.

"SCF Novoship Technical Management required a ballast water treatment system that is highly effectively in extreme climate conditions," explained Tom Perlich, president and founder of Ecochlor, "has low power consumption and is nearing completion of the U.S. Type Approval process. The Ecochlor ballast water treatment system met all of these requirements."

The Ecochlor ballast water treatment system uses a two-step process to treat ballast water - filtration followed by disinfection with the biocide chlorine dioxide. The system's effectiveness is not impaired by variations in salinity, temperature, turbidity, organics and vibration, which can impact other treatment options, says Perlich. Furthermore, the small size, low power, and low maintenance characteristics of the Ecochlor system make it ideally suited for installation on the world's largest ships.

Vertical Offerings: The engineering management services offered to shipowners continues to develop alongside the treatment systems. This week, Choice Ballast Solutions announced a strategic alliance with Drew Marine to provide vertically integrated capabilities. Choice handles the

application, installation and project management of all types of ballast water treatment systems for both newbuild and retrofit vessels.

To demonstrate the alliance, the two firms have joined to form, "Choice Alliance" which will provide shipowners with ballast water treatment system compliance planning, integration engineering, project management, fabrication, installation, compliance assessment and services. Also, Choice Alliance will develop additional resources as sub-contractors to support these activities.

More Tonnage Required: Despite the technological and service developments of an industry now over a decade old, shipowners continue to face the regulatory uncertainty that has plagued the Ballast Water Management Convention from the start. Forty-seven countries have now ratified the Convention, substantially more than the 30 required, but their combined fleets comprise 34.35 per cent of global tonnage, just under the 35 per cent required for entry into force.

Many in the industry expect 2016 to be the year that the tonnage requirements will be met, but many people have been saying that now for years.

New Tool Evaluates NSR Container Shipping Viability:

A new study examining the commercial opportunities of Arctic shipping by the Copenhagen Business School (CBS Maritime) concludes that the navigation season on the Northern Sea Route (NSR) will remain too short for investments in ice-class vessels to be economically viable until around 2040. Only then could the Arctic shipping route become competitive.



The calculations presented for a container ship are based on a calculation tool available for download along with the report. The tool allows researchers and industry professionals to insert the specifications of a given vessel, along with environmental and economic parameters, in order to obtain information on the feasibility of transporting containerized cargo along the NSR.

The study evaluated the viability of an ice-class container ship operating along the NSR compared to a vessel navigating the Suez Canal route. It also examined the tanker, offshore and cruise ship segments and states that the dry bulk and offshore segments are currently the sectors with the largest potential, as the Arctic hosts an abundance of natural resources.

The results from the quantitative study on the feasibility of liner shipping across the NSR indicate that Arctic liner shipping may become economically feasible around 2040 if the ice cover continues to diminish at the present rate.

The possibility of a major expansion of the maritime activities rests upon several crucial assumptions which are all subject to major uncertainties. These uncertainties include the hazardous environmental conditions, port and infrastructure availability and high costs of operation compared to the southern shipping lanes. Additionally the Arctic Ocean lacks an international governmental and regulative framework in combination with high entry costs creates uncertainty for the maritime industry seeking to operate in and around the Arctic Ocean.

CSCL Indian Ocean Readied for Next Refloat Attempt:

Salvage teams are preparing to refloat the ultra large container ship CSCL Indian Oceanduring a spring tide on Tuesday.

The CSCL Indian Ocean, grounded on the Elbe River near Hamburg on February 3, and several earlier attempts to refloat the vessel have failed.

The ballast water and most of the fuel have been removed from the vessel, and two dredgers have deepened the river at the scene. This, along with a spring tide on Tuesday, is expected to provide the conditions needed to free the vessel.



According to German media, the 399.6-meter (1,300-foot) vessel lost a starboard anchor and about a hundred meters of chain prior to the grounding while it was waiting to make the Elbe transit. The incident was not reported to local authorities, and the cause and significance of the loss is unclear.

CSCL Indian Ocean was en route from Felixtowe to Hamburg when it is believed to have suffered a blackout and steering failure which led to it grounding near Grunendeich.

