

Inséré le 04/10/13 BOEKEN LIVRES Enlevé le 04/11/13

“SEAWORTHY IV”

EEN NIEUW BOEK VAN WILLEM EERLAND



Dit jaar brengen we een boek uit. In navolging van de eerder genoemde kalenders wordt de titel ‘**Seaworthy IV**’ marine art by **Willem Eerland**. Het formaat is Oblong 27 X 23 cm en 144 pagina’s dik. De tekst is in het Nederlands en Engels. De prijs is € 19,90 incl. BTW excl. verzendkosten. In het boek, met Nederlands/Engelse tekst, staan ca. 140 olieverfschilderijen, aquarellen en schetjes van verschillende scheepstypen. natuurlijk ook veel sleepboten. In het verleden exposeerde Willem Eerland regelmatig, o.m. in Denemarken, Katwijk en Vlaardingingen.

Niet van al zijn werk waren foto’s of dia’s beschikbaar. Maar er bleef nog voldoende over om een keuze te kunnen maken. Soms is, om de diversiteit te laten zien, bewust gekozen voor wat minder belangrijke schilderijen. Met dit fraai uitgevoerde boek is een vrij compleet beeld van het uitgebreide werk van deze zeeschilder samengebracht.

Het boek kan medio november geleverd worden. Dus op tijd om het te gebruiken als een passend relatiegeschenk. U kunt het boek alleen in Nederland verkrijgen door storting van **€ 24,80** (€ 19,90 + € 4,90 verzendkosten) op banknummer 361715765 t.n.v. **Tableau Maritime Cards** in Nieuw-Lekkerland onder vermelding van uw naam en adres. Zie ook www.tableau-maritimecards.nl **This beautiful designed and printed book contains the most important work of Willem, and the story of his maritime life. The book is printed in English and Dutch.**

See also www.tableau-maritimecards.nl

Inséré le 04/10/13 Dossier Enlevé le 04/11/13

Seafarers deserve fairer lives at sea

by Fredrik Larsson, Marine Manager, INTERTANKO

I was delighted when asked by IFSMA's President, Captain Christer Lindvall, to give a presentation at the 2010 Annual General Assembly in Manila on the subject of either tanker recruitment or criminalisation of seafarers. Both subjects are not only close to my heart but also high on the agenda for the organisation I represent. They are also closely related and I therefore suggested that I cover both in this paper.

With the huge growth in the tanker fleet over the last couple of years, it is inevitable that an increase in demand for tanker officers and ratings will follow. This growth, despite the economic downturn and recession, will continue although probably at a slower pace than projected before the recession.

Various reports and studies conducted over the last couple of years have been forecasting a shortfall of officers in the region of 2-10 per cent.

Before the recession hit the industry, the shortage of officers in particular was causing shipowners and shipmanagers to allocate huge amounts of money in either salaries or training to secure the people they needed. Shipowners and shipmanagers who had invested in in-house training schemes and cadet berths saw poaching as a major threat. It caused salaries to hit new record levels several times a year. One chief executive of a major shipmanager went on record to say that Filipino second officers were earning more than their president.

Mindful of the lack of officers before the recession, the shipping industry in general and the tanker industry in particular have been keen not to scale back on recruitment campaigns or training programmes during the recent economic downturn. I am confident that the industry has been acting responsibly in this regard although many companies no doubt have had difficulties in keeping their training budgets intact.

Recruitment to the tanker industry is not a standalone issue. It's a question of attracting people to the industry as a whole. Most importantly it's about retaining the officers we already have. The existing pool of competent tanker officers is the heart of our industry. Without them no tanker can operate. We therefore need the existing officers to pass on experience and knowledge to the younger generation and to mentor it, just as they have always done and hopefully always will do, as in any profession.

Learning by doing is a great concept that was introduced thousands of years ago. No university or simulator can fully replace it although, of course, simulator training is now playing an important role



and will continue to do so in the future.

When the recession hit the world's economies in 2008 it hit global trade hard and as a result the shipping industry suffered. Anchorages were bursting at the seams with ships lying idle. This meant that demand for seafarers of all ranks was decreasing. Those who kept their jobs became reluctant to leave what they hoped were safe companies, hence

poaching suddenly wasn't an issue anymore. Various signs show that the recession conserved the existing pool of seafarers, and in fact shortages of career opportunities onshore prompted an influx of people to the industry, mainly on the ratings side. On the officer side it is far too early to tell as we have to factor in the time they spend at university before joining up and becoming a statistic in this context.

The big question now is how big the shortfall of seafarers will be, particularly the shortage of competent officers, once the economy recovers enough to employ the merchant fleet more fully. And what impact will this have? Which sectors of the industry will be able to compete with higher salaries? Your guess is as good as mine, perhaps better.

However, putting recessions and salaries aside, what attracts people to go to sea today? It is probably not the opportunity to see the world, which it used to be back in the good old days. My personal view is that recruitment at a company level today is all about creating a positive and professional atmosphere. This means engaging and recognising seafarers as the key-employees they are, trusting them, listening to them and honouring them as professional ship's officers and ratings. It also means treating them as human beings, as someone's husband, father, wife or mother and providing them with a meaningful, challenging and satisfying working environment. They should have a proper and stimulating home from home, one that includes the kind of amenities you might expect to find in someone's home ashore, such as a gym, a treadmill, a bike, Internet access and, of course, their own toilet and wash room facilities.

On a global level, industry associations, governments and others either in their own capacity or through collective efforts via bodies such as IMO, continue to campaign for youngsters to go to sea. They are conscious that without seafarers of the right calibre the industry will face a difficult and painful future. Let's face it, there are fantastic opportunities out there now. Never before have there been so many different sectors in the industry to choose between, such as cruise ships, offshore vessels, tankers, exploration ships and others. On the tanker side alone you can specialise in gas, oil or chemicals. It's like a ladder. The more skills you acquire the more attractive you become and, of course, your bank account will reflect this. Take into account the shortage of officers and the climb up the ranks is going to go even faster, no matter whether this is considered a good or a bad thing.

Despite the excellent prospects and salaries, the fact is that the industry at large has difficulty in attracting the younger generation. Depending on whom you ask you will get different answers on why this is the case. It seems that everyone has their own idea about why but nobody has the immediate solution to the problem.

Clearly, high salaries attract some entrants to the tanker industry but not in sufficient numbers. Is it therefore reasonable to assume that perhaps there are too many deterrent factors weighing.

What attracts people to go to sea today? Probably not the opportunity to see the world, which it used to be in? Deterrents such as multiple inspections by charterers (vetting) and port states (PSC), long working hours, limited shore leave, low manning levels, fatigue, being away from family and friends, minimal accommodation standards, difficulties with visas, poor communication facilities, being subject to drug and alcohol tests, excessive amounts of paperwork, strict and constantly changed regulations and criminalisation. These are more than enough!

Actually the key to recruiting and retaining young seafarers is to sort out the deterrent issues mentioned above, at least if we are to believe - and we have no reason not to - what was pointed out by 20 young people in a focus group that INTERTANKO and ITF arranged and organised last year for young seafarers of seven nationalities. They expressed their views on a career at sea and on what attracted young people to the shipping industry in 2009. They pointed out every deterrent item above as a negative factor. Note, however, that those 20 still had chosen a career at sea but to remain there they asserted that almost all of these things must improve, especially the lack of shore leave and the feeling of being suspected of being a terrorist under the ISPS code.

INTERTANKO believes that all the negative factors should be assessed and, if possible, eliminated. The organisation is looking into how to provide better accommodation space, to improve and make available crew communication facilities, including Internet access, to ensure adequate shoreleave, to minimise the number of inspections, to limit unnecessary paperwork, to harmonise port entry requirements, to overcome burdensome visa requirements and more besides.

This is a process that we wish could be advanced easier and quicker. But we are not alone on this and we need to cooperate with all stakeholders, such as regulators, classification societies, shipbuilders, flag states, port states and human-element experts, among others, to achieve success. These are issues that will not go away overnight. At IMO's Maritime Safety Committee (MSC 87) in May 2010, INTERTANKO and the ITF will introduce two submissions as an immediate follow up on the Young

Seafarers Focus Group. One is seeking a change in the ISPS code so as not to restrict shore leave for seafarers; the other is seeking an increase in the frequency and in the power of consideration of the human element whenever new requirements are developed or existing requirements are reviewed by IMO. These two submissions are bold, coming from non-governmental organisations, but we nevertheless feel strongly enough about the issues not to hesitate for a moment in submitting them.

As I have tried to explain, INTERTANKO and our fellow shipping associations are also working on improving the image of shipping and increasing the attractiveness of the industry to encourage youngsters to choose a career at sea.

I am sure you all agree the industry is already a great one to be in and has ample opportunities although there is still room for improvement. However, no matter how hard we try to raise its profile just one ship accident generates negative headlines and images in every imaginable medium, which, of course, young, potential seafarers are exposed to. The general public's outrage often makes this negative image stronger, which forces politicians to find scapegoats. This is devastating for the industry and its efforts in attracting and recruiting young seafarers. I am, of course, thinking of cases such as the Hebei Spirit and its officers, who, through no fault of their own, were penalised and criminalised.

How can we expect youngsters to go to sea when facing imprisonment due to accidents like that? The last couple of years have seen many similar cases.

Another utterly ridiculous example of how negative the world has become is the story of Captain Laptalo, master of the Coral Sea, who was jailed in Greece when drugs were found stashed among the thousands of boxes of bananas his vessel was carrying from Ecuador. Or the master of Full City in Norway, or Captain Mangouras of Prestige or... well, the list can go on, for far too long, but I guess you get the point.

Criminalisation of innocent seafarers is of course just as unacceptable to INTERTANKO as it is to IFSMA and every professional seafarer, company, industry organisation and, I would hope, government.

We all have to stand up for our seafarers and protect our industry from this menace, something the industry has proved able to do when it has been necessary, although admittedly with limited success. Take, for example, the case of Captain Chawla and Chief Officer Chetan of the MT Hebei Spirit. There wasn't an association or organisation that didn't stand up for these two good officers. A plethora of alphabetical associations co-sponsored a submission to the recent MEPC 60 on this matter, a submission that was based on an expert witness statement made by INTERTANKO to the Korean Supreme Court. It highlighted that these officers had followed international and industry-established good practice but were nevertheless penalised and imprisoned. This proves that the world is not perfect and that scapegoats apparently still have to be found. In this case the Korean public and the Korean legal system held the two senior deck officers responsible.

However, what cannot be misinterpreted is that the whole industry backed the two officers 100 per cent and made that abundantly clear, as numerous demonstrations on behalf of the two officers, campaigns, letters and submissions to IMO showed. The message is that the criminalisation of seafarers who are simply doing their jobs is not and never will be acceptable.

However, being reactive is not good enough. We need to be proactive.

So INTERTANKO has been and is still challenging new legislation in the EU, the US and elsewhere that we see as a threat to our industry and, not least, to our seafarers. Together with a few other industry stakeholders INTERTANKO took the European Commission to the European High Court in 2006 because it felt that the EU Directive on ship-source pollution conflicted with international law (Marpol) and prejudiced the rights of seafarers and others in the shipping industry.

INTERTANKO has also been active in the courts in the US, where it has initiated litigation in response to the state of Washington's regulation that imposed requirements for watch practices, towing and

navigation equipment and reporting requirements, and other rules that differed from the controlling federal and international rules. INTERTANKO has also been active in a case involving the state of Massachusetts regarding oil spills and fines.

Furthermore, in an appeal to governments, we have been urging the practice of reasonable and fair treatment following an accident. In the year of the seafarer surely this cannot be asking too much? In fact we are suggesting that the 'Guidelines on fair treatment of seafarers in the event of a maritime accident' are made mandatory.

The message that I would like to convey to future and existing members of IFSMA and seafarers ail over the world is that should you by any account be subject to unjustified unfair treatment or criminalisation, INTERTANKO and the rest of the shipping community care about it and will always be standing behind you.

Inséré le 08/10/13 Dossier Enlevé le 08/11/13



Recently, the Marine Environmental Protection Committee (MEPC) of the International Maritime Organization (IMO) took a major step toward bringing order out of the current chaos surrounding the regulation of air emissions from ships by provisionally adopting amendments to MARPOL Annex VI. In 1997, the IMO adopted the initial version of Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). This Annex is entitled "Regulations for the Prevention of Air Pollution from Ships". It addresses ozone-depleting substances, nitrogen oxides, sulfur oxides, volatile organic compounds, and shipboard incineration, among other things. While acknowledged as comprehensive, this first step by the IMO in the area of control of harmful air emissions was perceived by many as weak.

Various states of the United States staked out independent paths regarding control of air emissions from ships. Alaska was one of the first to act, adopting standards for stack emissions based on opacity. In other words, if the smoke from the ship's stack blocked the view for more than a limited period, the ship was subject to a fine. The methodology was crude, but did encourage several cruise lines to adopt procedures for utilizing shore-side power (ie. cold ironing), particularly in Juneau.

Not surprisingly, California has been the most active state with regard to air emissions from ships. Regulations have been adopted prohibiting on-board incineration when the ship is within three nautical miles of the California coast. Regulations have been drafted that would, if adopted, phase in a requirement for large commercial ships calling in the major ports of California to utilize shore power. Most controversially, the state adopted regulations requiring most large commercial ships operating within 24 nautical miles of the California coast to utilize ultra-low sulfur fuel. After this regulation was struck down (first by the federal district court and then by the US Court of Appeals for the Ninth Circuit), California announced that it would continue enforcing the regulation while the matter is on appeal. The US Environmental Protection Agency (EPA) has adopted regulations regarding air emissions from marine engines for use on ships and boats. These regulations address both spark-ignition (gasoline powered) engines and compression-ignition (diesel powered) engines. For marine diesel engines with 30 liters or more displacement per cylinder, the EPA basically adopted the MARPOL Annex VI standards. This was done in recognition that no marine engines of this size are manufactured in the United States. At the same time, though, the EPA brought pressure to bear on the IMO to raise the standards. Those efforts (as well as similar efforts by others) bore fruit with the recent development of more stringent air emission requirements by the MEPC. MARPOL Annex VI was adopted in September 1997 and came into effect in May 2005. It has been ratified by 49 countries, representing over 74% of the gross tonnage of the world's commercial shipping fleet. In the United States, the Senate gave its advice and consent to Annex VI, but the provisions cannot come into effect (and the government cannot formally accede to the Annex) until the implementing legislation is enacted into law. Implementing legislation has been passed by the House of Representatives, but is stalled in the Senate. Meanwhile, a bill has been introduced in the Senate that would, if adopted, establish unilateral air emission standards for ships operating in US waters, thus barring the United States from implementing Annex VI.

The amendments to Annex VI, provisionally approved by the MEPC session ending on April 4, 2008, will when formally adopted at the upcoming MEPC session in October, largely adopt the position espoused by the U.S. and other stakeholders, such as the International Association of Independent Tanker Owners (INTERTANKO).

The main changes to the international regulation of air emissions from ships would see a progressive reduction in sulfur oxide (SO_x) emissions, with the 4.5% global sulfur cap reduced initially to 3.5% effective from 1 January 2012; then progressively to 0.5 %, effective from 1 January 2020, subject to a feasibility review to be completed no later than 2018.

The limits applicable in Sulfur Emission Control Areas (SECAs) would be reduced from the current 1.5% to 1.0%, beginning on 1 March 2010; and would be further reduced to 0.1 %, with effect from 1 January 2015.

Progressive reductions in nitrogen oxide (NO_x) emissions from marine engines were also agreed, with the most stringent controls on so-called "Tier III" engines (those installed on ships constructed on or after 1 January 2016) operating in Emission Control Areas. The revised Annex VI will allow for an Emission Control Area to be designated for SO_x and particulate matter, or NO_x, or all three types of emissions from ships, subject to a proposal from a Party or Parties to the Annex that would be considered for adoption by the IMO, if supported by a demonstrated need to prevent, reduce, and control one or all three of those emissions from ships. Currently there are two designated SECAs: the Baltic Sea and the North Sea area, which also includes the English Channel. It is expected that, once the United States accedes to Annex VI, it will rapidly move for designation of one or more SECAs in U.S. waters. Nations that are party to MARPOL Annex VI would be obligated to take reasonable steps to ensure a proper supply of compliant fuel is available. This may prove interesting in a country, such as the United States, with many international ports.

If a ship is able to demonstrate that, despite reasonable efforts on its part, it has been unable to purchase compliant fuel, the ship would not be subject to penalty measures, but must notify both its flag administration and the relevant port.

As a result of reports of inconsistencies between data contained in Bunker Delivery Notes and commercial test results, revisions to Annex VI also tighten the verification procedures for fuel samples. With its recent action to strengthen the international regulation of air emissions from ships, the IMO has taken steps to meet the stated objectives of the United States.

It is now time for the US Congress to reciprocate by enacting legislation to implement MARPOL Annex VI. This will allow the United States to be an effective part of the solution to this world-wide issue, rather than just wringing its hands and allowing individual states to adopt unilateral, and counterproductive, regimes

Inséré le 18/10/13 Dossier Enlevé le 18/11/13

Preventing propulsion loss after switching fuels

The California Air Resources Board (ARB) has laid down regulations for vessel emissions' reductions in California waters, as part of its continual mission to improve air quality around the state*.

The new requirements came into effect in July 2009, under California Code of Regulations (CCR), Section 2299.2, Fuel Sulfur and Other Operational Requirements for Ocean Going Vessels within California Waters and 24 Nautical Miles of the California Baseline.

The regulations require that vessels burn either marine gas oil (MGO) with maximum 1.5% sulphur, or marine diesel oil (MDO) with maximum 0.5% sulphur, in their main and auxiliary engines.

However, following the implementation of the regulations, California witnessed a 100% increase in loss of propulsion (LOP) incidents within state waters during 2009. In 2010, California saw 54 LOP incidents compared to 24 in 2008 (the last full year before ARB regulations took effect).

The LOPs can be loosely categorised into six groups for ease of discussion.

Group 1

In this group, engine failures resulting in the LOP are due to the inability of the main engine, operating with MGO/MDO, to overcome the forces on the propeller from the forward momentum of the ship. The engine may turn over at higher rev/min and initiate combustion; however, as the engine reduces speed to come to dead slow, or slow astern, there is not enough BTUs in the fuel to maintain engine inertia. The engine stalls with the subsequent loss of propulsion.

Similarly, ships not getting engine starts while anchoring when an astern order is given, typically initiates a `Failure to Store scenario. The remedy, due to the lack of BTUs, is to adjust the fuel rack to allow more fuel into the cylinder. This procedure cannot be done from most ship bridges but only from the engine control room or from the engine ride (manual).

Group 2

In Group 2, failures resulting in the LOP are due to problems with controlling the temperature of the MGO/MDO. Each engine has specifications as to the temperature range required to operate using either heavy fuels or lighter fuels. For example, the optimal temperature range for an engine might be 135 deg C for a heavy fuel oil (HFO) and 40 deg C for the MGO.

Because heavy fuels must be heated (for the right viscosity to burn) and lighter fuels may not need to be heated, there are problems associated during the fuel oil switch over in both heating and cooling the different fuel oil systems (since the fuel oil is supplied through the same auxiliary systems). Heating an MGO/MDO may cause `flashing' of the lighter fuel oil to vapour. The fuel injectors would

not work when the fuel flashes causing a loss of power in that cylinder. Multiple cylinder flashes could result in LOP.

Group 3

In the third group, failures resulting in a LOP are associated with the loss of fuel oil pressure to either the fuel pumps or fuel injectors. The loss of pressure could be a result of many factors including wrong control set points, use of bypass valves, in-operable equipment, inattention to operating conditions, or excessive leakage through 'O' rings and seals.

The problem lies with physics. Metal expands when heated and contracts when cooled. Ships were evolved to burn the heaviest and cheapest fuel available - HFO. To utilise the HFO, the fuel is heated to as much as 150 deg C to get it to flow. In comparison, MGO/MDO fuel is burned at ambient engine room temperature or 40 deg C and no heating is required. Once the cooler MGO is introduced into the fuel pumps and injectors, they contract causing a loss of fuel pressure at the pump with marginal spray pattern and leaks at the injector.

One of the other issues using MGO in an engine that has successfully run HFO for some time is viscosity. Typically, the engine manufacturer's recommended minimum viscosity is 2 cst. Fuel viscosity specifications at 40 deg C temperature for MGO/MDO range from 1.5 cst to 6.5 cst. The MGO loaded in California has a viscosity of 2 cst to 3 cst at 40 deg C. When the temperature of the MGO is increased into an already warm engine that just operated on HFO, the heat lowers the viscosity causing the fuel machinery parts to bind or break. Bearing in mind that the cylinder temperature is usually maintained at 80 deg C and this heat migrates into the fuel lines as well. Unsurprisingly, the introduction of distillate fuel into the fuel system causes leaks, sometimes excessive leaks. With MGO/MDO there is a very real risk of external combustion or fire. The replacing of 'O' rings at the manufacturer's recommended intervals has proved to be inadequate. For example, in the case of injector 'O' rings on a ship, the manufacturer suggested interval for replacing fuel injector 'O' rings is 10,000 hours. The vessel's engineers found an interval of 2,000 hours was more appropriate to change the rings to prevent potential fire hazards. These fuel leaks tend to disappear when engines are switched back to the heavier fuel oil.

Group 4

In the fourth group, failures resulting in LOP are associated with the loss of fuel oil pressure, or the loss of flow in sufficient quantities to maintain operation. Strainers and filters, or the lack of a strainer and filter, contribute to clogging or restrictions in the fuel oil supply system.

The MGO/MDO acts as a solvent causing a de-coking effect, clogging fuel filters. This is due to burning a lower grade of HFO that has excessive amounts of asphaltenes. These asphaltenes adhere to the inside of the fuel lines and assorted other fuel components. When MGO is introduced the asphaltenes are released, collecting in the fuel filters/strainers.

Group 5

In Group 5, failures resulting in the LOP appear to be associated with problems in either the starting air system, or the control air systems. Problems with starting air systems are not fuel related and only need to be mentioned as a cause of LOPs.

Group 6

In the final group, failures resulting in the LOP appear to be associated with mechanical failure not associated with other groups.

Having defined the groups of LOPs, the intent of this guide is to reduce LOP incidents occurring within the state of California boundaries. The time to deal with problems on board ship is either miles out at sea, or alongside the dock. Not in manoeuvring/ pilotage waters!

Many of the LOP incidents that occurred in 2010 involved ships making their first entry into California waters since July 2009. Since California sees between one to two first time callers per week, the

Office of Spill Prevention and Response (OSPR) decided to provide suggestions for ships working with low sulphur distillate fuel oil (LSDFO).

Operations

For vessels intending to enter the emissions control area for the first time since July 2009, it is recommended and California advises the crew should conduct a trial (actual) fuel switching within 45 days prior to entering California waters. Run main and auxiliary engines no less than four hours on low sulphur distillate fuel (LSDFO). This will help identify any specific change over or operational issues or problems.

If ships perform a trial fuel switch, the operators will be more prone to avoid problems that could occur versus learning underway upon entering California waters and not knowing the sundry issues. Forty five days was chosen based upon an understanding of containership operations where schedule is everything. Somewhere within that schedule there is always time to perform a trial manoeuvre and 45 days should allow the ship's personnel to experience the fuel switchover and document remedial fixes, if any, mitigating Groups 1,2,3,4.

Repeat and initial entry

Part One-TRAINING:

- Within 45 days prior to entering the waters of California it is strongly advised ship engineers should exercise:
- Operating main engine from the engine control room.
- Operating main engine from engine side (local).
- Crew should become familiar with 'Failure to Start' procedures while manoeuvring and establish corrective protocols for 'Failure to Start' incidents.

Following, the "Perfect practice ensures proper performance" creed, if the bridge and engineering crew is practiced in the event of a 'Failure to Start' scenario, they will perform satisfactorily when called upon in the event of a real failure. This is especially important in manoeuvring/pilotage waters. The air and fuel in the start sequence can be adjusted in the engine control room and at engine side. These items cannot be adjusted from the bridge on most ships; hence, the provision of the advisory/guide establishes protocols for dealing with the 'Failure to Start' scenario as outlined in LOP groups 1 and 2.

Too many ships run out of 'start air' because they continue to initiate starts from the bridge where control of the fuel rack and amount of air for starting cannot be adjusted.

Part Two: While underway after fuel switching completed (HFO to LSDFO):

Ships should ensure one of the senior engineering officers is in the engine control room while the ship is in pilotage waters to be able:

- To operate the main engine from the engine control room.
- To operate the main engine from engine side (local).

Special attention should be given to the STCW rest requirements. While interviewing Chief Engineers (CE), the author of this guide found that they were putting in excessive hours. CE's are not subject to the STCW rest requirements as they are non-watchkeepers. However, the CE is human and subject to fatigue just as junior officers. It has been proven too many times that fatigue can cause errors in judgment and which could contribute to a LOP incident.

Usually the senior engineers consist of the CE and Second Engineer on internationally flagged ships, while CE and First Assistant Engineer (on US flag ships) have the most experience with the ship engine operation. If the CE is comfortable with anyone substituting on duty, it is usually the other senior engineer.

Hopefully, a substitution will allow the CE some rest. Some ships have the CE down in the engine room for the fuel switchover, then the CE retires for rest while assigning the other senior engineer to standby in the engine room, mitigating all the groups.

The following Engine Advisory Guidelines were taken from the US Coast Guard MSA 03-09 with additions and clarifications from industry partners.

Part Three-engine guidelines: Consult engine and boiler manufacturers for fuel switching guidance.

- Consult fuel suppliers for proper fuel selection. Exercise strict control when possible over the quality of the fuel oils received.
- Re Consult manufacturers to determine if system modifications, or additional safeguards are necessary for intended fuels.
- Develop detailed fuel switching procedures.
- Establish a fuel system inspection and maintenance schedule.
- Ensure system pressure and temperature alarms, flow indicators, filter differential pressure transmitters, etc, are all operational.
- Ensure system purifiers, filters and strainers are maintained.
- Ensure system seals, gaskets, flanges, fittings, brackets and supports are maintained.
- Ensure that the steam isolation valves on fuel lines, filters, heaters etc are fully tight in closed position while running LSDFO.
- Ensure that the fuel oil viscosity and temperature control equipment is accurate and operational.
- Ensure detailed system diagrams are available and engineers are familiar with systems and troubleshooting techniques.
- Ensure senior engineers know the location and fonction of all automation components associated with starting the main engine.

* This article was written by Capt Jeff Cowan of the State of California, office of spill prevention and response. Industry generated categories

Inséré le 20/10/13 Historiek Historique Enlevé le 20/11/13

De schrik van Tobermory

Dat de geallieerden na jarenlange beproevingen de slag om de Atlantische Oceaan wonnen, was het resultaat van talloze factoren. Maar één ervan was ongetwijfeld de inzet van duizenden matrozen en officieren. Tussen hen bevonden zich een aantal mannen van wie het dynamisme en vakmanschap bepalend waren voor de afloop van de oorlog. Zo iemand was de Britse commodore Gilbert Owen Stephenson (1878-1972). Hij had tijdens de Eerste Wereldoorlog op de Middellandse Zee op Duitse en Oostenrijkse onderzeeërs gejaagd en kreeg dankzij zijn ervaring in 1940 de leiding over het centrum voor duikbootbestrijding in het Schotse Tobermory. Vijf jaar lang zou Stephenson in HMS Western Isles, zoals het trainingscentrum officieel heette, de bemanningen van honderden escorteschepen opleiden tot professionele duikbootjagers.

De cursus duurde een tweetal weken en in die korte tijd bracht Stephenson zijn 'leerlingen' vaak in de meest onmogelijke situaties. Zijn onorthodoxe aanpak en al dan niet gespeelde onvoorspelbaarheid leverden de oude marineofficier de bijnaam 'Terror of Tobermory' op. Bekend is het voorval waarbij Stephenson zijn kepie op het dek van een schip gooide met de mededeling dat het een bom was. Toen een 'leerling' het hoofddek in zee schopte, kreeg hij én felicitaties van de commandant én het bevel de kepie achterna te duiken. De fantasierijke Stephenson had het ding immers plots 'omgetoverd' tot een drenkeling die moest worden gered. Toen Stephenson diezelfde

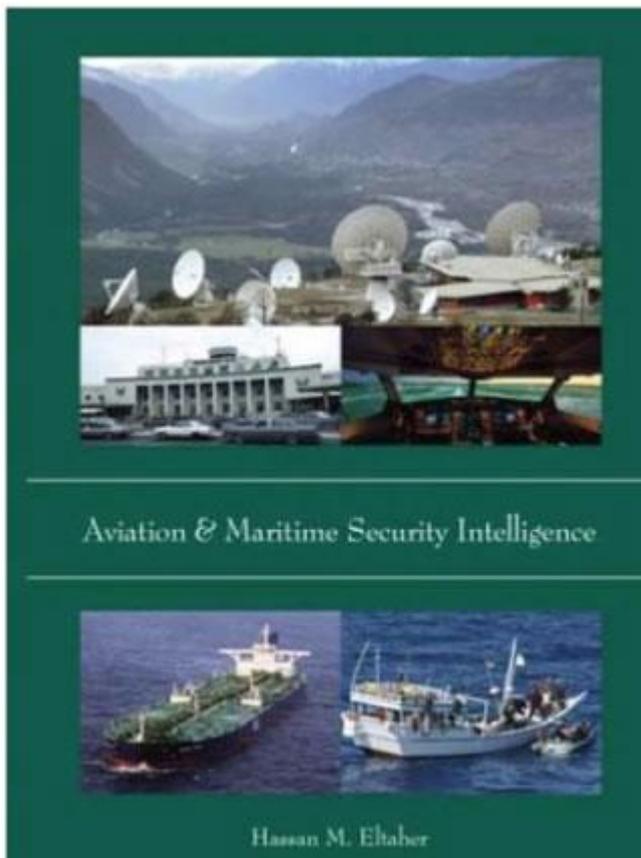
truc een keer uithaalde met een reddingsboei, merkte een officier in opleiding op dat het wel degelijk om een boei ging en niet om iets of iemand anders. Daarop trok Stephenson meteen zijn vest uit en zette zijn kepie af. Hij sprong in het water en toen hij weer bovenkwam, riep hij uit: 'There's a man overboard now!'

Hoewel hij een officier van de oude stempel was, stelde Stephenson zich vrij onafhankelijk op tegenover de machtige Lords van de Admiraliteit. Die luxe kon hij zich veroorloven, omdat de marine hem uitdrukkelijk gevraagd had weer in dienst te treden, nadat hij in 1934 op pensioen was gesteld. De marinetop liet hem sindsdien de vrije hand in 'zijn' Tobermory. Stephenson's bijzondere positie en autoriteit verklaren het respect dat hij afdwong en de vrees die hij inboezemde, ook bij de officieren. Een aantal van hen ontnam hij het bevel omdat ze om een of andere reden niet voldeden. In pure 'Nelsonstijl' wilde Stephenson een soort broederschap van marineofficieren creëren, met bevelhebbers die hun job toegewijd waren en die gerespecteerd werden door hun manschappen. Zo zou hij een Britse officier weggestuurd hebben omdat hij de Belgische zeelui op de korrel had genomen over de houding van koning Leopold III.

Erg geliefd was 'Monkey Stephenson' niet en voor velen was de toestemming om Tobermory te mogen verlaten een ware opluchting. Toch bleken de lessen van HMS Western Isles in oorlogstijd van onschatbare waarde. Alertheid, koelbloedigheid, flexibiliteit, zin voor initiatief... het waren onontbeerlijke eigenschappen in 'the heat of the fight'. De 'leerlingen' van Stephenson zouden alles bij elkaar meer dan 130 U-boten en 40 vliegtuigen vernietigen en zo maakten zij de trans-Atlantische route een flink stuk veiliger voor de geallieerde konvooiën.

Wie ook kennismakte met de legendarische commandant van Tobermory was voormalig BBC-nieuwsanker Richard Baker, geboren in 1925. Hij diende tijdens de Tweede Wereldoorlog bij de Royal Navy en kwam ook in HMS Western Isles terecht. In 1972, het jaar van Stephenson's overlijden, publiceerde Baker het boek *The Terror of Tobermory* en daarmee bezorgde hij de legendarische U-bootjager een plaatsje in de rij van grote Britse zeelui.

Inséré le 20/10/13 BOEKEN LIVRES Enlevé le 20/11/13



AVIATION & MARITIME SECURITY INTELLIGENCE

By : Hassan M. Eltaher, BA Pol. Sci., MBA Aviation Management (Ret.) Chief, Marine and Civil Aviation Security Intelligence Transport Canada

This book was written by a transportation security operations professional in the context of ensuring ongoing maritime and aviation security.

The subject matter of the book should be of timely interest to ports and port facilities, shipping companies, international maritime organizations, governments and

intelligence agencies worldwide, as well as colleges offering courses in maritime security.

The main purpose of the book is to help render maritime security more effective, more efficient, less cumbersome, and less expensive to implement for both users and operators.

To know more about the author, the book's contents, and to order copies, please visit the following website: www.eandwcommunications.com

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Inséré le 22/10/13 NOUVELLES NIEUWS Enlevé le 22/11/13 Port of Antwerp and EXMAR announce strategic alliance for LNG bunkering in Antwerp

As a result of a European public tender, the **Antwerp Port Authority** appointed ship owning company **EXMAR** as its strategic partner for LNG bunkering in the port of Antwerp. Both partners have teamed up for the development of an LNG bunkership as well as for the execution of several further required studies.

LNG as a fuel is an excellent solution for ship owners to meet the various emission regulations that will come into force as from 2015. Compared to traditional ship fuels such as heavy fuel oil and diesel, the use of LNG significantly reduces the emission of sulphur oxides, nitrogen oxides, CO2 and particulate matter. LNG is therefore considered as the ship fuel of the future. Through their strategic alliance, the Port Authority and EXMAR want to facilitate the use of LNG as ship fuel. Both partners plan to start with the actual construction of the LNG bunkership early 2014.

Mr. Eddy Bruyninckx, CEO of the port of Antwerp, states: "the Port Authority wishes to not only encourage but also to facilitate the use of LNG as ship fuel because of the associated environmental- and sustainable benefits. The Port Authority therefore wants to ensure that ships calling the port of Antwerp are able to bunker LNG as ship fuel as from 2015. By calling on the LNG expertise of EXMAR, LNG shall be offered as a ship fuel in a safe and efficient manner. The Port Authority's ambition to position itself as a sustainable port is herewith put into action."

Mr. Nicolas Saverys, CEO of EXMAR, adds: "EXMAR is very pleased to work together with the Port Authority on developing LNG bunkering in Antwerp. EXMAR considers LNG bunkering as a strategic target market for the coming years. Independent studies indicate that the LNG bunkering market has a worldwide potential of an additional tens of millions of tonnes of LNG per year by 2020. Given its unique LNG expertise in i.a. the transfer of LNG via flexible hoses, EXMAR is perfectly placed to position itself in this new LNG bunkering market and thus substantially contribute to the further reduction of ship emissions."

Inséré le 24/10/13 DOSSIER Enlevé le 24/11/13 Piracy and maritime terrorism: a two-headed Hydra?

by Dave Mugridge, independent maritime security consultant, research fellow, Dalhousie University

Questions about possible maritime links between terrorist and criminal groups have resurfaced following the rise of Somali piracy and the unconnected Mumbai attacks in December 2008. Within the context of a growing criminal exploitation of the world's oceans, this paper will attempt to ascertain the nature of this strengthening and apparently symbiotic relationship.

The evident and well documented deterioration in maritime security reflects a general malaise in society's appreciation of its importance to both the global economy and strategic environment,

particularly at a time when terrorism could be said to have entered a new phase of methodology in its attacks on noncombatants. The potential solution to these multifaceted problems would appear to lie in developing a co-ordinated, coherent and comprehensive approach (C3) rather than the standard myopic military jerk of the knee. Gaining political acceptance is essential if operational cross-pollination from related fields such as counter-insurgency, international development and law enforcement can be brought together to aid the restoration of good order.

In terms of methods of operation the practitioners of maritime criminality and terrorism share many common characteristics. Analysis of this should in turn aid the international response but, to date, what we have witnessed has been misdirected and avoids the many lessons learnt from fighting irregular opponents in modern-day counter-insurgency. These disparate terrorist and criminal forces are unconventional in their organisation, financing¹ and campaigning. They are small in number and, with the exception of the likes of Al-Qaeda or large-scale narco-terrorist organisations, focus on local or regional issues. The singular and fundamental issue that separates their political and criminal activities is the presence of ideology.

The maritime economy's multifaceted vulnerability to both terrorism and criminality should not come as a surprise to the readers of this journal. After all, sea going vessels carry 80 per cent of world trade by value and 92-96 per cent of trade by volume. This compares with less than 1 per cent by air. Since the end of the cold war we have seen the seemingly irresistible development of commercialism's greatest revolution - globalisation. This has in turn fuelled an incredible rise in both the volume and value of maritime trade, which allows terrorists and criminals to operate with virtual impunity as mere background noise.²

This environment has seen the rise of both piracy and maritime terrorism. Our collective failure to deal effectively with either should be the concern of all because, unless enduring solutions can be implemented, we are likely to witness their proliferation across the globe. Their spread will be based on growing global poverty, failures in national governance and a constant stream of targets of opportunity. The obdurate incidences of piracy off the Horn of Africa and into the Indian Ocean suggests the limited success of the conventional military response, the increased sophistication of these organised criminals and the growing recognition that piracy will continue unless outside authorities impose some degree of stability and effective security over Somalia and Yemen.

Tangible and enduring improvements in security and stability off the Horn of Africa are far from likely in the immediate term. The region reflects the ravages of civil war and the failure of the international community to intervene to stop this travesty from getting out of hand. Islamist and Al-Qaeda franchisee group Al-Shabab has enjoyed a successful military campaign but lacks widespread indigenous support for its political and religious agenda. On the coast, fishing clans are reluctant to turn their backs on the spoils of piracy and kidnap to follow a rule of law established by a transitional government of diaspora academics and domestic warlords who would undoubtedly return them to grinding poverty. As of March 2010 they held over 700 hostages and 30 ships, an unimaginable



scenario in any other global industry.

My contention is that as time has progressed we are now on the cusp of seeing a strengthening of these links and a potential nexus is either upon us or is imminent. There seems little more to divide these groups than the very radical ideology that separates a terrorist from the rest of mankind. Yet the factors that could unite them are being fused at an alarming rate by current world events and demonstrate little sign of abating. Terrorists are no strangers to criminality, and criminals are not strangers to the use of terror. So I suggest neither side has far to walk on their respective philosophical rendezvous. The current situation is in fact a time in which the "mutation" that Charters wrote of could in fact commence the final descent towards the "revolution in terrorist affairs".³

Now is not the time to turn our collective backs on maritime-based terrorism or criminality which threaten to interrupt the vital circulation of goods or raw materials, or their exploitation of the inability of failing nation states to police their territorial waters at a time of global weakness. What is required is comprehensive, coherent and co-ordinated (3C) activity that transcends both nation state and international body.⁴

Tackling the source socio-economic problems in concert with direct military and judicial delivery is reflective of the 'comprehensive approach' being pursued hesitantly in both Iraq and Afghanistan. With perhaps the exception of the forward-leaning examples of the US Navy (USN) and Royal Australian Navy (RAN) few maritime security organisations have taken advantage of learning from other people's mistakes, particularly in looking towards their land-based military cousins for divine inspiration in solving these problems.⁵ Even in the USA and Canada the pace of security co-operation in the maritime domain lags behind other well established aspects of mutual defence and protection.

As I have argued publicly, the multitude of modern international laws and conventions which were designed to support maritime security has proved to be incoherent in the face of modern security challenges.⁶ Based upon outdated concepts, a lack of international co-operation over their enactment and outright failure on the part of the international community to deal effectively with failed or rogue states, it has left many commentators questioning their validity.⁷ These problems have forced some states like the UK to establish bilateral agreements with similarly minded countries in problem regions to prosecute those involved in piracy. The International Ship & Port Facility Security Code (ISPS) (2002) was supposed to provide the maritime world with a comprehensive legal framework to combat both terrorism and criminality upon the high seas.⁸ Its stringent obligations are designed to guarantee the safety of crew, cargo and society from terrorist or criminal acts. Yet this stove-piped bureaucratic response will not address the many root causes of maritime criminality or deter radical non-state terrorism upon the high seas.

Somali piracy's pre-eminent position as the most newsworthy maritime security issue has come about because of the recent number of 'spectacular' attacks aimed at Western merchant shipping. Despite the efforts of the UN and a number of maritime powers they have continued to attack, seize and ransom vessels in the glare of the media spotlight. The IISS published an excellent article which examined the root causes behind its rise and its growing sophistication.⁹ There are a number of socio-economic and political reasons _ behind this, not least the failed nature of the Somali state, the loss of lucrative fishing grounds and the rise of warlord-ism. What is unclear is the level of co-operation that exists between the pirates who operate from Somali ports and the terrorists who have found sanctuary there.¹⁰ What is clear is the growing sophistication of their operational methodology that now includes money laundering, swarm tactics, encrypted communications, developing competence in weapons handling and an ability to operate from mother ships well into international waters. Western intelligence sources within Somalia are questionable at best. Despite ideological and religious differences the potential scenario of Al-Qaeda or Al-Shabab assisting pirates and vice-versa cannot be discounted.

Any new multidimensional approach will require additional political capital if it is to stand a chance of being successful. The western world is now vulnerable to any escalation in terrorist violence, and its ability to combat serious criminal activity remains questionable. Throughout history global financial crises have always seen a deterioration in national and personal security, and today is no exception. The need for flexibility in our response to security challenges has never been greater. Our ability to respond conventionally is overstretched and becoming less politically appealing, whereas a more comprehensive policy could offer politicians the ability to bring together the full force and legitimacy of whole government with new-found civilian partners within the shipping industry. The ability to learn lessons from the Iraq and Afghan campaigns would pay dividends in the arena of maritime security and certainly be more appropriate than looking for inspiration in a reincarnation of Lord Palmerston's gunboat diplomacy. IFSMA

1. Heidi Johnson, masters candidate at Dalhousie's CFPS (2007), pp1-21
2. Peter Lehr, professor at St Andrew's University, Scotland (2007), pviii
3. David Charters, professor at Greg Centre University of New Brunswick, in Charters & Walker (2004), p17
4. P Lehr (2007), pxi
5. J Michael Waller in Serviam (Nov/Dec 2008), p7
6. Author, research fellow at Dalhousie University (2009), maritime security seminar CFPS 29/01/09
7. Martin Murphy, fellow at Corbett Centre UK, in Peter Lehr (2007), p155-183
8. ISPS Code (2003 Edn), piii
9. Jason Alderwick, naval analyst at MBDA, London, formally of IISS (2009)
10. Ken Menkhaus, associate professor at Davidson (2008), pp21-22

Inséré le 26/10/13 NIEUWS NOUVELLES Enlevé le 26/11/13 The Myth of Arctic Shipping

Why the Northern Sea Route is Still of Limited Geo-Economic Importance

With the Chinese **YONG SHENG** which recently transited the Northern Sea Route (NSR), the potential of Arctic shipping is being discussed by the world's media. The **YONG SHENG** is the first Chinese cargo vessel to transport container goods (steel and heavy equipment) from Dalian, China to Rotterdam, Europe.

Researchers and public media have often cited the development of Arctic shipping routes as the driving factor of China's regional interests, and, vice versa, China's interest in Arctic shipping is taken as an important factor in the development of the NSR. Consequently, the NSR is identified as the most promising Arctic seaway with a considerable potential to shorten sailing distances from Europe to Asia (and, to a lesser extent, vice versa). A closer look at the actual NSR statistics tells a more differentiated story about the future outlook of the route.

As of September 5, 2013 the **NSR Administration** has issued 495 permits to navigate and operate on the NSR so far this year. However, most of these permits are for only parts of the route, predominantly the western part of Russian waters, i.e. the southwestern Kara Sea. As of 31 July 2013, of the 296 permits granted only 18% (58 permits) are for actual transits and 45% (133 permits) are approved for voyages only in the southwestern Kara Sea, primarily shipping goods within the region or bringing them south-westwards to Europe.

This is just one example of how current discussions on the NSR generally remain superficial, drawing an undifferentiated picture of current and future Arctic shipping. Discussions tend to ignore the complexity of global shipping and its immediate repercussions on the potential of Arctic shipping. Relevant questions such as for which goods the northern routes will be relevant and which markets can be sensibly served need to be asked. Shipping types of many kinds, including fishing, tourism, cargo, container, destination, transit, and intra trade and supply, are lumped together, despite the tremendous differences in the economics, conditions and potential of different types of ship traffic.

Reliability and viability are key factors in global shipping operations that are often not taken into account when discussing the economic feasibility of Arctic shipping. That these factors are usually ignored is a major issue given that predictability, punctuality, and economy-of-scale of Arctic shipping are currently afflicted with many challenges and uncertainties, and will continue to be for some time to come.

Thus, public discussions regarding the future of Arctic shipping must begin to include the economic considerations given to global shipping in general. Additionally, going into more detail concerning the many particularities and subtleties that are decisive when aiming to evaluate the potential of Arctic maritime routes, would be equally important. In this regard, several essential questions arise:

1. Which kinds of shipping are relevant for northern routes? Will intra- and destination shipping remain the predominant shipping activity or will transit take over the leading role?
2. What are relevant goods for northern maritime transport?
3. What are the relevant import and export markets for these goods and what are their respective routes?
4. What do the major, global trading routes currently look like? How will they develop in the years ahead and how do northern routes fit into the general maritime trade picture?

From a less economic perspective, debates about the future of Arctic shipping also need to include the evaluation and acceptance of risks, including environmental and human risks, linked to navigation in Arctic areas. Important questions include: How safe is safe enough? What kind of risks can be accepted?

To shed some light on these questions, the following maps illustrate the regional distribution of China's imports and exports. China is often highlighted as the driving force of potential Arctic shipping developments. However, the analysis of global trade patterns exemplified by China's current imports and exports and its future outlook show a different picture. China conducts half of its trade with its neighbors in the Pacific region. Europe's share - which would be relevant for Arctic shipping - is substantially smaller. Less than 20% of China's trade is bound for or originates in Europe. Further, the majority of trade between China and Europe is of a containerized nature, which, most experts agree, will not be routed through the Arctic Ocean, due to the seasonality of Arctic transit routes, limited reliability and predictability, and the lack of infrastructure.

In addition to these geo-economic considerations, national deliberations and interests have to be kept in mind. With regard to the NSR, it is essential to discuss the immediate relevance of this seaway for the Russian Federation: What is Russia's incentive to develop the NSR? Is it intended to be a national waterway or an internationally used sea route? Is it meant to transport regional goods, i.e. energy resources to Asian and/or European markets, or considered as a transiting route transporting goods from markets outside the Russian Federation navigating through Russian water? What is the strategic value of the NSR for Russia?

Several on-going developments in regard to the administration of the NSR currently influence the deliberation of these questions, with the "icebreaker paradox" as the most prominent. With the recently implemented Rules of navigation on the water area of the NSR[7], icebreaker assistance is no longer compulsory for each voyage through NSR straits, but now it depends on the ice class of the vessel and the ice conditions in the area in which the vessel will be traveling. Icebreaker fees will

depend on the capacity of the respective ship, its ice class, the distance of the escort and the time of navigation.

However, while the legal framework is now established, a detailed mechanism for the calculation of the fees still needs to be developed. Until this mechanism is in place, shipping fees for using the NSR will continue to be determined by the old rules from 1990, meaning fee determination through individual negotiations. According to the rules, the Russian authorities only demand fees for icebreaker assistance (not only for breaking ice but also for search and rescue and other functions) and pilotage for using the NSR, which constitute the only revenue sources from the NSR. As these sources are not enough to maintain and develop the necessary infrastructure assets for safe navigation on the NSR, the Russian government has to provide significant subsidies.

One begins to question the economic viability of the NSR for the Russian Federation. And also the question remains about who will bring about the vast investments needed to modernise, maintain, and (potentially) expand the existing icebreaker fleet. The potential lack of sufficient icebreaker capabilities in the NSR will likely lead to a delay in shipping traffic and has immediate negative effects on the development of the NSR as a transit route used for international navigation. For several maritime trading sectors, time savings are crucial for any economic feasibility considerations of transiting the NSR, especially in the case of seismic and liquefied natural gas (LNG) vessels, which have very high time-charter costs per day. Waiting times of a few days due to icebreaker delays may destroy any pre-calculated cost benefits in comparison to southern routes. Based on these considerations, it may be possible that an agreement between the Russian Federation and user states of the NSR increasing the latter's financial contribution to the maintenance of the NSR is a reasonable option to improve and safeguard NSR usage. This is especially relevant if Russia is seriously interested in the NSR not only being a national waterway, but also a route for international transits.

Conclusion

Development in the Arctic is happening and shipping numbers are indeed increasing. But both scientific and public debates and reporting need to be directed into a more nuanced and differentiated discussion about the region's general future and the potential of shipping along northern routes. A realistic perspective suggests that currently the NSR is intended as a Russian sea route. International shipping and potential revenues derived from the NSR are generally welcome but most likely Arctic shipping will not change major global trading routes. Consequently, while it is of regional relevance and potential importance as a niche route for a number of goods, the NSR's geopolitical and geo-economic relevance, especially in the sense of global trade patterns, is rather limited.

This article is part of a larger study which takes a look at China's geo-economic interests in Arctic shipping and the future of Arctic shipping generally. The study will be released by The Arctic Institute later this year. **Source : The Arctic Institute**

Norwegian LNG to Japan via Arctic route



Just few weeks after it rolled out from a Korean shipyard, the "ARCTIC AURORA" LNG carrier is on its Arctic maiden trip from the Norwegian terminal of Melkøya to Japan.

The brand new 155,000 ton ship has left the port of Melkøya with the Japanese port of Futtsu as its

end destination. The ship is the second ever LNG carrier sailing from the Statoil-operated Arctic terminal to Japan over the Northern Sea Route.

As previously reported, the “**Ob River**” in October 2012 took the same route from Norway to Japan. The “**ARCTIC AURORA**” is scheduled to arrive on October 16 at the Asian LNG terminal, Bloomberg reports. The LNG carrier is operated by Dynagas, the liquefied natural gas (LNG) shipping arm of the George Prokopiou shipping enterprises. The ship is the second of two ice-class membrane LNG tankers which was taken over by Dynagas from the **Hyundai Heavy Industry (HHI)** in late July this year, Lloyd’s Register informs. **Source : Barents Observer**

SCF Group’s NS Yakutia completes her NSR voyage

On October 6, 2013, Sovcomflot’s dry cargo carrier **NS Yakutia** completed her voyage along the Northern Sea Route. It was the sixth voyage of the Group’s vessels under the programme on developing high-latitude routes from the Atlantic and Pacific Oceans, Sovcomflot press center says. **NS Yakutia** loaded with 67,000 tonnes of iron ore concentrate of Eurochem Trading is on her way from port Murmansk to port Lanshan (China). 2,294 miles from Cape Zhelaniya (Novaya Zemlya archipelago) in the Kara Sea to Cape Dezhnev in the Bering Strait were covered in 14 days. Average speed of **NS Yakutia** at NSR was 9 knots. So it saved over 18 days as compared with the conventional route via the Suez Canal, the statement says. **NS Yakutia** used the new deepwater route to the north from New Siberian Islands, named Tikhonov Route after the company founder. The icebreaking assistance was provided by nuclear icebreakers **Yamal, Taimyr** and Vaygach of FSUE Atomflot. Technical support of the voyage is provided by SCF technical manager - Novoship OJSC in conjunction with the experts of Sovcomflot headquarters and the state structures. The vessel is expected to arrive in the port of destination on October 12. Vessel’s technical characteristics: built in 2013, deadweight – 74.559 t, ice class – 1B, length – 225 m, width – 32 m, draught – 14 m. Sovcomflot Group is Russia’s largest shipping company and one of the world’s leading shipping companies specializing in the maritime hydrocarbons transportation and supporting continental shelf exploration and oil & gas production. The SCF fleet includes 156 vessels with a combined deadweight of around 12 million tonnes. One third of them have a high ice class. The Group specialises in hydrocarbon transportation from regions with challenging ice conditions. Sovcomflot supports large-scale offshore energy projects in Russia and the rest of the world, including: Sakhalin-I, Sakhalin-II, Varandey, Prirazlomnoye, Tangguh, Escobar, and Peregrino. The company is registered in Saint-Petersburg and has representative offices in Moscow, Novorossiysk, Murmansk, Vladivostok, London, Limassol, Madrid, Singapore and Dubai.



The shipping forecast - it'll be colder but much, much quicker: New Arctic shipping route saves up to two weeks' travel between Asia and Europe



Its cargo was unremarkable: dismantled cranes to be used to hoist containers on to ships. But when the **Yong Sheng** sailed into Rotterdam this week, the boat and its crew were greeted with bouquets of roses, Chinese television crews, and the cheers of company officials who say they have made history.

While sailing from Dalian, in China, to the Dutch port of Rotterdam is one of the most plied routes in the world, the **Yong Sheng** has become the first

commercial Chinese container vessel to make the journey through the icy waters of the Arctic, rather than south via the Indian Ocean and the Suez Canal.

As global warming leads to a decline in Arctic ice, shipping-company officials are rubbing their hands at the prospect of a “Golden Waterway” which could cut journey times and reduce the cost of transporting goods from Asia to Europe. “It saves between 12 and 14 days of transit,” said Ron Sallet, a manager in Rotterdam for the state-owned Cosco Group, which operates the Yong Sheng.

Although there was much fanfare on Tuesday afternoon when the ship finally docked, she was not the first vessel to use that route: Russian authorities said that 46 permits were granted last year for ships to sail through its Arctic waters. What makes the **Yong Sheng** unique is that she was the first Chinese merchant vessel to make the journey, demonstrating its commercial potential for the world’s biggest exporter.

Via the Northern Sea Route (NSR), ships can make the 8,100-nautical-mile journey in about 35 days, instead of 48 through the southern route, saving fuel and therefore money. But there is at least one snag: right now, ships can make the journey for only about 10 weeks a year, during a window between July and November, when summer temperatures thaw the ice.

And the Arctic Institute, an independent think-tank, said in an analysis on its website that ships still run the risk of getting stuck in ice, which would then incur delays and the cost of calling out a Russian ice-breaking vessel to free them. Although ship owners see the potential of the route, many believe it will be years before it will be commercially viable.

“Large-scale transarctic shipping and a shift in global trade patterns towards the Arctic... are far from becoming a reality,” wrote Andreas Raspotnik, an analyst at the institute. “Traffic along the NSR will continue to be dominated by regional – primarily Russian – traffic and remain a seasonal and niche trade route.”





But decades ago, such journeys were not possible at all. Now, as scientists blame climate change for heating up the oceans, the level of ice in the Arctic has reduced by about 25 per cent over the past 30 years. Results of a study by the European Space Agency's CryoSat mission released today found that the volume of sea ice in the Arctic hit a new low this year, and some scientists predict that the Arctic could experience ice-free summers by 2030.

This is worrying environmentalists, who are calling for more research into the Arctic's delicate ecosystems before 20,000-tonne vessels carrying heavy fuel oil start chugging through the pristine waters every summer.

"If we are concerned about the potential for oil spills in this region and we know that we do not have sufficient resources to clean up a potential oil spill, then the best way to avoid that would be to only let ships with clean fuel sail through this region," said Nina Jensen, the head of WWF Norway. **Source : the Independent**

High safety requirements for ships in the North-East Passage

The Stena Polaris is one of the tankers in Stena Bulk's fleet with the necessary technology, equipment and crew competence for a safe voyage via the Arctic. This is the ninth time that one of Stena's ships will have sailed through the North-East Passage since 2011.



The Russian authorities responsible for administering the North East Passage have exacting requirements on technology and equipment. Additionally, only during a few months every year does the ice situation allow ships to pass through the North-East Passage. Even then, they are escorted, often in convoys,

through the most difficult sections and the Stena Polaris has been assisted by the Russian nuclear-powered icebreaker Taymyr with a crew of 110. Also, throughout the voyage there are so-called "ice advisors" on board Stena Polaris who are used to navigating in Arctic waters.

The Stena Polaris has been built to ice class 1 A specifications in accordance with Det Norske Veritas (DNV), which means that it is well equipped to sail in ice-covered waters where broken ice can be up to 0.8 m thick. In addition to an ice-strengthened hull, her rudder and propellers are technically

adapted for operation in icy waters and her main engines have been modified to deliver greater power. In order to raise competence on board still further, Stena has been collaborating for some years now with Russian Makarov State University in St. Petersburg, which specialises in navigation in icy waters. 25% of the officers on board Stena Bulk's tankers are Russian, and most of them were educated and trained at Makarov. Patrik Svahn, Manager Commercial Operations in Stena Bulk's office in Gothenburg, is now on board the Stena Polaris and blogs directly from the ship. "As always, Saturday is drill day and today was no exception. On the menu was a safety drill with helicopter launching, an abandon ship drill and again a fire drill but this time it was time for fire in the paint store. At 15:30 the alarm sounded and all crew and passengers went to their respective muster station. We started off with the helicopter launch drill which today consisted of the 3rd Officer verbally going through the different scenarios where helicopter launching could be necessary such as during a medical emergency, so called helivac, and what to think of if this would come into reality. Past experiences were shared and those who had questions had the opportunity to ask them. Before we were finished with this drill the 3rd Officer advised that after the remaining drills we will all meet inside in the ships office where we will watch an educational movie about helicopter launching". Source: Stena Bulk

Vitol Brings Asian Diesel to Europe via Arctic's Northern Sea Route

By Ron Bousso

LONDON, Oct 10 (Reuters) – The world's top oil trader Vitol has brought tankers with Asian diesel to Europe via the Arctic Ocean, a journey rarely used for oil, in yet another evidence the route is wide open for commercial trade due to thawing sea ice.

The Swiss-based trader booked two 90,000-tonne ice-class tankers to ship gasoil and diesel from South Korea to the Rotterdam area, traders said.

Propontis sailed out on August 20 and is currently in the North Sea, while Zaliv Amurskiy left South Korea on September 12 and is now in Laptev Sea, according to Reuters AIS Live ship tracking.

According to shipping data, Vitol booked the 30,000-tonne tanker to unload the

product from the Propontis mid-sea outside the Rotterdam port, in what is known as ship-to-ship transfers.

Vitol declined to comment on the shipments.

Diesel, gasoil and jet fuel regularly flow from South Korea to Europe on the traditional route passing through the Suez Canal which lasts around 40 days.

Traders have in recent weeks wanted to capitalize on the growing demand for diesel in Europe as a result of a drop in local production due to seasonal refinery maintenance.

And while naphtha cargoes often move in the reverse direction from Russia to Asia, few tankers have been used on the west-bound route, traders said.



The Arctic route through the Baring Strait could take as little as 22 days, according to traders, potentially saving hundreds of thousands of dollars.

It nevertheless also entails higher costs and risks of delays due to ice.

The route, opened for commercial trading only in recent years as a result of thawing sea ice, is open for no more than four months a year.

Inséré le 10/10/13 DOSSIER Enlevé le 10/11/13

Advancing e-Navigation

IMO's vision of e-Navigation is advancing towards real action, but without coordinated effort involving the range of stakeholders that will be affected by its impact, the project will struggle to reach its potential, writes Capt R. G. Moore

Folk sayings have a way of encapsulating basic truths. This is why for many among us the old saw "Can't see the forest because of the trees" applies to e-navigation.

People get wrapped up in the minutia of its shipboard building blocks - AIS, ECDIS, etc. - and lose sight of what's being created, and with the SOLAS carriage requirements for those basic tools now in place there are some who consider implementation of enavigation essentially complete.

While we may all be aware that e-navigation is "...the harmonized collection, integration, exchange, presentation and analysis of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment", what's buried in that statement is not necessarily apparent.

To that end, examination of the Preliminary Gap Analysis submitted to NAV 57 by the E-Navigation Correspondence Group is particularly instructive [1].

That 47 page summary highlights the barriers - or Gaps - which must be addressed during e-navigation's implementation and in the process conveys a real sense of the intended scope of e-navigation. Unfortunately, the intended scope remains a mystery to a substantial portion of the World's maritime community.

This is why, among the documents emerging from NAV 57, two sentences spoke directly to that issue: "At the outset the knowledge of e-navigation as an international effort is low or absent among the practical users. Throughout the development the promotion of e-navigation has been difficult, as it was hard to demonstrate the practical consequences to users and stakeholders".

When that lack of knowledge is combined with the goal that e-navigation is to be "User Driven" the resulting problem becomes self-evident. If the impetus for development is to be "pull" from the users, how will that happen if those users don't know what it's all about?

This returns us to the issue of how to advance e-navigation. Unless e-navigation is explained, and explained in terms that persuade the users of its benefits, progress is going to be difficult and - beyond a certain point - impossible.

The task appears daunting, particularly considering the various constituencies which must be convinced not just of what e-navigation will become but of its benefits.

It is also well to remember that e-navigation will be a public-private partnership, requiring real commitment from governments, quasi-governmental bodies such as leading NGO's and the private sector. And e-navigation will be made up of many different "bits and pieces", each of which must be employed correctly if the final system is to be greater than the sum of its parts.

Mr John Murray of the International Chamber of Shipping touched on this aspect when he discussed "competencies" at the January 2012 conference E-Navigation Underway 2012[2].
Marketing plan

A prerequisite for e-navigation's success, or at least implementation at a reasonable rate, is an educational campaign that, in reality, amounts to a marketing plan.

Development of that plan falls to the IMO. This is recognised by that organisation and is embodied, for example, in an output from NAV 54 in June 2008.

Among the enumerated "General Principles for the Development of E-navigation"[3] is one entitled "Clear Ownership and Control".

The descriptive paragraph for that principle led off with the words "Realization of the e-navigation vision requires a clear, global commitment, articulated through a viable and coherent framework which sets out a migration plan to guide Governments and industry. E-navigation is a global concept that will be implemented and operated at global, regional and local levels across all user groups."

It went on to say that, at the global level "...[the] IMO is the only organization that is capable of meeting the overall governance requirement."

Having thus acknowledged its ownership and control the MSC made clear that the IMO is responsible for "leading and coordinating the external communications effort necessary to support the case for enavigation" [4].

The first step may well be to recognise that the term "e-navigation" and the single phrase that currently defines it do not speak clearly to the intent, scope and importance of the undertaking.

This suggests that a more complete definition must be advanced, and since the current name "e-navigation" may of itself suggest a narrow interpretation perhaps it's time to migrate to a more descriptive one.

With an expanded definition as a base it should be possible to develop a "Marketing Plan" that includes identification of the various constituencies, their concerns, how e-navigation will impact them and the priority with which specific concerns should be addressed.

The Draft Strategy for the Development and Implementation of E-Navigation set forth in Annex 12 of NAV 54's Report to the Maritime Safety Committee could serve as the basis for development of the plan, and for general instruction outside the framework of the IMO and its participants the Plan should connect the dots in a way making clear the long term implications.

In this case the "dots" are such things as the ISM code, Maritime Domain Awareness (MDA) and the various industry-government information exchanges so essential to the movement of marine transportation.

"Success" for the plan will be achieved when e-navigation reaches that tipping point where - as was the case with the internet - user demands promote wider and wider applications. It is expected that the IMO will execute such a plan through the Member States and its consultative organisations.

Necessarily complex, there are several points which should be considered in its development.

Since e-navigation will only develop as a public-private partnership, governmental agencies must be convinced about the value of their participation.

In fact, it is government that may pose a greater challenge than the private sector. There is already a governmental school of thought that considers that e-navigation will be "revenue-neutral", developed and implemented with expenditures offset by savings to be achieved.

Lack of understanding thus raises enormous problems on several levels. A real danger is that some governments will view e-navigation as a substitute for their existing maritime safety infrastructure, using it as a reason to reduce, for example, its system of aids to navigation.

While such choices may ultimately become available, any changes must be made carefully and in keeping with the pace of e-navigation's implementation.

It must be recognised that upfront costs will accrue to National authorities incidental to implementing e-navigation, with savings coming some time in the future, and then perhaps only as "avoided costs". Unfortunately, avoided costs weigh little in the minds of those charged with the allocation of governmental funds.

Public awareness

The role of Member States in informing and educating their nationals about e-navigation is less clear, but certainly must be part of the overall effort.

Perhaps the most effective means of doing so would be to ensure information about e-navigation, whether IMO documents or reports of test bed results, is readily available.

One potential model is the actions taken by Norway, as illustrated by visiting one of that country's e-navigation web sites[5].

The Marketing Plan must recognise that public tolerance of maritime incidents has diminished, as reflected by the trend to criminalise actions previously considered errors in judgment or functions of circumstance.

The litany of incidents giving rise to this - TORREY CANYON, AMOCO CADIZ, EXXON VALDEZ, BRAER, ERIKA, PRESTIGE, etc. - goes on and on.

The plan should reinforce the words that the IMO's Secretary-General used in his 2007 World Maritime Day speech:

"I do not wish to see the maritime community stand accused of failing in its duty towards the protection and preservation of this beautiful planet, which, it seems to me, we have neglected for too long."

Promoting e-navigation as a significant step toward protecting the environment and encouraging nations to move away from punitive measures to the preventative ones inherent in e-navigation should be primary goals.

This is made easier by the success of several e-navigation "Test Beds" that, among other things, address environmental concerns and marine resource management.

Two of the most successful, HELCOM and EfficienSea, focus on the Baltic and its approaches, and provide many examples of what can be done.

As a more general comment, the marketing plan should provide the means to report upon and publicise the results of the various e-navigation test beds. These provide examples of actual applications and demonstrate measurable benefits, and are thus critical tools for the advancement of e-navigation.

Demonstrating benefits

Considering the private sector, owners and operators of ships must find answers to the question of "What's in it for my company?"

If the private maritime sector is to accept e-navigation as an important and necessary tool it must see the benefits couched not in terms of rhetoric but of demonstrable additions to their bottom line or as the solution to real problems. Several things make this a challenging sale.

First, companies have only limited ability to affect operating costs but will find many e-navigation expenses come up front, before significant benefits can be realised. These start before many of the future benefits from e-navigation kick in, and are thus a negative element.

Secondly, e-navigation may ultimately impact manning requirements in as yet unspecified ways.

Take as an example the Maritime Services Portfolio (MSP) concept. Defined as something which "...defines and describes the set of operational and technical services and their level of service provided by a stakeholder in a given sea area, waterway, or port, as appropriate"[6] the other side of the coin requires a rigorous examination of the tasks which must be accomplished by Bridge Management Teams when operating within the various areas.

That exercise concludes with a determination of the personnel, equipment and procedures needed when operating in those areas.

An example of such practice was provided by Princess Cruise Lines in a presentation by Captain David Christie, Senior Vice President, Professional Marine Standards at eNavigation 2010, a conference held in Seattle on 17 November, 2010.

Such realistic assessments could well lead to requirements for additional people, with offsetting benefits difficult to quantify in fiscal terms. The practice would however be an important step in risk reduction and have a positive effect upon personnel satisfaction, recruitment and retention.

On the equipment front, those determining standards and designing equipment must be included among the marketing targets.

When e-navigation is fully implemented it will represent a data-intensive system which unless appropriately designed will overwhelm those it is designed to serve, particularly those on the bridges of ships.

Unless development takes into consideration the users, their capabilities, needs and limitations - in short, the human element - the results may incorporate every feature of which the technology is capable rather than what is actually needed.

Examples of such overextension are legion; compare what's built into the word processing program Word to what the average user actually needs in his or her daily endeavours.

This problem has generated discussion of a so-called "S-Mode", providing a means to configure bridge displays to a common standard.

The marketing of e-navigation will not be simple but it is one of the keys to successful implementation and we need to get on with the job.

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Inséré le 28/10/13 HISTORIEK HISTORIQUE Enlevé le 28/11/13 1798, L'expédition d'Egypte partie 2

La traversée

Avant l'appareillage, Bonaparte a minutieusement organisé la vie quotidienne durant la traversée. A bord des navires, l'heure est réglée depuis le départ sur la pendule de l'observatoire de Marseille, qui servira de référence pendant toute la durée de l'expédition. Des signaux horaires sont prévus pour se recalculer sur l'heure de l'Orient. Quatre montres Berthoud, les plus modernes et les plus exactes qui soient, doivent garder l'heure de Marseille et servir pour le calcul des longitudes. Plus tard, elles seront utilisées pour cartographier l'Egypte.

Le réveil a lieu chaque matin vers 6 heures. A 7 heures, c'est le branle-bas de combat, et le début des exercices. Chacun doit rallier son poste et s'entraîner au tir du canon. Le rôle de chaque marin ou soldat est parfaitement réglé et connu pour l'armement et la manoeuvre des pièces de 36 ou de 24. L'installation des savants n'a pas été laissée au hasard. Ainsi les chimistes, tel Berthollet sur l'Orient, veillent-ils les poudres entreposées à la "sainte-barbe". Avec leur lunette, les astronomes surveillent l'horizon, les ingénieurs sont à la manoeuvre.

En fin de matinée, marins et soldats s'entraînent à la transmission des messages. Tout un réseau signalétique a été mis en place, avec des navires émetteurs, récepteurs et répéteurs. Les ordres et les informations se transmettent par signaux flottants ou pavillons, signaux à bras, signaux sonores et lumineux pour la nuit. Les messages longs et confidentiels sont pris par les avisos à bord de l'Orient et portés sur le navire désigné.

Parfois, pour plus de discrétion encore, les capitaines sont convoqués à bord du navire amiral pour recevoir des instructions orales. Ainsi, le commandant de la Junon est-il appelé quelques jours avant d'atteindre les côtes d'Afrique pour faire voile au plus vite vers Alexandrie. Il doit s'y informer de l'état de la ville et de ses défenses, de l'éventuel passage des Anglais et ramener le consul de France à bord de l'Orient. Ce sera chose facile, car les frégates ont une bonne marche, alors que l'ensemble du convoi se déplace au mieux à quatre noeuds, vitesse du navire le plus lent. Mais aucun traînard ne sera abandonné, non plus qu'aucun homme tombé à la mer.

La marche du convoi est aussi ralentie par la rencontre avec des voiliers inconnus. Des frégates sont dépêchées pour reconnaître le moindre navire repéré à l'horizon et amener son capitaine à bord de l'Orient, où Bonaparte en personne va s'enquérir de sa route, de sa provenance, de sa destination et surtout lui demander s'il a croisé des Anglais.

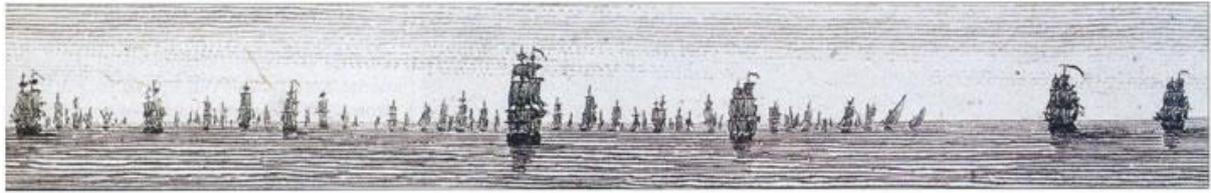


Le *Peuple Souverain*, vaisseau de 74 canons lancé à Toulon en 1756 sous le nom de *Souverain*, était l'un des plus forts bâtiments de l'expédition. Il est représenté ici en cours d'armement par Antoine Roux dans un carnet d'études daté de 1801 (conservé au Peabody Essex Museum de Salem, Etats-Unis).

Plusieurs capitaines de pays neutres, ainsi interpellés, loueront plus tard la magnanimité de Bonaparte qui reçoit ses hôtes du moment avec beaucoup d'égards, les faisant raccompagner à leur bord après les avoir interrogés, en leur demandant simplement de ne jamais révéler ce qu'ils ont vu. L'interrogatoire des officiers des navires rencontrés était à l'époque la meilleure source d'information sur la présence des flottes ennemies.

L'après-midi, les vaisseaux deviennent de véritables universités flottantes. Des livres ont été embarqués — plus de cinq cents sur l'Orient — et les passagers travaillent. Les interprètes enseignent les langues étrangères, en particulier l'arabe. Bonaparte se documente sur l'Egypte et les pays environnants, étudie les cartes du père Sicard et de d'Anville, lit la traduction du Coran et tous les ouvrages touchant à la civilisation, aux moeurs et aux lois de ces contrées. Il crée des petites académies maritimes où l'on discute de sujets divers. Les généraux s'intéressent aux connaissances

des amiraux et réciproquement. La Marine et les armées de terre sympathisent, délaissant leur coutumière rivalité.



Sur les différents navires, les savants participent activement à tous les travaux. Les astronomes observent le ciel, se passionnent pour la navigation et les problèmes d'heure. Les zoologistes demandent aux marins de leur pêcher des poissons afin de les observer, les disséquer et les dessiner. Les artistes, tel Vivant Denon, croquent tout ce qu'ils voient : la mer, le convoi, les îlots rencontrés, les îles longées, donnant pour la première fois de magnifiques représentations de la Corse, de Capraia, de l'île d'Elbe, de la Sardaigne, de la Sicile, de Malte, vues du large.

Souvent, les orchestres embarqués sur les gros vaisseaux jouent des marches militaires ou des airs d'opéra. Le convoi se resserre alors pour les écouter. A la nuit, les chanteurs, comme Villoteau ou Rigel, engagés au Conservatoire de Paris, entonnent le Chant du départ ou le Chant des victoires, composés par Méhul pour l'expédition. Plus tard, chaque navire fait entendre ses flageolets, violons et tambours et ses plus belles voix.

Une impressionnante vision panoramique du convoi en route pour Alexandrie, par le dessinateur Vivant Denon, embarqué à bord de la frégate *Junon*, auteur d'un journal de voyage et futur directeur du Musée du Louvre. On imagine l'humiliation ressentie par l'amiral anglais Nelson, qui n'a pu intercepter à temps une telle armada traversant avec lenteur la Méditerranée ! (Bibliothèque Méjanes d'Aix-en-Provence).

Des conteurs racontent des histoires merveilleuses dont les marins et les soldats sont les héros, qui délivrent des esclaves et les femmes des harems soumises au pouvoir et aux caprices des mamelouks... Chacun commence à nourrir son rêve d'Orient, qui influencera tout le XIXe siècle, aussi bien en peinture, en poésie qu'en littérature. Les Orientales de Victor Hugo ont pris leurs racines sur l'Orient de Bonaparte, entouré

d'une génération de jeunes gens — il n'a lui-même que 29 ans — qui donnera le jour au Romantisme. Chateaubriand, alors en exil à Londres, regrettera toute sa vie de ne pas avoir été du voyage. Il y aurait côtoyé des figures extraordinaires comme Kléber, architecte de formation devenu général, ou Dumas, né d'une mère africaine et futur père d'Alexandre.

Mais les soldats ne vivent pas seulement de gloire et de contes des "Mille et une nuits". Certains jouent aux cartes, aux dés et s'y ruinent. D'autres organisent des loteries où ils perdent leur argent et les quelques objets précieux qu'ils ont emportés. Le moral des troupes est bon et le beau temps épargne à la plupart les affres du mal de mer. Comme l'écrit Vivant Denon, "chacun apprécie de faire autant de kilomètres sans avoir à marcher". Habités aux mers du Sud, les marins ne se plaignent pas de la forte chaleur de la mi-juin. En revanche, sous leurs effets de laine, les soldats de l'armée du Rhin commencent à en souffrir.

Au début, la nourriture est correcte. On avait embarqué des animaux vivants, du lard, des légumes secs, des tonnes de bis cuit ainsi qu'un million de pintes de vin et 120 000 pintes d'eau-de-vie ! Mais Vivant Denon, qui vante à diverses reprises la bonne santé des hommes, écrit vers la fin du voyage : "Nos provisions s'achevaient, notre eau fétide ne pouvait plus être chauffée, les animaux utiles disparaissaient et ceux qui nous mangeaient centuplaient."

L'escale de Malte

Après avoir longé la côte orientale de la Sardaigne puis le Sud de la Sicile, le convoi se présente à l'aube du 9 juin devant l'archipel maltais. Partout, la vue de ces voiles innombrables inspire l'admiration ou sème l'épouvante. A Malte, Vivant Denon dit que ce fut "la stupeur". Ce jour-là, les Français connaîtront aussi un moment d'inquiétude, lorsqu'ils verront apparaître une quarantaine de

voiles à l'horizon. Ils pensent aussitôt à la flotte anglaise, mais c'est le convoi de Desaix parti de Civita Vecchia qui, ayant fait route par le détroit de Messine, attend le gros de l'armada au large de Malte, passage obligé des navires. Bonaparte retrouve ainsi son ami Monge qui était allé récupérer au Vatican des imprimeries en langues copte et syriaque. Les escadres se saluent et l'on tire cinq cents coups de canon dans la liesse générale.



Le débarquement de Bonaparte à Malte le 9 juin 1798, par Gudon. Pour se ravitailler en eau, la flotte fera escale dans cette île située au Sud de la Sicile. Le peu d'enthousiasme des chevaliers de l'Ordre à laisser entrer les navires français décidera Bonaparte à occuper militairement l'ensemble de l'archipel !

Le soir même, Bonaparte envoie une délégation menée par le savant Dolomieu, ancien chevalier de l'ordre de Malte, pour négocier avec le prieur Hornpesch la possibilité pour la flotte de faire le plein d'eau. Dolomieu n'obtient l'autorisation d'entrer dans le port de La Valette que pour quatre navires à la fois, ce qui rend impossible un ravitaillement rapide. Considérant cette réponse comme une déclaration de guerre, Bonaparte décide de débarquer sur les trois îles de Gozzo, Comino et Malte !

Le 10 juin au petit jour, des soldats mettent pied à terre simultanément en sept points des îles, et marchent sur les forts qu'ils occupent rapidement. Le soir même, les Français ont investi tout le territoire. Le débarquement a été si rapide que les défenseurs n'ont tiré qu'un petit nombre de volées qui n'ont touché aucun navire. Bonaparte s'installe pour quelques jours dans le palais du grand maître de l'Ordre et fait libérer tous les prisonniers arabes et les galériens turcs.

Tandis que les savants commencent leurs travaux, Bonaparte, pour disposer d'un petit trésor de guerre en Egypte, confisque dans les couvents tout l'or et l'argent ne servant pas directement au culte, une mesure qui choquera un grand nombre de Maltais. Par ailleurs, il fait saisir des canons, des fusils, 1 500 sacs de poudre et, pour transporter tout ce matériel, deux petits bricks et quatre galères pouvant marcher à la voile.

Tous les bâtiments du convoi se ravitaillent en eau, les plus démunis en hommes d'équipage embarquent des Turcs libérés et des marins maltais, tous volontaires. Pour administrer et assurer la défense de l'île contre les Anglais, Bonaparte laisse à La Valette le général Vanbois et trois mille hommes. Le 18 juin, la flotte reçoit l'ordre d'appareiller.

Une frégate, la Sensible, est dépêchée sur Toulon pour informer le Directoire de la prise de Malte. Alors que le convoi se reforme, un vaisseau et plusieurs frégates évitent de justesse un abordage

grâce aux Turcs nouvellement embarqués qui se précipitent pour les écarter. Ces actes de courage impressionnent les Français et marqueront le début de l'enrôlement en nombre de soldats étrangers dans l'armée de Bonaparte. Le 19 juin, le convoi reformé est en mesure de reprendre sa route. Dès lors, chacun comprend qu'il fait cap sur Alexandrie.

Débarquer à Alexandrie

Désormais, le convoi est rôdé à la navigation en escadre. La vie reprend son rythme avec deux



Dans la nuit du 1^{er} au 2 juillet, au terme de la traversée, Bonaparte met pied à terre en Egypte, à l'Ouest d'Alexandrie. Gravure au bleu de Charles Lemire, conservée au Musée des Beaux Arts de Lille.

exercices par jour, matin et soir. Le vent est favorable, l'armada quitte le Sud de la Crète le 25 juin et met le cap sur l'Egypte. Deux jours plus tard, la Junon part rejoindre Alexandrie au plus vite, avec mission d'en ramener des informations et le consul de France dans la place. Le 29 juin, les vigies signalent la terre et bientôt la côte d'Afrique apparaît à tous. Les plages blanches et nues, longs rubans de sable jetés entre ciel et mer, l'absence

totale de végétation, causent aux soldats "un saisissement indicible". Certains sont pris de terreur, mais il semble que très vite l'humour l'emporte et, en quelques heures, les hommes vont retrouver le sourire et le goût des plaisanteries.

A son retour, la Junon rapporte que Nelson a quitté Alexandrie deux jours plus tôt. L'amiral anglais s'était lancé début juin à la poursuite de la flotte française, mais en raison de la route et de la lenteur de cette dernière, l'avait devancée ! Ne trouvant aucun bâtiment ennemi et à court d'informations, Nelson était reparti vers Chypre. Craignant son retour, Bonaparte précipite les opérations de débarquement. Le 1er juillet, malgré le mauvais temps de Nord-Est et le crépuscule naissant, l'ordre est donné aux navires de s'approcher du rivage dans l'anse du Marabout et de commencer la mise à terre des soldats avec les chaloupes. De l'une des petites galères saisies à Malte, Bonaparte dirige lui-

même la difficile progression des embarcations.

Au milieu de la nuit, cinq mille soldats foulent déjà le sable. A l'aube, Bonaparte se lance vers Alexandrie, qui est prise dans la matinée. Les

soldats embarqués sur les vaisseaux



Sur cette gravure en couleurs de Pingret, on distingue les embarcations faisant la navette entre les navires au mouillage et l'anse du Marabout, sous l'œil de Bonaparte et de son état-major militaire.

arrivent toujours par la plage, tandis que les navires marchands, qui calent moins, débarquent à tour de rôle leurs hommes et le matériel sur les quais du port. Une fois cette opération achevée, les bâtiments marchands chargeront des vivres achetés sur place et reprendront la mer vers leurs ports d'attache. Certains petits navires seront néanmoins réquisitionnés pour remonter le Nil jusqu'au Caire et au-delà.

Au cours de sa manœuvre, le Patriote, la plus grosse unité de la flotte marchande, heurte un haut-fond et coule avec une bonne partie du matériel scientifique embarqué. A cause de ce naufrage traumatisant et du fait de l'incertitude des sondes, Brueys et Bonaparte renoncent à faire entrer les vaisseaux dans le port. Une décision qui, quelques semaines plus tard, sera l'une des causes de la bataille d'Aboukir, particulièrement meurtrière pour la flotte française (lire encadré ci-contre).

Une réussite scientifique

Les soldats, les marins et les savants de l'expédition vont accomplir en Egypte un travail considérable, à tel point qu'aujourd'hui, les opérations militaires s'estompent — en France — pour laisser la place aux seuls souvenirs des découvertes scientifiques. Le 22 août, soit moins de deux mois après le débarquement, Bonaparte crée l'Institut d'Egypte qui entreprend des recherches dans tous les domaines du savoir, aussi bien en mathématiques, physique, chimie, botanique, zoologie, médecine, astronomie, qu'en archéologie, musique, littérature arabe et ethnologie. C'est ainsi que sous la direction de Larrey et de Desgenettes, les médecins étudient les maladies locales comme la dysenterie, la peste, les ophtalmies et introduisent pour la première fois des statistiques de mortalité. De leur côté, les ingénieurs et les géomètres réalisent des opérations de nivellement pour étudier la possibilité d'un canal reliant la mer Rouge à la Méditerranée.

L'archéologie devient pour beaucoup de membres de l'expédition, même chez les soldats, une véritable passion. Les "savants" font des relevés des obélisques, des pyramides, des hiéroglyphes, des sculptures, des peintures, des momies. En juillet 1799, l'officier Bouchard découvre au cours de travaux de fortifications la fameuse "pierre de Rosette" qui permettra à Champollion de percer le mystère des hiéroglyphes.

Au retour de l'expédition, la commission des arts et sciences publiera la fameuse Description de l'Egypte, en vingt-trois volumes, dont dix de planches, la plus belle encyclopédie jamais réalisée. En France et en Europe, le style "retour d'Egypte" va tout envahir : l'architecture, le mobilier urbain, la décoration. L'égyptomanie bat son plein, la mode orientaliste investit les arts. Quelques années plus tard, les saint-simoniens partiront en Egypte pour réaliser leur rêve et l'obélisque de Louxor sera transporté jusqu'à Paris à bord du Louxor, un navire construit spécialement, avec l'arrière démontable. Enfin, le fabuleux projet du canal de Suez se concrétisera sous le Second Empire...

La bataille d'Aboukir

Une semaine après leur arrivée, tous les navires de l'expédition ont achevé les opérations de débarquement. Brueys et Bonaparte avaient étudié plusieurs possibilités concernant les treize vaisseaux et les frégates : les renvoyer à Toulon ou à Malte, les placer en attente dans les parages de Corfou, ou encore près d'Alexandrie pour, en cas d'échec des opérations terrestres, pouvoir procéder à un réembarquement en urgence. Compte tenu du faible nombre de marins disponibles — d'autant qu'une partie d'entre eux assuraient l'armement des forts et des redoutes en prévision d'une éventuelle attaque anglaise ou turque — et des difficultés rencontrées pour l'avitaillement nécessaire à un retour, c'est la troisième solution qui sera retenue.

L'idéal serait d'abriter la flotte dans le port, bien défendu. Mais au cours de sa manœuvre d'entrée, le Patriote, calant environ 5 mètres, sombre sur un haut-fond. Un relevé de sondes met en évidence de nombreux obstacles dans les passes d'accès au port, qui s'avèrent dangereuses pour des vaisseaux ayant au moins 6 mètres de tirant d'eau, même légers.



Etant parti à la conquête du Caire, Bonparte laisse à l'amiral Brueys le soin de résoudre ce problème. Celui-ci prend alors la décision qui lui semble la plus sage : faire mouiller dans la rade d'Aboukir les navires en ligne, suivant les dispositions habituelles des combats d'escadre. Ainsi peut-il espérer l'abri d'un petit fort et s'estimer suffisamment à terre pour que des vaisseaux ennemis ne puissent s'infiltrer entre le rivage et sa flotte. Cette solution a l'avantage de garder les navires proches de l'armée, de permettre des liens avec la terre et de résoudre les problèmes de ravitaillement au quotidien. Mais elle présente le risque d'une forte concentration, sans possibilité de manœuvre rapide de l'ensemble des bâtiments.

La flotte anglaise offre des caractéristiques totalement différentes. Nelson a quitté Alexandrie le 28 juin, deux jours avant l'arrivée des Français. Il a fait voile vers Chypre, puis vers la Crète. Ensuite, entre le 20 et le 25 juillet, il s'est ravitaillé à Syracuse, où il apprend le débarquement français.

Au soir du 1er août 1798, au coeur de la bataille d'Aboukir, le vaisseau amiral Orient est la proie des flammes et finit par exploser. Ce magnifique tableau de George Arnald (1763-1841) intitulé *The battle of the Nile*, est conservé au Musée de Greenwich. L'épave de l'Orient et celles de deux frégates ayant sombré au cours de cette bataille viennent d'être découvertes cette année (1998), reposant

par douze mètres de fond, grâce à une équipe franco-égyptienne dirigée par l'archéologue Franck Goddio.

Humilié d'avoir parcouru toute la Méditerranée avec quatorze vaisseaux de premier rang sans avoir intercepté l'immense convoi de Bonaparte, Nelson découvre la flotte française au mouillage dans l'après-midi du 1er août. Averti de la présence des voiles ennemies, Brueys rassemble ses adjoints, les contre-amiraux Blanquet du Chayla, Perrée, Ganteaume, Villeneuve et Decrès, tous d'accord pour combattre au mouillage parce qu'ils craignent de n'avoir pas assez d'hommes pour assurer à la fois les manoeuvres et le service d'artillerie. Pensant que Nelson n'attaquera que le lendemain, car il n'est pas habituel de combattre la nuit — surtout quand les fonds sont malsains et la navigation difficile —, ils envoient des messagers à terre pour que les marins rallient leur bord.

Mais Nelson va débiter les hostilités immédiatement. Vers six heures du soir, alors que le soleil décline, il place son escadre sur une double file, l'une devant contourner l'îlot d'Aboukir et s'avancer entre la côte et la ligne française, l'autre devant attaquer les navires du côté du large. Le premier navire aglais, le Culloden, qui tente de s'infiltrer entre le rivage et le Guerrier, s'échoue sur un haut-fond et devient inopérant. Mais les suivants passent et rapidement les premiers vaisseaux français sont pris entre deux feux, leurs équipages étant trop peu nombreux pour riposter des deux bords.