The 19,000TEU CSCL Indian Ocean is owned by Chinese shipping company China Shipping Container Lines.

Wire Rope Parted After Years of Neglect and Daily Inspections:

The U.K. Marine Accident Investigation Branch (MAIB) has released its report into the collapse of a mezzanine deck on board the roll-on roll-off passenger ferry St Helen citing a long-standing maintenance failure by shipowner Wightlink.

The accident occurred at Fishbourne Ferry Terminal on the



Isle of Wight in July 2014. The passengers and vehicles on board the 77-meter (250-foot) cross-Solent roll-on roll-off passenger ferry were in the process of disembarking at Fishbourne ferry terminal on the Isle of Wight when the vessel's starboard forward mezzanine deck collapsed.

The collapse occurred because one of the deck's steel wire lifting ropes parted as it and the deck had not been routinely lubricated.

The parting wire caused the forward inboard corner of the suspended deck to drop from a height of about two meters



(six feet) and hit the main deck below.

A crewman and 11 cars, with their seated passengers, were on the deck at the time. The crewman suffered a minor head injury and was temporarily rendered unconscious; several passengers suffered minor impact related injuries.

The force of the impact caused the failure of one of the mezzanine deck's main structural beams. Post-accident analysis of the failed wire rope found that it had suffered a significant amount of mechanical wear. The mechanical wear, which had primarily been attributed to internal and external abrasion caused by a lack of lubrication, had severely diminished the strength of the rope.

The investigation found weaknesses in the way that Wightlink had managed the day-to-day maintenance of its vessels and, in particular, their mezzanine decks. This was despite the mezzanine decks being subject to regular inspections and mandatory six-monthly thorough examinations by a Royal & Sun Alliance Engineering Inspection & Consultancy surveyor.

A Long-Standing Issue: The investigators found that Wightlink was aware of many of the safety issues and contributing factors highlighted in this investigation report. Of note: the absence of a formal mezzanine deck greasing routine had been subject to an internal safety management system non-conformity for over two years. The failure to address the non-conformity was highlighted by the Maritime and Coastguard Agency nine months prior to the accident, and the failure to lubricate the steel wire lifting ropes was identified during six-monthly examinations.

Given this knowledge, and the potential consequences of a rope parting, Wightlink demonstrated little or no appetite to allocate the resources necessary to resolve this long-standing issue. This apparent lack of impetus was probably influenced by an over reliance on its four-yearly wire rope replacement program and the Royal & Sun Alliance Engineering Inspection & Consultancy and the Maritime and Coastguard Agency's reluctance to escalate the issue.

Daily Inspections: Daily and monthly inspections were conducted by the ship's crew and recorded in various logbooks and checklists. After an overnight or longer layover period, a member of the deck crew inspected the mezzanine decks prior to loading vehicles for the first crossing of the day. This included a visual inspection of the lifting ropes. The inspections were recorded on a daily inspection log sheet. Additionally, any faults or other problems that were identified during the crossings were recorded within the vessel's bridge day book.

At the end of every shift the master completed an operational status form listing the status of all critical and important equipment. The mezzanine decks were classified as 'Important' equipment. The last status report recorded on the day of the collapse gave the starboard forward mezzanine deck an operational status of "A."

Ship Banned After Five Detentions in Three Years:

The Australian Maritime Safety Authority (AMSA) has banned the 86 meter (280-foot) general cargo ship Noah Satu from entering any Australian port for the second time in less than twelve months.

Noah Satu is owned by PT Anugerah Samudra Indomakur and was on charter to Orica

Singapore.

The Noah Satu has been detained by AMSA five times since August 2013 for deficiencies related to its equipment, its operations, its safety management system and non-compliance with the Maritime Labour Convention. The safety management system detentions resulted from repeated failings related to navigation safety, compliance with pollution prevention requirements and fire safety.

The Noah Satu was previously banned from Australian ports for three months in September 2015 for repeated non-compliance with Australian maritime regulations.