Les combats se poursuivent toute la nuit. Touché par un boulet, Brueys meurt à bord de l'Orient. Vers 23 heures, le feu atteint la réserve de poudre de ce navire, qui explose. Peu avant la déflagration, son commandant, Luce de Casabianca venait de mourir dans les bras de son jeune fils. Le 2 août, alors que le combat continue, le Guillaume Tell, le Généreux et trois frégates réussissent à gagner la haute mer, mais tous les autres navires sont détruits ou saisis. Les Français perdent ainsi onze vaisseaux et près de deux mille marins. De son côté, la flotte anglaise a beaucoup souffert et part entreprendre des réparations à Chypre. Les liaisons maritimes entre la France et l'Egypte deviennent difficiles. Néanmoins, l'année suivante, Bonaparte va rejeter à la mer un débarquement anglo-turc dans cette même baie d'Aboukir. Et le 23 août 1799, il appareillera pour la Corse et la Provence à bord de la frégate Muiron. J-M. H.

Chasse-marée n° 120

Inséré le 01/11/13 NEWS NOUVELLES Enlevé le 01/12/13

Drifting cruise ship moves closer to oil platform

An empty Russian cruise ship was drifting toward the open sea off Newfoundland as questions mounted about its safety and why a tugboat was allowed to haul it out of the St. John's harbour in the middle of winter.

The **Lyubov Orlova**, a 237-passenger vessel about 100 metres in length, has been adrift since its tow line snapped in rough weather last week as it was pulled to the Dominican Republic for scrap. Transport Canada says it ordered the tugboat Charlene Hunt back to St. John's over safety concerns and was inspecting it.

Department spokesman Steve Bone said Transport Canada, the coast guard, the Natural Resources Department and the Canada-Newfoundland and Labrador Offshore Petroleum Board were working together on the Lyubov Orlova. In an email, he said operators of offshore oil rigs in the area have implemented contingency plans to deal with potential collisions from floating objects, such as

icebergs and vessels that have lost power. He did not elaborate on what actions those contingency plans include.

Bone said the **Lyubov Orlova** was about 270 kilometres southeast of St. John's on Tuesday night. About 40 km from **Hibernia platform**

A source said Tuesday evening that the ship had drifted about 40 kilometres from the Hibernia offshore oil platform, which is about 315 kilometres southeast of St. John's, and a supply boat was headed to the Lyubov Orlova to keep watch.

ExxonMobil Canada could not be reached for comment on the Hibernia platform. Bone also played down the environmental risk posed by the drifting ship, saying the coast guard "advises that there is virtually no risk of pollution from the **Lyubov Orlova**." The owner of a vessel "is always responsible for its movements," he added.

The ill-fated **Lyubov Orlova** was named for the beloved Russian actress best known for the 1934 comedy "Jolly Fellows." It was a popular Arctic cruise ship before Canadian authorities seized it in St. John's in September 2010 as part of a lawsuit by Cruise North Expeditions against its Russian owners. The company was trying to recoup cash for the cost of a trip it cancelled due to technical problems.

The ship's mostly Russian crew, who hadn't been paid for months, was stranded in St. John's for six weeks as local residents offered everything from food to cigarettes to Internet access. The Russian government eventually helped fly most of the workers home.

The increasingly derelict, listing ship sat in the harbour for more than two years. She was bought last year by Iranian scrap merchant Hussein Humayuni for \$275,000 in a Federal Court process in Montreal.

The St. John's Port Authority confirmed that Humayuni hired the **Charlene Hunt** to tow his ship to a scrapyards in the Dominican Republic. He was in the capital of Santo Domingo on Tuesday and could not be reached.

The long journey started last Wednesday but halted the next day when the tug cable snapped. Efforts to reattach it failed, and Transport Canada ordered the Charlene Hunt back to St. John's on Sunday. It isn't clear if it will return to try again. Mac Mackay, a longtime ship watcher and marine blogger in Halifax, questions why the Charlene Hunt was tasked with pulling the **Lyubov Orlova** — especially in January's turbulent seas. Mackay cites another major incident 17 months ago in the waters off Nova Scotia. The **MV Miner** ran aground on Scaterie Island off Cape Breton on Sept. 20, 2011, while being towed to a scrapyards in Turkey. Federal and provincial officials have since pointed fingers at each other over who should pay for the cleanup.

"If the **Lyubov Orlova** does pile up on the shore, it'll be interesting to know whose responsibility it is to clean it up," Mackay said. "If it sinks in the ocean ... there's bound to be some pollution." "It really is a drifting accident waiting to happen." Jacqueline Savitz is deputy vice-president of U.S. campaigns for Oceana, billed as the largest international group focused solely on ocean conservation. She called for quick action by Canada if the ship's owner won't step up.

Besides the risk of collision if the vessel drifts into shipping lanes, there's significant environmental risk if it sinks, she said. "This ship probably still contains lots of toxic chemicals, electronics, oil probably. Those are all things we want to keep out of the ocean." **Source : CBC**

Irish lambast Canada for letting 'biohazard' derelict cruise ship MV Lyubov Orlova bob toward Emerald Isle

The chief of the Irish Coast Guard is expressing frustration with Canadian authorities for their February decision to send a derelict, rat-infested "biohazard" bobbing toward the Emerald Isle. "It was over 10 days from when it went missing to when we were told about it," Irish Coast Guard director Chris Reynolds told the Irish Independent this week. "We would have been much happier if they told us much earlier." "We could have sank it or towed it in for salvage." The biohazard in question is the , a former Arctic cruise ship that broke free from its tow line eight months ago while being pulled out of St. John's harbour in Newfoundland. It was destined for a scrapyard in the Dominican Republic. Although briefly corralled, the **Orlova** was cut loose into international waters as soon as it was clear of Canadian offshore oil platforms.

Transport Canada then announced it had "decided not to pursue the drifting vessel," due to safety concerns.

Besides, "given current patterns and predominant winds," the agency said, "it is very unlikely that the vessel will re-enter waters under Canadian jurisdiction." Instead the Yugoslavia-built cruise ship became a logistical nightmare for Irish maritime authorities.

In a February statement to the National Post, the Irish Department of Transport detailed the unprecedented regime of computer modelling and satellite data they quickly marshalled to figure out if, and when the rusty hulk would come smashing into Galway harbour. s of Wednesday, however, the **MV Lyubov Orlova** is still missing. "We can't be certain it's sunk, but we can't be certain it's not sunk," Mr. Reynolds told the BBC.

As the liner was enroute to a scrapyard, the **Lyubov Orlova** had no transponders on board. Speaking to the BBC on Monday, Mr. Reynolds called it "essentially, 4,000 tonnes of metal."

That, and untold swarms of rats. Before its ill-advised tow into the North Atlantic, the Lyubov Orlova spent two years tied up in St. John's harbour, virtually guaranteeing its status as a floating rat colony.

Or, as Mr. Reynolds called it, a "biohazard."

"We don't want rats from foreign ships coming onto Irish soil. If it came and broke up on shore, I'm sure local people wouldn't be very happy about it," Mr. Reynolds told the Irish Independent. A much greater danger than Newfoundland rats, however, is the prospect of the Lyubov Orlova looming out of the fog and obliterating an Irish freighter or fishing vessel.

"For us, the big danger is something hitting it," Mr. Reynoldstold the BBC. "It can bump into something, or more likely, something can bump into it in the middle of the night in the Atlantic."

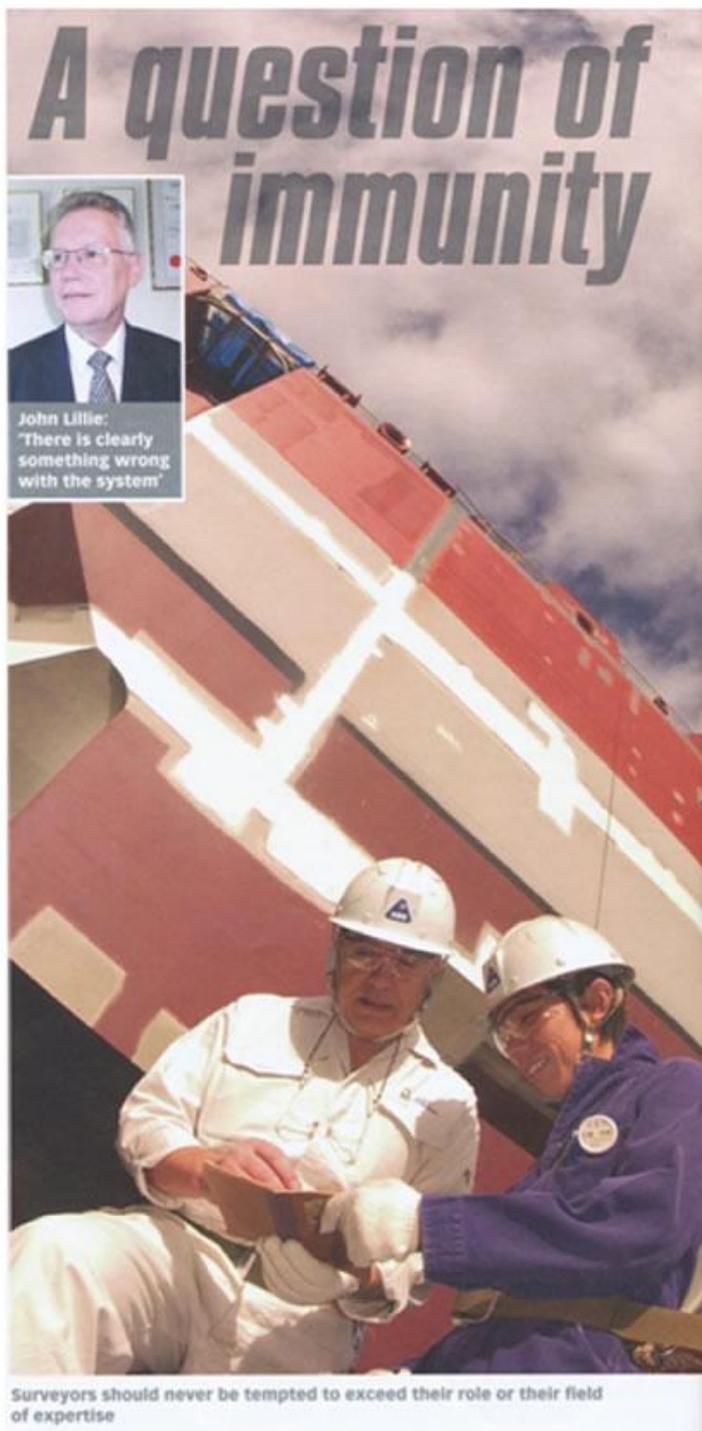
Built in communist Yugoslavia in the 1970s, the **MV Lyubov Orlova** was serving as a luxury Arctic cruise ship when, in 2010, Canadian authorities seized the ship during a stopover in St. John's as part of a lawsuit led by Cruise North Expeditions against the vessel's Russian owners.

There it stayed for two years before a scrap merchant picked up the ship for \$275,000, hooked it up to an underpowered tug and set it on a course for the Dominican Republic. To the surprise of few veteran Newfoundland mariners, the tow line snapped after only 24 hours. Last month, NDP

transport critic Olivia Chow said the rogue ship had been cut loose by the “benign neglect” of Canadian authorities.

“Transport Canada should never have allowed it to be towed out of port in the dead of winter,” she told Newfoundland’s The Telegram. “Even for a city-slicker like me, I can tell you that in winter in the Maritimes, that’s the worst time for a ship to be towed,” she added, unwittingly proving her city-slicker status by confusing Newfoundland with the Maritimes. **Source: National Post**

Inséré le 03/11/13 Dossier Enlevé le 03/12/13



John Lillie* considers what marine surveyors should do to protect themselves against the mega-lawsuit.

In a leader to my company newsletter I wrote this It is sad to report that a law suit launched by a giant insurance company against one of the largest international survey companies, the successor to perhaps the oldest such company, has led to the survey company entering administration. It seems that when an accident happened and an underwriter was forced to pay a large claim, the underwriter decided to attack his surveyor. The lawsuit, for many thousand times the size of the survey fee, was not against the person who caused the damage with a welding torch, but against a surveyor who was perceived to have deep PII (Professional Indemnity Insurance) cover. The outcome was to seek the protection of administration and what amounts to a forced sale.'

Since the Newsletter went out, I have been contacted by a number of survey companies who are also being sued by various parties, most of which are fortunately minor suits and should be defensible. So what can marine surveyors do to protect themselves from the mega-suit? Firstly, we need to review a bit of background. Warranty surveyors are appointed to approve various aspects of a maritime venture to make sure that the specific provisions of an

insurance policy have been complied with and, while they are often paid by the assured, their appointment must be agreed by the insurer. The surveyor's recommendations must be complied with if the policy is to attach and underwriters rely on their expertise when considering placing the business. Of course an underwriter's reliance does not stop them finding the cheapest surveyor available, often without knowing anything about his experience! And despite providing this essential service, getting paid at all is one of the surveyor's problems — especially if they do not finally give their approval to the project.

In the cargo insurance field, especially if a loss occurs during a voyage or a towage, cargo insurers — who usually have only a short term interest — sometimes take the view that the surveyor must have done something wrong and can therefore be sued for negligence. Many of you reading this will probably say: 'Quite right too!' And if the surveyor was clearly negligent you would be correct; but things are seldom black and white and as values of vessels, cargoes and shipyard risk projects spiral, this vulnerability to the mega-suit becomes untenable.

MUSICAL CHAIRS

Many times the surveyor's voyage recommendations are ignored or at best circumvented by the assured giving underwriters an escape clause if something goes wrong; but it can be more expedient for underwriters to pay the claim and then pursue the surveyor than it is to fight the claim directly. Sometimes there are hold-harmless or co-insurance arrangements between the parties, which the surveyor knows nothing about, and it leaves him as the one without a chair when the music stops. Sometimes too, it is the reinsurance underwriter, with whom the surveyor has no contact whatsoever, who pursues a claim, as in the case cited above.

When the size of the claim or suit is manageable and proportionate, then perhaps a suit can be defended, but when a fee of few thousand dollars attracts a multi-million dollar claim then there is clearly something wrong with the system, and no amount of PII will be sufficient. In these circumstances the question of immunity, à la tugs and pilots, should be considered.

Almost any warranty survey can involve high values: high value machinery; high value vessels under tow; very large business interruption attached to the transport of equipment for a project and very large shipyard projects; but if the underwriter trusts the surveyor not to be grossly negligent, then he should consider backing his judgement with a hold-harmless agreement. There should certainly be no recourse for a re-insurer to pursue a service provider and this should be spelt out by surveyors in their terms and conditions.

HOLD-HARMLESS

So what can surveyors do to protect themselves? Firstly of course, the surveyor must be diligent and do the best job he can. Actual negligence deserves censure, but taking into account that everyone makes mistakes. Secondly, surveyors must make sure that there is insurance in place for the project or he may find the venture relying on his PII if something goes wrong! Thirdly, surveyors must try to get the contracting parties, underwriters and assureds, to agree to a 'request for survey' form which should clearly set out why the surveyor is attending and under what terms and conditions.



When accidents happen the surveyor could be pursued

The purpose of the warranty survey is to enable the assured to obtain coverage by complying with the surveyor's recommendations; if something then goes wrong and the insurance pays, then the surveyor has clearly discharged his duty. What possible claim can an insurer have in those circumstances? If the assured paid for the survey (as they often do) and the assured obtained insurance, there can surely be no action against the surveyor.

The recent case cited at the start of this article happened when a re-insurer tried to recover his loss by suing the survey company and if this goes on surveyors become very vulnerable: they cannot possibly pay for sufficient PII and they can seldom afford to pay for their defence. To make matters worse, until the suit arrives surveyors have no idea who these predators might be.

I have discussed this matter with a solicitor who thinks that some form of hold-harmless could be achieved for surveyors within their terms and conditions, provided they have all parties to the venture sign up to it. But is that practical? Someone should certainly try.

Lastly, surveyors should never be tempted to exceed their role or their field of expertise: never design anything, always review the work of others; never 'take over' the job of the superintendent no matter how inept he may appear; never leave anyone in any doubt what your recommendations are; never approve anything unless you are absolutely sure that the maritime risks are understood, managed and would fall within an underwriter's expected comfort zone; and never, never, never, be rushed into starting an assignment without all your paperwork in place!

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*John Lillie is a marine surveyor with more than 30-years' experience. From 2001 to 2007 he was the Managing Director of The Salvage Association and has been instrumental in the development of Marine Risk Assessment. His company JSL Marine Associates Limited offers a wide range and general consultancy to the marine markets.

Inséré le 03/11/13 BOEKEN LIVRES Enlevé le 03/12/13 De laatste traan”

BOEKBESPREKING door : Frank NEYTS

Recent verscheen bij Walburg Pers het buitengewoon interessante boek **“De laatste traan. Walvisvangst met de Willem Barendsz, 1946-1964”**. Jaap R. Bruijn en Joost C.A.Schokkenbroek tekenden als auteurs Traan heeft niks te maken met de beruchte levertraan van vroeger. Walvistraan werd voor margarine gebruikt. Nederland had in 1945 voor zijn bevolking een levensgrote behoefte aan vetten, maar had bijna geen deviezen om ze te kopen. Eigen walvisvangst bracht traan, kostte geen deviezen en leverde werkgelegenheid op. Een Amsterdams initiatief werd door Haagse ministriële instanties omarmd. De **Nederlandse Maatschappij voor de Walvisvaart** onder directie van **Vinke & Co** stuurde achttien keer achtereenvolgens tussen 1946 en 1964 het fabrieksschip de **Willem Barendsz I** en **II**, vergezeld van vangstboten, naar het Zuidpoolgebied om de grootste baleinwalvissen te vangen. Er is veel traan aangevoerd en tot margarine verwerkt, maar miljoenen aan staatsteun was daarbij onmisbaar. Toen die steun in 1961 wegviel, was het gauw gedaan met de Nederlandse walvisvangst. De walvispopulaties waren veel kleiner geworden. Ook andere landen moesten stoppen. In de International Whaling Commission nam Nederland vaak een heel eigen plaats in. In totaal zijn er door de **Willem Barendsz**, het bekende schip met een gat achterin, 24.000 baleinvissen en 3.500 potvissen gevangen. Het schieten van deze dieren door Noorse gunners, de verwerking in de fabriek en de uiteindelijke financiële baten komen in dit boek uitgebreid aan de orde. En daarnaast de samenstelling van de bemanningen en het scheepsleven in Antarctische wateren.

“De laatste traan” (ISBN 978-90-5730-844-4) telt 272 pagina's en werd als hardback uitgegeven, en kost 29.95 euro. Aankopen kan via de boekhandel of rechtstreeks bij **Uitgeversmaatschappij Walburg Pers**, Postbus 4159, 7200BD Zutphen. Tel. +32(0)575.510522, Fax +31(0)575.542289. . In België wordt het boek verdeeld door Agora Uitgeverscentrum, Aalst/Ermbodegem. Tel. 053/76.72.26, Fax 053/78.26.91, E-mail: info@agorabooks.com

Inséré le 05/11/13 NIEUWS NOUVELLES Enlevé le 05/12/13 Why size matters

Maersk Line's first 18,000 teu vessel, the **Maersk Mc-Kinney Moller**, which was doing the rounds on her maiden voyage in Northern Europe last week, has prompted much speculation on her economies of scale, particularly as HHI has just confirmed that it is negotiating an order for five slightly larger ships with UASC. The economies of scale offered by Maersk Line's 18,000 teu vessels are so great that few can ignore them. Assuming the Triple E's consume 164 tonnes of fuel a day (excluding diesel), the estimated IFO bunker cost of the **Maersk Mc-Kinney Moller** (18,270 teu) would already be 35% lower than a typical 13,100 teu vessel on a per teu carried basis – \$218/teu versus \$333/teu. Apart from the fact that the ships are bigger, their hulls are reported to be designed around an average ship speed of only 23 knots, compared to over 24 knots for the first 13,000 teu vessels, enabling them to glide through the water more efficiently.

The unit cost comparison is based on an average westbound ship speed of 20 knots for both sizes of vessel, and an eastbound ship speed of 14.6 knots, which is the average of Maersk's services between Asia and Europe according to Drewry's Carrier Performance Insight. The ships are also assumed to be 85% full westbound, and 55% full eastbound, which may only be achieved in steady state conditions, when all of the vessels deployed in the AE10 service are Triple Es.

As bunker consumption tables for 18,000 teu vessels are not readily available, and Maersk does not disclose such information, the daily consumption has had to be extrapolated from those of vessels ranging between 10,000 teu and 16,000 teu, but they do more-or-less tie in with public announcements from Maersk and national press reports. Maersk claims the vessels to be 35% more fuel efficient per container carried than the first 13,100 teu ships, and the Daily Telegraph has reported that their westbound fuel consumption is approximately 150 tons/day, compared to normal consumption of over 214 tons/day. Ship operating costs, including manning, insurance, stores/lubes, R&M and Admin, are also an impressive 11% cheaper – \$76/teu carried versus \$85/teu carried, although here again, the result has had to be extrapolated from Drewry's analysis of vessel sizes ranging between 3,000 teu and 12,000 teu in its report entitled 'Ship Operating Costs 2012-2013'. It is based on 2011 costs, which are currently being updated for this year's edition. The **Maersk McKinney Moller** is manned with a crew of just 21, which is not unusual these days, but it is possible to run her with just 13 crew.

Putting both IFO bunker and ship operating cost savings together reveals that Maersk's 18,000 teu ships are a massive 30% cheaper than 13,100 teu ships on a round voyage basis – \$294/teu carried versus \$418/teu carried. This does not include Suez Canal and port costs, however, so is not a total slot cost, but the differential in ship operating cost is clear. Drilling down into this result in more detail, the westbound saving amounted to \$121/teu, which is equivalent to approximately 9% of last week's average spot freight rate from Shanghai to Rotterdam, according to the World Container Index. The eastbound saving was an even higher \$128/teu, which is equivalent to 30% of last week's spot rate from Rotterdam to Shanghai. Other savings include faster cargo handling. According to APM Terminals, berth and crane productivity of the **Maersk Mc-Kinney Moller** (18,270 teu) last week already reached a record 215 and 37.1 gross moves per hour respectively in Rotterdam. This compares with a 'normal' berth productivity average of between 140 and 150 moves per hour and a crane productivity average of between 32 and 33 moves per hour for a well stowed 14,000 teu vessel. Because of its greater size, an average of seven cranes could be worked on the **Maersk Mc-Kinney Moller**, with the maximum going up to eight, whereas only six can usually be worked on a 14,000 teu size vessel.

Estimated Economies of Scale of Maersk's Tripe-E's Between Asia and N Europe

The rush to order vessels over 16,000 teu for deployment between Asia and Northern Europe will gain momentum, despite the fact that they will be too big for the new Panama Canal locks that are due to open in mid-2015

Inséré le 07/11/13 Dossier Enlevé le 07/12/13 Can't buy me love?

By Felicity Landon

“Tell me that you want those kind of things that money just can’t buy...for money can’t buy me love.” Paul McCartney’s words seem remarkably aligned to the efforts of ship owners and crew managers to attract – and keep – sufficiently, well-qualified, experienced seafarers.

Of course money is important – why wouldn’t it be? But ask around and you’ll find the same themes cropping up again and again: loyalty, a sense of belonging, career prospects, communication and, overwhelmingly, respect. Seafarers want to feel appreciated and recognised.

On the other side of the scales, of course qualifications and experience are important for the employer. But that’s not the whole story – increasingly, they are focusing on finding officers and crew with the right attitude and the ability to fit in with the company’s philosophy and, at the risk of sounding old-fashioned, people who are nice to work with.

Anglo-Eastern takes the view that “the best training is your own training” according to Peter Cremers, Chief Executive Officer. “However, we also need to recruit from the market – with its own pitfalls. We are at lengths to try to have more strict recruitment processes in place and very comprehensive management systems, so that we interview in a very scientific way. That means trying to find out their competence before they join the group, and in this connection we have some mandatory simulator training, which we believe will give us the edge in the interview process and in contracting the right people. There is not a lack of seafarers in the world – but they are not all of the right competence. So indeed one has to be careful and demanding.”

Anglo-Eastern has retention rates “which are the envy of the industry” he said, citing a number of factors. “Firstly, we have been very loyal to people. We are not shopping around every five minutes for nationalities, and people know that. We try to take proper care of our crew and their families, and support them. And safety is an important issue. If they feel that the company is doing everything to maintain the ship to a high standard, with a high respect for environmental issues and with high consideration for safety, then they feel as if it is a safe company to work for – and that will also help a lot.”

Training is another critical issue, he added. “If you train people, they feel that through working for you, they can improve their skills. Training not only increases competence but also makes people like to work for you and see that there are opportunities to learn.”

Are crew and officers sufficiently valued, both inside and outside the industry? This isn’t an easy question, said Mr Cremers. “My reaction is that maybe we don’t always show respect for the people – but it has become a hard world. Our industry has become very professional now and it is all performance-driven. I get a lot of pressure on me. The people in the offices – superintendents, etc., have a lot of pressure. And obviously some of that is translated to pressure onboard ships, something which is not always appreciated. At the same time, one has to hope that in the push for performance there is also respect for performance – and these two are not always possible in the same measure.”

Retaining good seafarers requires a combination of pay and other benefits, said Dirk Fry, Managing Director of Columbia Shipmanagement. “However, the most important thing is for the company to be able to build a culture among its crew so that they remain loyal through good but also tough times. When a company manages to recruit second and third generation seafarers from the same family, then possibly that company has managed to find the right recipe for retention.”

CSM's culture is such that officers and crew are respected and their problems are being heard, said Capt Fry. The company holds annual senior officers' meetings, where CSM is represented by a senior person from each department with the aim of discussing issues arising onboard and other concerns.

It is important to have the right manning agencies in situ, with the right attitude and ability to source the right people and assist in their training and retention at a later stage, he said. CSM has opened a number of subsidiary offices in the countries where it recruits seafarers, to make sure that the issue of recruitment is under control.

Recruiting and retaining seafarers is not simply a matter of wages but of company philosophy and the overall package that a seafarer receives, he emphasised. "In addition, when there is a problem, however challenging this may be, there must be a solution."



It would be naïve to suggest that pay doesn't matter – but based on the assumption that most shipping companies are paying a market rate, the choice for the seafarer often comes down to non-pay related issues, said Marc Nuytemans, Chief Executive Officer, Exmar Shipmanagement.

Referring to a message from Nick Hastir, one of Exmar's crewing managers, he said: "One of our seafarers told us that he was getting offers of a higher salary elsewhere, but wished to remain with us. For him, the fact that we take care of our employees was more important. He started with us as a cadet and had climbed the ladder since then. He was grateful for all the chances he had received – and, furthermore, he mentioned that we allowed him to sign off early in order to be home for the

birth of his first child. In his words: "What's more important? Earning \$2,000 more or being present at the birth of your first child?" Helping seafarers in finding a balance between their professional life and their family life is one of our key strengths and one of the reasons why people don't leave us."

Capt Nuytemans said promotion prospects are vital: "If you can show that you are actively working on their career path and that there will be promotion prospects open to them – even if they sometimes have to wait – you can win their loyalty."

Quite apart from the challenge of finding suitable replacements if officers leave, focusing on retention makes clear financial sense, said Erik Toft, Vice President Marine Personnel, Wilhelmsen Ship Management (WSM). "To replace one very good seafarer represents a huge cost. You have to train the new person, including in company procedures, and it takes some time to get people up to speed compared to a good officer you have just lost," he said.

He puts the real cost of replacing just one officer – admin costs, recruitment costs, supernumerary wages, travelling costs, flag state courses, familiarisation at office, and so on – at \$14,300. Waving goodbye to a large number of officers could add up to a staggering sum.

"First of all, WSM is a people business," said Mr Toft. "When you give officers and crew responsibility, operating 24/7 onboard a valuable asset owned by someone else, you must, as a ship manager, recruit the best people – that is job number one. Because of our significant growth, that does give us a challenge and requires us to have a strong retention strategy – something I am very focused on."

WSM is trying to 'brand' itself, said Mr Toft. "What is in it for them? Why should they choose us, how do we identify ourselves as an employer of choice? We focus on having good leaders, on regular performance appraisals and on dialogue about ongoing career opportunities. We do a lot of good things but we still need to do more."

Creating a “positive relationship” between WSM and the individual seafarers is crucial, he said. “We need to create this sense of belonging – so our good seafarers know, particularly in this competitive world, that we recognise their talent.”

WSM is about to implement a three-year strategy in which it will seek more feedback from its seafarers on what is most important for them. A captains’ forum twice a year is part of this. The company employs 10,000 seafarers and has 19 manning centres around the world, with obvious challenges of time zone and cultural differences; communication is really important, he added. “The overall purpose of our HR strategy is to develop initiatives which will improve attraction of new crew, crew motivation, job satisfaction and, in the long run, retention of all our crew.”

Mr Toft, who joined WSM in April this year and is based at global headquarters in Kuala Lumpur, has been in the shipping industry for eight years. He believes that his previous extensive experience in shore-based HR is valuable: “The shipping industry can learn from onshore HR. Seafarers are no different to anyone else – they want to feel appreciated and recognised and they want to work in professional organisations where their career development is taken seriously.”

Recruiting the right people is a growing challenge, according to CMA CGM. “Regardless of whether you are recruiting for a shore-based or seagoing position, our industry often demands a high degree of technical knowledge and quite specific previous experience and that’s before we even start to consider the human elements which are equally important – after all, they are joining our team and it is important that they will fit in,” said Ludovic Gerard, Vice President of CMA Ships.

Retention is always going to be an issue, particularly for a serious company that really invests in its people, he added. “However, this investment is in itself a key to success. Wages will always remain a key motivator, this is fact, but more important than the money is the feeling of being respected, valued and appreciated for the job that you do – and in this respect our industry is no different to any other.”

Good working conditions, a pleasant comfortable working and living environment, a good overall package of pay and conditions, and fair honest treatment are all vital, said Mr Gerard. “For example, the value of simply ensuring that your seafarers are relieved on time in a well-organised manner and that they leave the vessel in the knowledge of when and on what vessel they are wanted back cannot be underestimated – and it’s free!”

Quality owners and managers do not really have crew retention problems, said Simon Spacey, Director of CMA Ships UK. “There will always be a small turnover and that’s a healthy thing to have. The key issue is replenishing your team with the right quality of person with the right experience and skills – and in that respect, yes, it is getting harder every year, particularly for officers. The solution is a strong officer cadet programme supported by a well-structured ongoing training programme to support these young people as they move up through the ranks. If you make this longterm investment and sustain it even through the toughest financial periods, you will almost certainly ensure that you have a well- trained, loyal and dedicated pool of quality officers into the future.”

The respect and admiration for seafarers and their work has risen in recent years, according to Marc Nuytemans at Exmar. “Even with the general public, the image of a seafarer has changed from the red-light district visiting and drunk loud-mouth to a highly educated manager, running a million-dollar piece of equipment.”

Within the industry, most people do realise the difficult job seafarers do, and the demanding circumstances in which they work, said Capt Nuytemans, but an enduring problem in shipmanagement can be the ‘us versus them’ attitude.

“People at sea often feel that the people in the office are just there to harass them and that is one of the biggest things you have to overcome. People in the office must understand that they can’t ‘boss’

the seafarer or, even worse, dispose of their responsibility by just shoving it onto the ship. It's vital to make sure that both parties are contributing to the same goal – in the office and on the ship.

“It's like someone running the 100 metres at the Olympic Games; you don't ask him to carry his shoes and arrange the transport. Of course our seafarers must perform, but we must enable them to do so.”

However, he said, it all starts with careful selection. “For many shipping companies, recruitment is based solely on competence and skills – do they have the right licences and the exact number of years in ranks and enough experience, etc.? But that is not the only thing. You have to hire people based on attitude. In the famous old days, very successful masters who were absolutely horrible to sail with could be found in every port. You must not allow that to happen. You have to ask – are these people you want to work with and do these people share the values you have in your company? A key value in our company is respect. We don't want a chief engineer treating colleagues like minions – it just doesn't work.”

And, he added, if you hire for attitude, you must also be prepared to fire for attitude. “If you have people who are unpleasant to work with, you have to send out a very clear message that you will not tolerate behaviour such as bullying.”

Seafarers have been overloaded with work which is 'non-core', and respect for them has often been eroded as a result, according to Peter Cremers at AngloEastern. “At the end of the day, the 'core' job of people onboard is to get safely from A to B with the ship and cargo. Nowadays it is almost as if garbage treatment and security are the most important things. The way seafarers are handled by Port State Control inspectors could also be improved.”



Some PSC inspectors seem to be trying to score points by finding a certain number of failings and do always give the people onboard the respect that is due to them, said Mr Cremers. “And that is taking people's attention away from the real reason why they are there, i.e. looking after the cargo when they are onboard. These are all things which unfortunately, one by one, take away a little bit of the status from the seafarers.”

He would like to see the unnecessary 'peripherals' removed from seafarers' duties. “We overload them with regulations and legislation – they have to do this and know that and fill in this document and have to meet so many inspectors and surveyors, and at the end of the day you risk burying the core values and requirements.”

The distance between ship and shore can become a problem, even with the communication technology available today, according to CMA CGM. Ludovic Gerard said: “The solution is to take full advantage of any opportunity to get your seafarers involved with your shore-based staff, so they really get to know and understand each other. This is achieved using regular meetings, officer seminars, ship visits and short voyages by shore-based staff, collective training sessions and so on. And, of course, we grab any opportunity to have our senior officers working ashore, even if only for a temporary or trial period. In this way you can continually develop and build the mutual respect between your shore-based and seagoing staff that is so important for any successful company.”

The Maritime Labour Convention should help improve respect for seafarers within the industry, according to Dirk Fry, Managing Director of Columbia Shipmanagement. "Where people are not respected, there will be opportunities for complaints through documented grievance procedures," he said. "The point, though, is to manage not to reach that stage. Company (CSM) employees are being made aware of the importance of respecting their colleagues onboard, and blame culture is not tolerated."

Scott Bergeron, Chief Executive Officer, LISCR, the US-based manager of the Liberian Registry, believes that the introduction of MLC 2006 will create a better connection between the people at sea and their management ashore.

"It will bring a new level of openness and communication that will help eliminate many of the frustrations and insecurities that seafarers experience in their relationships with ship owners, managers and crewing agents," he said. "Everything should be transparent, open and, ultimately, verifiable. The upside for owners and managers is that, when MLC is properly and effectively implemented, they will reap the benefits in terms of improved retention of happy and properly motivated seafarers."

Cedric D'Souza, the Liberian Registry's Manager, Maritime Labour and Plan Reviews, said: "Under MLC 2006, private crewing agents operating in a country that has ratified the convention must operate only in conformity with a standardised system of licensing or certification or other form of regulation. Additionally, the convention imposes certain responsibilities on labour-supply states to ensure implementation of the convention in respect of the recruitment and placement of seafarers." Liberia's auditors will pay special attention to ensuring that employment agreements meet the requirements of MLC with regard to health and medical benefits, ship owners' liability arising from sickness or injury of seafarers, repatriation of seafarers and social security protection, said Mr D'Souza.

Earlier this year, the French classification society Bureau Veritas (BV) launched an e-learning programme for MLC training. "The programme is aimed at people in crew management companies but also at people involved in implementation of MLC systems onboard ships and in shore-based positions," said Octavio Rinaldi, Deputy Director, BV Ships in Service Management. "This could include shipboard personnel ranging from masters and officers to able-bodied seafarers who their employers feel could benefit from the training." The programme, to be run by the BV Business School in Madrid, comprises eight modules and trainees are given a 'passport' allowing them three months to complete the course.

Inséré le 09/11/13 HISTORIEK HISTORIQUE Enlevé le 09/12/13

Maatschappelijke Zekerheid voor de zeelieden ter koopvaardij

Het is immers door het koninklijk besluit van 19 september 1845 dat de « Caisse de Secours et de Prévoyance en faveur des Marins naviguant sous Pavillon belge » werd gesticht. Deze instelling bestaat nog steeds onder dezelfde officiële benaming, maar is (in het Nederlands : « Hulp- en Voorzorgskas voor Zeevarenden onder Belgische Vlag ») bij de zeelieden beter gekend onder de naam van « Zeemanskas ».

Dit belangrijk koninklijk besluit vindt zijn oorsprong in de wet van 21 juli 1844 op de differentiële rechten. Bij de bespreking van dit wetsontwerp stelde M. Rogier, voor het eerst, de gedachte voorop van de oprichting van zulke « Kas ». Volgens de Moniteur Belge van 5 juni 1844 zette M. Rogier zijn voorstel als volgt uiteen :

« Ik heb, mijne Heren, een bijkomende maatregel voor te stellen en omdat ik niet wil dat hij slechts op het laatste ogenblik zou worden behandeld, meen ik hem te moeten voorleggen vóór de bespreking in » het geheim Comité, onder voorbehoud van latere meer uitvoerige toelichting, indien

de Kamers me dit willen toestaan. Ziehier, in enkele woorden, waarover het gaat : Wij willen aan de Belgische reders een bescherming verlenen, welke ze gevraagd hebben in navolging van al de andere industrieën. Welnu, mijne Heren, het volstaat niet een bescherming te verlenen aan de reders alleen, ook de Belgische zeelieden zouden moeten beschermd en aangemoedigd worden. De maatregel die ik met dat doel wil voorstellen zou kunnen opgenomen worden in een reglement van algemeen bestuur. Ik bedoel hier een hulp- en verzorgingskas ten voordele van de Belgische zeelieden. Ik ben ervan overtuigd dat, wanneer ik er dieper moest op ingaan, mijn voorstel » zonder enig bezwaar zal worden aanvaard, onverschillig op welke wijze men het zou realiseren, hetzij door een bijkomend artikel, hetzij door een speciale wet. Ziehier, mijne Heren, hoe mijn voorstel zou moeten opgevat worden : In het jaar dat zal volgen op de uitvaardiging van deze wet, zal er worden overgegaan tot de oprichting, bij koninklijk besluit, van hulp- en verzorgingskassen ten voordele van alle » zeelieden die onder Belgische vlag waren. Het kapitaal van deze kassen zal als volgt worden samengesteld :

1° een afhouding op de gages van de zeelieden;

2° een storting door de reders;

3° giften en legaten;

4° een subsidie van staatswege, die, voor de verschillende kassen, niet meer mag bedragen dan 10.000 F per jaar. »

Gedurende de bespreking van 10 juni, drukte één der leden van de Kamers van Volksvertegenwoordigers zich uit als volgt : « Het voorstel van de achtbare M. Rogier getuigt van liefdadigheid, menselijkheid en » vooruitzicht. M. Rogier heeft de oprichting gevraagd van een verzorgingskas in het belang van de zeelieden. Wat een verheven en edelmoedige gedachte die voor doel heeft de zeelieden, die dagelijks hun leven veil hebben, te waarborgen tegen de wisselvalligheid van hun bestaan, tegen de gevaren van hun beroep, en de sociale bescherming uit te breiden tot hun weduwen en wezen; dit voorstel is van aard de eenparige sympathie der Kamers weg te dragen. »

Deze tussenkomsten, zo waardig geformuleerd in de opgesmukte en romantische stijl van die tijd, hebben aanleiding gegeven tot de inlassing van artikel 11 in de wet van 21 juli 1844.

De « Hulp- en Verzorgingskas voor Zeevarenden onder Belgische Vlag », opgericht te Antwerpen in 1845, had tot doel :

1° een tijdelijke of blijvende hulp te verlenen aan zeevarenden onder Belgische vlag, die zich, tijdelijk of blijvend, in de onmogelijkheid bevonden hun beroep verder uit te oefenen, door ziekte, ongeval of ouderdom, alsook aan hen die zonder bestaansmiddelen zouden vallen door schipbreuk of door zware en onvoorziene omstandigheden;

2° in geval van overlijden van de zeeman, hulp te verlenen aan zijn weduwe of aan zijn familie. De statuten voorzagen dat de zeelieden van de zeevisserij uitgesloten waren van deze voordelen. Deze uitsluiting strekt zich echter niet uit tot de walvisvaarders.

Het is overbodig er op te wijzen dat de basisprincipes van de Kas, van méér dan een eeuw oud, slechts beantwoordden aan de opvattingen van die tijd inzake sociale zekerheid. Deze statuten hebben immers belangrijke wijzigingen ondergaan in de loop der tijden en voornamelijk gedurende de laatste decennia.

De wet van 5 juni 1928 op de arbeidsovereenkomst wegens scheepsdienst heeft de vergoedingen, verschuldigd aan de zeelieden in geval van verlies van plunje en in geval van werkloosheid ten gevolge van schipbreuk, rechtstreeks ten laste gelegd van de reders. De wet van 30 december 1929 heeft de vergoeding der schade voortvloeiende uit arbeidsongevallen geregeld volgens meer moderne opvattingen. De Hulp- en Verzorgingskas is aldus kunnen ontlast worden van die verschillende verzekeringssectoren.



m/s "Lubumbashi" (10.675 tdw) de la Compagnie Maritime Belge (Lloyd Royal) s.a.,
aux installations de l'armement à Anvers.

m/s "Lubumbashi" (10.675 tdw) van de Compagnie Maritime Belge (Lloyd Royal) n.v.,
aan de installaties van de rederij te Antwerpen.

Wanneer in 1924 en 1925 twee wetten de verplichte verzekering tegen ouderdom en vroegtijdig overlijden respectievelijk van de arbeiders en bedienden invoerden wetten die eveneens toepasselijk waren op de zeelieden is de Hulp- en Voorzorgskas echter voortgegaan met het gelijklopend verzekeren van dezelfde risico's voor de zeelieden ter koopvaardij. Er is slechts een einde gemaakt aan deze dubbele verzekering door de wet van 6 juli 1931, tot voorbereiding van het inrichten der sociale verzekeringen der zeelieden van alle rang der

koopvaardij. Deze wet bepaalt dat de zeelieden onttrokken zijn aan de toepassing van de algemene wetten en dat hun verzekeringsstatuut zal geregeld worden door de Koning, met dien verstande evenwel dat dit statuut hun voordelen moet verzekeren die ten minste evenwaardig zijn aan het algemeen regime. Ingevolge die wet van 6 juli 1931 werden de statuten van de Hulp- en Voorzorgskas volledig omgewerkt door een koninklijk besluit van dezelfde datum.

Het is dan ook niet te verwonderen dat, wanneer bij het einde van de tweede wereldoorlog, een besluitwet van 28 december 1944 de sociale zekerheid voor arbeiders heeft ingericht, de zeelieden niet onderworpen werden aan dit algemene regime, maar dat er, in een tweede besluitwet van 7 februari 1945 ten gunste van hen een speciaal regime van sociale zekerheid werd voorzien. Dit nieuwe regime voorzag o.a. de uitbreiding van de verzekering tegen ziekte en invaliditeit die voor de zeeman reeds verplichtend was ingevoerd sedert 1845 tot de familieleden van de zeelieden.

Laten wij er even aan herinneren dat, wat men in België onder de rubriek « Sociale Zekerheid » verstaat, betrekking heeft op vijf sectoren :

- verzekering tegen werkloosheid;
- kinderbijslagen;
- jaarlijkse vakantie
- verzekering tegen ziekte en invaliditeit;
- ouderdoms- en overlevingspensioen.

De besluitwet van 7 februari 1945 zoals ze werd gewijzigd door latere wetten is de basis geworden van de huidige structuur van het regime van de sociale zekerheid voor de zeelieden ter koopvaardij. Het is hoogst merkwaardig dat enerzijds deze fundamentele vernieuwing plaats grijpt juist één eeuw na de eerste basiswet en dat anderzijds de Hulp- en Voorzorgskas belast werd, bij koninklijk besluit van 12 juli 1956, met het beheer van de dienst voor sociale zekerheid der zeelieden. Dit koninklijk besluit was eigenlijk slechts een bevestiging van de bestaande toestand, vermits, reeds sedert 1945, de Kas steeds de taken heeft vervuld die waren toevertrouwd aan de Dienst voor Sociale Zekerheid.

In 1945 eveneens, werd door een besluitwet (12-51945) een Pool voor Zeelieden ter koopvaardij opgericht te Antwerpen. De beschikkingen, bekrachtigd door die besluitwet, hadden reeds hun praktische toepassing sedert 1 november 1944.

De besluitwet van 12 mei 1945 heeft in de Belgische reglementering op de handelsvaart drie nieuwe principes met zeer grote draagwijdte ingevoerd :

- De aanwerving van de staf en van de bemanning der Belgische koopvaardij schepen, alsook van de officieren en bemanningsleden benuttigd aan boord van die schepen in de thuishavens (aflossingspersoneel) zal verplichtend en uitsluitend geschieden onder de ingeschrevenen in de " Pool ".
- Door het feit van hun inschrijving in de Pool gaan de zeelieden de verbintenis aan zich ter beschikking te houden van de Belgische reders om de eerst vrijkomende plaats, in overeenstemming met hun bekwaamheden, aan boord van een schip te aanvaarden.
- Van zodra zij ingeschreven zijn en gedurende de ganse duur van die inschrijving in de Pool, mogen zij geen andere betrekking aanvaarden buiten de koopvaardij. Zij moeten zonder onderbreking ter beschikking blijven van de koopvaardij en ontvangen gedurende deze terbeschikkingstelling een wachtgeld.

Deze besluitwet, die te veel gesteund was op de typische toestanden van de naoorlogse scheepvaart, werd vervangen door de wet van 25 februari 1964. Deze heeft de Pool georganiseerd in functie van de huidige arbeidsvoorwaarden in de koopvaardij. Dezelfde fundamentele principes van 1945 zijn bewaard gebleven, maar er werden meerdere maatregelen aan toegevoegd, ingegeven door de sociale evolutie inzake de toekenning van de wachtvergoeding en in verband met de beroepsvervolmaking.

Om de uiteenzetting over de maatregelen op sociaal gebied, getroffen ten voordele van de zeeman, te voltooien, past het een woord te zeggen over de vergoeding der schade voortspuitend uit arbeidsongevallen.

De eerste algemene wet over de vergoeding der schade voortspuitend uit arbeidsongevallen dateert van 1903.

Ze was niet toepasselijk op de zeelieden, maar zoals we Niervoren hebben gezien was de zeeman ter koopvaardij verzekerd, sedert 1845, door toedoen van zijn Hulp- en Voorzorgskas de wellicht onvoldoende vergoeding voor stoffelijke schade ingevolge arbeidsongeval te ontvangen.

Een wet van 30 december 1929 heeft ten voordele van de zeeman (alsook van de visser) een regime ingevoerd van vergoeding der schade voortspuitend uit arbeidsongevallen gelijkend op deze welke van toepassing is op de arbeiders aan land maar met zekere afwijkingen.

Veelvuldige beschikkingen van die wet zijn door latere wetten nog veranderd. De meest substantiële wijzigingen werden aangebracht door de wet van 7 april 1953, die met terugwerkende kracht van toepassing werd op 15 oktober 1951. Op dat ogenblik immers werd het principe van de gedeelde verantwoordelijkheid van de werkgever en het slachtoffer, dat tot uiting kwam door de vergoeding op basis van 50 0/o van het loon, opgegeven. De nieuwe wet heeft inderdaad het principe van de volledige vergoeding ervoor in de plaats gesteld. Dit principe is gebaseerd op de veronderstelling dat de werkgever volledig verantwoordelijk is voor het ongeval, overkomen gedurende de uitvoering van het contract. Hij ontsnapt slechts aan deze verantwoordelijkheid indien hij een oorzaak kan bewijzen die vreemd is aan deze uitvoering.

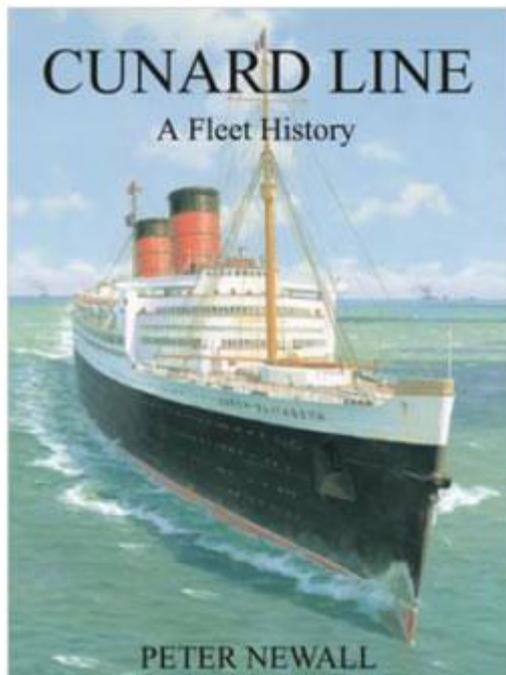
Wij kunnen dit bondig overzicht niet besluiten zonder enkele woorden te wijden aan de internationale arbeidsovereenkomsten. Van zodra de « Internationale Arbeidsorganisatie » was opgericht in 1919 heeft België er zich bij aangesloten. Van de 17 internationale overeenkomsten die betrekking hebben op de arbeidsvoorwaarden, het welzijn en de sociale zekerheid der zeelieden en die op huidig ogenblik van kracht zijn, werden er 15 door ons land geratificeerd. Alles schijnt er op te wijzen dat tot de goedkeuring van de andere twee overeenkomsten eerlang zal kunnen overgegaan worden.

Zonder vrees voor overdrijving mogen wij besluiten dat ons land een gezaghebbende rol vervult wat betreft de opbouw van een volwaardig sociaal statuut voor de zeelieden ter koopvaardij en we zijn er van overtuigd dat het deze eervolle vermelding ook in de toekomst zal weten te behouden.

Inséré le 11/11/13 BOEKEN BOOKS Enlevé le 11/12/13

CUNARD LINE -A fleet history

By : Peter Newall



Cunard Line is the most famous shipping company in the world. Although many books have been written about Cunard's passenger ships in the 20th century, few have covered the 19th century fleet in much detail, particularly the important Mediterranean services. The cargo fleet has also been poorly served, especially with the carriage of cargo being as important as passenger carryings during the first 150 years of Cunard's existence. Little has also been written about the company tenders and the many ships managed by Cunard during both World Wars. Using original source material, this book redresses this imbalance with the most comprehensive history ever written about Cunard and its ships. The individual histories of 310 ships from Unicorn in 1840 to the current **Queen Elizabeth** are featured plus over 700 illustrations, many of which have never been published before, including many in colour. Great care has also been taken with the layout of the book so that it is easy to follow. Not only is there

a detailed index, individual chapters also tell the story of the ships in each aspect of the company's operation, including the trans-Atlantic liners, cargo fleet, cruise ships, tankers, bulk carriers, container ships, reefers and managed ships. The front cover of the book has a specially-commissioned painting of the original **Queen Elizabeth** by the renowned marine artist **Stephen Card**.

Written by the author of **Mauretania Triumph** and **Resurrection** and the definitive fleet histories of the **Union Castle** and **Orient Lines**, it is hoped that **Cunard Line** a fleet history will become the standard reference for the 173-year-old **Cunard Line**. **Cunard Line a fleet history** is a 304-page, A4 hardback, available at £39.50 plus £3.50 postage (UK) from **J. and M. Clarkson**, 18 Franklands, Longton, Preston, PR4 5PD, UK tel 01772 612855, or by email from shipsinfocus@btinternet.com

Inséré le 11/11/13 Nieuws Nouvelles Enlevé le 11/12/13

Pirate Menace Triggers Special Coverage, Security Measures

"Pirates of the Caribbean" they aren't. They are for the most part desperate men from a failed state that have discovered that one of the world's oldest professions offers wealth and power, if you're willing to take the risks. In a rather tongue in cheek award the Harvard Business School selected piracy as 2010's best business model.

However, for every action there's a reaction, and London's marine insurance community is in the forefront of devising strategies to thwart the pirates, who operate mainly from untouchable bases in Somalia, from succeeding in their attacks on Indian Ocean shipping. Catlin Group Limited, with operational hubs in London, Bermuda, the U.S. Europe and Asia, as well as being the managing agent

of Lloyd's largest syndicate, has therefore upped its efforts in the fight. Headed by Peter Dobbs, Catlin's Asset Protection service offers coverage designed to deal specifically with the threats from pirates. In an interview with the IJ he described the move as a "natural extension" of Catlin's marine



and Lloyd's business.

Lloyd's roots go back to the need for marine insurance at the end of the 17th century, as the British Empire expanded its global reach. Until the end of the 19th century Lloyd's was essentially a marine insurer. Although it's a lot more than that nowadays, the marine tradition remains strong. But it needs to change. "I think in the end the maritime industry is going to have to wake up," Dobbs said; "in the same way that the aviation industry had to wake up 40 years ago." He cited the rash of hijackings that took place in the 60's, which imposed "fairly draconian, – or at least what we thought at the time were fairly draconian – security measures to prevent hijacking." More recent events have served only to increase those security measures.

"I think it's no longer possible now to have a vessel, valued at a hundred million dollars, with cargo valued at two hundred million dollars, and to allow that vessel through some of the rougher waters of the world completely unprotected." As a result the maritime industry has to recognize "the world has moved on; the world has changed, and I think possibly in the future we're going to have to look at forms of security that the maritime industry haven't been used to in the past." London's leading role is a natural one, as "the whole piracy issue is uniquely British," said Dobbs. "The majority of the insurers involved are British, the majority of the law firms are British, the majority of the better guarding firms are British, and the majority of the ransom delivery firms are English. Piracy is very much an insurance issue that's centered in London, as opposed to anywhere else in the world. London is where it's at, and where piracy has been [a concern] for three hundred years from the age of privateers in the 1700's."

Catlin has done a lot of work on the subject, which is summarized in an excellent 20 page booklet that sets out the basic facts, figures and potential solutions to the piracy problem. Peter Dobbs was one of the principal sources.

He described coverage related to piracy as "very much a niche business, as you need a fundamental understanding of the risk to really be able to understand how it should be written...profitably." Marine insurance is complex, as there are different policies covering different risks. He also noted that when dealing with pirates, "there are a huge number of other factors that come into this." Owners or charterers of a vessel buy "hull insurance, and they have to buy war risk cover if they're going through restricted areas, of which there are a number around the world," Dobbs explained. In addition the cargo is insured – not necessarily by the ship owner – and it may also be subject to

claims for delayed delivery. P&I [Protection & Indemnity] Clubs are the most common writers of liability coverage and for indemnity of crew members who are injured or die on voyages. However, even with all that coverage, Dobbs said they are frequently “silent or vague on piracy or acts of piracy. That’s why there’s a niche piracy market to take into account all the expenses and issues around piracy.” He also explained that Catlin’s policy offers “ransom reimbursement” (insurers are not permitted to pay ransoms directly), and the “risk of losing the ransom in transit,” which has occurred. In addition it covers “all of the legal expenses,” and the “personal accident expenses of the crew,” as well as “all sorts of additional expenses,” such as “re-bunkering – putting the vessel back into service, the costs of ‘response’ sums, cost of law firms handling the incident, communications costs, travel costs, salary costs.” In essence the policy covers those costs directly incurred as a result of a piracy incident that are not, otherwise covered. “Bear in mind,” Dobbs added, “that piracy incidents can last over a year.”

He described the situation in Somalia as “unique” in that piracy, while it’s a “worldwide problem,” is usually “robbery on vessels.” Incidents in such areas as the Caribbean, off of West Africa and in the Malacca Straits fit this pattern. However, in Somalia – a “failed state, and has been for twenty years” – and the Indian Ocean the situation differs. In addition Somalia “commands the longest coastline in Africa,” which is also strategically located along one of the world’s main shipping routes. “Over 20,000 vessels a year are funnelled into the Suez Canal.”

As a failed state Somali pirates can hold captured vessels, which is not the case in other areas of the world. They’ve “proven that they can hold vessels indefinitely,” and have done so in many cases “for over a year. In so doing they can ask for ransoms, instead of robbery. And those ransoms have escalated from a couple of hundred thousand dollars five years ago to up to twelve million dollars today.” With that kind of exposure, security measures have become increasingly important, as the best solution to prevent acts of piracy is to avoid a ship being seized in the first place. In this regard a portion of the premiums on a policy are for measures to make it less likely that a ship will be taken. “There are many methods of ‘hardening’ a vessel,” said Dobbs, “whether that’s razor wire or putting in grills or welding doors shut. “But more recently in the last three months the industry has been moving over to using armed guards on vessels. There’s been a huge shift in 2011.” Previously most ships didn’t have armed guards, “but it’s now accepted by most of the ‘flag nations’ of the world that the way around piracy is to use armed guards on vessels.” However, their increased use raises the question of their qualifications. Dobbs is an expert on this subject. He actually served as an armed guard on a vessel in this area some 30 years ago. The use of weapons and potentially deadly force raises a host of legal issues. Catlin is committed to assuring that guards on any of the vessels it covers are of the highest quality. Dobbs has met with naval officers, in order to ascertain “exactly what the licensing requirements [for security personnel] are.

“We’re making sure that the guards that we’re allowing on vessels are fully licensed and fully trained, and that the right rules of force, rules of engagement and procedures, are in place,” he said. Catlin has prepared an 8 page questionnaire, which, Dobbs said, “asks the right questions.” He also explained the role of the Security Association for the Maritime Industry (SAMI), a recently formed organization in reviewing the experience and qualifications of potential armed guards. “The better regulated armed guard companies are applying for membership.” Dobbs thinks that, as armed guards become more common, it will create three classes of shipping in the Indian Ocean – ships with guards, ships “with a degree of hardening,”- razor wire, water jets, ‘citadels’ for the crew – and “those with no precautions at all, and they are certainly being pirated.” While ‘hardening has proved reasonably effective in deterring pirates, Dobbs said “so far no vessel with an armed guard on it has been hijacked or pirated.” Vessels which are alert to piracy threats can also take evasive actions, and let the pirates know they are prepared for them, which “sometimes in itself can stop the pirates from attempting to board a vessel.” The situation is analogous to “burglars on land,” he continued. If they

see “heavy locks on doors and burglar alarms they tend to look at the neighboring property; shipping is exactly the same thing.”

Armed guards are an extension of this deterrent principle. They aren’t there to blow the pirates out of the water. For the most part, Dobbs explained, they are equipped with bolt action rifles with telescopic sights and night vision. Their range is up to around 700 yards; whereas the pirates are usually armed with AK-47’s and rocket propelled grenades, which, although they are more powerful weapons, have an effective range of around 200 yards. Being exposed to accurate rifle fire for 500 yards serves as an effective warning. The type of vessel also carries its own deterrent. “No vessel with more than eight meters [about 25 feet] of freeboard has been pirated, said Dobbs. Likewise “no ship capable of speeds over 18 knots (around 21 mph) has been pirated.” This includes most container and cruise ships. He cautioned, however, that if the ship is stopped, it could then be taken. Catlin’s policy evinces the seriousness of the situation. It has “an upper limit of ten million dollars per transit, while most insurance has a limit of five million dollars per transit,” said Dobbs, adding that the average ransom – at the moment – “is around five point four million dollars.” The change to a “transit basis” shows how the pirates’ threat has changed coverage terms, “whereas five years ago they were written on an annual basis.” The weather in the Indian Ocean also has a bearing on coverage terms. Dobbs explained that during the monsoon season in the summer months rough seas – over two meters [over 6 feet] – serves to make piracy impractical; “so clearly in the summer months pricing takes into account sea state in the Indian Ocean.” Software in Catlin’s office monitors these sea conditions. As the monsoon season has ended, Dobbs said “there are now piracy attacks every day of the week.” However, even though there are more attacks, Dobbs pointed out that the success rate “has actually gone down . The main reason being that “vessels are better protected from a hardening point of view and from an armed guard point of view. There’s now about a one in five hundred and fifty chance of being pirated in the Indian Ocean – successfully.” Although there will be an end, or at least a respite to the piracy threat, Dobbs doesn’t see it happening any time soon. For one thing “many of the major powers in the world are over-committed in other places.” There’s also been “a considerable amount of regime change; there’s been a global meltdown. Global leaders have a lot of things to worry about, and, unfortunately the issues off Somalia aren’t the highest on the list, although they are very serious.” He also noted that “piracy over the centuries has always operated in a cycle; it comes and goes depending on how it’s policed, and I do think that this is a phenomenon that will go away.” However, while it’s in a state of growth it encourages piracy in other areas of the world, as shown by recent attacks off the coast of West Africa. Dobbs said it’s in some ways “similar to kidnapping, and other forms of crime where you get copy-cat incidents.” Given the speed at which news travels, if it’s successful, “it will almost certainly get copied.” In addition the possibility that there will be more “failed states” in Africa heightens the danger that it will spread. “But,” he said, “in the long term I’m hopeful that it can resolve itself.” A lot of people in London and elsewhere share that hope. **Source: Insurance Journal**

Inséré le 13/11/13 Dossier Enlevé le 13/12/13

New benchmark to prove coatings performance

Strong academic research and firm ship operating evidence of the correlation between applying specific fouling control coatings and reducing fuel consumption and CO2 emissions has found further backing.

This followed on from the forming of a new industry partnership between International Paint (IP) and BMT ARGOS, who came together to use the new BMT SMARTSERVICES system to verify, through independent monitoring and software analysis, the contribution to vessel performance, fuel savings and reduced emissions made by IP's highest performance fouling control coatings - Intersmooth SPC (self polishing copolymer) antifouling and Intersleek foul release coating.

Understanding hull roughness is an important factor in understanding ship performance, IP pointed out. Any increase in hull roughness will increase the hull frictional resistance, which will either require additional power and fuel to maintain vessel speed or, if maintaining constant power, will result in speed loss and longer voyage times.

IP claimed fuel and emissions savings for its Intersmooth SPC coating, citing evidence gathered from over 5,000 vessel drydock and inspections for fouling rating, combined with AHR (average hull roughness) measurements.

Behind this specific argument, IP's Dataplan system has coating details of over 1.7 bill dwt, representing almost 200,000 drydockings that allow antifouling performance to be predicted and assessed. Results are derived from analysing the in-docking condition of a vessel, its coating performance and assessing the type, severity and extent of any fouling, if present. In conjunction with the vessel's trading pattern, operational profile and drydocking interval, an antifouling performance rating can be calculated.

Dataplan also records the vessel's coating condition, including the type, severity and extent of any corrosion, cracking, blistering, detachment and mechanical damage, all of which contribute to and are included in, hull roughness measurement.

IP also cited the report, 'Energy and GHG Emissions Savings Analysis of Fluoropolymer Foul Release Hull Coating', by Professor James Corbett's Energy & Environmental Research Associates, dated the 10th December 2010.

Aframax analysed

The report analysed the latest fuel consumption data of three vessel types coated with Intersleek 900; Prem Divya, a single engine 21,126 bhp tanker, Ikuna, a twin engine 3,400 bhp bulker and five



Coatins' performance can now be benchmarked.

identical post panamax container vessels, three of which were coated with SPC antifoulings and two with Intersleek 900.

The results were remarkable for the correlation they showed between the coating applied and the fuel consumed. The report showed that fuel consumption was reduced by 10% on the Prem Divya, 22% on the Ikuna and by 5% in five container vessels (based on all five ships carrying a comparable load). The report

stated that if similar fuel efficiency results were realised by all tanker and bulk cargo vessels within the commercial fleet that: "annual fuel oil consumption could be reduced by roughly 16 mill tonnes

per year, fuel expenditures could be reduced by \$4.4 bill to \$8.8 bill per year, and nearly 49 mill tonnes of CO2 emissions could be avoided annually”.

At a more detailed level, the report said that the latest generation fluoropolymer foul release coating could offer average fuel and emissions savings of up to 9%.

Challenge

For some, though, such claims are always open to challenge. Critics argue that, no matter which coating is applied, a ship will naturally move through the water more smoothly, if it has been blast cleaned during drydocking. Furthermore, they argue, the linkage between hull smoothness and reduced emissions is tenuous: traditionally, extra smoothness was more likely to lead to some ships being driven faster, not to fuel savings.

On the face of it, seemingly persuasive such arguments could be readily countered by observing the growing propensity for owners to operate slow steaming policies specifically in pursuit of fuel (and consequently emissions) savings. Again, while no one would dispute that depending upon the fouling control system employed, a newly grit blasted, or hydroblasted, freshly coated hull will perform better than a hull at the end of its docking cycle, the point is surely to measure how quickly hull performance deteriorates over time in the context of the coating systems applied.

Measurement methods

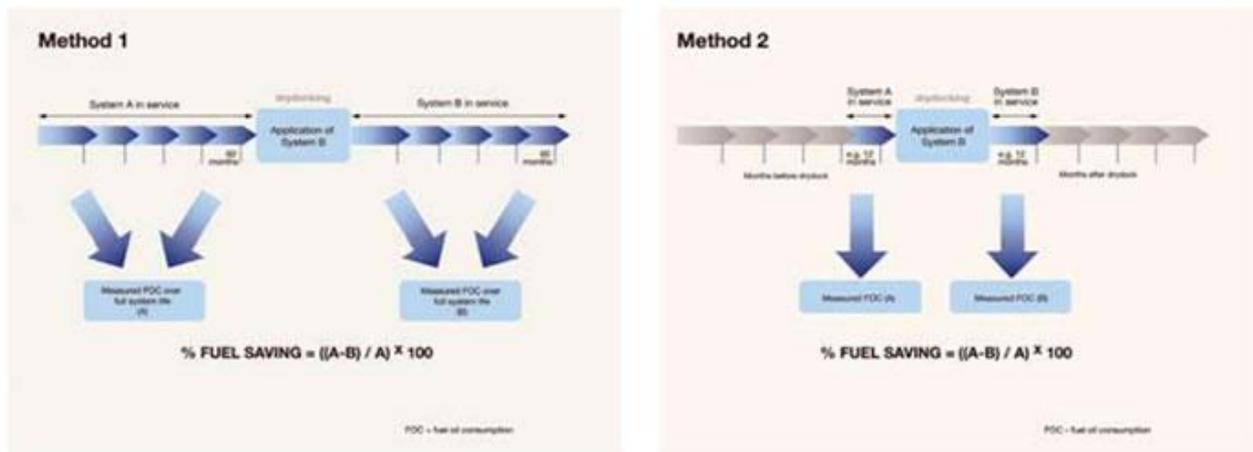
For this reason, IP has been explicit in detailing the alternative methods that have been used as the means of establishing linkage between the fouling control system selected and potential fuel savings. Some common methods were as follows:

1. Directly comparing the in-service vessel performance when using one fouling control system over its full lifetime to that of another fouling control system over its full lifetime.
2. Directly comparing a period of time in-service prior to drydocking with one fouling control system to the same period after the drydocking and application of a new fouling control system. Different before and after periods can be used and in general are much less than full in-service periods, ie 12 months before a drydocking, compared to 12 months after application of the ‘new’ paint system. Other factors need to remain the same, eg no engine overhaul at drydock.
3. Directly measuring the same fouling control system over a given time period. This method uses an ‘industry view’ that a vessel on average will lose 5% speed over a 60 month period. This 5% speed loss would translate to roughly a maximum average of 15% increase in fuel in order to maintain speed. This assumption is not specific on fouling control type. The baseline data is then compared to the performance predicted, or measured in service.

Antifoulings as examples

Using method 1, comparing a 60 month docking cycle of a typical rosin-based system with another 60 month docking cycle with Intersmooth SPC, IP calculated an annual average 4% fuel saving for Intersmooth SPC over the rosin-based system.

If method 2 were to be used and compared 12 months before drydock for a rosin-based system with 12 months after drydock with Intersmooth SPC, IP calculated fuel savings would be higher, at 9%. However, as the periods in service are at different time periods in the docking cycle, the company argued that there are limitations of this method and that the resultant high value of the improvement is misleading. It suggested that this method should not be used.



Two of the three fuel savings methods.

As for method 3, IP pointed out that in 1986 evidence was published of vessel performance using SPC technology. Townsin et al[1] showed that the effect of hull roughness on fuel consumption could be related in a fairly simple formula - % Power Increase = $A(\text{AHR}2^{-1/3} - \text{AHR}1^{-1/3})$ - that for every increase in hull roughness of 25 microns there would be approximately a 1% penalty in the fuel consumption of the vessel.

For typical rosin based antifouling systems, hull roughness increases by around 40 microns per year. However, due to polishing, smoothing and minimal build up of leached layer, an SPC antifouling increases in roughness by only 20 microns per year.

Therefore for SPC technology, the fuel consumption increase over the full period (of 60 months) would be just under 1% per year, reaching 4% in year five (for the vast majority of vessels that return from service in a clean condition).

Using data generated in the comprehensive Townsin paper and a detailed analysis of antifouling performance from Dataplan, the fuel consumption increase over a 60 month period for a rosin based system can be calculated as 15%, the same figure as what has been described as the 'industry view'.

The calculation of 15% is as follows; Rosin containing systems were measured to increase in average hull roughness by 40 microns per year. Over a 60 month period, this would be a 200 micron increase. A 25 micron increase in average hull roughness equates to a 1% fuel increase. This means an 8% fuel increase on roughness alone. Between 36 and 60 months a rosin based system is highly likely to foul, typically due to the build up of a large leached layer preventing biocide release. This results in increased roughness and drag. The effect of this on fuel consumption has been measured and then calculated to increase by 7%; this gives the total increase in fuel consumption of 15%. If only SPC products are measured, then the fuel consumption increase over the 60 month period will be 4%. Not being specific on fouling control type highlights a potential flaw in using an 'industry view' average of fuel loss, IP said.

One important omission in Method 3 is that there is no allowance given for any fuel consumption rise effects that are non-fouling related, such as a damaged propeller, mechanical damage to the coating, or general engine wear and tear.

Going forward, IP stated that it recognised the importance of providing owners with as much information on the performance of its products as it can.

Breaking new ground

The new relationship with BMT looks to do just that; it will provide the independent monitoring that the partners believe will make both the evidence and methodology cited above incontrovertible.

The BMT SMARTSERVICES system, developed by BMT ARGOSS, will capture and compile real vessel data and independently monitor and report on vessel performance. It will record data automatically from ships' sensors to monitor engine torque, the speed log, navigational signals (heading and speed over ground) and provide performance information to the crew and to shore-based management for analysis. The system, which can be installed at the newbuilding stage, or as a retrofit, automatically records thousands of readings per day, providing unparalleled, accurate analysis of vessel performance, IP claimed.

The system will clearly and transparently measure the in-service performance of IP's hull coatings, drawing on BMT's 24/7 in house high quality and validated MetOcean data. The significance of the MetOcean data gathered automatically from high resolution, highly accurate satellite monitoring for use as part of BMT SMARTSERVICES should not be underestimated.

While it is clearly essential to monitor information on board, such as the relationship between hull roughness condition and fuel consumption, this information needs to be integrated with the environmental conditions being experienced by the vessel. This MetOcean data includes factors, such as wind speed and direction, currents, (speed and direction) and wave height and direction.

The system has been modelled using weighted performance coefficients to provide the basis for measurement of vessel performance against the condition of the propeller, hull, engine and fuel consumption. In depth analysis can be used to monitor the propulsive performance of a ship and to indicate how much additional power, or fuel, would be required as a consequence of the combined effects of weather and fouling, or of the isolated effects of fouling on the hull or propeller. This analysis enables data trending, which can be used to optimise any scheduling of hull and propeller cleaning events and can be subsequently used to quantify the effectiveness of any such events. To ensure complete data integrity, all information collected will be sent to BMT. The client and IP will be able to view vessel data in graphic, or tabular form, to develop trend analysis via a secure access web interface. However, the data cannot be changed or manipulated.

The consortium pointed out that accurate monitoring has several benefits for the ship operator:

1. Proof of compliance to charter agreements.
2. Ability to determine the energy efficiency of the vessel within the EEOI (Energy Efficiency Operational Index) encompassed in the SEEMP (Ship Energy Efficiency Management Plan) guidelines.
3. Ability to act immediately on anything adversely affecting the optimum running of the vessel, eg hull fouling, propeller fouling, trim optimisation, hull damage etc. In achieving these benefits, it is essential to be able to show that there is an agreed way of recording standardised data, using an agreed scientific approach that will be generally accepted by the industry.

Clear information

IP and BMT said that they wanted to provide shipowners and operators with information in a completely open and transparent way to provide clarity to those using the information. They wanted owners to get fuel saving benefits, but wanted to ensure that there is a complete understanding of the actual savings possible, rather than just accepting the largest number.

It is from many years of proven in-service performance with data from owner/operators, from Dataplan and from independent testimony that they claim that they know exactly what benefits each of their technology types can deliver. They also said that they believed this new partnership will make that knowledge completely transparent. TO

Inséré le 15/11/13 NIEUWS NOUVELLES Enlevé le 15/12/13

Piracy Update: Armed Guards, West African Hijackings And Guardcon Revisited

Piracy (and more recently terrorism) remains a thorn in the side of modern shipping. With incidents in the Indian Ocean dwindling to almost nothing, focus has shifted during the past 12 months back on to West Africa, where there has been an increase in hijackings and, in particular, in Extended Duration Robberies (“EDR”) involving attacks on vessels and the theft of oil cargoes.

Most Flag States are working with existing legislation or have brought in new laws to allow vessels to deploy operators supplied by Private Maritime Security Companies (“PMSCs”). Some countries, for example Italy and Holland, continue to allow only military Vessel Protection Detachments (“VPDs”), despite pressure from their own shipping communities, who are frustrated by the inflexibility of VPDs, to go down the PMSC route. Other countries, including Japan, are in the process of introducing legislation to allow armed guards.

This article considers and summarises some of the recent regulatory changes governing armed guards and the challenges that hijackings in West Africa present.

The regulatory system that is now being constructed around the maritime security sector has arisen primarily to meet the threat off East Africa. It is worth reminding ourselves where we are in that respect. Even as that threat recedes, some 80% of ships continue to register with the Maritime Security Centre Horn of Africa (“MSCHOA”). According to MSCHOA, around a third of those ships are declaring the presence of armed guards. Interestingly, that figure has held pretty steady over the past six months and, if correct, (and assuming that none of the 20% that are not registering has weapons on-board) that means about 28% of all ships transiting the area have armed guards on-board, which is lower than the 40% estimated by the Security Association for the Maritime Industry (“SAMI”).

The IMO series of Interim Guidances on the Use of Armed Guards (1405-1443), aimed at Flag States and shipowners, are well understood and GUARDCON (issued by BIMCO in March 2012) has proved a great success. With over 4,000 downloads, GUARDCON is the third most used BIMCO form, after the GENCON and Supplytime charterparty forms.

As at the time of writing (mid-September 2013), the High Risk Area (“HRA”) and the Joint War Committee (“JWC”) additional premium risk area remain unchanged. Activity in the whole of the High Risk Area has fallen to levels not seen since pre-2008 and, anecdotally, seems to be largely confined to opportunistic approaches, perhaps by people smugglers or by others plying their trade across the Gulf of Aden. No ship has been hijacked since April 2012, but, as the military would say, the situation is “permissive”. The fact is that the circumstances within Somalia have not changed significantly and, if we have learned anything, it is that the Somali pirates are very patient. They can afford to wait until the coalition forces are pulled back to home waters or diverted to other tasks. The advice from industry bodies is that Best Management Practice (“BMP”) is still very important and, indeed, aspects of it (such as the deployment of razor wire) are encouraged through insurance policy wordings.

From a legal point of view, there are two strands of authority where the courts have considered the concept of risk and danger to shipping. Most recently, in the context of the CONWARTIME clause, in an Ince case, the Triton Lark [2012] EWHC 70 (Comm), the Court looked at the Owners' right to refuse an order to transit the Gulf Of Aden in 2008, where there was a risk of attack from pirates. As a result of that decision, the Court now asks whether there is a real likelihood that the area is or will become dangerous (i.e. something beyond a mere possibility of attack) and, if so, then considers the extent of the prevalence of the risk, along with the severity and nature of the consequences of a

successful attack. The second strand of authority stems from unsafe port cases, such as the *Saga Cob* [1992] 2 Lloyd's 545, in which the Court looked at whether an attack was a characteristic of the port and not just an isolated or abnormal event. It is difficult to see how a case could be made at the present time such that an owner could refuse a similar order to pass through the High Risk Areas off East Africa.

As stated above, most Flag States have now enacted legislation to allow armed guards. The arguments about this leading to an escalation of violence by the Somali pirates have fallen away in the light of the practical experience of those on-board (although the same arguments are now being repeated as justification, certainly by the UK at least, for not allowing PMSCs on UK vessels off West Africa, of which see further below).

West Africa

In general terms, the littoral states of West Africa (which are now moving to a regional cooperation agreement to deal with piracy, maritime crime and illegal fishing) do not allow PMSCs to operate with weapons inside territorial waters. Further, the fact that most vessels are not in transit with obvious embarkation and disembarkation points makes the logistics of operating in the region difficult. Some countries, such as the UK, do not allow weapons to be deployed on UK-flagged vessels anywhere other than in the HRA in the Indian Ocean, unless they are military personnel placed on-board by the state in whose territorial waters the vessel is. Clearly, a state mandating the presence of its security forces on-board a vessel is not something that the Flag State could do much about. The UK position accords with that. Much less certain is the situation in which UK owners have the same military guards on-board as a result of a commercial relationship under which the military personnel have been arranged through an independent PMSC. Logically, there should be no difference, but this has not been clarified.

Whilst Nigeria, Benin and Togo now have designated safe anchorages for ships, it remains the case that, in the past year, a slightly greater number of attacks have taken place outside the 12 mile limit than within, although attacks have taken place as far west as Abidjan and as far south as Port Gentil in Gabon. The danger is that, as in-shore security increases, more piracy will be pushed towards the High Seas. The unique selling point, that no ship off Somalia has been hijacked with armed guards on-board, holds good for West Africa. It would seem inconsistent to allow UK vessels to be unguarded on the High Seas in the Gulf of Guinea.

Floating armouries and Open General Trade Control Licences ("OGTCL")

Under the OGTCL, weapons can be moved between the approved armouries of third party countries. Until July 2013, those armouries had to be shore-based and did not include floating armouries. This potentially meant that the UK PMSCs using floating armouries were acting outside their licences and, therefore, that their activities were illegal, with potential consequences in respect of their liability insurance policies. The UK government has now begun to give approval for floating armouries on a case-by-case basis. There is still little transparency on this and no list of those vessels that have been approved for the storage of weapons. The relevant UK ministry says that, in reaching a decision, they will apply the same Consolidated EU and National Arms Export Licensing Criteria as they do for the export licences themselves. In general terms, these Criteria relate to the UK's international commitments and whether the request could affect the national security of the UK or its allies. In other words, they are broad strategic criteria related to the UK's foreign policy objectives.

Coupled to that is a questionnaire that seeks basic details of the vessel and its operation. These questions are aimed at the security of the weapons and the vessel itself, access, replenishment and risk assessments where there is leasing of space to other PMSCs.

Approved armouries are operating off East Africa and are situated primarily off the UAE and in the Red Sea. Some PMSCs are looking at doing the same thing off West Africa, outside the territorial limits but within the EEZ. There is nothing as a matter of international law which precludes that, but,

in any event, this comes with some risk. Any such operation is vulnerable to interdiction by the local naval forces, who are unlikely to sit back and tolerate weapons being stored and moved in such a way.

Maritime security certification: ISO/PAS 28007

There has been a drive toward raising PMSC standards, which, again, has been UK-led. The latest is the ISO 28007 standard, which has been published, and the only accrediting companies able to carry out the audits are UK-based. A few companies have been audited as part of the pilot scheme and are marketing themselves on that basis. The standard robustly tests the PMSC management system and its ability to deliver security services using qualified personnel with the requisite qualifications. It was hoped that this would be a one-stop shop that would then avoid PMSCs having to be audited by individual states. That has not happened yet, but, if the IMO gets behind it more emphatically, that may change. In the meantime, Flag States have set their own criteria, which they continue to apply.

One issue is whether passing an audit, thereby demonstrating that the PMSC can deliver the right quality of people on board ships off East Africa, means that the PMSC can do the same off West Africa, where the guards are local military of unproven quality and training. In other words, is there a geographical limit that requires a formal extension to the scope of the original certificate? The answer is uncertain and that means that owners (and indeed their insurers), as understand whether there are any restrictions. It does not mean there would be doubts about the PMSC management system, but there is a danger that the existence of a 28007 certificate may, in the minds of some, be seen as a kitemark of quality for all guards, including the local military. No doubt, as the system becomes more widely used, it will be better understood. This is also relevant to the proposed amendments that BIMCO is considering for the use of GUARDCON off West Africa.

GUARDCON

Guardcon is designed to be used anywhere in the world. However, in effect, it is designed to be used in circumstances in which the PMSC provides and is responsible for the team on-board, who are led by a designated team leader. That has meant that everyone has understood where the risk lies and insurance products have been developed to meet those potential commercial and contractual liabilities. However, the reality off West Africa is that the team on-board are provided by the local military or security forces and will adopt their own Rules for the Use of Force. The model there is to have a designated and independent liaison man from the PMSC who will liaise with the master and, in that sense, will act as he would do if he were a team leader. In reality, however, he has no formal control of the team on board. Indeed, under the Nigerian MOU (which governs the use of their military personnel, who are often in their own craft) there is a suggestion that the military are also not bound by the instructions of the master. No-one will want to see any dilution of the master's authority, as provided for in Clause 8, but there has to be a degree of realism about the level of negotiation that is possible with those military commanders on the ground. The amended Guardcon must deal with this type of model.

That exercise is on-going. There is no intention to have a separate contract, but there will be a version with pre-printed suggested amendments that allow a distinction to be drawn between the guards and team leader supplied by the PMSC and those that are supplied, and indeed are employed, by the local military. Some owners will want to contract directly with the military, but BIMCO does not want Guardcon to be a form of agency agreement. It is intended to be an agreement between owners and a PMSC. If there is no PMSC, Guardcon is unlikely to be the right contract. **Source: Ince & Co**

Inséré le 17/11/13 Dossier Enlevé le 17/12/13

Time to address the global manning crisis

by Captain Ashoke K. Bansal, individual member, India

It may be a godsend for many that IMO has declared 2010 as the Year of the Seafarer. Those for whom this could be true include shipowners, ship agents, manning agents, charterers and officials and delegates of many governments. The declaration may help them to thump their chests and exchange platitudes in seminars, conférences, cocktail parties and dinners. It is another matter whether the international maritime community will take advantage of these 12 months to look into what seafarers mean to their industry and the world, what is involved in using their professional services with loyalty for the benefit of international trade and commerce, and what needs to be done to retain these highly trained professionals to benefit the industry.

An adage goes: "What matters is not only to make a person perform but also to make them want to perform." The international maritime community should take advantage of 2010 and ask itself what it is doing to make today's seafarers want to stay at sea and want to perform. Other questions are what is it that they are not doing? Should there be an investigation into what is happening? What is remiss and what needs to be done?

The latest figures show that the shortage of certified seafarers amounts to 44,000 and is likely to reach 70,000 by end of this year. This has also to be viewed in the light of the fact that more than 50 per cent of serving certified seafarers are over 50 years of age. This requires not only short-term measures but forward planning too.

Today's manning crisis is attributed to a rise in tonnage from 85 million tonnes in 1948 to over 700 million tonnes today. But tanker fleets of large sizes account for 7,276 ships out of a total of some 482 million tonnes. The cape size fleet alone consists of 791 ships of 136 million tonnes. In 1948 the largest carriers were Liberty ships, which could carry 10,000 tonnes but an average ship then could carry only about 6,000 tonnes, which is 50-60 times less than the size of the VLCC of today. The 7,276 tankers of today can carry cargoes equivalent to over 90,000 ships of the 1948 era. Much the same number of certified officers and engineers are aboard each of these 7,276 as was the case in 1948. So the increase of world tonnage cannot be the only factor that has created such an unusual demand for seafarers.

On the other hand, with the world's population having doubled, the number of young people available for shipping should be twice what it was in 1948. Yet in Poland, for example, not even 1,000 out of the 350,000-500,000 high school graduates of 2007 opted for the merchant navy. This should ring alarm bells, especially as seafaring is a far more lucrative career than others.

Many ship managers of today were previously seafarers but have forgotten what seafaring was in their time and they don't know the realities on the ground in 2010. A stark example of the differences that can exist between seafarers and people in other professions who hold equally responsible positions is shown by the treatment the master of Prestige received compared with the captain of the BA plane that crash landed at Heathrow airport. Both captains used their training, experience, professionalism and dedication to avert considerably greater disasters. However, adulation went to the aviator, the stigma of blame and prosecution to the unfortunate seafarer!



Captain Jasprit Chawla, master of MT Hebei Spirit: "I don't want to see a ship again"

Clipper airline crews work a day less than 8 hours in duration and have no maintenance, management or operational worries. If something on a plane fails to work they fill in the gripe sheet and leave it to the ground crew. They take the 'Crew-only' queue to sail through immigration and customs on arrival and rest and sleep in comfortable hotels. On their next assignment they go to an aircraft made ready for them to fly.

In comparison ships' crews stand on day and night watches for days on end, seven days a week. On arrival in port they are investigated, inspected, interrogated and treated as suspects or criminals. After hauling thousands of tonnes of vital materials across oceans, they still perform managerial, security, legal, commercial, operational, repair and maintenance tasks, seven days a week, even while in port, to make the ship

ready to sail again.

A person ashore who is reasonably well employed and well qualified works about 230 days of 8 hours' length each, five days a week. They get a month of paid leave plus national and other holidays, not considering casual leave. A seafarer, on the other hand, works a minimum of 12 hours, seven days a week! In other words, they work the same number of hours in less than five months on board and should be entitled to more than 7 months of fully paid leave every year! Do today's shipowners think about this?

On 7 December 2007 the fully loaded VLCC MT Hebei Spirit was safely anchored off Daesan harbor South Korea in the anchorage designated by the port authority. She was hit by a huge passing mobile crane barge under tow when that vessel's tow line parted. This not only damaged the superstructure of the VLCC but also punctured three holes in her hull.



"...which young man would want to be a seafarer after reading cases such as that of MT Hebei Spirit..."

Some 10,800 tonnes of crude oil leaked out to cause much pollution. Later came the discovery that the entire towing operation in the harbour was unlicensed and that the tow line was a used runner

wire not fit for that kind of operation. The master injected inert gas into the punctured tanks to eliminate the possibility of fire or explosion, in that way ensuring the safety of the lives on board his ship. Well accepted principles of international maritime law that are fully recognised worldwide hold that an anchored ship that complies with all international regulations cannot be blamed if a mobile marine craft hits her. International regulations of 1972 for the prevention of collision at sea, ratified by 130 countries including Korea, have equally endorsed and recognised this principle. But Korea charged both master and chief officer for causing pollution.

So what is it that the master did that he should not have done, except not to have commanded that ship into a Korean harbour? And what did he not do that he should have? And why was he made to lose 18 months of his productive life, a time that no one can give back to him? And which young man would want to be a seafarer after reading cases such as that of Prestige and MT Hebei Spirit, which have received worldwide publicity?

Captain Chawla, 39-year-old master of MT Hebei Spirit, said, "I don't want to see a ship again. If I was to return to a navigation bridge, any future decisions I took would be coloured by this experience instead of me 'just doing what I thought was right'." He added that before this incident he would have advised anybody, including his own son, to look at all job options, including a seafaring career. "Now I would discourage anyone and everyone, including my son, from seafaring," he said.

Until the last quarter of the 20th century most shipowners trained their officers and engineers from tender ages to become masters and chief engineers and employed them permanently. Paid leave was the inherent right of every serving seafarer, together with provident funds and gratuity. This provided a sense of belonging and security to seafarers and their families and created durable loyalties. It also made most seafarers serve their full working lives at sea with the same shipowner, from cadet to master and from junior to chief engineer. Captain Gaetano Mintauro served his entire life on the 'Italian line'. He was master of Andrea Doria in 1956 when she sank after colliding with Stockholm. Yet even after this disaster, he continued sailing as master with the same company.

The old adage was, "Fools of the family go out to sea." Today advancements in technology and automation mean officers and engineers have more education, training and learning than previously. So young seafarers see no reason to continue to put up with insecurity, loneliness, criminalisation and ceaseless work, seven days a week in bad living and working conditions on board. Hence seafaring today warrants a changeover after 8 to 12 years. This means there is a need to integrate their education and training for long-term career opportunities after their ship-board training, experience and expertise.

This will attract today's youth to seafaring with an eye on further prospects.

Employment related to maritime transport in Europe alone adds up to 1.5 million people. Out of this some 70 per cent of shipping-related jobs are in shipbuilding, naval architecture, science, engineering, electronics, cargo-handling and logistics. Unfortunately industrialists and rule makers worldwide fail to consider or pay for seafaring experience in post-sea careers in shorebased industries.

Long-term planning must take this factor into consideration to create positive awareness of the merits of this profession worldwide.

Today's acute manning shortage means management and manning agents move seafarers from ship to ship, owner to owner and contract to contract. They pick up the first seafarer in the market and rarely stop to find out whether they are experienced enough for the job. The story goes that when a

master of a ship saw courses laid on the chart by the second officer before sailing out through a traffic separation scheme, he asked the second officer why that was the case. The answer was, "Sir, that is the way we came in."