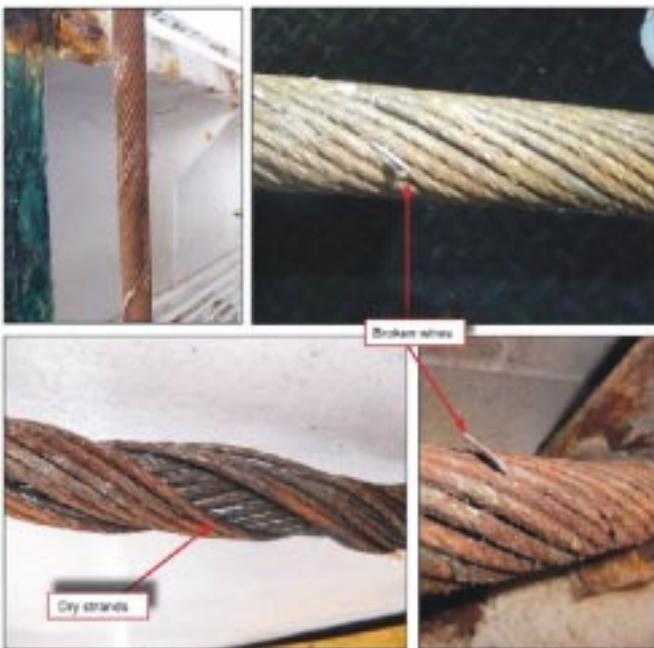
The vessel returned to Australian waters on January 26, 2016 and was subject to a port state control inspection in Port Alma, Queensland.

AMSA port State control detentions of Noah Satu

Date of inspection	Location	No. of Deficiencies	Detained
06/08/2013	Port Alma, Qld	10	Yes
06/01/2014	Port Alma, Qld	7	Yes
10/07/2014	Port Alma, Qld	19	Yes
14/09/2015	Port Alma, Qld	11	Yes
26/01/2016	Port Alma, Qld	13	Yes

The vessel was again detained, due to failings in the vessel's safety management system related to safe navigational practice, communications, pollution prevention arrangements, firefighting systems and hours of work and rest for the seafarers.

In visits to Australian ports over the past year, the vessel has also failed to comply with all the mandatory reporting requirements for vessels transiting the Great Barrier Reef area.



AMSA identified serious and repeated failings in the vessel's operations and maintenance, indicating the vessel is unable to ensure compliance with the Safety of Life at Sea Convention, the International Convention for the Prevention of Pollution from Ships and the Maritime Labour Convention.

As the Noah Satu was previously banned for three months, the current direction will remain in place for twelve months, until February 2, 2017.

AMSA Chief Executive Officer, Mick Kinley, said AMSA has a responsibility to ensure ships visiting Australian ports comply with the standards established by the International Maritime Organization and the International Labour Organization.

"The performance of this vessel is completely unacceptable. Unsafe vessels put the lives of seafarers at risk and pose a threat to Australia's marine environment," Kinley said. "Operators and charterers of ships that repeatedly fail to meet Australian standards need to accept that these ships are not welcome in Australian waters."

Manufacturer's Inspection

At Wightlink's request, the original equipment manufacturer, MacGregor, conducted detailed inspections of all the mezzanine decks, and other MacGregor equipment fitted on board its conventional ferries.

MacGregor's inspections identified a range of issues that supported the findings in a separate The Test House (Cambridge) Ltd analysis of the wire rope. In particular, the manufacturer's reports highlighted that the lifting ropes had not been protected against corrosion, several lifting ropes were found to be damaged, and many of the rope sheaves were corroded and had visible imprints of the steel wires in their grooves. The MacGregor inspections also found examples of:

- Incorrect adjustment of lifting ropes.
- Slack wire rope adjusting mechanisms.
- Ropes fouling the edges of the deck beam lightning holes.
- Hydraulic pipe corrosion.
- Hydraulic oil leaks from various components.

The inspections of the MacGregor bow and stern doors found:

- A lack of lubrication on the door assemblies.
- Wear on bow and stern door locking mechanisms.
- Inoperative warning sirens.
- Damaged guide rails.

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