Today most masters, watch keeping officers and engineers are over-worked, fatigued and loaded with paper work. This is well accepted and acknowledged, even by owners when they provide instruments like BNWAS on the navigation bridge to keep a duty officer awake and alert about his navigational duties. Therefore when a young seagoing officer sees an exhausted, worn down, unsmiling senior on board, loaded with work and worries, it makes him think, "Do I want such a job?" The moment he finds an opportunity or an opening ashore he leaves without even waiting for a command or the chief engineer's position. That not only creates voids but also makes the industry rush inexperienced officers to senior positions for which they are not ready. This is a sure prescription for disaster. Reduced manning, even with automation, cannot be warranted beyond a point.

A senior and highly placed seafarer had this to say on his return from the STW 39 session of IMO in early March 2008: "I was witness to hypocrisy at its height. Everyone spoke of fatigue and rest periods being flouted by ships' staff. But when it came to tackling the issue at its root, namely increasing safe manning and making mandatory prescriptive criteria, the European states did a double take and started speaking of goal-based standards - a jargon for keeping safe manning criteria voluntary and flexible." Thus, shipowners themselves engineered to abort a proposal about minimum manning on board ships!

There was a time when if the master saw a second officer awake past 7pm while at sea he would insist that they go to sleep to be alert on the 12am-4am watch. The officer who was to keep night duty in port was not expected to go ashore in the afternoon when off duty but to sleep after lunch to enable him to keep night duty from 6pm. Today paper work, cargo watches and maintenance work keep seafarers busy at sea and in port, even when off duty. So what kind of navigation watch or deck duty would they keep without proper sleep or rest? Why wonder that it causes sub-standard performance and accidents? Most paperwork should be done ashore after getting what is needed from seafarers verbally.

Another reason to choose a sea career used to be to see the world. Today seafarers get no time to step ashore in port. Even when visa formalities allow them, there is a fear of being treated like criminals when ashore. This prevents them from stepping off their vessels even when they are off duty. Ships' crews are not concerned with what foreign governments do and think and what their rules and laws are. Their only concern is, "I had this problem while my ship was in so-and-so port and I went ashore but no one helped me."

The top priority among young seafarers is the need for instant communication with their loved ones. This alleviates loneliness. Seafarers know that instant worldwide communications are available with ultra-modem equipment on board. But most owners do not allow it at a reasonable cost. This plus better, more comfortable and spacious accommodation and recreational facilities need to be provided but owners fail to do so.

Here is what a sailing chief engineer has to say about sailing today: "A few years ago any young man would say, 'I came to sea for adventure, to see the world!' Now they might say, 'I came to sea because I didn't have anywhere else to go!' Have we really become the bilges of society?"

Some 75 per cent of cargo by volume and 56 per cent by value travels worldwide by sea. Human traffic between European ports alone comes to more than 400 million sea passengers yearly.

Transport of freight and passengers by sea generated €24.7 billion (US\$30.5 billion) in 2006 in net contribution to the balance of payments of the EU. Such worldwide activity means that cargo and passenger ships have a direct impact on the quality of life of citizen all over the world. It also means that only 1.15 million seafarers are serving our world community of 6.7 billion humans. Should we not recognise their vital role in making our lives comfortable in the 21st century?

Today shipowners seem to pay more attention to finding the right ships and the right employment for their busy fleets, forgetting that it is not the ships that are their greatest assets but seafarers who man those ships and can make or break an owner, regardless of what kind of fine ships it has.

On 16 April 2006 the 162,000 tonne tanker M.T. Eton was bought ex-shipyard for US\$90 million. With interest on investment, depreciation, crew wages, maintenance and administration expenses, her daily standing cost to owners is US\$30,023. She was time chartered at US\$35,000 daily. Shipowners make such investments to make profit, not to lose the ship and recover the cost from their insurers. Regardless of what kind of fine ship she is, her commercial success depends on the seafarers on board. No one knows better than her crew how to make her and her equipment perform with the utmost efficiency, economy and productivity. If the crew delay M.T. Eton by even one day it means a US\$35,000 cost for the owner. Therefore a disgruntled or disinterested crew can be a recipe for commercial and financial disaster.

Out of total CO2 emissions of over 27 billion tonnes in 2005, ships emitted only 843 million tonnes, or 3.1 per cent of all emissions worldwide. Yet, fuelled by the media, the international community blames ships and seafarers for environmental pollution today. So why work on ships?

There is a mistaken understanding that a ship is a closed, isolated society remote from the office. This creates an 'us and them' scenario. Efficiency, performance and loyalty cannot be bought but can be exacted by making seafarers feel that they belong. Managers cannot delegate success or failure. A single poorly written email by a manager can do a lot of harm. On the other hand, the effect of a communication of appreciation can achieve a lot. Also, incorporating crew suggestions into systems gives 'ownership' to the crew and boosts morale. Owners should realise that ships are not their greatest assets but the crew are, and their contribution to achieve their objectives cannot be underestimated. That is why shipowners need to create reciprocal loyalties. Unfortunately, barring those few that are intelligent and durable, shipowners seem to have lost this psyche, which earlier shipowners used to have. Instead what one hears today is of the high salaries of seafarers, which are actually just a fraction of the standing costs of ships!

History cannot be reversed. Management agents, crewing agents, flags of convenience, multinational crews and all else that the 20th century brought to international shipping will stay with us. But the 21st century world cannot exist without international trade and commerce. Regardless of what fine ships we can build with ultra-modern technology, international cargoes cannot be carried across continents without professionally competent and loyal seafarers. It is therefore time to come to terms with reality and recognise the part seafarers play in maintaining and promoting modern international trade and commerce.

The challenge for 2012 is to retain the best professionals not only to perform but to want to perform. IMO can only show the way. It is for the international maritime community to remove the blinkers from their eyes and see what needs to be done to retain the best of the seafaring community and nurture more to fill to their own advantage the voids already created.

Inséré le 01/11/13 HISTORIEK HISTORIQUE Enlevé le 02/12/13

Ship crosses Northwest Passage, sails into history

Last week the bulk carrier **NORDIC ORION** passed through the Northwest Passage and into Baffin Bay, sailing into history as it went. The ship – a 225-metre, ice-strengthened carrier loaded with B.C. coal bound for Finland – became the first bulk carrier to make the voyage, which has lured explorers for more than a century and has long been eyed as a commercial route.

Until the **NORDIC ORION**, however, the passage was travelled mostly by icebreakers, tugs and small cargo ships hauling supplies to northern communities, as well as adventurers undertaking the journey in rowboats and even Jet Skis.

With a commercial bulk carrier now having passed through the route, discussions about Arctic sovereignty and



marine infrastructure have become more than theoretical.

“The Canadian government needs to take a firm stand on shipping via the Northwest passage in order to safeguard the

environment and to enforce Canada’s sovereignty,” James Given, president of the Seafarers’ International Union of Canada, said Wednesday in an e-mail. “There must be a net benefit to Canada, and Canadian stakeholders in the shipping industry, not just an open door to Flag of Convenience Shipping to increase their profit margins by shaving miles off of their shipping routes.”

The SIU represents sailors working in Canadian waters and on vessels delivering cargo to the United States, Europe and South America.

By sailing through the Northwest Passage, the Nordic Orion was able to trim about 1,000 nautical miles from the usual route through the Panama Canal. It was also able to carry about 25 per cent more coal, given how shallow the canal is.

Transport Canada, along with the Canadian Coast Guard, monitored the vessel while it was in the Northwest Passage, and the ship was required to provide daily position and ice conditions to Nordreg, a Coast Guard agency.

The **NORDIC ORION** is owned by Nordic Bulk Carriers, a Danish company that has staked its future on Arctic shipping. In 2010, it became the first non-Russian company to use the Northern Sea Route when it shipped iron ore from Norway to China.

This is the first time the company has sent one of its vessels through the Northwest Passage. It left Vancouver on Sept. 6, loaded with metallurgical coal. Port Metro Vancouver says the **NORDIC ORION** loaded at Neptune Terminals, which is partly owned by Vancouver-based Teck Corp., one of the world’s biggest producers of metallurgical coal.

Metallurgical coal is used primarily in steel making, while thermal coal is used in electricity plants.

Neither Neptune Terminals nor Teck would comment on the sailing, citing customer confidentiality, and Teck said it does not use the Northwest Passage. But shipping agents say most coal is sold on a "freight on board" basis, which means that the customer takes ownership of the product as soon as it is loaded on the ship, and that Teck would not monitor or even necessarily know which route the coal would take to its final destination.

While shipping agents in Vancouver and around the world are mulling potential implications for shipping commodities, others have voiced concerns about the lack of environmental and safety infrastructure in Canada's North.

In a recent article, Michael Byers, an international law expert at the University of British Columbia, noted that Canada does not have a single port along the Northwest Passage but that Russia, by comparison, has 16 deep water ports along its Arctic coastline. **Source : The Globe and Mail**

Inséré le 21/11/13 HISTORIEK HISTORIQUE Enlevé le 21/12/13 Oorzaak en Omstandigheden van het kapseizen van de "Herald of Free Enterprise"

Het kapseizen van de "Herald" op vrijdag 6 maart 1987 met het verlies van 188 passagiers en bemanningsleden was wereldnieuws. Niemand had er zich ooit kunnen aan verwachten dat circa 6 minuten na het verlaten van de haven van Zeebrugge de Herald zou gekapseisd zijn. Anderzijds moet de nadruk gelegd worden op het feit dat op een totaal van 543 personen aan boord er 355 gered werden. Het is merkwaardig dat in de vele artikels en TV uitzendingen die hieraan werden gewijd, tot nu toe de juiste toedracht van het kapseizen nergens volledig werd toegelicht. Meestal werd aangehaald dat het kapseizen te wijten was aan het water dat in het autodek binnen is gestroomd via de open boegdeuren.

Maar "waarom" dit zo snel gebeurd is en "waarom" het schip zo snel slagzij heeft gemaakt daar alwaar 'roll on - roll off `schepen regelmatig met open deuren zee kiezen en hierbij niets is gebeurd wordt nergens vermeld. Zelf de "Herald" was voordien reeds 5 maal met open boegdeuren uitgevaren..

Evenmin werd enige uitleg verstrekt waarom het schip een korte en snelle bocht gemaakt heeft en na het kapseizen met de boeg naar Zeebrugge gekeerd was alhoewel deze bocht mede de doodsteek heeft betekend bij de ramp.

Het is duidelijk dat de openstaande boegdeuren een belangrijke rol gespeeld hebben, in de catastrofe, al is dit element niet voldoende om het kapseizen te verklaren. Het staat vast dat een ongelukkige samenloop van bijkomende omstandigheden bijgedragen heeft om de ramp te veroorzaken. Neem één van deze elementen weg en de ramp was niet gebeurd.

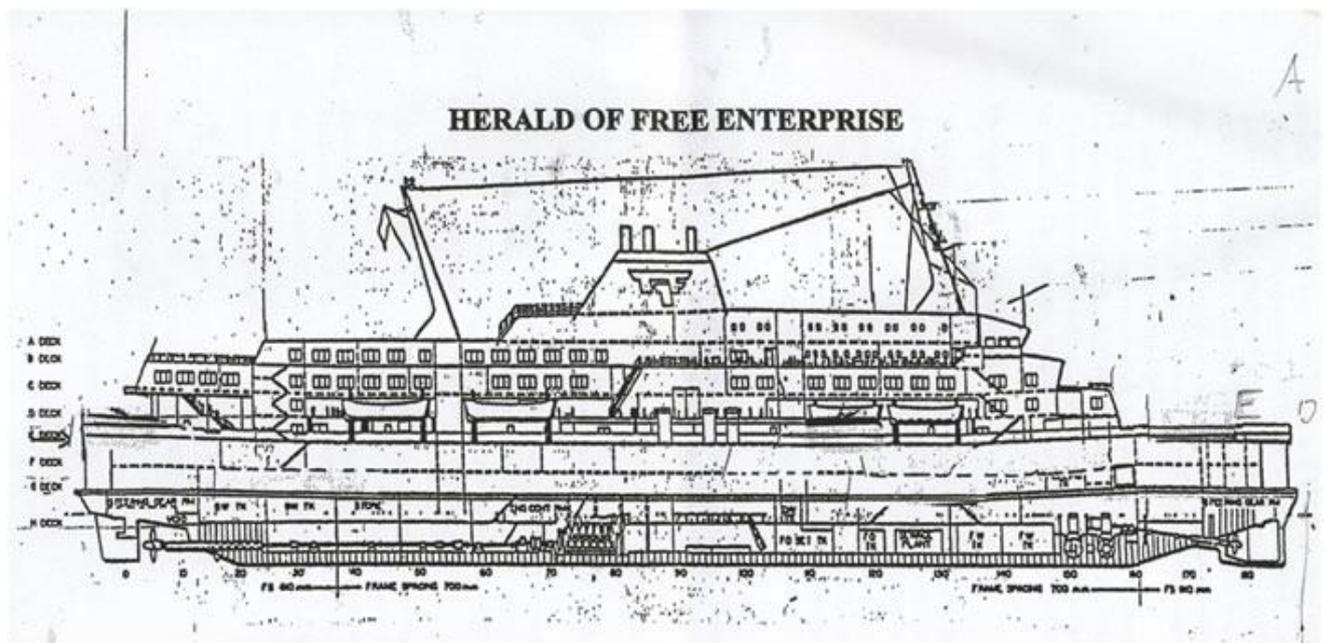
Mijn aanstelling.

Omstreeks 1963 zijn er in de haven van Antwerpen enkele spectaculaire branden geweest als gevolg van een verkeerde stuwage van gevaarlijke stoffen. Sedertdien specialiseerde mij als deskundige in dit type van vervoer, de stuwage aan boord en het nemen van maatregelen bij ongevallen zoals brand, oliebezoedeling en lekkage van brandbare, giftige en bijtende stoffen. Daar er allerlei gevaarlijke stoffen aan boord van de Herald vervoerd werden, werd ik dan ook door het parket in Brugge gelast met het strafrechterlijk onderzoek inzake dit vervoer.

Er waren een groot aantal partijen betrokken in de zaak meestal met tegenstrijdige belangen waardoor de berging van het schip en het verwijderen van de slachtoffers in het gedrang kwam. Op verzoek van de eigenaar P & O, werd ik eveneens als gerechtsdeskundige aangesteld door de Rechtbank van Koophandel te Brugge. met als opdracht het nautisch gedeelte van de ramp, namelijk de coördinatie van berging van schip en lading en het treffen van maatregelen om elke bezoedeling te vermijden.

Beschrijving van het schip.

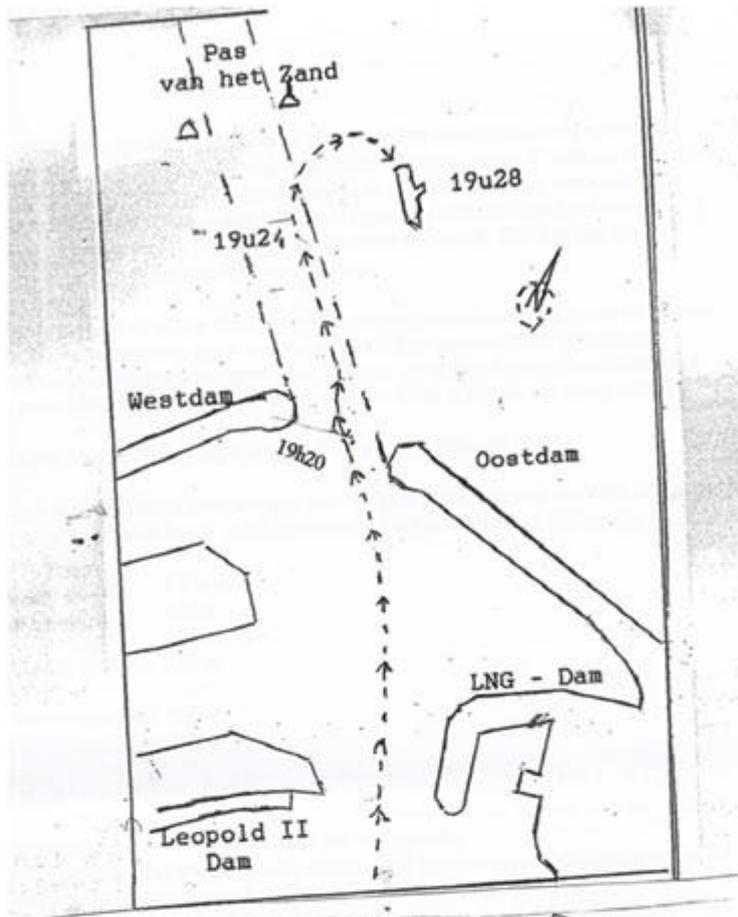
De 'Herald of Free Enterprise' was van het type 'Roll on-Roll off ferry', uitgerust om passagiers, voertuigen en vrachtwagens te vervoeren. Het was gebouwd zoals de twee zusterschepen voor de lijn 'Townsend Thoresen' in 1979 in Bremerhaven. Op het ogenblik der feiten was het schip zeven jaar oud zodat men kan spreken van een betrekkelijk nieuw schip. De Herald was uitgerust met drie verstelbare schroeven en een boegschroef om het manoeuvreren te vergemakkelijken. Met haar Sulzer Diesel motoren van 24.000 bhp kon een snelheid van 22 knopen gehaald worden.



De bruto tonnemaat bedroeg 7.691 ton en 3.439 ton netto en zijn waterverplaatsing bij geladen schip 8.800 ton.. Zijn lengte was 131,9 m. en de breedte 23,15 m.

Het schip had 8 dekken boven de tanktop. Het hoofddek, het zogenaamde 'G-dek' was ingebouwd in de opperbouw en deed dienst als doorlopend autodek. Het was afgesloten aan het voorschip met een dubbele waterdichte deur en aan het achterschip met één waterdichte deur. Vooraan het 'G-dek' bevond zich een rechthoekig platform om de wagens te kunnen laden.. Boven het 'G-deck' was een tweede doorlopend autodek 'E-dek', eveneens afgesloten vooraan met een waterdichte deur.

De Herald was uitgerust met de nodige certificaten waaronder het 'Passenger Safety Certificate' en het schip beantwoorde aan de 'Merchant Shipping Rules 1980' en Solas 1974. Met een vrijboord van 1.11 m. mocht het schip 630 personen vervoeren met inbegrip van de bemanning. De diepgang mocht dan niet meer 5,70 m. bedragen..



De stabiliteit van de Herald.

Stabiliteit aan boord van een schip wordt verzekerd door zijn vorm en de verdeling van de gewichten aan boord, de zogezegde vorm en gewichtstabiliteit. Een veerboot heeft hoge opperbouw en is daarom vervaardigd uit lichtere materialen. Het gewicht van deze bovenbouw wordt in evenwicht gehouden door voldoende gewicht beneden het zwaartepunt. Verder dient er rekening te worden gehouden dat er soms beperkte diepte is bij de nadering van kusthavens zodat de diepgang van een veerboot beperkt is. De metacentrische hoogte 'GM' toont samen met de stabiliteitskrommen aan hoe veel de stabiliteit van het schip bedraagt

De 'Herald' was bij het vertrek uit Zeebrugge afgeladen en had een GM van 2,09 m. Dit is zelf meer dan het dubbele dat men algemeen bij gewone vrachtschepen aantreft. We hebben hier te maken met een stijf schip.. Een stijf schip maakt snel slagzij en bij slingerend schip heeft het een korte slingerperiode zodat het snel terug komt in de verticale positie.

Het dienstrooster en de belading van de Herald in Zeebrugge.

Samen met de twee zusterschepen voer de Herald normaal op het traject 'Calais-Dover'. Met zijn krachtige motoren kon onmiddellijk een hoge snelheid ontwikkeld

worden. De bedoeling was de passagiers en de wagens snel te ontschepen en zonder enige vertraging de terugreis aan te vangen met een nieuwe lading.

De P & O lijn vaart zowel op Zeebrugge als op Calais maar wegens een staking in Calais werd de veerboot ingezet op het traject Zeebrugge-Dover. Op 6 maart 1987 lag de Herald gemeerd in de voorhaven van Zeebrugge met de boeg gestrekt naar de kade toe. In eerste instantie worden de vrachtwagens en een aantal auto's geladen via de boegdeuren vooraan in de open ruimte van het

beneden autodek (G-dek) gevolgd door het laden van auto's op het bovenautodek (E-dek). Daar alle ingeschreven wagens ingescheept worden werd er tot kort voor het vertrek geladen..

Het dienstrooster in Zeebrugge was anders dan in Calais namelijk:: Er zijn slechts twee dekkofficieren beschikbaar Slechts op één dek kan terzelfdertijd geladen worden. Het was meestal nodig het schip vooraan te ballasten.

De boegdeuren konden gesloten worden op de ligplaats.

De voorhaven is onderhevig aan getij en in tegenstelling met Calais is de hoogte van de aanloopbrug ontoereikend om bij hoog water de auto's op het boven 'E' autodek te kunnen laden. Men was daarom verplicht de voorpiek én de twee dubbelbodems tanks vooraan te ballasten waarbij het voorschip dieper kwam te liggen. De eerste officier had het toezicht op de lading en bevond zich in het autodek tot kort voor het vertrek. Zodra de laatste auto's geladen waren begon men de ballast uit te pompen.

De lading bestond uit auto's, vrachtwagens en aanhangwagens meestal geladen met allerlei goederen. Enkele aanhangwagens met gevaarlijke lading werden aan dek geladen met uitzondering van een kleinere vrachtwagen met zeer gevaarlijke laboratorium chemicaliën. Deze waren niet aangemeld en hun vervoer aan boord van de Herald was streng verboden.

De conditie van de Herald bij zijn vertrek op 6 maart 1987 om 19u10

Tot kort voor het vertrek wordener nog auto's geladen. Bij zijn vertrek bevonden er zich nog 260 ton ballast vooraan boord zodat de Herald nog steeds koplust had. Zij beladingstoestand was als volgt:
Waterverplaatsing : 8.874 ton

Diepgang voor : 6,06 m.

Diepgang achter 5,31 m.

Gemiddelde diepgang 5,68 m. Koplust: 0,75 m. Verticaal zwaartepunt 9,71 m. GM: 2,09 m

De Herald was praktisch afgeladen met een diepgang midscheeps van 5;68 m. zij 2 cm. minder dan het toegelaten Plimsoll merk (5,70 m.) Het schip was dus niet overladen en het aantal toegelaten personen aan boord was niet overschreden.

Het 'G' autodek is het hoofddek en de afstand vanaf het waterniveau midscheeps tot aan het hoofddek bedroeg bij het vertrek: 1.11 m. (vrijboord) + 0.02 m. = 1,13 m.

Het platform vooraan loopt stilaan op en ligt ongeveer 30 cm hoger dan het hoofddek. De diepgang voor bedroeg 6,06m zij 38 cm meer dan de diepgang midscheeps.

Hieruit volgt dat de afstand van de voorkant van het platform tot het waterniveau bij het vertrek 1,13 m. — 0;38m + 0;30 m = 1,05 m. bedroeg.

De vaarroute naar open zee loopt via het Pas van het Zand en het Scheur. De breedte van de Pas bedraagt circa 1000 m. en de diepte bij laag water 14 tot 15 m. De strekking van de vaargeul is nagenoeg Noord-West. Het weer is goed, klaar zicht, kabbelende zee, wind uit het Noord-Oost, kracht 2 tot 3 en de luchttemperatuur bedraagt 4°. Men kan zich daarom verwachten aan een rustige overtocht. De duur van de overtocht bedraagt slechts 4 uur en bij deze korte overtocht worden enkel de vrachtwagens met gevaarlijke lading, deze die zich op het open dek bevinden, vastgesjord.

Men kan de ramp met de 'Herald' onderverdelen in drie fases:
Eerste fase: Van 19u10 tot 19u20: Vertrek en zwaaimaneuver in de voorhaven.

Om 19u08 worden de trossen los gegooid en om 19u10 vertrekt de "Herald" van de kade en de 10 minuten vertraging moeten ingehaald worden. De "Herald" is gehouden aan een strikt uurrooster en moet elke dag 4 overtochten maken. Om dit te kunnen halen, zijn er zelf onderrichtingen om, indien mogelijk, het schip 15 minuten vroeger te laten vertrekken en deze keer heeft de Herald een vertraging van 10 minuten. De scheepstaf staat hierdoor voortdurend onder stress.

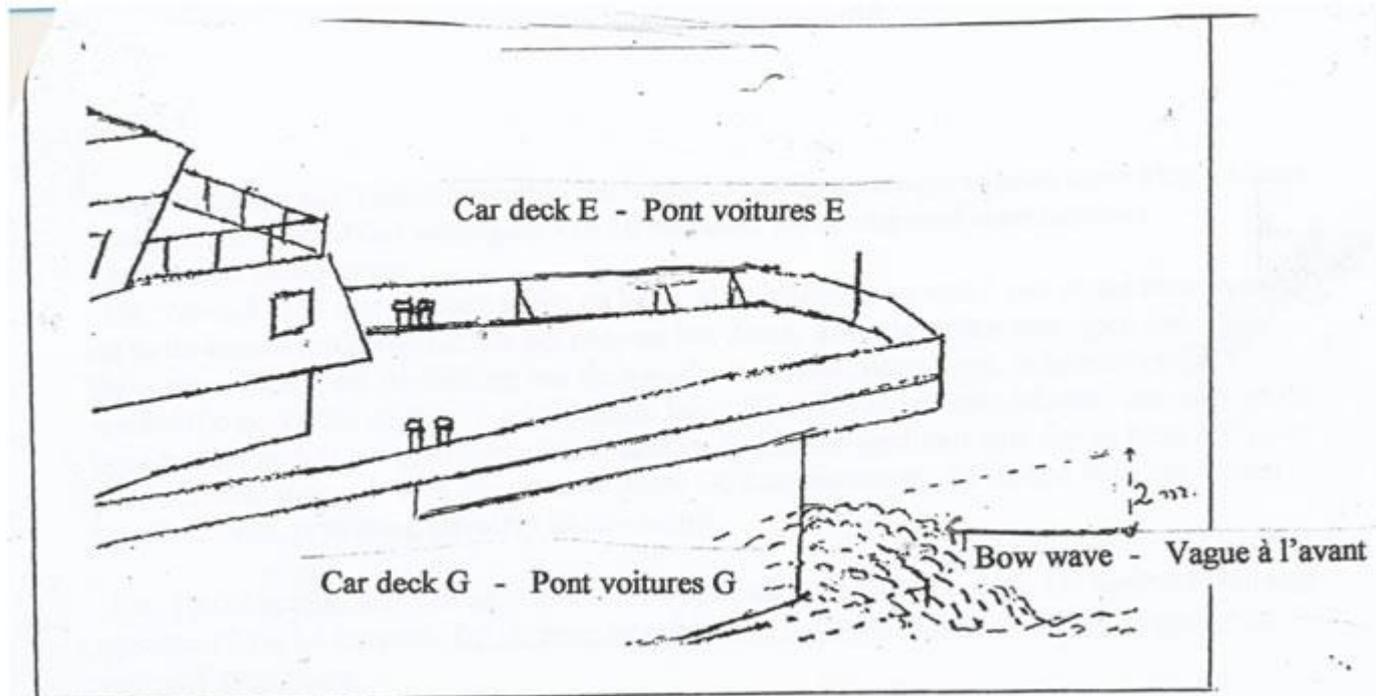
De "Herald" ligt met de boeg tegen de kade, slaat achteruit en voert een zwaai manoeuvre uit in de voorhaven alvorens, via het pas van het Zand, koers te zetten naar open zee.

De eerste officier, die de sluiting van de boegdeuren moet controleren, is terzelfdertijd wachtofficier. Zodra de auto's geladen zijn, haast hij zich van het autodek naar zijn post op de brug zonder zich te vergewissen of deze deuren al dan niet gesloten zijn. Op de brug zelf is er geen controle mogelijkheid om dit na te gaan. De hulpbootsman, die instaat voor het sluiten van de deuren, is in slaap gevallen in zijn kajuit.

Om 19u20 bevindt de "Herald" zich ter hoogte van de buitenstrekdam. De snelheid bedraagt nu circa 12 tot 14 knopen.. Op de brug beseft men niet dat de binnen en buiten boegdeuren vooraan open staan.

Tweede fase: Van 19u20 tot 19u24. De "Herald" kiest zee en duikt met zijn voorschip onder water .

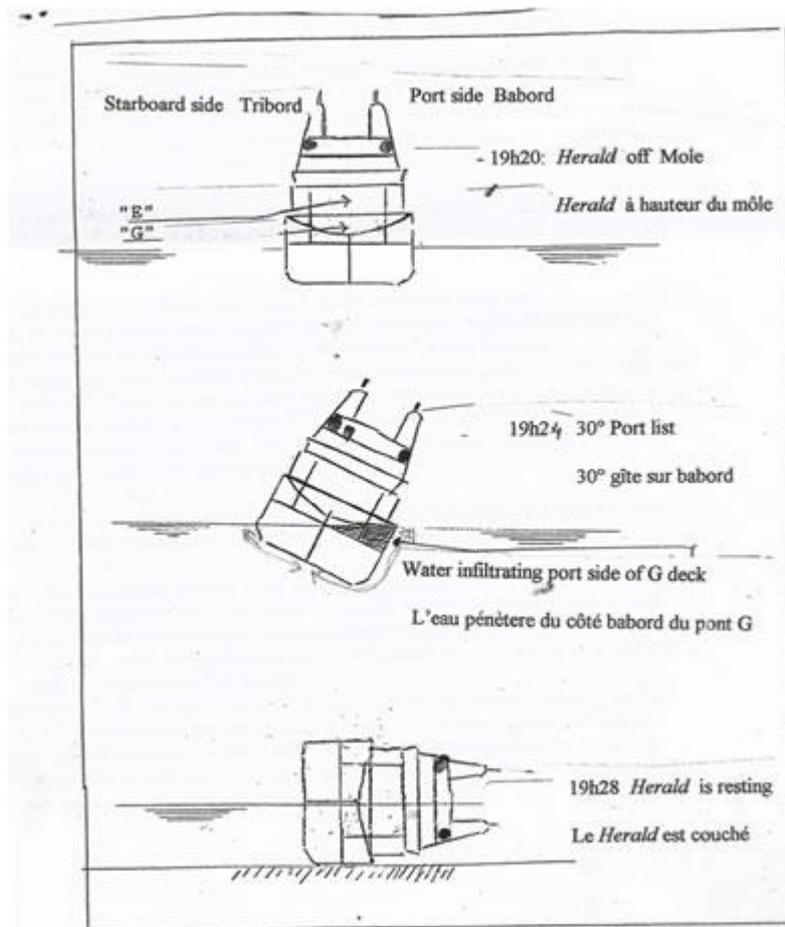
Zodra de "Herald" ter hoogte van de buitenstrekdam is aangekomen wordt "volle kracht vooruit" gegeven en loopt de snelheid onmiddellijk op tot 18 knopen (32 Km). Hierdoor ontstaat een dynamische inzinking vooraan, het zogezegde 'squatting' effect, waardoor het voorschip ongeveer 10 cm. inzinkt. Squat wordt beïnvloed door de vorm en de snelheid van het schip en de diepte van het water onder de kiel. Ondertussen is er reeds 50 ton ballast uitgepompt waardoor het voorschip 5 cm gelicht is.



De afstand van de bovenkant van het laadplatform tot aan de waterspiegel bedraagt hierdoor nog slechts 1,05 m. — 0,05 m + 0,10 m. = 1,10 m. . Dit zal later catastrofale gevolgen met zich meebrengen.

Hoe groter de snelheid hoe hoger de boegwolk wordt en weldra komt het water boven het

laadplatform en stroomt via de open boegdeuren in het beneden autodek. Dit gebeurt zeer snel. Uit latere proeven met het zusterschip van de "Herald" onder dezelfde weersomstandigheden en met dezelfde diepgang maar ditmaal met gesloten deuren blijkt dat de boeggolf meer dan 1 meter boven het platform stijgt. Als gevolg van de vaart van het schip stroomt meer en meer water vooraan in het 'G' autodek en duikt de "Herald" met zijn voorschip om zo te zeggen onder water. De Herald is een stijf schip veerboot en krijgt snel een hoge slagzij over bakboord toen het water zich aldaar verzamelt.



Op de brug is men volledig verrast door deze snelle slagzij en kostbare tijd gaat verloren alvorens men vaart kan verminderen door volle kracht achteruit te slaan.

De "Herald" ligt nog steeds gestrekt in de vaargeul, zijn slagzij neemt toe maar de veerboot heeft nog steeds een hoge snelheid..Hoe groter de slagzij, hoe groter de oppervlakte en de druk van het water op de bakboordzijde van het ondergedompelde voorschip Elke zeiler weet dat een zeilschip met slagzij loefgierig is en een neiging heeft om met de kop in de wind te lopen.. Dit wordt gecompenseerd met lijroer.

Hetzelfde gebeurt met de "Herald" en door deze druk op het bakboord voorschip en door

zijn snelheid krijgt het schip een sterke neiging om met de kop naar stuurboord over te komen. Verder was de bakboord schroef dieper ingedompeld dan de stuurboord schroef zodat de voorstuwende kracht aan bakboord groter was dan aan stuurboord, waardoor de neiging om met de kop naar stuurboord over te komen nog toenam.

Dit wordt aanvankelijk verholpen door hard bakboord roer te geven. Om 19u26 bevindt de "Herald" zich op circa 1000 meter van de buitenstrekdam. Zijn slagzij bedraagt nu 30° maar ondanks deze slagzij en de vrije oppervlakte van het water in het autodek beschikt de "Herald" nog steeds over voldoende stabiliteit om tijdens deze tweede fase niet te kapseizen.

Derde fase: Van 19u24 tot 19u26. De "Herald" maakt een korte en snelle bocht over stuurboord en kapseist geleidelijk aan over bakboord.

Tijdens de derde fase grijpen er praktisch op het zelfde ogenblik achtereenvolgens drie gebeurtenissen plaats, die allen bijdragen om de doodsteek aan de "Herald" te geven.

Door de grotere slagzij neemt de druk op het bakboord voorschip nog meer toe Ondanks het roermanoeuvre komt de "Herald" nu zeer snel over naar stuurboord en maakt het een korte en

snelle bocht. Alhoewel men voluit achteruit slaat, maakt het schip nog voldoende snelheid. Ondanks de massa's water die ondertussen binnenstromen, legt het schip nog een afstand af van circa 400-500 m. tot de plaats alwaar het volledig kapseist.

Eerste fatale gebeurtenis.

Geholpen door het laad platform vooraan, dat door de snelheid van het schip als het ware het water schept en de toenemende slagzij stromen er 400-500 ton water binnen in het autodek, hetgeen reeds voldoende is om de Herald te doen kapseizen.

Tweede fatale gebeurtenis.

Tijdens het nemen van de korte en snelle bocht heeft het schip nog voldoende snelheid en door de middelpuntvliedende kracht bij zijn draaiende beweging maakt het schip nog meer slagzij over bakboord en komt er nog meer water binnen. Dit fenomeen ziet men dagelijks wanneer een motorfietser een korte en snelle bocht maakt en hij naar de binnenkant van de bocht overhelmt omdat te verhelpen. Op de "Herald" is dit niet mogelijk

Derde fatale gebeurtenis.

De wagens in de autodekken zijn niet vastgesjord en door de grote slagzij glijden ze allen naar de lage kant aan bakboord, alwaar ze opgehoopt liggen.

De koersverandering na het nemen van de korte bocht bedraagt 180° zodat de voorsteven nu gestrekt ligt in de richting van Zeebrugge. De Herald bevindt zich nu buiten de vaargeul.. Om 19u26 is de "Herald" volledig gekapseisd en begint te zinken Wegens de kleinere diepte aldaar wordt het kapseizen beperkt tot 90°. Het zinken neemt nagenoeg 2 minuten in beslag en om 19u28 rust het met zijn bakboordzijde op de zeebodem ten Oosten van de vaargeul. De reis is hier ten einde en alles gebeurt zo snel dat er geen tijd meer is om over de radio het internationaal noodsein 'Mayday' uit te zenden.

De afstand van het wrak tot aan de buitenstrekdam bedraagt circa 1000 m. Gelukkig bevindt het schip zich buiten de vaargeul alwaar de diepte bij laag water slechts 10 m. bedraagt. De breedte van de "Herald" bedraagt 22,70 meter zodat bij laag water meer dan de helft van de breedte van het wrak, zij 13 m., boven de waterspiegel uitsteekt. Hierdoor is de redding van 355 opvarenden mogelijk geweest. We betreuren 193 slachtoffers waarvan 155 passagiers en 38 bemanningsleden. Enkele minuten later zou de "Herald" zich in diep water bevinden alwaar het volledige schip

ondergedompeld had geweest. Slechts weinigen hadden dan kunnen gered worden.



De redding van de overlevenden en de slachtoffers.

Toevallig is de baggerboot "Sanderus" getuige van het ongeval en verwittigt onmiddellijk de bevoegde overheden. De gouverneur kondigt de hoogste fase van het alarmplan af. Reeds 12 minuten na het ongeval ligt de sleepboot 'Burgemeester Van Damme' opzij van het wrak en begint met de redding van de slachtoffers, weldra gevolgd door tal van andere boten en komt er hulp van duikers van de Marine. Om 19u55 bevindt er zich zelf een helikopter van de basis van Koksijde boven het wrak en neemt actief deel aan de redding.

De ganse nacht wordt met man en kracht in moeilijke weersomstandigheden doorgewerkt. Er moet snel gewerkt worden daar de temperatuur van het zeewater slechts 5° bedraagt en dood is onvermijdelijk door onderkoeling binnen in het schip na 2 tot 3 uren. Het alarmplan en de diensten aan wal werken uitstekend en zorgen er voor dat de vele geredden opgenomen worden in hospitalen en de slachtoffers op een waardige manier worden geborgen. Deze effectieve redding is een unicum en wekt wereldwijd bewondering op.

De berging van schip en lading.

Het schip kapseisde op 6 maart. Het contract voor de berging van schip en lading werd getekend op 14 maart met de gekende Nederlandse firma "Smit Tak" en de Belgische firma's URS en Decloedt in een 'joint venture'. De schotse firma Alba, waarmee ik samen gewerkt heb in de Perzische Golf tijdens de oorlog Irak-Iran, heeft grote ervaring in oliebezoedeling en werd nadien aangesteld en staat in voor de bestrijding hiervan en de behandeling van de gevaarlijke chemicaliën.

Het ongeval betekent een nationale ramp in Engeland en Premier Margaret Thatcher brengt 's anderendaags een bezoek aan Zeebrugge. Toevallig verneem ik dat de Heer Ford, voorzitter van P & O Line aan Mevr. Thatcher toegezegd heeft dat bij de redding er geen beroep zal gedaan worden op beperkte aansprakelijk, de zogezegde abandonment-waarde, zoals voorzien in maritieme wetgeving. Dit is zeer belangrijk nieuws daar deze waarde merkkelijk lager ligt dan de bergingskosten en dit bij de vele rampen wordt toegepast.. De "Herald" bevindt zich in Belgische territoriale wateren en indien de P & O Line dit had ingeroepen moest de Belgische staat instaan voor de kosten van de berging.

Het komt er dus op aan dat de nodige verantwoorde maatregelen tijdig getroffen worden en dat het schip niet het gevaar loopt van te breken zodat er geen beroep wordt gedaan op beperkte aansprakelijkheid. Vanzelfsprekend moet er in dergelijk geval voortdurend rekening gehouden met prioriteiten waaronder de berging van schip en lading, het verwijderen van de slachtoffers en de zorg voor het milieu.

De berging mocht evenmin niet de minste vertraging oplopen wegens het risico van brand en het gevaar van breken van het schip. De Herald ligt dwars van de vloed en de ebstroom, die elk een snelheid tot 4 knopen kunnen halen. Hierdoor bestaat het risico dat het zand en het slijk onder de voorstevens en de achterstevens wegspoelt waardoor het schip enkel zou komen te rusten op zijn midscheeps zodat het gevaar van breken van het schip niet denkbeeldig is.

Na de voorbereidende werkzaamheden is er men in geslaagd ondanks het slechte weder na 6 weken het schip op te richten. Ondertussen worden er zoveel mogelijk slachtoffers geborgen en wordt gezorgd dat elke oliebezoedeling vermeden is. Twee weken nadien wordt het schip leeg gepompt en is het drijvende. Dit gaat met grote moeilijkheden gepaard daar alle wagens aan één kant in de autodekken opeen gestapeld liggen. Op 27 april, 7 weken na het kapseizen, wordt de "Herald" gesleept naar de voorhaven van Zeebrugge en wordt de lading aldaar gelost. De lossing moest met de grootse omzichtigheid gebeuren wegens het gevaar van instorten van de opeen gehoopte wagens inzonderlijk daar er zich tussenin nog slachtoffers konden bevinden.

Het gerechtelijk onderzoek en uitspraak.

Zowel het Britse als het Belgisch gerecht stelden een onderzoek in. De Londense rechtbank sprak op 19 oktober 1990 de rederij P & O en de gewezen werknemers vrij van doodslag. Volgens minister van justitie Wathelet kan de Belgische Staat niet juridisch vervolgen. Volgens de conventie van Geneve is de Staat die de zaak moet behandelen deze waarvan het schip de vlag voert. De "Herald" voer onder Britse vlag en bovendien hadden de eigenaar, de bemanning en de passagiers allen de Britse nationaliteit. Overigens kan de justitie van een land zich niet meer uitspreken over een zaak waarin de justitie van een ander land reeds een vonnis heeft geveld. Na akkoord tussen de partijen krijgen de nabestaanden van de omgekomen bemanningsleden een totale schadevergoeding van 124 miljoen Bef. en aan de nabestaanden van de omgekomen passagiers wordt per persoon maximum 5 8 miljoen toegekend.

Lessen als gevolg van de ramp.

Bij dergelijke ongevallen wordt nadien steeds een grondig onderzoek uitgevoerd. De doodsteek van het ongeval is gebeurd toen de veerboot om 19u24 een korte en snelle bocht heeft gemaakt over stuurboord. Hierdoor nam zijn slagzij toe en kwam er nog meer water terecht in het autodek.

Welke noodmanoeuvres maakten wellicht een kans om hieraan te verhelpen.

De veerboot had wel een grote stabiliteit en deze is slechts negatief geworden bij het nemen van de bocht. Om zijn vaart te stoppen heeft de Herald te vergeefs volle kracht achteruit geslaan. Wellicht kon een manoeuvre bakboord schroef achteruit en midden en stuurboord schroef vollekraft vooruit, gepaard met een weinig hulp van de boegschroef en roer hard bakboord de scherpe bocht over stuurboord kunnen vertragen of vermijden. Dit is evenwel zuivere theorie want vaart verminderen zoals dit gebeurd is op de Herald was een normale reactie.

Nadien kan men dit allemaal uitpluizen maar zoals het engels gerecht heeft geoordeeld kan men de kapitein hieromtrent geen fouten aanwijzen.

Er is een gekend gezegde 'L'accident pousse au droit'. Onder druk van de media en steunend op de opgedane ervaring werden de nodige lessen getrokken.; De 'International Maritime Organisation' (I.M.O) gaf onmiddellijk een groot aanbevelingen en ook de Classificatie Maatschappijen stellen nu strengere eisen inzake de boegdeuren en de stabiliteit van 'roll on - roll off' schepen en de controle daarop..

De ramp met de "Herald" heeft ons evenwel meer dan ooit bewust gemaakt dat ondanks zeer volledige reglementen, het menselijk falen meestal de hoofdoorzaak blijft bij een ongeval op zee. Daarom blijven toewijding, verantwoordelijkheidszin, beroepsbekwaamheid en zeemanschap aan de basis bij de vorming van de zeeman.

Roger

GHYS

Oud-deken Nautische Commissie bij de Rechtbank van Koophandel te Antwerpen

Inséré le 23/11/13 Dossier Enlevé le 23/12/13 Industry welcomes IMO initiative on armed guards

As the mood swings in the shipping industry in favour of the use of privately contracted armed guards (PCASP) on vessels transiting pirate infested waters, or so called High Risk Areas (HRA), the IMO is gradually coming to the party.

However, despite issuing further guidance on the subject, the IMO is sticking to its guns by reiterating that it is up to the flag states to decide on the use of armed guards on board their vessels.

As for the guidance, last month, further interim guidance on the use of PCASP was approved by an IMO MSC intersessional working group.

The MSC's intersessional maritime security and piracy working group has approved the following circulars for dissemination:

- MSC.1/Circ.1408 on interim recommendations for port and coastal states regarding the use of PCASP in the HRA;
- MSC.1/Circ.1406/Rev.1 on revised interim recommendations for flag states regarding the use of PCASP in the HRA;

- MSC.1/Circ.1405/Rev.1 on revised interim guidance to shipowners, ship operators and ship masters on the use of PCASP in the HRA;
- A joint MSC and Facilitation Committee (FAL) circular on questionnaire on information on port and coastal state requirements related to PCASP, which is aimed at gathering information on current requirements.

The circulars provide interim guidance and recommendations to be taken into account when considering the use of PCASP if and when a flag state determines that such a measure would be lawful and, following a full risk assessment.

The IMO was at pains to point out that the interim guidance and recommendations 'are not intended to endorse or institutionalise' the use of armed guards. Therefore, they do not represent any fundamental change of policy. It is for each flag state, individually, to decide whether, or not PCASP should be authorised for use on board ships flying their flag. If a flag state decides to allow this practice, it is up to that state to determine the conditions under which authorisation will be granted.

PCASP should not be considered as an alternative to best management practices (BMP) and other protective measures. BMP4 has recently been issued by the shipping industry and will shortly be disseminated by IMO (as MSC.1/Circ.1339), the organisation said.

This move has been welcomed by many other organisations including the Security Association for the Maritime Industry (SAMI) and the ICS among others.

Flag state listing

With the assistance of its members, the International Chamber of Shipping (ICS) in association with the European Community Shipowners' Associations (ECSA), has compiled a reference document collating the policy and rules of flag states on the carriage of arms and PCASP on board vessels.

The document, providing tabulated information on flag states' rules, has been added to the ICS website. Kiran Khosla, ICS director of legal affairs and secretary of the ICS' maritime law and insurance committees, said: "When the information is compiled together like this it is interesting to see the similarities and variations in approach throughout the international community. Piracy remains a major cause for concern among shipowners and the wider shipping industry and we are not surprised that members are keen to ensure they are up to speed with the latest recommendations and advice.

"The consensus view among ICS national shipowner associations remains that private armed guards are a clear second best to military personnel. However, in view of the current crisis, ICS has had to acknowledge that the decision to engage armed guards, whether military, or private, is a decision to be made by the ship operator after due consideration of all the risks and subject to the approval of the vessel's flag state and insurer, she said.

The ICS pointed out that this information is for general guidance only and is not a substitute for proper verification with the flag states concerned. Further information from flag states to update the listing would be welcomed, the ICS said.

Crisis highlighted

At its recent annual meeting, the ICS members agreed to use every opportunity to continue highlighting the severity of the crisis and the reality that the international community has ceded control of the Indian Ocean to criminal gangs, despite the best efforts and dedication of military navies in the area.

"The truth about governments' failure, and the terrible suffering endured by captured seafarers, might be unpalatable to many politicians," said ICS president Spyros Polemis "But our expectation is that the frequency of attacks against shipping will escalate again dramatically, once the monsoon season is over. The current military response — with only a handful of navy ships available to provide protection on any given day — has just been a sticking plaster on a gaping

wound. We have still not yet seen the political will from governments needed to develop a comprehensive military strategy that will have a decisive impact.

"It is ironic that the world has just marked the anniversary of the tragic events of '9/11', following which very radical measures were taken, such as the IMO ISPS Code, to reduce the possibility that shipping might be used by terrorists to attack society at large — measures that have cost the shipping industry billions of dollars to implement. However, for all the talk of maritime security during the last 10 years, governments have so far failed to protect shipping, and the smooth flow of world trade, from being literally held to ransom by Somali criminals," he concluded.

Flag State	Authorization of arms on board, employment of private armed guards on board and use of firearms		Terms and Conditions	National OIVs for guidance	Other commentaries
	Security personnel on board	Possession of weapons on board			
Bahamas	Not recommended neither prohibited. It is a decision to be made by the ship operator after due consideration of all risks	Possibility under Bahamian Law But it is also a decision to be made by the ship operator after due consideration of all risks In addition to that, a firearms license is required	The ship-owner should be able to demonstrate its due diligence (in selecting the security service provider with professional standing): • the security company should be licensed by its national authorities and have licenses from local Port authorities to bring arms on board; • if force is used it shall be the minimum necessary in the circumstances and proportionate according to the threat.	Guidance from the Bahamas Maritime Authority (BMA Information Bulletin No.128 "Guidance to ship-owners on carriage of armed personnel for vessel protection") http://www.bahamasmaritime.com/downloads/Bulletin/128bulletin.pdf	Recommendation to fully follow BIMF's requirements. The Bahamas Government will not accept liability for any matter arising from the use of private armed security personnel on board. It is the sole responsibility of the ship-owner or agents contracting such services (cf. insurance)
Belgium	It is not per se forbidden neither by the general applicable Belgian laws, nor by the Belgian criminal Code	It is not per se forbidden neither by the general applicable Belgian laws, nor by the Belgian criminal Code	Each ship-owner has to decide according to general applicable Belgian laws and Belgian criminal Code. The person using weapon has to have a gun license/ firearms certificate. It is not permitted to use certain arm (as automatic firearms).	General Belgian laws and Belgian criminal Code	Political and practical options are under discussion

An example page of the ICS/ECSA flag state rule table.

SAMI endorsement

As mentioned, the Security Association for the Maritime Industry (SAMI) has welcomed the IMO's progress on its revised guidance and recommendations for the use of privately contracted armed security on board ships.

Following last month's intersessional maritime and piracy working group meeting, the IMO has released new guidance and recommendations on the use of privately contracted armed security personnel.

SAMI believes the new guidance and recommendations are timely, as violent pirate attacks are set to reach record levels, as they resume after the lull during the monsoon period and a reduction in scale and operation of the world's navies.

Commenting on the first intersessional meeting of the IMOs Maritime Security and Piracy Working Group, SAMI director Peter Cook (who attended the meeting as a consultant to the Marshall Islands) said, "The IMO is making great progress towards providing a structure for the maritime security industry, importantly the IMO has made recommendations and provided guidance for the use of armed security personnel which is a necessary step towards creating a relevant structure for the industry to work within."

There has also been praise for the work undertaken by the IMO on facilitating the passage of armed guards and their weapons on board ships. It is hoped that the IMO's work in this regard will remove

flag and port state obstructions, thereby clarifying the procedures and rules on the embarkation and disembarkation of armed guards and their equipment, SAMI concluded.

Inséré le 25/11/13 News Nieuws Enlevé le 25/12/13

MARPOL ANNEX V: NEW AMENDMENTS RELATING TO DISPOSAL OF CARGO RESIDUES

In July 2011, by resolution MEPC.201(62), the Marine Environment Protection Committee ("MEPC") adopted certain amendments to MARPOL Annex V. Those amendments entered into force on 1 January 2013, causing a certain amount of concern within the shipping and international trade community as to their practical implications. This article is intended to address certain of those concerns and to clarify certain aspects of the amendments in relation to the disposal of cargo residues.

Background to and scope of the amendments

Annex V is primarily directed at prohibiting the disposal of garbage at sea and, when it first came into force in 1988, its main focus was to reduce the disposal at sea of plastics, such as drinking water bottles and synthetic nets, by cruise ships and fishing vessels.

Under previous versions of Annex V, disposal of garbage at sea was generally permitted (with certain exceptions), provided it was disposed of far enough from the nearest land. The new regime sets out a blanket prohibition such that disposal of all garbage at sea is now prohibited except as otherwise provided in Annex V.

The definition of "Garbage" includes "Cargo Residues", which are defined as "*the remnants of any cargo which are not covered by other Annexes to the present convention.....*" Accordingly, Annex V applies to the disposal of any cargo residue of any dry bulk cargo/commodity that is not an oil, a noxious liquid or carried in packaged form (as covered by Annexes I, II and III and defined therein).

To which parties does Annex V apply and what are their obligations?

Regulation 2 (Application) of Annex V provides that "*the provisions of this Annex shall apply to all ships*" and the primary focus of Annex V is, therefore, on the vessel's compliance.

Accordingly, every vessel's owners, operators and crew should ensure that the vessel complies with Annex V and takes every precaution to avoid discharging any garbage at sea other than in accordance with the exceptions set out in Annex V.

In this regard, in addition to the general prohibition on disposal of garbage at sea, Annex V also sets out three positive obligations which apply depending upon the size/tonnage of the vessel in question. These are as follows:

- a. Regulation 10.1.1: every ship of 12m or more in length and fixed/floating platforms must display placards to notify the crew and passengers of the discharge requirements of regulations 3-6 of Annex V;
- b. Regulation 10.2: every ship of 100 gross tonnage or above must carry a garbage management plan which the crew follows and which meets the specified criteria; and
- c. Regulation 10.3: every ship of 400 gross tonnage and above must carry a Garbage Record Book in the form specified in the appendix to Annex V, and ensure that it records the information stipulated in Regulation 10.3.1-4.

Annex V contains no specific terms applicable either to shippers or time/voyage charterers, but this does not necessarily mean that a charterer or shipper could never have any liability in respect of a breach of Annex V.

In addition, paragraph 3.4 of the Guidelines does provide that "*solid bulk cargoes should be classified and declared by the shipper as to whether or not they are **harmful to the marine environment***" ("HME"). However, because the Guidelines are non-mandatory, it seems as though a breach of the

Guidelines would not amount to a violation of either the Convention or Annex V, so as to render a shipper liable if it did not provide such a declaration.

Nevertheless, it seems to us that, if a master were to discharge cargo residue at sea in good faith, in reliance on a shipper's declaration that it was not HME, and it then transpired that the cargo residue was HME and that the declaration had been fraudulently or negligently given by the shipper, then the possibility that the relevant authorities might seek to prosecute the shipper cannot be ruled out.

Permitted disposal of cargo residues

Regulation 4.1.3 of Annex V states that discharge at sea of "*cargo residues that cannot be recovered using commonly available methods for unloading*" can take place at sea provided that:

1. this happens at least 12 nautical miles from the nearest land (and not within a special area); and
2. the discharge contains no substances that are harmful to the marine environment.

It should be noted, however, that this only applies to cargo residues "*that cannot be recovered using commonly available methods for unloading*" (our emphasis), such that the amount of any cargo residue to be disposed of at sea should be minimised. In this regard, the 2012 IMO Guidelines for the implementation of Annex V (the "Guidelines") state that ports, terminals and ship operators should consider cargo loading, unloading and on board handling practices in order to minimise production of cargo residues.

Every effort should be made, therefore, to ensure that as much of the cargo is unloaded as possible in port.

What substances will be considered harmful to the marine environment ("HME") for the purposes of Annex V?

The term "*harmful to the marine environment*" is not defined in Annex V itself, but guidance as to what constitutes an HME substance is set out in the Guidelines.

Paragraph 3.2 of the Guidelines states that cargo residues will be considered HME if they are solid bulk substances that meet the seven parameters that are set out in paragraphs 3.2.1-3.2.7 of the Guidelines. These parameters are based on the fourth revised edition of the UN Globally Harmonised System ("GHS") 2011.

The difficulty for those in the industry is that there is no list of solid bulk cargoes or assessment of individual cargoes that are HME, in relation to compliance with Annex V for the discharge of solid bulk cargo residues. As a result, there is no easily accessible reference source to which owners/charterers/shippers/masters/operators or any other party can refer in order to assess whether or not a given cargo residue is HME.

The IMO has recognised that there are certain "challenges" in classifying solid bulk cargoes and with the discharge of the associated residues. It has issued a circular (MEPC.1/Circ.791) stating that, for the first year that revised Annex V is in force (from 1 January 2013 to 31 December 2014), competent governmental authorities should accept provisional classifications.

However, such provisional classification is only permitted where reliable data as to four of the listed criteria is not available and where such provisional classification is based on the other three criteria (namely acute aquatic toxicity, chronic aquatic toxicity, and the plastic/polymer/rubber content of that cargo). There is no exception in relation to aquatic toxicity (whether acute or chronic) or the plastic/polymer/rubber content, for which it appears all cargoes must be tested.

It is also unclear whether, if one laboratory tests a particular type of bulk cargo and determines that it is not harmful to the marine environment, other parties will be entitled to rely upon that determination in dealing with other cargoes of the same commodity.

Much may depend upon the nature of the cargo in question. If the cargo is of a standard nature, such that there is little/no variation in chemical make-up between cargoes, then we anticipate that, once it has been tested in accordance with the criteria specified in paragraph 3.2 of the Guidelines, that

determination as to whether or not that cargo is HME ought to hold good for all cargoes of the same type.

The position will be more complex, however, where the chemical composition of a type of cargo varies widely from consignment to consignment, or where cargoes are blended so as to produce a new substance, or where a cargo that would generally be considered as non-harmful contains a tiny proportion of a substance that might be considered harmful. In those circumstances, we anticipate that it may be necessary to sample and test individual cargoes and, where a product is to be blended, test both the blended product and any by-product (including the waste resulting from any tank washings) in accordance with the specified criteria. In doing so, it should be borne in mind that a cargo may react with seawater such that it becomes harmful on contact with the sea, although we anticipate that this possibility is likely to be covered by the tests for chronic and acute aquatic toxicity.

Practical guidance

As will be apparent from the above, it is far from clear that all the practical implications of the new rules have yet been fully considered by the IMO or any of its member states. A number of practical questions arise, for example: as to who carries out any testing to determine whether a particular substance is considered harmful or not; whether the test result is centrally registered in some way and accessible to other parties; whether it is accepted as applicable to other similar cargoes; and whether it carries any particular status, if, for example, it supports the view that a substance is harmless, but a different view is taken by authorities in another part of the world.

There is currently no indication as to whether the UN will seek to publish a comprehensive list of substances for the purposes of establishing whether or not a particular cargo is HME for the purposes of Annex V. It is possible that an official list will be developed by the IMO in the period ahead, as the practical implications of the new Annex V become more widely appreciated.

Until these practical issues have been worked out in clearer detail it is not easy to give practical legal guidance with as much clarity or certainty as is desirable, but in the meantime, we consider it better to err on the side of caution regarding the classification and disposal of any cargo residue and, if in doubt, to discharge at appropriate discharge facilities ashore, rather than at sea.

We appreciate that disposal ashore costs money and is not always an available option. In those circumstances we hope that the following 'pointers' may be of assistance:

1. GESAMP (the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection) publishes a list of certain products/minerals that are carried by ships, with a profile for each one that indicates whether or not it is considered "*hazardous*" to the marine environment. These profiles are not comprehensive for the purposes of establishing whether the listed products are HME pursuant to Annex V: the parameters for which GESAMP tests are conducted do not correspond precisely with the criteria set out in Paragraph 3.2 of the Guidelines and, in addition, the list of substances covered by GESAMP is not comprehensive and certain products (such as petcoke) are missing from the list. However, they do cover some of the UN GHS criteria specified in paragraph 3.2 of the Guidelines, and we suggest that the GESAMP list would be a good starting point when assessing whether or not a particular type of cargo is HME.

2. Any analysis relied upon ought to have been undertaken by a laboratory of international standing/repute, with the experience and equipment to properly analyse samples of the cargo in question in accordance with the specified UN GHS criteria. In this regard we are aware that the issue of accurate testing has previously arisen in relation to cargoes of substances such as nickel ore, where mining companies/shippers have produced certificates as to a cargo's transportable moisture limit in circumstances where the local laboratories in question have not had the correct equipment accurately to test for such characteristics.

3. The amount of any cargo residue to be disposed of at sea should be minimised and every effort made to ensure that as much as possible of the cargo is unloaded at port.

Otherwise, we can only recommend that those concerned use their best efforts to establish whether any cargo residue is or would be considered harmful by reference to the UN GHS criteria specified in the Guidelines and that, in cases of doubt, advice be sought from ITOPI or other appropriate sources of technical expertise.

Inséré le 27/11/13 Dossier Enlevé le 27/12/13

Absorption/desorption in tank linings

This paper, edited by Gard Reian of Jotun Coatings R&D department*, looks at the absorption/desorption of different cargoes in two different no-volac epoxy tank linings.

Investigations show that the degree of absorption is highly dependent on the specific cargo and its chemical functionality. It was also seen that absorption/desorption testing alone cannot help differentiate between the quality of different coatings.

Chemical tankers are built to carry a wide range of chemicals worldwide, including petroleum products, specialised chemicals and foodstuffs. Some of the more specialist switch from one type of cargo to another in each port. It is important to try and understand the absorption mechanisms in order to avoid cross-contamination and/or premature paint failure.

It is also important to understand if absorption testing alone can tell us anything about the overall quality of a coating system.

Two different, two-component, novolac epoxy tank linings were investigated; Novolac 1 and Novolac 2, as in contrast to 'standard' epoxies, which are diglycidyl ethers of either bisphenol-A or bisphenol-F, Novolac epoxy resins are glycidyl ethers of phenolic novolac resins. These generally have higher functionality and give more cross linking and subsequently a better chemical resistance.

They were applied on Mylar® polyester film for easy removal. After application, the coating was cured for seven days at 23 deg C and three days at 60 deg C. During the absorption period, the coating squares were immersed in water (Artificial seawater was made in according to ASTM D 1141. Brackish water was made mixing the artificial seawater with distilled water in the ratio 1:1), or different organic solvents in closed containers. The samples were removed at intervals for weighing. All surface liquids were removed and samples wiped off with a dry paper towel. Weighing was performed using an analytical balance to ~0.1 mg.

During the desorption period, the coating was left to ventilate in about 23.1 deg C and weighed periodically until equilibrium was reached.

For chemical exposure testing 150 x 75 x 1.5 mm steel panels, with a surface profile of 70 um and a cleanliness of Sa 2.5 (ISO 8501 1:2007), were coated with Novolac 1 and Novolac 2, respectively. The dry film thicknesses averaged around 300 um. Several panels of containing each paint were tested to ensure authenticity.

Definitions

Sorption describes the combined processes of adsorption and absorption.[2] Adsorption is the physical adherence or bonding of ions and molecules onto the surface of another phase. Absorption is the incorporation of a substance in one state into another of a different state. For the sake of this article it is assumed that the migratory process is purely absorptional and all the molecules contributing to weight gain are incorporated in the free volume of the coating film.

Desorption is a phenomenon whereby a substance is released from or through a volume. The process is the opposite of sorption (that is, either adsorption and absorption). This occurs in a system being in the state of sorption equilibrium between the bulk phase and an absorbing volume (coating film). When the concentration (or pressure) of substance in the bulk phase is lowered, some of the sorbed substance changes to the bulk state.

Some of the most important factors contributing to the degree of absorption into a coating (and following desorption) are temperature, functional groups and molecular size of the absorbed substance.[3]

In high temperature conditions, the absorption rate most often increases as does the desorption rate, due to increased molecular movements at higher temperatures.

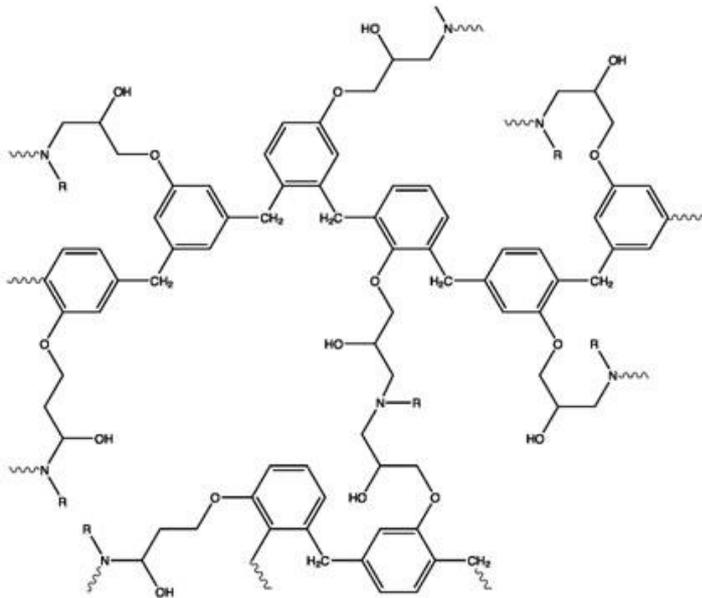


Figure 1: A two dimensional cross cut, showing what an amine cured novolac epoxy polymer network might look like. The polymer network contains both polar hydrogen-bonding sites and non-polar alifatic chains and aromatic rings.

The absorption and diffusion of water in polymeric materials, such as epoxy systems is related to the free volume[4,5] and the polymer-water affinity[5,6].

It is natural to assume that this is also true for other chemical species than water. Methanol and ethanol are related to water in that they are both polar protic molecules (can donate a hydrogen to form a relatively strong hydrogen bond with the hydroxy and amine groups in the polymer network).[7]

1,2-Dichloroethane (EDC) and tetrahydrofuran (THF) are slightly polar but they are aprotic and cannot form

hydrogen bonds. When the coating is immersed in these chemicals they fill the free volume.

Even though they cannot form hydrogen bonds, they can still disrupt the polymer chains as they show more affinity towards the largest part of the polymer network, the parts not containing hydrogen-bonding sites. These non-polar link sites consist of alifatic chains and aromatic rings. They have affinity towards dipoles of the polymer chain through relatively weak dipole-dipole forces or induced-dipole forces. These forces are often called London dispersion forces, or van der Waal's forces.[8] An example of how the structure of an amine cured Novolac epoxy polymer network might look like is shown in Figure 1.

The amount of free volume depends on the molecular packing and is affected by both the crosslink density (and therefore the extent of curing) and physical aging[9]. The polymer-water affinity is significantly influenced by the presence of hydrogen-bonding sites within the polymer[10]. Water can sometimes be absorbed without causing swelling; when this happens, it is suggested that it remains unbound to the polymer and is effectively accommodated within the free volume[6].

On the other hand, bound water molecules that attach to the polymer through hydrogen bonds disrupt the interchain hydrogen bonds and induce swelling[10,11] and plasticise the polymer. In a Novolac epoxy binder network the hydroxyl (-OH) groups shows good affinity with chemicals containing -OH groups.

Other than functional group effects, molecular size plays an important role in the process of absorption. Molecules that are larger than the "mesh" of the polymer network will not absorb into the volume at all. Some molecules might adhere to the surface structure, but the weight increase caused by this will, in the case of thick coatings, be negligible compared to the weight of the non-absorbing volume.

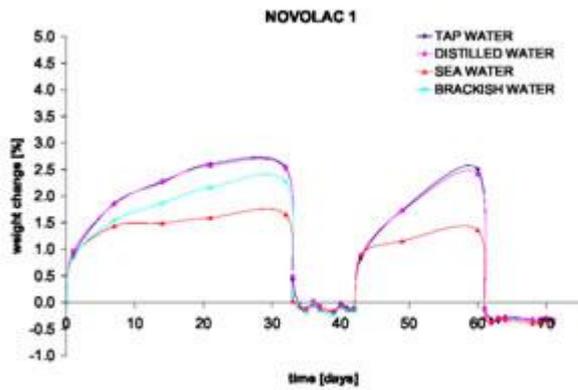


Figure 2: The two cycles of absorption-desorption of water solutions with varying degree of salinity in coating "Novolac 1".

coating. No data was obtained for brackish water during the second absorption/desorption cycle, as

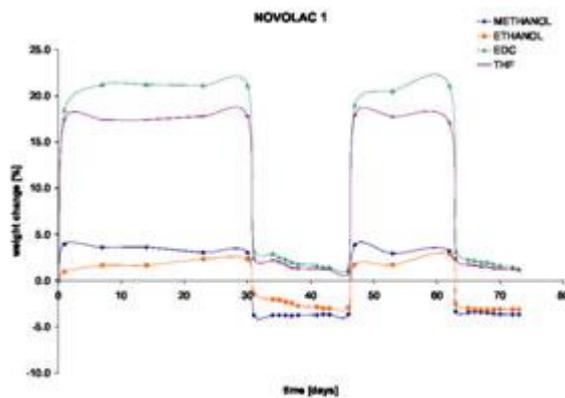


Figure 3: The absorption-desorption curves of various organic solvents in coating "Novolac 1".

subsequently absorb differently. In Figures 3 and 4 this effect can be easily be seen. Both EDC and THF show a large absorption relative to methanol and ethanol for both coatings.

For methanol and ethanol a negative weight change was observed during the desorption phase. It was important to test if this net negative desorption increased further during a second absorption-desorption cycle as this would suggest a systematic breakdown of the coating (or to be more exact, the coating's organic polymer network).

From the two absorption/desorption cycles for methanol and ethanol for Novolac 1, it can be seen that the net negative desorption does not increase further, suggesting that a systematic breakdown is not taking place, but rather that some rest solvents and/or monomers are extracted from the coating during the liquid immersion of the first absorption cycle.

In the absorption/desorption of water Novolac 1 was immersed in water with different levels of salinity. The results are given in Figure 2. From this, we see a clear link between water absorption and level of salinity. Tap water and distilled are quite similar and give the highest weight change. Sea water shows the lowest absorption and brackish water comes in-between.

During the second absorption cycle, we see the same trend with sea water giving the least weight increase, but the overall rate of absorption has slowed down a little, using longer time to 'saturate' the coating. No data was obtained for brackish water during the second absorption/desorption cycle, as a damage in the coating caused rust to form, making the weight measurements unreliable.

Interestingly enough, the desorption rate is quite fast and most all the water left the coating within 24 hours of ventilation. In other words, by using Novolac 1, a tank can be put into service quite fast after sea trials, or after water washing. Water absorption/desorption was not tested for Novolac 2, but similar results could be expected. Different molecules have different size and different affinity to the epoxyamine polymer network, and will

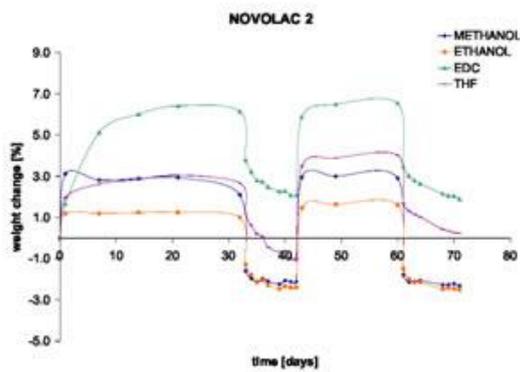


Figure 4: The absorption-desorption curves of various organic solvent in coating "Novolac 2".

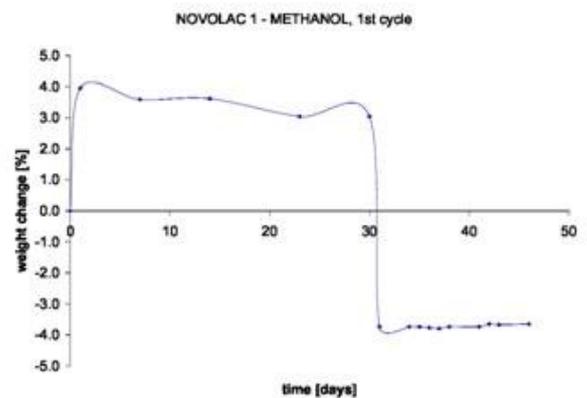


Figure 5: Novolac 1, methanol, 1st cycle.

This can be seen even more clearly by splitting up the two cycles and shifting down the abscissa of the second absorption-desorption cycle (see Figure 6). A GC-MS analysis confirmed that the negative weight change was due mostly to trapped solvents, extracted by the polar medium. Comparing Figure 5 and Figure 6 it can be seen that net weight gain during the absorption phase is larger in the second cycle. This is as expected, seeing that unreacted components were extracted

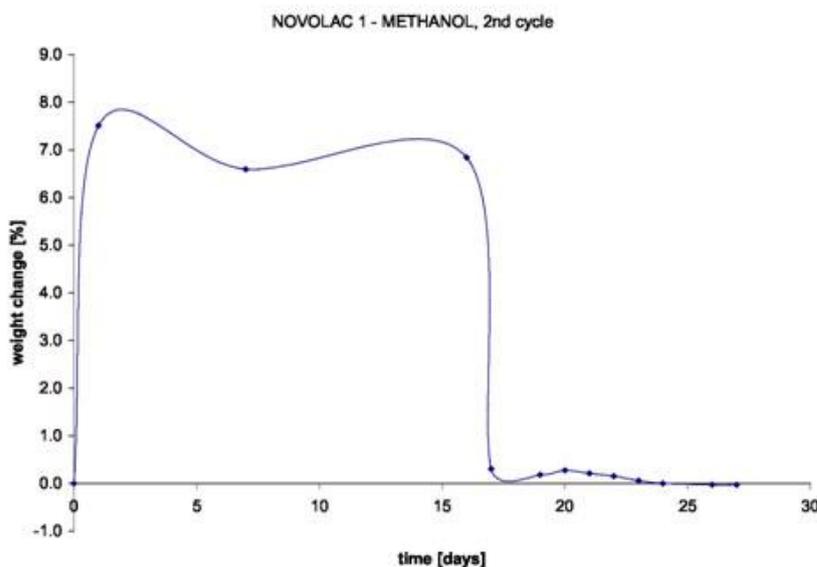


Figure 6: Novolac 1, methanol, 2nd cycle.

during the first absorption/ desorption cycle, leaving more free volume in the polymer network available for absorption. A promising result is that most all the methanol has left the coating after only one day in air. The fact that the net negative weight is quite substantial during the first absorption/desorption cycle, but not the second cycle, indicates that it might be advisable to wash down a tank lining thoroughly with a polar solvent before it goes into

service, especially if foodstuffs are part of the cargo carried.

It is reasonable to assume that water will have the same washing effect as a low molecular polar solvent like methanol. For both 1,2-dichlorethane and tetrahydrofuran the net weight gain during absorption is quite substantial for both Novolac 1 and Novolac 2. The absorption curves seemingly reaches equilibrium after one to two weeks of immersion.

During the desorption phase however, Novolac 1 differs from Novolac 2. Interestingly enough, it seems that Novolac 1 reaches equilibrium faster than Novolac 2 during desorption. While Novolac 1 seems to reach equilibrium after just one to three days depending on the chemical, Novolac 2 has not reached equilibrium after 10 days, as following this period, solvent is still trapped in the network. While Novolac 1 seems to show a higher degree of absorption, the desorption is correspondingly fast meaning that Novolac 1 probably has a slightly more open network.

For long-term chemical immersion testing, based on the absorption testing described above, it could be thought that perhaps Novolac 2 is a better coating material, seeing that the net weight gain during absorption is lower for Novolac 2 than for Novolac 1 for all chemicals.

To further test this assumption, steel panels coated with Novolac 1 and Novolac 2 were exposed to different chemicals, including a cyclic methanol fatigue test (5 days in methanol - eight hours ventilation - two days in water - eight hours ventilation; repeated for up to 10 cycles). The results are given below.

It can be seen from these results that there is not much difference between the two coatings. They

Chemical	Novolac 1	Novolac 2
Methanol	OK, 180 days	OK, 180 days
Ethanol	OK, 180 days	OK, 180 days
EDC	OK, 180 days	OK, 180 days
THF	OK, 180 days	OK, 180 days
Distilled water, 60°C	OK, 180 days	OK, 180 days
Methanol fatigue	OK, 10 cycles	Fail, 2 cycles

Long-term chemical exposure testing.

both withstand aggressive chemicals, quite impressively, for 180 days. However, for methanol fatigue, which is a maximum stress test, Novolac 1 showed no sign of failure while Novolac 2 blistered and rusted severely after only two cycles. So even though Novolac

1 shows a significantly higher absorption than Novolac 2 (compare Figure 3 and Figure 4), this alone does not tell us that Novolac 2 is a better coating. Quite the opposite, the methanol fatigue test shows that Novolac 1 is probably a better coating. One explanation for this is that Novolac 1 has perhaps a slightly more open polymer network allowing for fast desorption, but is still tightly cross linked enough to ensure a good chemical resistance. Novolac 2 might suffer from being too tightly cross linked, and subsequently more brittle, and can therefore not handle the same degree of chemical stress.

Conclusions

This work has raised a lot of new questions, but it has answered some as well. First, it is evident that absorption/desorption testing alone is not enough to differentiate on quality between different tank coatings. It was found that even though the relative absorption of Novolac 1 was high compared to Novolac 2, Novolac 1 was the overall better performer in that it had a faster desorption rate (faster return to service) and a better overall chemical resistance.

It was also shown that the degree of absorption is highly dependent on the specific cargo and its chemical nature.

TO

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*Gard Reian M. Sc. Senior Chemist, R&D Specialty Products, Jotun Coatings. Contact - Gard.Reian@jotun.no

Inséré le 29/11/13 BOEKEN LIVRES Enlevé le 29/12/13 "Walking on Water".

BOEKBEPREKING door : Frank NEYTS

Adlard Coles Nautical issued a most beautiful book entitled 'Walking on Water. The daredevil acrobatics of a pioneering photographer'.

As one of the foremost marine photographers, Kos Evans is a woman in the danger zone. Leaping between racing yachts in rough weather; dangling out of helicopters on a harness at 100 mph; climbing 200 ft masts to get her trademark shots and diving deep beneath the surface of the ocean: her bravery in pursuit of the most dramatic images is respected throughout the photographic world.

From shooting Maxi yachts for a global Rolex advertising campaign to chasing a boat through central London for an action sequence in a Bond movie, this wonderful book captures Kos' most dramatic photographs in a stunning and captivating collection, and offers thrilling 'behind-the-scenes' anecdotes of her life on the edge. "Walking on Water" (ISBN 978-1-4081-7844-7), is a hardback of 158 pages and costs 46.50 euro. The book can be ordered at any bookshop, or direct with the publisher, Adlard Coles Nautical, 38 Soho Square, London W1D 3HB,UK. www.adlardcoles.com

Inséré le 29/11/13 NEWS NOUVELLES Enlevé le 29/12/13 Manhattan already in 1969 made Artic voyage

Referring to the article "Ship crosses Northwest Passage, sails into history" last Monday, about the **NORDIC ORION** it has to be noted that the tanker **MANHATTAN** made an Arctic passage already in 1969. When the 115,000 deadweight ton tanker **Manhattan** departed Delaware Bay in August 1969, she was setting out on a voyage of discovery that would test the viability of modern technology in the most inhospitable of marine environments.



A major oil find at Prudhoe Bay on Alaska's northern coastline in 1968 begged the question - "What is the optimum route for getting this oil to market - pipeline or tankers?" As the heavily populated US East Coast loomed as a likely destination, consideration was given to the use of

icebreaking tankers to carry crude oil from Prudhoe Bay on a 4,400-mile journey through the Northwest Passage to the New York/Philadelphia area. A little less than half this distance would be through ice cover. Because there was no previous experience of such voyages and model simulation would be impossible, it was decided that the only way to test the feasibility of year-round tanker transportation through the high Arctic at approximately 76° north latitude would be to conduct a major experiment with a large ship in ice.

Exxon provided the primary financial backing for the project, with BP and Arco, two of the oil company's North Slope partners, supplying additional funding, and the Manhattan was taken on charter. At the time, she was the only twin-propeller tanker of over 100,000 dwt in service and the ship's short cargo tank lengths and Class C steel deck and upper hull plating were deemed especially suitable for the experiment. Nevertheless, extensive modification work would be necessary to prepare the vessel for Arctic service, including strengthening the hull, installing an icebreaker bow and beefing up the propellers and rudder, as well as their support and protective arrangements. With Exxon as the project leader and ship operator, **Sun Shipbuilding** of Chester, Pennsylvania was chosen to coordinate the work of several US shipyards on the seven-month conversion, and 10,000 tonnes of steel were ordered to augment the ship's hull. The hull reinforcement featured the provision of an ice belt in way of the ship's waterline and a double hull structure to protect the engine, boiler room and steering gear areas.

When **Manhattan** departed on her epic voyage, 126 people were onboard, comprising crew, engineers, scientists, US Congressmen, Canadian Members of Parliament and media, and her tanks were full of water to simulate a laden voyage. As she approached the ice fields, the tanker was joined by two icebreakers, one Canadian and one American. Initially, the ice was new, brackish with salt and weak, but it wasn't long before hard-set floes of second-year ice, with the salt leached out and refrozen following the summer melt, was encountered. **Manhattan** was able to maintain speed in ice up to 4 feet thick, but ice of uniform thickness on the route was rare. For the most part the ship had to deal with second-year ice, characterised by ridges and blocks of ice extending sometimes as much as 50 feet below the waterline, for which ramming was necessary. The **Manhattan** experiment - termed the world's biggest ship model test - cost \$54 million to carry out (about \$250 million in today's money). A return voyage was made to further study the ship's capabilities in ice, and the results of both voyages were utilised in a model basin testing programme that considered the feasibility of icebreaking tankers of up to 300,000 dwt. The tests showed that such tankers would require propulsive power four to five times greater than that required for a conventional tanker. Furthermore, the entire hull structure of such ships would need to be constructed of low-temperature steels able to withstand the effects of an Arctic winter without becoming brittle. "**Manhattan's** two Arctic voyages were highly successful in providing valuable data on the performance of large ships in ice and showed that the operation of icebreaking tankers was a technically and commercially feasible option," comments William O (Bill) Gray, Exxon's manager for

the Manhattan project and now a maritime industry consultant.



In October 1970 the oil companies decided that the pipeline alternatives represented the optimum route for Alaskan North Slope oil and the tanker studies were suspended, bringing to an end a fascinating experiment in naval architecture and ship operations. "In view of current discussions on the

viability of the Northern Sea Route in the Russian Arctic to halve the distance between Europe and Asia, the Manhattan voyages have relevance today," points out Bill Gray. "While such a route is not an option for voyages that start and finish in icefree waters, I believe that under the right circumstances icebreaking tankers could be competitive for exploiting large oil or gas fields situated

in the Arctic polar region." **Manhattan** was built in the US for the Greek shipowner Niarchos and, on her delivery in January 1962, she was the largest ship afloat. This distinction lasted five weeks before the next ship on the world's busy tanker production line at the time usurped the role. Sailing with a 45-man crew, **Manhattan** was employed primarily carrying gasoline on US domestic routes and in the grain export trades in the 1960s. Following her Arctic adventure, the ship returned to the grain trades for several years, before an ironic twist of fate brought her back to Alaska in 1977. This time it was southern Alaska, however, as she loaded North Slope oil that had been piped across Alaska to Valdez for transport to US West Coast refineries. The tanker's working life drew to premature close in 1987 when a typhoon drove her aground in the Far East and she was subsequently scrapped. Manhattan sported her distinctive icebreaker bow until the very end. **Source : The tanker newsletter / Auke Visser's International Esso Tankers site**

Inséré le 01/12/13 HISTORIEK HISTORIQUE Enlevé le 02/01/14

ZEEWOORDEN

SHELDE

De Schelde betovert en inspireert.

Aan deze machtige rivier is dan ook een welhaast onoverzienbaar gamma publicaties gewijd. In deze bijdrage willen we geenszins deze uitgebreide kennis de revue laten passeren. Na een korte blik op het ontstaan van het estuarium zoals we het vandaag kennen, zoomen we in op één specifiek aandachtspunt: de oorsprong van de naam van deze machtige stroom. In welke historische taallaag heeft Schelde zijn wortels? Welk betekenisvol woord gaat er achter de thans ondoorzichtige vorm schuil, en hoe zijn uit de ene oervorm zulke verschillende varianten als Schelde, Escaut en Schouwen ontstaan?

De Schelde zoals we die vandaag kennen, ontspringt ongeveer honderd meter boven de zeespiegel op een hoogvlakte nabij het Franse Saint-Quentin. Tot aan de monding in het Nederlandse Breskens en Vlissingen meet deze rivier zo'n 350 km. Over zowat de helft van die lengte is er getijinvloed merkbaar, waarmee de Schelde één van de langste getijdenrivieren van Europa is. Pas ter hoogte van de sluisen van Gentbrugge, Merelbeke en Zwijnaarde wordt het getij volledig afgeblokt en zit de loop stroomopwaarts gevangen in een gekanaliseerd, niet langer door de zee beïnvloed keurslijf. De golf die via de brede trechtervormige monding binnentreedt bij elke vloed, laat ter hoogte van Vlissingen/ Breskens een gemiddeld tijverschil noteren van 4 meter. Ter hoogte van Merelbeke is dat nog steeds een respectabele 2 meter. De oorzaak: het getij dat tweemaal per etmaal ongeveer 1 miljard kubieke meter zeewater (= ca. 50.000 m³/s) de Schelde in duwt.

Toch is het niet altijd zo geweest. Tijdens de laatste ijstijd stond de zeespiegel veel te laag om de loop van de Schelde diep landinwaarts te beïnvloeden. Door de klimaatsopwarming werd die invloed echter steeds belangrijker en zo'n 8000 jaar geleden was er al sprake van een zwakke getijdenwerking tot aan de huidige Belgisch-Nederlandse grens. Het is echter pas veel later (vanaf 11de -13de eeuw, afhankelijk van de bron) dat de getijdenwerking in de Schelde echt belangrijk is geworden. Die grotere tijgevoeligheid hangt samen met de voortschrijdende zeespiegelstijging in de afgelopen 2000 jaar (a rato van 15-20 cm per eeuw), het ontstaan en de ontwikkeling van de Honte of latere Westerschelde en diverse menselijke ingrepen (bedijkingen en, recent, de 20ste eeuwse baggerwerken). Aanvankelijk immers bevond de Scheldemonding zich niet ter hoogte van de huidige westwaarts verlopende Westerschelde. De rivier liep in noordelijke richting naar de zee, om uit te monden eerst via een brakwaterlagune achter de toenmalige kustlijn ter hoogte van de Maasmond, later via wat we vandaag als de Oosterschelde kennen.

Waar de Westerschelde zou komen te liggen lag er toen nog een moerassig gebied achter een vrij gesloten kustwal. Deze Honte bestond zeker al in 1183, toen het oostelijke deel ervan een aanzienlijke zeearm vormde met getijdenwerking, in verbinding met de Schelde. Geleidelijk aan won

de Honte ten opzichte van de Oosterschelde aan belang als verbinding met de zee. Pas tegen het einde van de 15de eeuw was ze ook breed en diep genoeg om vlot toegankelijk te zijn voor het scheepvaartverkeer naar Antwerpen.



De eilanden (o.a. Wulpen, Koezand, Schoonevelde), gelegen waar nu de monding ligt en zelf ontstaan uit wat ooit een min of meer gesloten kustwal was, verdwenen geheel of gedeeltelijk door een combinatie van rivierafvoer, zeespiegelstijging en stormvloed. Ook heel wat dorpen ondergingen dit lot. De vorming van de Westerschelde werd gedurende lange tijd ook gehinderd in het oosten. Pleistocene zandruggen met een ijzerhoudende kern tussen Woensdrecht en Zwijndrecht boden lange tijd weerstand aan het wassende water. Het is sinds de 17de eeuw dat de benamingen Honte en Westerschelde naast elkaar voorkomen op kaarten.

Schelde is de Nederlandse afstammeling van een Voorgermaanse, Keltische waternaam Scaldis, die al vermeld wordt door de Romeinse geschiedschrijvers Julius Caesar en Plinius. Volgens de Gentse naamkundige M. Gysseling is die Keltische naam afgeleid van een Indo-Europese wortel kal / kel, waarop ook Nederlands helder, Latijn color 'kleur' en Grieks kallos 'mooi' teruggaan en die oorspronkelijk 'schitterend' betekende. De Schelde werd dus betiteld als "de schitterende rivier". Voorheen hebben verschillende auteurs Schelde als een jongere, van oorsprong Germaanse naam proberen te verklaren. Die zou dan zijn afgeleid van Germaans skald- 'riet', zoals in het vaak voorkomende toponiem schouwbroek en het nog bekende Engelse shalder 'riet, bies, lis', ofwel zou de naam verwant zijn met Oudengels sceald en Engels shallow 'ondiep'. Die theorieën worden vandaag niet langer plausibel geacht. Niet alleen dateren in onze streken bijna alle namen voor grote rivieren van voor de Germaanse tijd, ook ligt een Keltische oorsprong voor de hand door de vroege attestatie van de uit Scaldis gevormde plaatsnaam Escaudin (847 Scaldinium) in de buurt van het Noord-Franse Kamerijk (Cambrai), een streek waar de toponymie door en door Keltisch is. Daarom geniet de verklaring van Gysseling, die Schelde dus op een Keltische taallaag terugvoert, de voorkeur.

De Franse naam Escaut is het resultaat van de Romaanse klankontwikkeling van het Keltische Scaldis. De medeklinkerverbinding sk- aan het woordbegin wordt in het Frans al sinds de middeleeuwen niet langer als inheems aangevoeld, daar wordt steevast een e- voor gezet. Denk maar aan escalier uit Latijn scala. Bovendien, als in het Oudfrans een al- gevolgd werd door o.m. een d of een t, ontwikkelde die verbinding zich tot een tweeklank au, die in het moderne Frans tot een éénklank oo is geëvolueerd, vergelijk Frans autre (uitspraak ootre) en sauter uit resp. Latijn alter en saltare. Zo ook evolueerde scald- tot scoud- en scaud-. Zo'n vertweeklanking deed zich overigens ook voor in de Oudfranse verbinding olt (vaak uit Latijn ult), die eerst een ow-achtige tweeklank werd en vervolgens een oe, bv. Modern Frans outre uit Oudfrans oltre (van Latijn ultra). De tweede lettergreep van scaldis is in het Oudfrans al vroeg verdwenen, getuige attestaties als Scalth uit 954 en Scolt uit de 10de -11de eeuw.

In de West-Germaanse en latere Oudnederlandse voorloper van onze huidige zuidwestelijke dialecten heeft Scaldis twee verschillende klankontwikkelingen gekend, de ene leidend tot de riviernaam Schelde en de andere tot Schouwen, de naam van het voormalige Zeeuwse eiland dat vandaag tezamen met drie andere vroegere eilanden Schouwen-Duiveland vormt. Schelde ontstond uit Scaldis door umlaut. Umlaut is een klankontwikkeling waarbij een beklemtoonde klinker van kleur verandert onder invloed van en in de richting van een onbeklemtoonde klinker in een volgende lettergreep. De i zoals in scaldis is een gesloten klinker, die vooraan in de mond wordt gevormd, de a is een open klinker die in het midden van de mond wordt gevormd. De i trok de a naar zich toe, en die evolueerde tot een halfopen voorklinker e. Geheel analoog is de ontwikkeling van Nederlands en Engels bed en Duits bett uit West-Germaans baddi. Nadat de umlaut zijn werk heeft gedaan, verdoft de umlautsverwekkende klinker tot een doffe e. Op die manier ontstond dus de vorm Schelde.



Schouwen gaat terug op scaldim, de datief meervoud van scaldis. Daarin heeft de i van het achtervoegsel echter geen umlaut veroorzaakt, hij verdoftte zonder dat hij enige invloed op de eerste klinker had uitgeoefend. Verder heeft de verbinding ald- de normale klankwettige route gevolgd. Nog in de West-Germaanse tijd verschoof de klinker in de verbinding ald/alt in de westelijke variëteiten van het latere Nederlands – Vlaams, Zeeuws, Hollands – naar achteren in de mond, waardoor hij een o werd: skald- werd skold-, zoals ook Germaans salt- en ald- evolueerden tot solt en old. De vorm Scolden verschijnt voor het eerst in een bron uit 1156, maar is in het mondelinge taalgebruik natuurlijk een stuk ouder. Later, op het einde van de Oudnederlandse periode (12de eeuw), evolueerde de verbinding ol + t/d, net zoals in het Oudfrans, algemeen tot een tweeklank ow, vandaar Middelnederlands zout, oud en ook Scouden. De wegval van de –d- in het midden van de plaatsnaam, die tot de huidige vorm Schouwen leidde, dateert van na de middeleeuwen.

De Grote Rede

Inséré le 03/12/13 Dossier Enlevé le 03/01/14

The economic cost of piracy

At the end of 2010, around 500 seafarers from more than 18 countries are being held hostage by pirates. Piracy clearly affects the world's largest trade transport industry, but how much is it costing the world?*

Oceans Beyond Piracy has completed a study on the economic cost of maritime piracy. The project set out to analyse the cost of piracy to three regions: (1) the Horn of Africa; (2) Nigeria and the Gulf of Guinea; (3) the Malacca Straits.

The focus has inevitably been on the costs of Somali piracy as this is the region where contemporary piracy is most highly concentrated and is the greatest source of current data and information. The project primarily analyses direct costs, but also considers some secondary (indirect) costs. The project is designed to be a collaborative effort, and Oceans Beyond Piracy said that it would welcome any data sources, comments, or other suggestions that interested stakeholders might have.

Ransoms

Over the past five years, ransoms paid to Somali pirates have increased from an average of \$150,000 in 2005 to \$5.4 mill in 2010. The largest known ransom payment was for the South Korean VLCC, Samho Dream. This vessel was ransomed for a record \$9.5 mill in November 2010. By the end of 2010, approximately \$238 mill was paid in ransoms to Somali pirates in that year alone.

Shippers purchase four main types of insurance as indemnity against piracy - war risk, kidnap and ransom (K&R), cargo and hull. The most significant increase in premiums has been in 'war risk' and K&R. The Gulf of Aden was classified as a 'war risk area' by Lloyds Market Association (LMA) Joint War Committee in May 2008, and is therefore subject to these specific insurance premiums.

The 'Cost of Piracy' model calculates the additional cost of insurance to the shipping industry by using a lower bound estimate (10% of ships purchasing these insurance premiums) and an upper bound estimate (70% of ships). From these calculations, it is estimated that total excess costs of insurance due to Somali piracy are between \$460 mill and \$3.2 bill per year.

Navy forces

Organization	Funds
Contact Group on Piracy of the Coast of Somalia	\$3.7 million
IMO Djibouti Code	\$13.8 million
Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)	\$2 million
UN Office of Drugs and Crime (UNODC)	\$5 million
Total Cost of Counter-Piracy Organizations	\$24.5 million

By the publisher's calculations, around \$2 bill is spent each year on naval operations off the coast of Somalia. The cost of naval presence comes in two forms:

1 The cost of each contributing naval

vessel. These costs are calculated using approximations of the cost of deploying a ship per steaming day, and multiplying this number by the number of vessels deployed each year - currently around 43.

2) The administrative and staffing budgets of the 'big three' naval operations - Operation Atalanta, Operation Ocean Shield, and Combined Task Force 151.2.

Prosecuting piracy

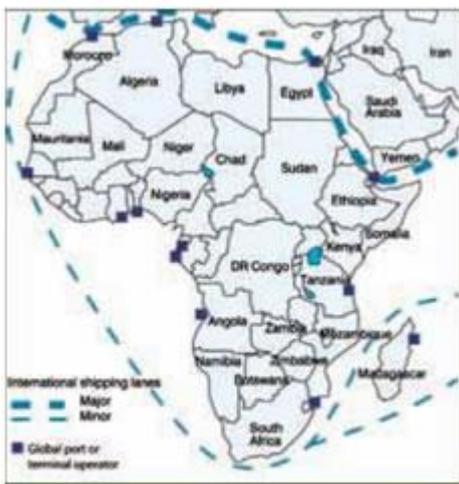
Over 750 Somali piracy suspects have either been tried for piracy, or await trial in more than 11 countries. To calculate the cost of piracy prosecutions, the number of prosecutions held in three regions was taken into account: Africa and the Indian Ocean, Europe, and North America. This number was then multiplied by an approximation of the average cost of prosecutions for piracy or similar crimes in each region. The project estimates that the cost of piracy trials and imprisonment in 2010 to be around \$31 mill.

A number of intergovernmental organisations are dedicated to working towards a solution for maritime piracy. These funds represent operating costs as well as established trust funds. The total budget of these organisations is around \$24.5 mill.

Re-routing ships

For some vessels, especially 'low and slow' moving ships, which are at the greatest risk of piracy attack, avoiding risk zones altogether may be a safer or cheaper option. Total excess costs of re-routing to those ships is estimated to be between \$2.4 to \$3 bill per year.

Shipowners may attempt to protect their property and crew from piracy attacks by preparing their ships with security equipment and/or guards prior to transiting a high-risk zone. The total cost of this equipment is between \$363 mill and \$2.5 bill per year.



Source: UNCTAD secretariat

The alternative routes will add substantial costs

Total costs

From the above calculations, the 'Cost of Piracy' project estimated the total cost of piracy in 2010 to be between \$7 bill and \$12 bill. This figure is not a definitive result, but an approximation. It should also be noted that like all economic assessments, these estimates reflect the current economic environment. It is worth remembering that as the international economy rebounds from the present economic recession, these numbers could be expected to change substantially.

UN Secretary General, Ban Ki-moon stated in November 2010: "Piracy... has had an immense impact on the economies of East Africa and also the wider world..."

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Country	Main Cost Factor	Loss Per Year
Egypt	Loss of revenue from Suez Canal fees (as ships re-route away from the Gulf of Aden)	\$642 million
Kenya	Trade Impact	\$414 million
Yemen	Trade Impact	\$150 million
Nigeria	Losses to oil and fishing industry	\$42 million
Seychelles	Losses to fishing and tourism industries	\$6 million
Total Macroeconomic Costs		\$1.25 billion

International trade routes are threatened and goods in the region as well as Somalia are becoming more expensive." The table above shows just some of the costs different countries suffer,

as a result of piracy.

Note that determining the macroeconomic impact of piracy is especially challenging because it is difficult to assess which costs result directly from piracy, and which costs are associated with general political or financial instability.

Cost factor	Cost
Ransoms: (excess costs)	\$148 million
Insurance Premiums	\$460 million to \$3.2 billion
Re-Routing Ships	\$2.4 to 3 billion
Security Equipment	\$363 million to \$2.5 billion
Naval Forces	\$2 billion
Prosecutions	\$31 million
Anit-Piracy Organizations	19.5 million
Cost to Regional Economies	\$1.25 billion
Total Estimated Cost	\$7 to \$12 billion per year

One Earth Future (OEF), a private foundation, is committed to seeking effective solutions to emerging governance challenges. OEF's first project was a strategic commitment to the Oceans Beyond Piracy project. Oceans Beyond Piracy seeks to engage and mobilise stakeholders to develop a global response that deals comprehensively with deterrence, suppression, and prosecution of piracy.

TO

*This is an extract from a paper published by Oceans Beyond Piracy – www.oceansbeyondpiracy.org

**Inséré le 05/12/13 NEWS NOUVELLES Enlevé le 05/01/14
OSG cadet scheme explained**

In order to meet its crewing needs, leading US tanker owner OSG continually adjusts its international cadet development programme, focusing on training and mentoring future OSG seafarers to help ensure the vessels are manned by competent crew*.

While it may take only a year or two to construct a new vessel, it takes as many as eight years to produce a competent seafarer. Trainee officers and engineers need from three to five years to qualify for the junior ranks and up to eight years to reach a senior level in the international fleet, OSG said.



The forward end blocks of OSG's first VLCC to be constructed in China, which will be named Overseas McKinley when launched at DSIC Dalian Shipyard.

OSG's international cadet programme has been in place since 1994. The programme was expanded in 2001 to take in an average of 40 cadets each year. The company said that it scouts the best maritime schools in the Philippines and more recently China, to identify young men and women with the potential to one day become an officer on board an OSG-managed vessel. Since its inception, this effort has produced 36 senior level officers and 330 junior level officers across the international fleet.

To begin with, OSG applies rigorous selection procedures including psychological assessments, general knowledge ability tests and panel interviews to select cadets. To be accepted into the programme,

candidates not only have to pass these tests but also display initiative and ambition during the interview.

Under the programme, Philippine cadets spent two years in maritime school, one year on board and then returned to school for a final year of formal education, with many expenses underwritten by OSG.

Changes in the programme are aimed at reducing OSG's financial outlay for individuals and to cultivate more fully prepared and competent young seafarers by shifting sea experience to post-

graduation. Upon completion of the cadet's third year of school and pre-sea training, the cadet will complete a one-year on board programme, followed by license examination.

While OSG's management system clearly defines the role of the shipboard management team as it relates to cadet training and mentoring, increased emphasis will be placed on the cadet and his or her own self-motivation toward attaining officer status.

US cadet programme is managed and directed by the country's leading maritime academies. With its expanding fleet, the OSG US flag cadet programme is a coveted assignment, the company claimed. OSG accepted 28 cadets in 2010 from five academies. Each cadet is required to complete a sea project dictated by the school. On board training is managed by the vessel's master and chief mate.

To enhance cargo handling training, OSG has installed a state-of-the-art liquid cargo handling simulator at its training centre in Manila.

The simulator provides tanker personnel responsible for cargo handling operations hands-on training in efficient, safe transfer of petroleum products and use of auxiliary



equipment. The simulator has been developed to meet the specific and extensive requirements of STCW training and IMO model courses, the company explained.

It is also compliant with OCIMF's recommendations for oil tanker manifolds and associated equipment.

The simulator can replicate the operational processes of cargo, ballast and auxiliary systems with either an integrated system (terminal and vessel) or standalone (terminal or vessel). The integration of the two systems results in the added benefit of complete team training in the processes of cargo transfer and ballast water management. The system also includes tools to collect information useful in conducting performance assessments.

The liquid cargo handling simulator provides standard training for officers serving on all vessel types with respect to control of the vessel's ballast system, trim, stability and stress and prevention of oil pollution from the vessel.

Specialised training is also available for tanker personnel in charge of cargo handling operations in the areas of general arrangement of the tanker and its systems, maintenance of tanker systems and proficiency in technological operations.

TO TankerOperator

*This article was taken from extracts appearing in OSG Signal, the company's in-house newsletter.

Inséré le 07/12/13 Dossier Enlevé le 07/01/14

Future looks bright for cruise shipping industry

The cruise industry is predicting that 2011 will be another record setting year. Helping buoy that enthusiasm are reports of strong early "wave season" (January-March) bookings. Back in December 2010, Carnival Corporation Chairman & CEO Micky Arison said that booking volumes had continued strong since September and at prices higher than the previous year. "We are optimistic these positive trends are an indicator of a strong wave season, our heaviest booking period which begins in early January" he said. "Given the recent cold weather and snow, particularly in the Northern U.S. and Europe, there is no better time to book a cruise vacation."

At the end of January, when Royal Caribbean turned in its fourth quarter report, it called early wave season bookings "encouraging" and said that booked load factors and average per diems were ahead of the equivalent period last year.

RIDING OUT THE ECONOMIC STORM

The reports from the two industry giants are in line with the results of a December survey by Cruise Line International Association (CLIA) that found 86% of travel agents anticipate cruise booking increases in 2011 and 85% expect the 2011 wave season to surpass last year by 16% on average. Agents also predicted that cruises will outperform other types of travel in 2011 and in the coming years.

Buoying industry enthusiasm is the expected impact of the 14 new ships that will join the fleet of the 25 CLIA member lines.

In the December survey, agents reported that cruising has earned the No.1 ranking in consumer interest compared to other types of travel largely because of perceived value, past cruise experience, price—and excitement generated by new ships.

When final figures are totaled, CLIA expects to report that member lines, operating at 103% occupancy, carried 15 million people in 2010, including 11.1 million North Americans. The forecast for 2011 is 16 million passengers, an increase of 6.6%, with 73% of guests (11.68 million) coming from North America, and 27% (4.32 million) sourced internationally.

"The cruise industry has ridden the economic storm of the past 18 plus months with remarkable resiliency, skill and success," said CLIA's new marketing committee chair Jan Swartz, who is EVP of sales, marketing and customer service for Carnival's Princess Cruises and Cunard Line brands. "We are confident that, just as 2010 showed impressive gains, 2011



CRUISE SHIP ORDERBOOK (As of January 1, 2011)

Cruise Line/Vessel	Shipyard	GT	Lower Berths	Est. Delivery	Est. Price (\$ in Mil.)
AIDA Cruises					
AIDA Sol	Meyer Werft	71,000	2,174	April 2011	\$957
unnamed	Meyer Werft	71,000	2,174	May 2012	\$565
unnamed	Meyer Werft	71,300	2,192	Winter 2013	\$417
Carnival Cruise Lines					
Carnival Magic	Fincantieri	130,000	3,652	Spring 2011	\$859
Carnival Breeze	Fincantieri	130,000	3,690	Spring 2012	\$738
Celebrity Cruises					
Celebrity Silhouette	Meyer Werft	71,000	2,084	Autumn 2011	\$798
Celebrity Reflection	Meyer Werft	126,000	3,030	Autumn 2012	\$768
Costa Cruises					
Costa Favolosa	Fincantieri	114,200	3,012	Spring 2011	\$726
Costa Fascinosa	Fincantieri	114,200	3,012	Winter 2012	\$726
Disney Cruise Line					
Disney Fantasy	Meyer Werft	128,000	2,500	Spring 2012	\$899
GNMTC Libya					
unnamed	STX France	139,400	3,478	December 2012	\$711
Hapag Lloyd					
Europa 2	STX France	39,500	516	Spring 2013	\$317
MSC Cruises					
MSC Divina	STX France	140,000	3,502	Winter 2012	\$742
NCL					
unnamed	Meyer Werft	143,500	4,000	Spring 2013	\$840
unnamed	Meyer Werft	143,500	4,000	Spring 2014	\$840
Oceania Cruises					
Marina	Fincantieri	65,000	1,260	January 2011	\$530
Riviera	Fincantieri	65,000	1,260	April 2012	\$530
Ponant Cruises					
L'Austral	Fincantieri	10,600	264	May 2011	\$150
Princess Cruises					
unnamed	Fincantieri	141,000	3,600	Spring 2013	\$735
unnamed	Fincantieri	141,000	3,600	Spring 2014	\$735
Sea Cloud					
Sea Cloud Hussar	Factoria Naval de Marin	-	136	Spring 2011	\$140
Seabourn Cruise Line					
Seabourn Quest	T. Mariotti	32,000	450	Summer 2011	\$290
Utopia Residences					
Utopia	Samsung Heavy Industries	105,000	-	2013	\$1.1 billion

will be another strong year, generating increased benefits for cruise lines, travel agents, the destinations we serve, as well as exciting opportunities for consumers."

Since 1980, the average annual passenger growth rate for CLIA member lines has been more than 7.5%. In 2010, 12 ships representing an investment of \$5.9 billion, ranging in capacity from 101 passengers to 5,400 passengers, joined the CLIA fleet. Between 2011 and 2012, an additional 22 ships are on order, including 14 in 2011.

The CLIA count also includes a number of smaller coastal and waterways cruise vessels that are not included in our table. Adding these in, net addition to CLIA fleet capacity in 2011 and 2012 will be 51,306 beds.

While CLIA membership includes most major cruise operators, its roster does not include, among others, Carnival's German market Aida brand, nor Hapag-Lloyd Cruises, both of whom have ships on order. So, too, does a somewhat surprising newcomer, GNMTC of Libya. Also shown on the table is a residential ship for Utopia Residences. We include it partly because its builder, Korea's Samsung Heavy Industries, classifies it as cruise ship and partly because we think that Samsung's desire to penetrate this market is so strong that it may help in putting together the funding that will make the project happen.

ENTICING PASSENGERS

While new ships continue to generate excitement and take more exotic entertainment options to sea, they represent only the most obvious factor in the cruise industry's success. Also key has been



The Disney Dream's AquaDuck, the first-of-its kind water coaster, features a "swing out" translucent loop that lets guests look down on the ocean

plain, old fashioned brilliant management. That has included such things as continuing to woo travel agents even as airlines were kicking them into the gutter, taking advantage of the fact that ships float so as to position them where the most potential customers are and more humdrum things such as taking advantage of advances in marine technology that maximize fuel efficiency.

Still, what's on board those new ships does add a lot to the marketing mix. Take the latest addition to the Disney Cruise Line fleet, Disney Dream. At 128,000 grt, the Meyer Werft-built ship is the largest cruise ship built in Germany and Disney has packed it with features such as a first-of-its-kind water coaster that sends guests racing above the upper decks of the ship. Some 765 feet in length and spanning four decks in height, AquaDuck uses 10,000 gal/min water jets to propel riders upward and forward—and at one point take guests 12 feet over the side of the ship in a translucent "swing out" loop allowing them to look down on the ocean 150 feet below.

Of course, not all the possibilities considered by the cruise industry make it to the market. A little over a year ago, sea trial footage of the world's largest cruise liner, Oasis of the Seas, showed it towing what looked like a blimp. Technically, it was something called an aerostat. If the idea had panned out, guests would have been able to go up in the aerostat and take a look at the Oasis from on high. The idea did not pan out. But even without the aerostat, the Oasis and its sister, Allure of the Seas, are packed with features such as on board surfing pools, rock climbing walls and just about anything else imaginable.

LOOKING AHEAD

Though the appeal of new ships is a proven customer puller, the pace of cruise ship ordering has slowed in the last couple of years and backlogs are dwindling at the relatively small number of yards favored by the industry.

The question for these yards has to be how long will the hiatus continue.

Some cruise line shareholders may welcome getting a little catch up time from the recent relentless pace of fleet expansion. Carnival Corporation on January 20 announced an increase in its regular quarterly dividend to \$0.25 per share from \$0.10 per share.

"Considering the current economic climate, our ability to more than double our dividend just a year after its reinstatement is a remarkable testament to the resilience of our global cruise brands and our confidence in the future of our business," said Micky Arison. "Given our projected increase in cash from operations, expected to exceed \$4 billion in 2011, combined with lower capital investment commitments due to the slower pace of our newbuild program, the company will begin generating significant free cash flow in 2011 and beyond."

Over at Royal Caribbean, however, thoughts of a return to new-building are not too far away. In a conference call with investors on January 27, Chairman and CEO Richard Fain said that the company may be ready to look to building a new cruise ship.

'We feel the time may now be right for such a move,' he said. The new ship would be a new class of ship, not another Oasis class ship. There's no timetable yet for placing an order but in the meantime, said Fain, in the short term Royal Caribbean is focusing on enhancing current ships through what he called "Oasisizing"—rolling out features from Oasis and Allure of the Seas to older ships.

In a Q&A session, Fain said the company would remain tight lipped about the new ship, but said it would be a Royal Caribbean brand ship and would likely start with one ship.

Presumably, shipbuilders are feverishly sharpening pencils and making phone calls. ML

Inséré le 07/12/13 BOOKS BOEKEN LIVRES Enlevé le 07/01/14

Force Z Shipwrecks of the South China Sea HMS Prince of Wales and HMS Repulse

By : Rod Macdonald

acclaimed author and well-known diver, Rod Macdonald, takes his readers to the South China Sea in his next book to be published later this month! Invited as a civilian expert on a military expedition to dive and survey the wrecks of two of the most famous British capital ships lost during WWII, this is the first book to explore these wrecks in detail. Specially commissioned artist's illustrations of the wrecks reveal them as they are today lying on the seabed. It was also a personal journey for Rod whose grandfather was serving in Singapore when Force Z arrived.

The tragedy of the loss in 1941 of two Royal Navy capital ships, **HMS Prince of Wales** and **HMS Repulse**, the core of Churchill's deterrent Force Z, stunned the world. Churchill had hoped that sending a small powerful squadron of ships to Singapore would deter a threatened Japanese invasion of Malaya and Thailand. He was to be proved tragically wrong. Denuded of aircraft cover, Force Z was left disastrously exposed to air attack. Within eight days of their arrival at Singapore both ships were sunk with huge loss of life in a mass attack by 85 Japanese bombers. It was the Royal Navy's greatest loss in a single engagement and the first time a modern battleship had been sunk by air power. This is the first book to explore in detail the wrecks of these two vessels and it grippingly narrates a summary of the Japanese threat, Fortress Singapore and the subsequent Japanese invasion. Today the wrecks of these two famous British warships lie on the bottom of the South China Sea, 200 miles north of Singapore and 50 miles offshore. The author was invited as a civilian expert on a military

expedition to dive and survey these wrecks and now, for the first time, the wrecks are revealed as they are today. Beautifully illustrated with specially commissioned artist's illustrations of the wrecks, each one is looked at in detail. The story of the loss of these two ships, and of the sacrifice of the men who served in them, is remembered.

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Feature: Accident investigations thwarted

Another fire on a containership will have given fresh impetus to demands for answers, but waiting for the metaphorical smoke to clear could take a long time. Accident investigators hoping to discover the cause of the blaze on the Liberian-flag Hansa Brandenburg, abandoned by its crew last week after a fire is reported to have broken out in a container on deck, may have to wait until salvors have completed their work and the ship is allowed into a port.

A full report into a similar incident in July last year on the German-flag **MSC Flaminia** is still awaited. In an interim report last month Germany's Federal Bureau of Maritime Casualty Investigation (BSU) said it had been forced to suspend the publication date of the full report, partly because the prolonged search for a European country prepared to accept the under-tow, disabled vessel meant its investigators could not begin work in earnest until two months after the incident.

The latest incident occurred in the Indian Ocean shortly after **MSC Flaminia** had been cleared to enter dry-dock for repairs to the damage caused by the fire that started in containers and by the subsequent explosion when the ship was crossing the Atlantic. Two of the crew died from severe burns, while a third has been presumed dead. Two others sustained serious injuries.

The BSU said it had been examining the fire, the crisis management on the ship and the salvage operations, but it added it had also made a "critical evaluation" of the time between the incident itself and the eventual decision by German authorities to allow the containership to dock in Wilhelmshaven.

Answers to why another containership – **MOL Comfort** – split in two and sank may also be delayed, following the loss of both fore and aft sections which are now lying on the bottom of the Indian Ocean. The ship's classification society has, however, promised preliminary results of its investigation will be available by September, while the Bahamas, as the flag state, is carrying out its own inquiry.

Even as **MOL Comfort** was splitting in two last month British accident investigators were revealing how they had been frustrated in their attempts to find out why two containerships – the UK-flag **Hyundai Discovery** and the Panamanian-flag **ACX Hibiscus** – collided in December 2011. The UK's Marine Accident Investigation Branch (MAIB) in its report into the incident, which occurred when heavy rain had reduced visibility in the eastern approaches to the Singapore Strait, said it had been denied access to "primary evidence" from **ACX Hibiscus** and that pressure had been put on the Panamanian authorities not to release "critical evidence", including that from the ship's Voyage Data Recorder, to the MAIB.

The British investigators said as a result of being deprived of key information by the “obstructive behaviour” of the owners of ACX Hibiscus, their report could not deal with the “underlying causes of the accident”. This, they added, was despite the fact Panama had agreed to the MAIB taking the lead in a joint investigation. Industry organisations have also expressed their frustration at the failure of many flag states to make public casualty investigation reports whose findings could help prevent similar incidents occurring. INTERCARGO, the dry cargo owners’ trade association, recently revealed the results of its attempt to access reports on the database maintained by the International Maritime Organization (IMO). Concerned by the high loss rate of bulk carriers and, in particular, those involving the carriage of nickel ore, INTERCARGO searched the Global Integrated Shipping Information System (GISIS) for serious incidents involving both loss of life and vessel in the period 2008-11. The association found that the majority of cases on the GISIS “marine casualties and incidents module” were either unaccompanied by flag state investigation reports or, if they were, the reports were unavailable for download. (Three reports by Panama into separate incidents involving nickel ore were, in fact, submitted simultaneously to GISIS and made available for download shortly before INTERCARGO revealed its findings.) A similar problem will confront anyone searching GISIS for reports of serious containership incidents. For three of the most serious and well-known incidents involving cargo-related fires – the Antigua-and-Barbudan-flag **CMA Djakarta** in 1997, the Liberian-flag **Hanjin Pennsylvania** (2002) and the Panamanian-flag **Hyundai Fortune** (2006) – no flag state investigation reports are available on GISIS.

Even when an investigation report has been entered on the database, for it to be available for download, according to the GISIS website, it has to have been released to the public by the flag state, but this is not always the case. Two other well-known containership incidents (both in 2007) – the Hong Kong-flag **Cosco Busan** and the UK-flag **MSC Napoli** – have been the subject of published investigation reports. But while they are not available for download from GISIS, both can be downloaded from the respective websites, www.mardep.gov.hk and www.maib.gov.uk

Flag states not only face demands to make investigation reports public but to do so as quickly as possible. The complexity of some serious incidents, however, can limit the ability of often under-resourced investigators to produce reports as fast as some might like. As the frustrated German investigators pointed out, one of the problems they faced in dealing with the complex issues raised by the MSC Flaminia incident was their “limited personnel resources”.

The two-month delay, the incident’s complexity and lack of manpower meant they would have been unable to meet the European Union’s target of producing a final report for very serious or serious casualties within 12 months without “serious losses [to] the conclusions and safety recommendations”, hence last month’s interim report. The full MAIB report into the containership collision also failed to meet the EU’s 12-month deadline, although whether this was entirely due to the lack of co-operation it encountered is not clear. It too was forced to publish an interim report in December last year. Without the lessons that accident investigation reports can provide, the higher the risk that containerships will continue to burn and bulk carriers to sink and more lives to be lost. Source: BIMCO

**Inséré le 11/12/13 HISTORIEK HISTORIQUE Enlevé le 11/01/14
THE LOSS OF ADMIRAL KARPFANGER ex L'AVENIR**

Captain Roger GHYS
Hon. Captain STV "MERCATOR"
Int. General Secretary Captains Cape Homers

PREAMBLE.

Whilst reading the article on multiple steering wheels, it reminded me that our former Belgian Sail Training vessel "L'Avenir", built in 1908 in Germany, was similarly equipped with a multiple steering-wheel.

At a lecture on this subject, given by my confrère Mr Van Coolput, member of the Royal Belgian Marine Academy, he mentioned a.o. that same could have played a role in her loss. Being closely involved with sail-training vessels, it is therefore most interesting to relate some new considerations on her tragic fate, which, as far as I know, some never have been published and are based on testimonies of people who have sailed with her.

This report was submitted to Admiral R. Benavente, President of the Chilean Section of the Cape Homers brotherhood, who is quite acquainted with the the weather and the dangers at Cape Horn. Based on his experience he agreed with my opinion and conclusions about this deplorable loss. The accident happened more than 60 years ago but the extreme weather circumstances at Cape Horn remain still the same. Out of the story of this tragedy some lessons may be therefore drawn illustrating the dangers, which may be expected at Cape Horn.

HISTORY OF L'AVENIR later ADMIRAL KARPFANGER

The four-masted barque L'Avenir was lost in March 1938 under the name of 'Admiral Karpfanger' with all hands in the vicinity of Cape Horn on her way back from Australia to Great Britain. She had a crew of 60 of which 44 trainees under command of Captain Wilhelm Reinhold.

Her loss remained a mystery and the Maritime Court of Inquiry in Germany had only suspicions what could have happened. The Court decided however in her conclusions that when leaving port she was in a seaworthy condition and no fault could be found in the command of the vessel.

As a result of the capsizing of the four-masted barque Pamir in 1957 and being bound for South America with my ship, the three-masted barquentine Mercator, I discussed the case thoroughly with my predecessor Captain Remi Van de Sande. He was an old sea dog with quite some experience and also last master of L'Avenir under Belgian flag. The expression "Master after God" certainly applied to him and we all respected him for his seamanship. He trained me the hard way to take over command of the Belgian sail training-vessel for which I am still grateful.

L'Avenir was built on the Rickmers Ship-yard in Bremerhaven (Germany) in 1908 to replace the previous Belgian sail-training vessel Comte de Smet de Nayer, which was lost in the Bay of Biscay in 1906. Thirty five members of the crew lost their life including her master but the Association Maritime Belge (ASMAR), owner of the vessel and in charge of maritime education, did not hesitate to rebuild a new sail-training vessel.

Captain F. Zander, an experienced German Master in Sail was the first one to take over command and staid on board for four years. L'Avenirs ended her career under Belgian Flag under command of my predecessor Captain R. Van de Sande. He took over command of the new sail training vessel Mercator in 1931 and L'Avenir was sold the same year to the Finnish shipping Company G. Erikson for the sum of 2820 British pounds.

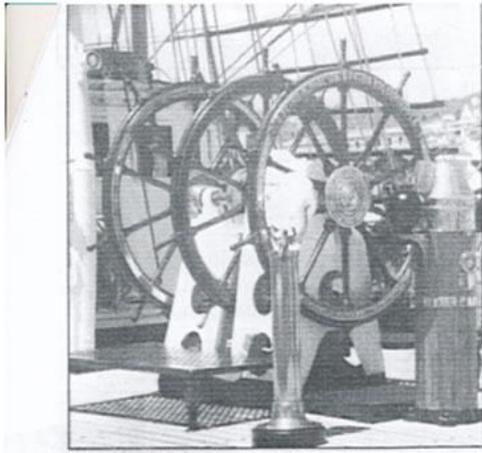
The previous Belgian sail training vessel Comte de Smet de Nayer was lost in the Bay of Biscay in 1905 and 35 crew members lost their life at sea. ASMAR and the Belgian Government therefore wanted by all means that only experienced captains would take command of their sail training vessel. Captain Sander and Captain Remi Van de Sande were such men.

"C'étaient des hommes qui savaient commander sans élever le ton, des gens à la vie simple et droite, mais capables de faire entendre le timbre leur voix lorsque les circonstances l'exigeaient".

She was efficiently managed by her new owner on the grain trade to Australia under command a.o. of captain G. Lundberg and Nils Erikson till she was sold in 1937 to the "Deutschen Schulschiff-Vereins", sponsored by Hapag Lloyd, for the sum of 17.000 British Pounds. At that time in order to

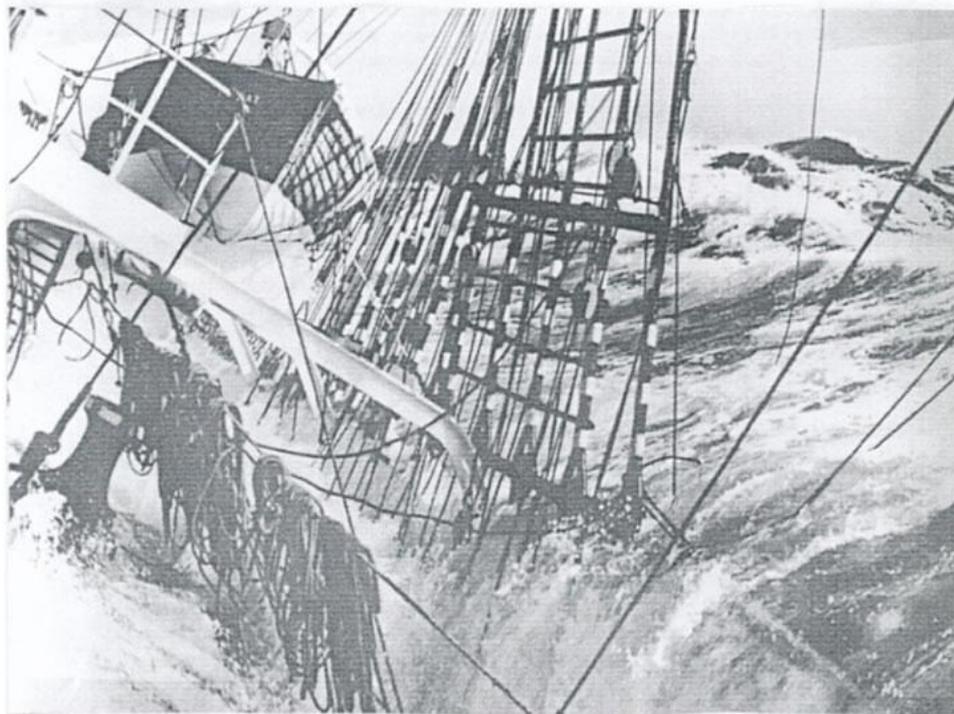
get your master'ticket, it was required in Germany to embark for a certain period on board of a sailing- vessel. Captain Gustaf Erikson was indeed a very clever business-man.

Her name was changed in Admiral Karpfanger and after a refit and dry docking in 1937 she left for her first voyage under German flag Hamburg in September 1937 bound for Port Germein (Australia). After a voyage of 107 days she arrived safely at her destination. She stayed in port for almost five



Multiple steering wheel on
Sagres (ex Schlageter)

weeks loading a full cargo of wheat in bags. On her return voyage to Great Britain she was lost all hands in March 1938 in the vicinity of Cape Horn. There is an old superstition between sailors about a 'Lucky ship' - 'clever change her name'.



L'Avenir was a fast sailing vessel and deserved her second name "The White Lady". Speeds of 16 to 18 knots were not uncommon. Under the able command of Captain Remi Van de Sande she once was caught in the eye of a hurricane in 1929 and suffered no damage which

confirmed her excellent reputation and sea qualities.

Below is the sea, the raging sea. High as hills, the foaming waves, ceaselessly reborn by the promiscuous wind, batter the ship's sides and roll her over until her decks are under and even the rails awash.

PROBABLE CAUSES OF THE LOSS OF ADMIRAL KARPFANGER.

All probable causes of her loss are therefore closely examined and commented as follows:

Falling broadside in a trough of the sea while scudding.

In the vicinity of Cape Horn winds are generally blowing from a Westerly direction and stormy weather in this period of the year is not uncommon. Being on an almost Easterly course, it is therefore quite possible that the four-masted barque was scudding (running before a storm).

The point of sailing 'a dead run' or the wind dead aft is always avoided and in general when scudding a sailing-vessel is usually running "with the wind", which is the point of sailing when the wind is blowing within 4 points (45 degrees) either side of the stern.

The oncoming seas, the so called grey-beards, which are pooping the vessel and then breaking over her stern are putting a heavy strain on the rudder blade while the decks are awash with green water. The expression 'green water' is used when masses of water submerge the decks while. 'White water' is used for lesser quantities, due to the presence of foam.

It is a situation of considerable danger, especially in a ship heavily laden, which was the case of Admiral Karpfanger. The special attention is drawn that when leaving Port Germein in Australia on the 8th of February 1938, she was loaded with a full cargo of wheat in bags (40.419 bags) and her freeboard on the ill fated voyage was only 1,24 m.

It is therefore obvious that due to the small distance between the main deck and the water-level Admiral Karpfanger embarked heavy seas when running "with the wind."

Such a dangerous situation usually comes about when the speed of the ship is approximately the speed of the following seas, so that the rudder has little or no grip on the sea. In such cases, a sea which poops a ship is very apt to swing her off course until she is broadside on the sea, WITH THE DANGER OF ROLLING OVER.

A freeboard of 1,11m was allowed for Admiral Karpfanger, which means that she was not overloaded on that particular voyage but nevertheless it is a fact that she was very low in the water.. In comparison the four-masted barques Archibald Russell had a freeboard of 1;68m and Pamir 1,70m.

Captain David Williams, who was L'Avenir's previous master in 1919, was of the opinion that a mistake has been, made in the calculations of the freeboard but I rather doubt this as the German Maritime Inspection is well known for its accuracy especially as it concerned the national sail training vessel. On the other hand during the investigation by the Maritime Court, there is no doubt that this aspect has been verified once again and as there have been no comments on that particular subject, we may disregard the remark by Captain Williams.

When the wind is blowing from the quarter and the vessel is running by the lee, a sailing vessel also has a large tendency to luff which means that same must be corrected by weather helm. In other words to keep the vessel on her course, amidships rudder for steering is then to be found at the lee-side which means that the rudder blade itself is not in line with the keel.

The reason of this phenomena is as follows:

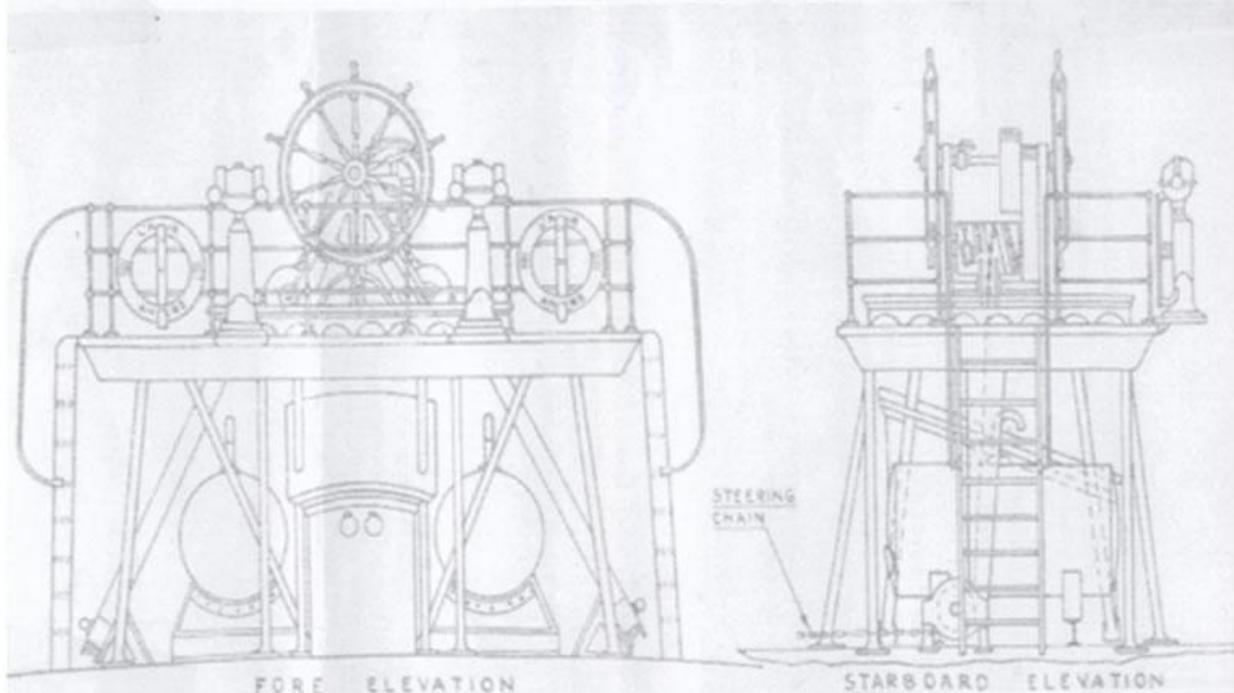
As the vessel moves forward, the fore part of the vessel encounters more resistance than the aft part. Further more as the vessel is heeling over to the lee-side, the surface of the immersed bow at the lee-side is larger than on the wind-side, causing more resistance on that part of the bow. Same results in bringing the head of the vessel closer to the wind direction and a major tendency to luff..

Further more there is no doubt that , when the point of sailing is on the quarter while scudding, keeping the vessel on a straight course together with proper steering requires the skill of an experienced helmsman due to her tendency of yawing.

Yawing is the effect on a ship's course by a following wind or sea. With the vessel traveling through the water in the same direction as that in which the sea is running or the wind is blowing, the effect of the rudder is diminished and the vessel is said to be yawing away from the desired course.

When a sailing vessel is scudding or running before storm, sometimes under bare poles, the oncoming seas, which are pooping and breaking over her stern or her quarter, cause a heavy strain

Multiple Steering wheel of Admiral Karpfanger (A. Underhill)
 Quand l'Avenir fut construit, la barre se trouvait sur la
 dunette. Le Commandant Zander estimait que cet endroit était
 trop dangereux pour les hommes de barre lors d'une mer
 déferlante. A sa requête une barre multiple fut construit
 après le premier voyage sur une plateforme surélevée au
 milieu du navire au dessus de deux réservoirs d'eau douce.



When L'Avenir was built, there was no steering wheel
 amidships and she had only a steering wheel on the poopdeck
 aft. At the request of Captain Zander, who was of the
 opinion that this position was too dangerous for the helmsman
 in a pooping sea, an extra steering wheel was constructed
 amidships on a platform above two water tanks after the
 first voyage.

on the rudder blade. When her speed is lower than the oncoming seas, large waves will attack the quarter causing the vessel to lurch.

LURCHING is a violent rolling in a storm alternatively to one side and the other in a trough or hollow of the waves. At Cape Horn waves of 10 meter height may be expected which means that in such a case heavy seas on deck are not uncommon.

As the heavy seas are accumulating on the lee-side, the list of the vessel also is increased.. The more a vessel heels over the more she has a tendency to fly up in the wind., resulting even in more weather helm..

When L'Avenir was built, there was no steering wheel amidships and she had only a steering wheel on the poopdeck aft. At the request of Captain Zander, who was of the opinion that this location was too dangerous for the helmsman in a pooping sea, an extra steering wheel was constructed after her first voyage amidships above two water tanks on a platform , situated about two meter above deck. It was a double multiple steering wheel, which required several helmsmen but made steering easier in heavy weather. However due to the presence of the watertanks, there was not sufficient place available on the main deck and therefore an elevated platform was built. Together with the above tendency to luff, this is another special factor which could have been playing a role in the loss of the Admiral Karpfanger.

This means that a helmsman had to climb up about 2 meters on a vertical ladder to take over the wheel. while the officer on watch was usually standing below on the main deck .

Valuable seconds maybe have been lost , while climbing up the ladder to assist the helmsman, especially when the vessel is caught in a sudden heavy pooping sea, breaking over the decks,

resulting in such a tendency to lull that even with the wheel hard over, falling off is impossible. In such a case the vessel is not obeying any more to the rudder and inevitably the vessel is then falling athwart of the sea.

Same was experienced by John Summerstrom, a Finnish sail-maker who has been a long time on board of L'Avenir, when she was part of the Erikson fleet and who was convinced that this was the cause of her loss.

It also has been said that the deck crew on board of the Admiral Karpfanger consisted only of trainees and that there were no experienced A.B. seamen on board. However according to my experience trainees, who had several months practice of steering on board, which was the case on board of the Admiral Karpfanger, have in general no problems with the art of steering..

As seen from the above, the possibility that while embarking heavy seas Admiral Karpfanger did not respond to her rudder and fell broadside in a trough athwart of the sea, suddenly rolled violently over and capsized is therefore a major possibility.

Carriage of too much sail..

Another fact that may have playing a role is the tradition on board German Sailing vessels to make fast passages. We remember the fast voyages to Chile by square riggers such as the "Potosi" and the "Preussen" from the shipping company Laesz under command of such famous Captains as Hilgendorf and Boye Petersen. It was even a standard instruction by the owner to his captains but at the same time it also was a strict rule that his vessels should be properly equipped.

Did Admiral Karpfanger carry too much sail forward to make a better mileage, nobody will ever give any answer.

It is a fact that whenever a sailing vessel is making more speed, the resistance on the lee bow increases, resulting in more weather helm and increasing the danger of falling athwart of the sea. Whenever she falls athwart of the sea in a trough, the possibility of rolling over due to the larger surface of canvas and pressure on the rigging is no doubt increased. This was also the case in 1957 when Pamir was lost when she fell broadside to the sea in hurricane Carrie.

However though the consideration that Karpfanger was carrying too much sail is only a presumption it could nevertheless have been playing a role in her loss.

What about radio signals !

The vessel was equipped with radio communication which was working properly. Same is confirmed by the fact that Norddeich Radio received a first message on the 1st giving her position latitude 51° South and longitude 172° East. A second message was received on the 12th of April.

As no distress signal whatsoever was received, the catastrophe must have happened quite suddenly. Same is confirmed by the fact that only a very few wreck pieces were found later on. If the vessel was in peril of sinking and this took some time, there is no doubt that the life-boats would have been lowered to save the crew. In such a case more remnants of Admiral Karpfanger would have been retraced.

Even if the radio equipment was damaged during the fatal last moments, bringing down for instance the radio antenna and the vessel was in a dangerous situation, it is obvious that all would have been done to repair it, which means that they must have run out of time.

The lack of any radio distress signal is therefore an indication that the catastrophe must have happened suddenly.

Was the vessel dismasted when fall broadside to the sea ?

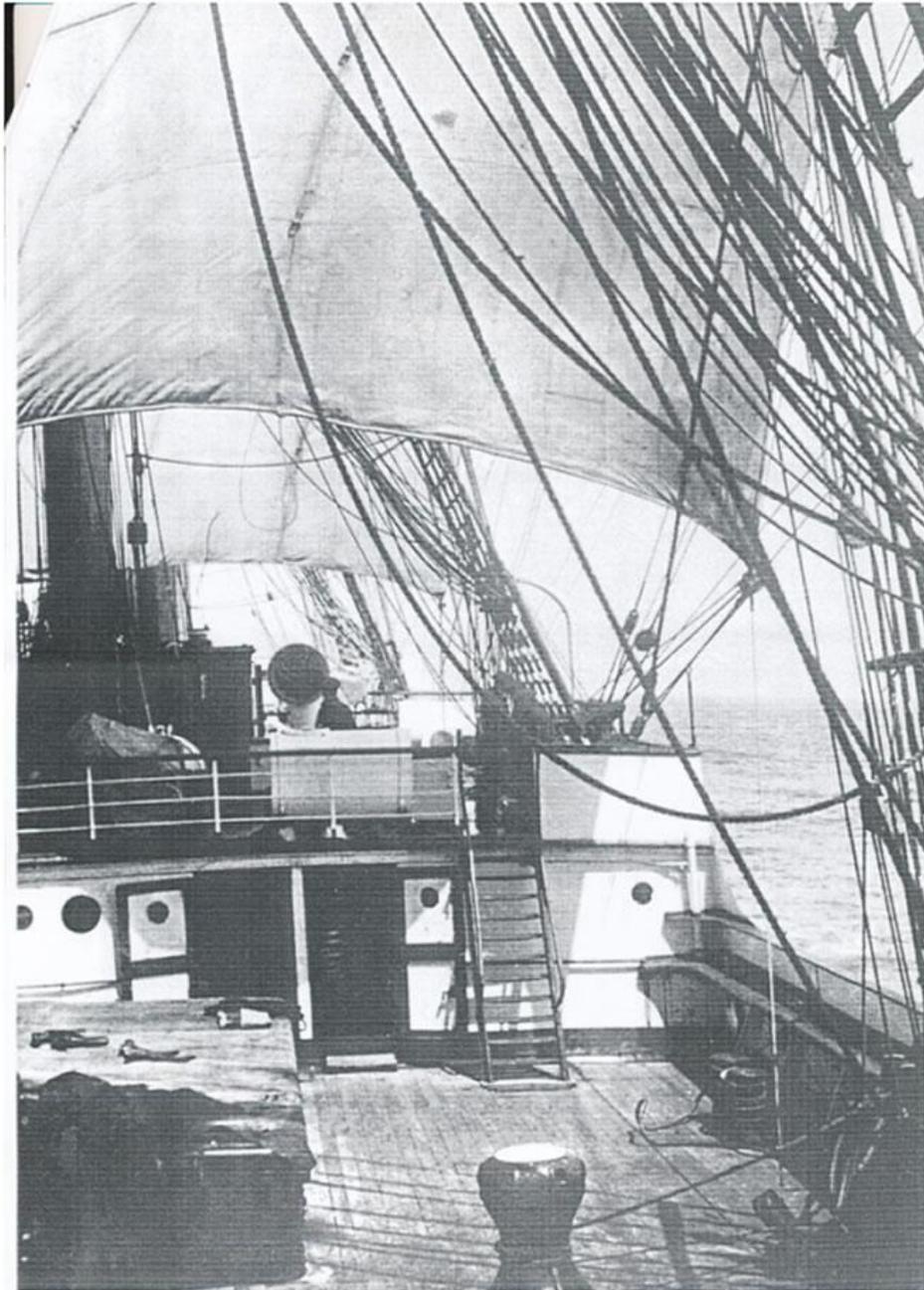
There is no doubt that the rigging was in good order because it was thoroughly inspected when she was registered under German flag.

Dismasting when falling athwart of the sea could have relieved the pressure on mast, yards and sails with the result that the danger of rolling over and sudden capsizing was avoided. However this most probably did not occur, especially as no wrecked spars were discovered later on.

An extensive search of the coast of Patagonia went on later on . The only wrecked pieces, which were discovered, were the door of the doctor's cabin, marked with the inscription (médecin), a life-boat and a frame. of a window. They were found in Windhound Bay on the Chilean isle of Navarino near Cape Horn.

From which we may conclude that, when the vessel has foundered suddenly, her rigging was intact.

The square rigger "Pinnas" suffered almost the same fate as the Admiral Karpfanger in a storm at



Cape Horn in 1929 but was dismasted. She struck a leak but stayed afloat. Though there was a high sea running, her 25 crew-members could be saved later on by a Chilean passenger-ship

Was the vessel lost by grounding ?

Grounding may also be excluded as a probable cause of her loss because otherwise more remnants of the wreck would have been found.

Vue du pont avant de L'Avenir du côté babord arrière.

C'était un phénomène connu que le navire embarquait par mauvais temps sur le pont avant des gros paquets de mer. Dans les années vingt un membre d'équipage a été soulevé à cet endroit par une lame déferlante et a passé par dessus bord. C'était trop dangereux de mettre un canot l'eau à cause de l'état de la mer et malheureusement il n'a pas pu être récupéré Vieww of the fore-deck of L'Avenir port-side aft

It was well known that in bad weather she embarked on the fore-deck heavy seas. In the twenties a crew-member was lifted up at that place by a pooping sea and went over board. It was too dangerous to lower a boat due to the rough sea and unfortunately he was lost.

Has there been a shifting of cargo, which jeopardized the ship's stability ?

Shifting of the cargo was also quite improbable because it consisted of a full cargo of wheat in bags, filling up completely all the holds. Further more as the Maritime Court of Inquiry was of the opinion that Admiral Karpfanger was in a seaworthy when leaving port, this means that the cargo was stowed properly .

Nowadays regulations do not prescribe any special rules for a bagged grain cargo except when it is loaded in bulk. The reason for it is that shifting of same is quite improbable and therefore we may conclude a shifting of the cargo has not been a cause of a sudden capsizing.

It is true that in the charter parties subscribed by the shipping company G. Erikson, there was a clause that 2% of the bags could be cut open in order to fill up any empty space between the layers of bags. Such a clause was not entered in the charter party of the Admiral Karpfanger. Nowadays such a clause does not exist any more because experience has proven that this extra precaution is not necessary for the safety of the vessel.

The Maritime Court of Inquiry being of the opinion that the vessel was seaworthy when leaving the port, there is no doubt that her stability was not put into question because this aspect has certainly been examined.

The holds being filled up completely with bagged cargo, the possibility of a shifting of same may therefore be disregarded.

Was there an infiltration of water into the hatches?

The hatch covers were covered by three tarpaulins, which were properly secured and wedged. According to the Maritime Court of Inquiry. the vessel was seaworthy when leaving the port, which means also that the hatches were properly closed.

It is of course not excluded that some tarpaulins of a hatch have been torn away by the breaking seas and that water has infiltrated in a hold. It is true that sometimes an extra precaution was taken by tightening cross wires on top of the hatches but we must keep in mind that this extra precaution was not considered by the Court as a mistake. Nobody however will ever find out if there has been a flooding of a compartment but it is quite improbable that such an infiltration has happened at the same moment in all the hatches.

A sudden capsizing due to infiltration of water in one hatch does not mean that the vessel's stability is immediately in jeopardy especially as the holds were completely filled with bagged cargo.

As the space in the holds were almost fully occupied, the possibility of having a free surface of moving water, which is detrimental for the stability of a vessel is excluded. Even if water has penetrated in a hold, it would have taken quite some time before the vessel experienced a negative

stability with the danger of capsizing. This was not the case because as seen from the above, the catastrophe must have happened suddenly.

From the above we may conclude that though an infiltration of water into a hold is a possibility, it is very unlikely that this has been the direct cause of a sudden capsizing of Admiral Karpfanger.

Has the vessel run into ice ?

The discovery of the wreck of the "Titanic", which collided with an iceberg made front pages and the danger of sinking due to such a collision is well known. However we are aware that it took several hours before she was sunk.

An iceberg. 500 feet high has been reported the same month in that area on board of the four-masted barque Viking. Visibility at Cape Horn is sometimes reduced due to thick fog. The usual precaution is then to send a man forward with a thermometer to notice any drop in temperature. This precaution was however ineffective in this case because the wind was blowing abaft the beam.

Sometimes listening to the echo of the fog horn due to repercussion on an iceberg could give an indication of its presence. However, in this case an iceberg would have been downwind, which means that it is very unlikely that an echo would have been heard on board. Further more a foghorn of a sailing vessel is hand driven and not powerful..

We read that some authors attribute her loss to a collision with an iceberg.

We can imagine that during a dark night in thick fog a collision with ice is not excluded.

Admiral Karpfanger however was equipped with steel bulkheads and double bottoms. Even if a collision with an iceberg would have happened, it is quite improbable that all double bottoms would have been ripped open and flooded at the same time. The vessel would have been afloat for quite some time which means that a radio warning could have been given and that life-boats would have been lowered and more pieces of wreck found, which has not been the case..

The same situation applies for a collision with growlers. Growlers are pieces of low-lying ice floating in the sea in high northern or southern latitudes, which is difficult to see from a ship approaching it because of its dark colour and being almost awash. Growlers are formed of blocks of ice which have broken away from the ice pack or from icebergs, and have been blown or drifted clear.

L'Avenir grounded on the Bahama banks in 1929 and though she pounded heavily on the reefs, no infiltration was observed. The double bottoms plates were all renewed on her return in Antwerp and we may therefore accept that her bottom was in excellent condition.

It also must be reminded that the vessel was strongly built and that the German emperor Wilhelm himself expressed the personal wish to the Rickmers Shipyard when, she was built, that she should be a model of German shipbuilding.

Sudden foundering due to a collision with an iceberg or with growlers is therefore quite improbable.

Was the rudder in good condition?

Captain Everard, who was second officer on board of L'Avenir when she grounded on the Bahama Banks, told me that though extensive repairs have been done later on, he noticed nevertheless later on a strange noise and a vibration on the aft ship when she was sailing with strong winds on the quarter. He was of the opinion that same was the result of the grounding causing some damage to the rudder and which was not discovered later on. The possibility that she lost her rudder while scudding with all its consequences was according to him therefore not excluded.

There is no doubt that the rudder has been lifted out in dry-dock for examination of the rudder pintles and rudder gudgeons with realigning of the rudder itself. A rudder being of the utmost importance for the safety of a sailing-vessel, this is done with utmost care and any hidden damage would certainly have been discovered.

It also must be mentioned that that during the six years that L'Avenir was part of the Erikson fleet, she was on a regular trade to Australia and though she met bad weather during this period, there never was any mention of the observation by Captain Everard.

For the above reason, we may disregard the remark of Captain Everard that there was a hidden damage to the rudder and that same had any influence on her loss.

Was Admiral Karpfangr lost due to fire ?

Fire was a most dreaded enemy on board sailing-vessels, especially on the Chilean trade whereof several of them caught fire. The cargo consisted then of guano, the so called Chile saltpetre. Guano was transported from Chile to be used as a fertilizer or to make sodium nitrate for gun powder. Being an oxidizing product self combustion due to contamination with an organic product was frequent. Some sailing vessels even had a barrel of heavily salted water ready to quench immediately any start of a fire

In this case however the cargo of Admiral Karpfanger consisted of wheat in bags. Cases of heating up by wetting bags of wheat have been known but are seldom. On the other hand even if there has been a fire in the cargo it would have been taken quite some time before it was spread all over the vessel.

As seen already, the tragedy must have happened suddenly and therefore we may disregard the possibility that she was lost due to fire.

CONCLUSIONS

If we recapitulate all the possibilities how the loss of Admiral Karpfanger has happened we may sum them up as follows:

- Collision with an iceberg or with growlers for instance in thick fog is not excluded but very unlikely.
- Capsizing due to lack of stability due to shifting of cargo or infiltration of water in a hold is very unlikely.
- Loss due to grounding is very unlikely.
- Hidden damage to the rudder is very unlikely.
- Loss due to fire is very unlikely

The most plausible cause for her loss, which is left over, is therefore as follows: While scudding before a storm, Admiral Karpfanger was caught by a pooping sea which swung her off course with a major tendency to lull.. As she did not obey any more to her rudder, she fell broadside in a trough athwart of the sea and rolled over. The capsizing must have been happening suddenly while her rigging most probably was intact.

The fact that she had a rather small freeboard resulting in embarking heavy seas on deck must have played certainly a role. Lurching is therefore a major possibility.

The location of the double steering wheel on a higher situated platform also is an argument which should be considered

The possibility that she was carrying too much sail forward to make more mileage is a consideration which must not be disregarded but it remains only a presumption.

Inséré le 13/12/13 Dossier Enlevé le 13/01/14

Anti-piracy – are weapons the answer?

This paper is intended to help inform the debate on the use of arms, in particular, armed 'sea marshals', in the protection of vessels conducting commercial business.*

A better understanding of the factors that will affect the maritime adventure with the introduction of weapons to vessels is required. The following is a summary of those factors.

The underlying motivation to arm vessels is a genuine desire to protect crews, ships and cargo. However, the debate currently seems to be driven more by the following: fear induced pressure on the stakeholders; the questionable authority of some proponents of arming ships; frustration throughout the industry at the apparent ease with which pirates can gain access and control of ships.

There is also much confusion on the subject of arming vessels, with the polarised views of the absolutely 'NO' lobby and the definitely 'YES' lobby, an uncertain legal environment, the effects of competing interests and the absence of real direction. The argument for arming ships increasingly relies on the use of the strap line "No ship with armed escorts has been taken." There are many equally true statements such as, "ships with particular funnel markings have not been taken".

In our view, the real debate should not be as to whether armed 'sea marshals' are appropriate for defense of vessels, but how to better protect shipping on a global basis. However, within the scope of this paper we will focus only on the issue of arms in protecting a maritime adventure.

In our view, the employment of armed guards does not, and should never allow the delegation of responsibility for their actions, or the accountability for the consequences from the employer.

Risk assessment

The starting point in the decision making process as to whether to employ armed support should be based on a full understanding of the risks that must be mitigated. In the context of this paper this is piracy, or perhaps more accurately, the unauthorised access to a vessel of unknown persons with a view to detaining the crew, ship and cargo for ransom of some kind, or the removal of cargo and/or possessions of value. (This covers situations globally).

It is fundamentally important to understand the modus operandi of pirates and their training and equipment; indeed, without an understanding any decision is likely to be flawed. Also, and in relation to Somali pirates, the debate as to whether they are actually pirates or terrorists, in the context of defending against them, is purely academic and has more to do with political agendas than providing a solution to the problem, and has no place in the threat assessment other than help define their motivation.

In any risk assessment, it is advisable to look at the situation from the attacker's perspective. It is also important to understand the three elements that are necessary for any successful attack.

1. Motivation: This is clearly a commercial proposition with large sums to be made.
- 2 Opportunity: This is provided by the target market, ie ships; and in the case of transiting the Gulf of Aden it is fundamentally important to understand the opportunity a vessel presents to any potential attacker.
3. Capability: This is the resource, expertise and the training required by pirates to be able to take advantage of any opportunity presented to them.

With regards to motivation, if we are successful in removing the opportunities that exist and restrict the capabilities of the pirates it will become a less rewarding enterprise for pirates and in doing so we attack their motivation.

A brief example of this may be that if 20,000 plus ships transit the Gulf of Aden each year, this provides 20,000 possible opportunities. While other obvious factors will remove some of these

transiting vessels from the 'opportunity' category many more vessels could remove themselves from it if their masters and crew understood and were confident in the defensive capabilities of their vessels.

Size, speed and freeboard are characteristics that, if supported by good procedures, should require no additional security and, properly utilised, will put many ships beyond the capabilities of the pirates. In principle, the identification and removal of as much opportunity as is possible-without affecting the commercial enterprise- and the restriction of the pirates' capability to effectively deploy their resources combined with good procedures and their effective application will substantially mitigate the risk and will reduce the threat to shipping in general.

Of fundamental importance is that to achieve their aim, pirates must gain access to the controls of the target vessel. Gaining access to the deck alone need not necessarily provide access to controls. In any attack, we need to look at it from the pirate's perspective and the problems confronting them in achieving their objectives. They must come alongside the target vessel; they must climb the vessel to gain access to the deck; they have to traverse the deck and companionways to gain access to and take over the controls. They must make a transit to a safe port and then carry out the rest of their activities.

Difficulties that will confront pirates are; sea states, bad weather, height and difficulty of freeboard to climb, speed of target vessel, wash and manoeuvring, as well as weapons effectiveness (they do not have the weapons with the capabilities of stopping the majority of ships unless their intimidating image prevails!). A stationary vessel in a calm sea is a considerably easier prospect than one that is manoeuvring at speed.

From considerable experience in shooting, training and developing shooting techniques, we can testify to the difficulties experienced by most professional soldiers in achieving hits over 100, 200 and 300 m, when firing from a stable ground platform against a stationary target fixed to a stable platform in a benign range environment.



GAC Solutions provides security services.

When you apply any movement at either end, the difficulty increases dramatically and when movement is at both ends, accuracy is replaced by luck. The chances of anyone firing from a moving skiff and hitting what they are aiming for, is very low. A hit with even an RPG7, to do any serious damage, would have to be luckiest shot in the world, and would certainly not be the result of deliberate aimed shot at a specific point on the vessel.

The use of weapons to counter piracy needs to be carefully thought through. The application of weapons should be a staged approach with the first being deterrence. For deterrence to be effective, knowledge of the weapon systems presence must be with the pirates. It must also be in their minds the fact that the weapon systems on board the vessel are more powerful than their own otherwise any deterrent effect is diminished.

To achieve this, the weapons systems on board have to be prominently displayed at least at the point of danger.

The next stage where deterrence has failed is to effectively neutralise an attack. The weapons must either be able to put down sufficient fire power as a demonstration to clearly convince pirates that further attack would not be in their interest; or be of sufficient accuracy to disable the power units of pirate vessels; ideally without endangering any of the occupants of the pirate vessel.

This requires a category of weapons that can be described as 'specialist'. Weapons such as pistols, shotguns and single shot rifles are not capable of providing a deterrent. Neither are they capable of effectively stopping a determined armed attack. Of equal importance is the expertise of those handling the weapons systems on board ship and this is an area where the shipping industry will find it most difficult to determine.

Having served in any branch of any military for any length of time will not, on its own, illustrate the capability of security personnel with any weapons system. There is no effective system of accreditation for security companies in the world. Some of the companies who have signed up for latest Swiss generated protocols have dubious histories in relation to application of standards and there is no way of effectively policing whether or not a company complies with what it has signed up for.

When the risks are fully understood, the appropriate weapons systems have been identified and are manned by those of requisite experience so that the advantage and control of situation clearly lies with the ship and its security there needs to be clear rules of engagement to cover every situation.

Perhaps two of the most difficult areas within the rules of engagement are:

1. Who has control of the situation?
2. What actually constitutes a risk to life whereby, pirates would be engaged with lethal force?

It is our view that in all circumstances the Master must have control (and this is probably the legal position), supported and advised by the head of security. What constitutes a risk or a threat to life will, in many cases, be subjective and dependent on the experience of those security operatives involved and this could increase dramatically the potential for criminal error.

Summary

To achieve and then maintain control, the industry needs to institutionalise a better understanding of the actual risks confronting it. It must also have the means to communicate this knowledge to individual ships' Masters, officers and crews, so that all can and do understand the actual risks and how to mitigate them. In situations where it is considered appropriate to have weapons on board vessels, there needs to be a clear understanding of what constitutes appropriate weaponry that will effectively provide deterrence, and where deterrence fails be capable of effectively neutralising an armed and determined attack.

Where weapons are deployed, it is absolutely critical that those employed to operate them have the appropriate skills and experience and are also current in weapon use. Finally, rules of engagement need to be appropriate and have to be realistic; and there must be absolute clarity as to who has control.

The legal ramifications of this practical consideration are likely to be extensive.

Without proper consideration of the factors above, the deployment of weapons on vessels will do nothing to reduce the risk of piracy to shipping and could in fact perversely add further and unnecessary risks to the industry at considerable extra cost.

TO

*This is an extract from a paper written by: Andrew Kain, CEO and Ric Filon, director maritime services, AKE Ltd. AKE acknowledges an interest through its support to GAC Solutions in the provision of maritime security services and support to maritime clients.

Inséré le 15/12/13 BOEKEN LIVRES Enlevé le 15/01/14

“Harbour Light”

BOEKBESPREKING door : Frank NEYTS

Harbour Light, zo heet de nieuwe publicatie die geïnteresseerden wegwijs maakt in niet minder dan zesenvertig Europese haven- en transportgebonden dossiers. De Vlaamse Havencommissie (VHC) heeft samen met de Europese zeehavenvereniging ESPO en de Nederlandse Nationale Havenraad een Engelstalige versie klaar van zijn ‘Wegwijzer in Europese haven- en vervoerdossiers’. VHC-voorzitter Francis Rome stelde de nieuwe publicatie in Brussel voor bij de presentatie van de jongste winnaar van de ESPO Award voor maatschappelijke integratie van havens. Over elk van 46 dossiers die in ‘Harbour Light – Port and transport related EU policy and regulations – The professionals’ guide’ aan bod komen, wordt de stand van zaken gegeven en krijgt de lezer ook een lijstje met de belangrijkste beleidsdocumenten. De publicatie bestaat zowel op papier als op het net. Zolang de voorraad strekt is de papieren versie gratis beschikbaar bij de Vlaamse Havencommissie (aanvragen via hieronder vermelde website). De digitale versie staat op de website van de VHC op het adres www.flemishportcommission.be/harbourlight en bevat ook rechtstreekse links naar alle richtlijnen, communicaties, ontwerp teksten... die betrekking hebben op het behandelde onderwerp. “Duizenden pagina’s van Europese instellingen zijn beschikbaar op het internet, maar het is niet altijd eenvoudig om een overzicht te krijgen van wat op Europees niveau gebeurt, of de exacte status van een bepaald dossier te vinden. ‘**Harbour Lights**’ is precies ontworpen voor wie geen tijd heeft om door al die internetpagina’s te gaan. Of voor wie door de bomen het bos niet meer ziet,” zo lichtte Francis Rome toe. De elektronische versie van ‘Harbour Light’ zal regelmatig geüpdated worden.

Inséré le 17/12/13 NIEUWS NOUVELLE Enlevé le 17/01/14

'City on a ship' plan refloated

Back in the 1990s, a team of visionaries started planning a floating city of 50,000 to 100,000 people, with shops, restaurants, and other amenities, that would travel the globe and let people spend their entire lives at sea.

Named **Freedom Ship International**, the project was the brainchild of a Florida engineer named Norman Nixon. “As soon as we get this joker built we're going to retire and live on it for two years,” he bragged in 2002.



That never happened. The ambitious project struggled to attract venture capital and was abandoned after the financial crisis. Nixon himself passed away last year. Things could be

about to change for Freedom Ship International, however. Roger Gooch, part of the original team that worked with Nixon, recently sensed a change in the economic climate and decided to try to revive the idea. Gooch, 60, is a marketing man by training (he also formerly owned an insurance company and worked in the travel industry), so he thought he'd do what he did best and get the idea some press. After a few interviews, the idea was back in the spotlight again.

"It's gone viral on the Internet," Gooch told Business Insider with a laugh. "In the last three or four days we've been inundated with emails and responses and stuff, most of them have — quite truthfully — been very favourable."

The press is important, Gooch explains, as the company needs to get past the biggest hurdle — the truly astronomical price tag of the Freedom Ship. Gooch estimates that the project would have a budget of \$US9-10 billion (\$9.93-11.0 billion), but he says it would provide a good return on investment.

Thanks to the new-found attention, Gooch says, a number of private investors have contacted him about the idea, though no venture capital firms have reached out so far. He says his team is now interested in partnering with "notable or established private maritime entities" and has also floated the idea of what he called a "constructive equity capitalisation" — wherein the vendors he would use to construct the **Freedom Ship** would be given equity in the finished product for discounts of services and goods.

The plans for the **Freedom Ship** are certainly audacious. The 1.6km-long and 25-storey-high ship would circle the planet every two years, spending roughly 70 per cent of its time moored outside major cities and ports (it will be too big to enter most ports, so residents can fly to and from the

shore from the Freedom Ship's onboard airport).

On board, the floating ship would have its own economy, with tens of thousands of people working in shops, bars, and other businesses, and everyone on board paying a maintenance fee to support infrastructure such as security services and fire fighters.

Gooch is adamant,

however, that the project is feasible, and points out that technically the idea of a city on a boat is a misnomer — the **Freedom Ship** is actually a "super platform".

"There are super platforms now in the world, they're just not mobile platforms or floating cities," Gooch explains. "There's a large platform Japan uses as an airport. Super platforms are not the question, the question is whether an autonomous city circumnavigating the world can be economically viable, and we truly believe it can."

(Exactly who "we" is at this point remains unclear: Gooch admits that much of the team that was working on Freedom Ship International 10-15 years ago is no longer involved, and that he needs a project manager and marine architects, but he does say he is one of five currently working on the project.)

Even before its comeback, however, the **Freedom Ship project** had endured a good amount of criticism, and it seems unlikely that the critics will be satisfied by Gooch's claims.





Back in 2001 Patri Friedman, an American activist and political economy theorist, collected criticism of the Freedom Ship project. Friedman is a supporter of life on the sea (he co-founded the **Seasteading Institute**, dedicated to studying and promoting floating cities, with Peter Thiel in 2008), but he was forced to conclude that “the project is unrealistic”.

“I am still quite pessimistic,” Friedman said when contacted via email.

For example, he pointed to the struggles of residential cruise ship **The World**, operated by **Residensea**, which has struggled financially, despite being 30 times smaller than **Freedom Ship**.

Friedman likens the idea to a startup tech company. “Here in Silicon Valley, you can raise a million dollars with little more than a good resume and a cool idea that could become the next Google or Facebook,” he writes. “But even Facebook didn't raise a billion dollars until January of 2011, when the company had 600 million users and was worth \$US50 billion.

“Rather than trying to build a huge product and then sell it, startups now focus on creating the 'Minimum Viable Product'. This is the smallest thing they can build and get users or, even better, customers to start getting market traction, feedback, and of course revenue.

"The results of that MVP test determine whether venture capitalists will fund their next stage of development. When your Minimum Viable Product is a mile-long city at sea that costs \$US11 billion, it's time to go back to the drawing board.”



Even if Freedom Ship can raise the money, there are a lot of complications. For example, CNBC's Roger Gooch points out that the floating city might be considered a tax haven. While Gooch himself acknowledges that some passengers might be able to work out some tax benefits, that isn't the

intention of the boat, and he expects most will have to pay taxes in their country of citizenship. The question of legality onboard is a little murky too, though the Freedom Ship will likely have to operate under the laws of the country whose flag it flies. Still, Gooch remains hopeful. "The question is if there's enough interest globally," he says. "On the first ship we really only need about 50,000 interested people out of 3 billion, and we've run the numbers and believe there might be a need for 2 or 3 ships down the road. Is the timing now, in this decade? That we're not sure of, and that's why we are exploring it as we are right now to see if there is the demand and the interest."

And does Gooch want to live on the **Freedom Ship** himself? "Absolutely," he replies immediately. "I've been sold on the concept. The first time I heard about it, I thought, if you guys can build this I would live on it. "I would like it to happen in my lifetime," he says before laughing. "It better hurry up." **Source : canberratimes**

Inséré le 19/12/13 Dossier Enlevé le 19/01/14

Reprieve for owners or manufacturers?

Hyde Marine's Guardian system is one of over 20 type approved ballast water treatment systems. **According to Wendy Laursen, opinions differ on how the extra time made available before ballast water treatment systems need to be fitted should be used to best advantage.**

The latest resolution from MEPC65 recommends that ships built before entry into force of the ballast water management convention must fit a certified system by their first International Oil Pollution Certificate renewal survey after the date of entry into force of the convention, i.e. beginning 12 months after full ratification.

"It is noticeable that this is purely an attempt to spread the burden and ease the pressure on shipyards in order to facilitate implementation of the convention," says Janet Strode, general manager of the International Parcel Tanker Association (IPTA). "It does not acknowledge the concerns expressed by industry about the ability of available systems to cope with ambient conditions in different parts of the world despite them having been approved by the IMO, or the possibility of owners and crews being penalised despite investing in a system in all good faith and maintaining and operating it properly. Many of the IMO member states remain in denial about this aspect of the current situation."

Claus Usen Jensen, Senior Vice President of the technical division of Torm, believes that the extra time should be put to use by equipment manufacturers. "The manufacturers that we have today do not have solution that fit our operational needs because they do not have any piece of equipment that is able to deal with rivers, deltas and the sea," he says. Mr Jensen has reviewed many systems. "Each manufacturer tells me they have tested it according to the guidelines. Can you deal with our operating profiles, I ask. They normally say 'no'." Additionally, there is no single device that can deal with the volumes of ballast water used by the company's tankers and bulkers. "Hopefully equipment manufacturers will use the implementation delay in order to innovate more. As the customers, we are pushing them all the time and it is not that they are unaware of these issues."

Another concern for Mr Jensen is the lack of a way of checking the biological efficacy of ballast water treatment systems on board so that ships' crew can monitor performance and prepare for port state inspections. "Without this, we are working blind."

Thome Ship Management is not against the convention, or the result after implementation, but asks for more time to adjust and understand this major change.

“I believe that the revision in the timeline is a wise proposal by the committee. In reality, no one was really ready to go ahead yet,” says CEO Carsten Ostenfeldt. “People are still trying to make sense of the implementation and to understand the technology needed to get the certification done. The industry needs to be assured that the system works and should get more time to do that. Despite having 20+ type approved systems on the market, very few or close to zero, have actually been proven in reality and in the demanding environment that ships are in at the moment, and it can have huge consequences if it turns out that the technology is not matured sufficiently.” There are enough examples of systems which have been withdrawn from the market and even systems which have been installed, but did not work as intended, and that has to be avoided, he says. “No one can afford such costly mistakes in today’s market. On top of this there have been a lot of doubt around the confirmation of compliance, so even with the very honourable goal of saving our globe, the reality is that the industry – herein included lawmakers, countries, suppliers and ship owners – are not ready to implement this efficiently.”



The Australian Shipowners' Association (ASA) understands the reasons for the delay but does not want to see early adopters penalised. Many members of the association already have plans to fit equipment in their docking cycles, says Angela Gillham, the association's manager of industry operations. “But it is a lot of money to spend when you are not sure whether the convention will ever enter into force.”

Tim Wilkins, environmental manager at Intertanko, is positive about the MEPC65 agreement that type approval documentation should include details of all testing undertaken. He believes it is a positive step towards gaining shipowner confidence and allowing them to make informed purchase decisions. While he, and many other shipowner representative groups, would have preferred opening up the G8 guidelines for type approval to change, this expansion of type approval documentation at least makes it clear that shipowner concerns are valid and could be used for the basis for contractual agreements about system performance. “It is not the best solution, but it is better than what we had before.”

Wilkins believes it is now up to member states to lobby those yet to ratify the convention. “We feel that the member states have taken a lot of what we’ve said very seriously and have acted on those things. It is time to move forward.”

Manufacturers have also responded to industry concerns. DESMI claims the first UV-type system to be IMO-tested on land in fresh water. Severn Trent De Nora has sought out many testing opportunities. After the initial testing at the University of Washington, the Naval Research Laboratory and the land-based testing of the commercial version against the G8/G9 guidelines at NIOZ, the company also tested at MERC Maryland and on the US DOT owned/California State Lands Commission training vessel Golden Bear. The company also has its Balpure system in the US Coast Guard STEP program operating during every ballasting operation.

Optimarin put its three leading filter suppliers – Boll & Kirch, Filtersafe and Filtrex - to the test at Goeje Island in South Korea. Filter performance is critical to the operation of all vessels across the

globe. "Shipowners and operators have expressed concern about such risks, so this is our way of tangibly demonstrating just how good our filters perform, under the most demanding environmental conditions," said Tore Andersen, Sales and Marketing Director at Optimarin. The filters, all of which have capacities of 500m³/h, were placed on a moveable barge anchored out at sea. Each filter was then tested for two hours a day over three days. Although the water conditions were prone to rapid changes, the filters coped extremely well and maintained complete performance integrity, says Optimarin.

Some manufacturers are streamlining their equipment. RWO's CleanBallast system uses disk-filtration technology combined with advanced electrochemical disinfection. The filters were generously sized, says the company, which has since reduced the number of filter housings, and therefore system footprint, without impacting shipboard performance. Alfa Laval has made substantial changes with their PureBallast 3.0 model and the company is therefore redoing the IMO type approval process. Land-based and onboard type approval testing is underway, with formal type approval expected in Q4 2013.

Many manufacturers now believe the convention is ready for ratification. "Having attended the MEPC and BLG Meetings since 2010, I understand that there was genuine concern on the part of the shipowners about their ability to get suitable equipment and to install it in time to meet the convention requirements," says Tom Mackey, senior consultant at Hyde Marine. "I also feel that a great deal of time was lost and damage done to the environment over the past decade since the convention was first adopted in 2004. I believe it was necessary for those with both viewpoints to compromise and reach a consensus on these issues and I think that was finally accomplished during MEPC 64 and 65. Hopefully, the convention will be fully ratified within this year and will come into force during 2014."

Shipowners and manufacturers alike have articulated the view of a 2014 entry into force. In particular, the outcomes of MEPC65 could stimulate Panama to act. Panama could singly meet the remaining requirements for entry into force. However, despite all the news stories circulated to this effect, it is by no means certain. Asked if any of the outcomes, including the fact that Arsenio Domingo of Panama has been named the next MEPC chairman, would really lead to enough ratifications for entry into force, David Tongue, director of regulatory affairs at the International Chamber of Shipping, says "No".

"I don't think [ratification] can be jumped on until we get a suitable G8 and we get an agreement on the type of sampling analysis to be used for compliance because what we've got at the moment is simply introducing any form of testing through the back door." This is not in accordance with the agreement of MEPC that any sampling used for compliance should be consistent with that used for type approval. The wording of the two year moratorium goes completely against this, says Mr Tongue.

The situation is compounded by the US position on compliance testing. The US does not support the concept of a port state, a priori, giving up enforcement discretion. Agreeing to not use sampling results as the basis for a criminal sanction, regardless of the circumstances, is not something the US will accept. To make this position clear, the US reserved its position when the approach was proposed by BLG 17, and then again when it was agreed by MEPC65. Otherwise it might be perceived that the US would not use sampling results in enforcing its own domestic requirements.

**Inséré le 21/12/13 HISTORIEK HISTORIQUE Enlevé le 21/01/14
Een eeuw Cockerill**

De geschiedenis van de werf neemt echter reeds een aanvang in 1799, met de komst in Verviers van

de Engelsman William Cockerill, zijn echtgenote en vier kinderen. (Later wordt de familienaam gewijzigd in Cockerill). De jongste zoon is John, vermoedelijk 12 april 1789 te Haslington geboren.

William Cockerill is werktuigkundige. Een economische crisis in Engeland verplicht hem werk te zoeken op het vasteland. Uiteindelijk komt hij in België terecht, waar hij met succes machines begint te bouwen voor de textielindustrie. In 1807 wordt Verviers verlaten. Vader en zoon John Cockerill vestigen een bedrijf te Luik. In 1813 laat William Cockerill de zaak over aan zijn zoons James en John. Spoedig daarna neemt John de zaak volledig in handen; hij begrijpt onmiddellijk wat de toekomstmogelijkheden zijn van de jongste uitvinding van James Watt, die het gebruik van stoom als drijfkracht ontwikkeld heeft. In 1817 richt hij, met de steun van koning Willem I, ijzergieterijen te Seraing op. Hij specialiseert zich in het bouwen van stoomketels en -machines, en vindt hiervoor een goede markt in de scheepsbouw.



In 1821 vaart John Cockerill de havens van Rotterdam en Amsterdam binnen met zijn eerste stoomboot — 75 voet lang en 19 voet breed — gebouwd in zijn „ateliers" te Seraing aan de Maas. Dank zij de steun van koning Willem van Oranje en de medewerking van deskundigen uit de Nederlanden, kan hij samen met de „Societe Van Vollenhoven, Dutilh & Cie" — de latere Nederlandsche Stoombootmaatschappij — het monopolie verwerven inzake het leveren' van stoommachines aan de Nederlandse provincies.

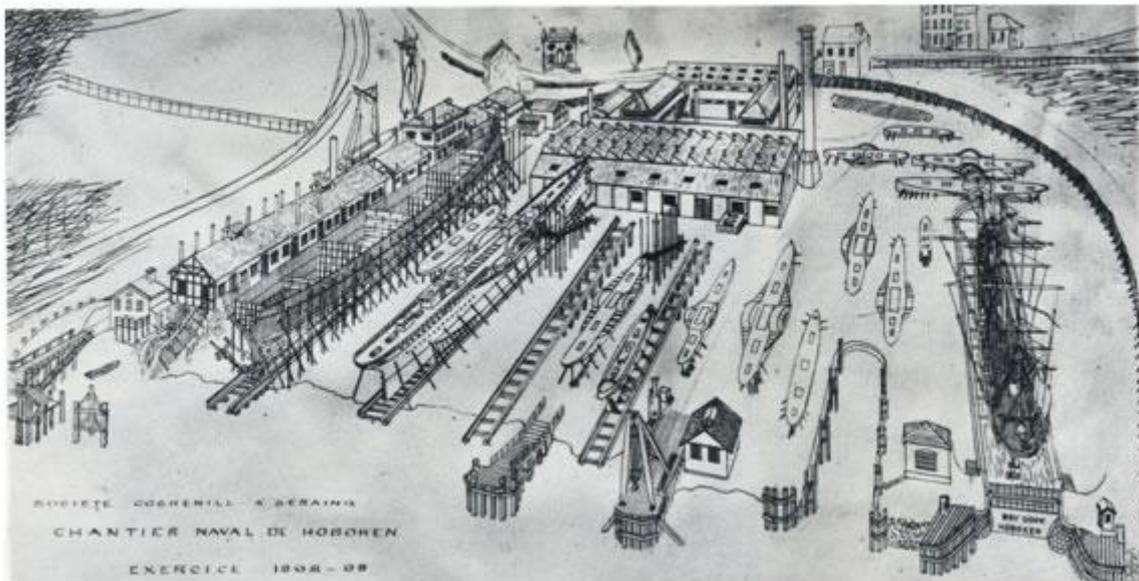
Intussen vraagt de stoomvaart meer en meer aandacht. In 1824 wordt de proefvaart van de „Zeeuw" op de Rijn een zegetocht. De „Zeeuw" is een schip van 112 Rijnlandse voet lang, 16 voet breed en met 4 voet diepgang — met plaats voor 60 passagiers en 17 bemanningsleden — en voortgedreven door stoomketels en -machines, gebouwd door John Cockerill.

De Omwenteling van 1830 — waarbij de Nederlanden gescheiden worden en België ontstaat — werkt echter remmend op de verdere expansie van het bedrijf. Nauwelijks 51 jaar oud, overlijdt John Cockerill te Warschau op 19 juni 1840, tijdens een reis door Polen.



In 1845 besluit de Belgische regering tot het oprichten van een regelmatige scheepvaartverbinding tussen Oostende en Dover. Tussen de Belgische Staat en de „Ets. John Cockerill" wordt een contract gesloten voor de bouw van een aantal postboten. In Seraing zelf is — tengevolge van de beperkte diepte van de Maas — de bouw van zulke schepen onmogelijk. De beheerraad van de N.V. John Cockerill besluit dan een werf op te richten aan de Schelde te Antwerpen. Een perceel grond ten zuiden van de stad — op de plaats van de vroegere scheepswerven van Napoleon! — wordt in huur genomen. Een speciaal budget van 3.896 Fr wordt uitgetrokken voor de bouw van een helling. In augustus en december 1847 worden de eerste postboten, de „Ville d'Ostende" en de „Ville de Bruges", opgeleverd. Het bedrijf van John Cockerill te Seraing bouwt de stoommachines die deze schepen voortraderen met een snelheid van 13 knopen ...

In 1866 hangt de terugvordering van de gehuurde grond in de lucht. De beheerraad neemt een besluit: nabij het Kattendijkdok te Antwerpen wordt een perceel grond aangekocht. Dit is slechts een tijdelijke oplossing, omdat er op deze plaats zo goed als geen uitbreidingsmogelijkheden aanwezig zijn. Trouwens, bij de stapelloop in oktober 1873 botst de „Parlement Belge" tegen de kademuur van het Kattendijkdok. Er moet dringend uitgezien worden naar een geschikte én definitieve plaats voor de bouw van een nieuwe en vooral grotere werf. Die plaats is Hoboken.



Op 25 juni 1873 wordt de N.V. John Cockerill aldaar eigenaar van 6 ha. weiland. Een jaar na het begin der werkzaamheden werken er op de werf reeds 600 arbeiders en bedienden; honderd jaar later zijn dat er ruim 3.000. De zaken worden van begin af aan degelijk aangepakt in Hoboken. In 1883 wordt het eerste droogdok in dienst gesteld en het zelfde jaar richt Cockerill een eigen vakschool op, een

verplichte maar kosteloze 3 jaar durende cursus voor iedere werknemer die nog niet is opgeroepen voor de dienstplicht. In 1914 wordt de school door de Duitse bezetter opgeheven. Later zal de gemeente Hoboken het technisch onderwijs gaan verzorgen. In 1890 komt de eerste stoomkraan op de werf, die dan al geschikt is voor de bouw van schepen tot 4.000 ton dw. In 1900 steekt de concurrentie de kop op.



4. Cockerill omstreeks 1960. Aan de kade het passagierschip „Vera Cruz”, door de werf gebouwd voor de Companhia Colonial de Navegação te Lissabon. Voor dezelfde rederij werden ook de passagiersschepen „Santa Maria” en „Infante Dom Henrique” opgeleverd.

5. Na een geslaagde proefreis gaat de „Federal Schelde” voor een laatste beurt in een van de Cockerill droogdokken.



Vlakbij Cockerill wordt begonnen met de uitbouw van de „Chantiers Navals Anversois". Men kan er schepen bouwen tot een lengte van 700 voet. De crisis van 1903 is fataal. Genoemd bedrijf moet voor de duur van twee jaar zijn deuren sluiten. In 1941 wordt deze werf door Cockerill overgenomen. Bij Cockerill te Hoboken wordt de scheepsbouwevolutie van nabij gevolgd — en de allereerste mailboot, die met turbine-aandrijving gebouwd wordt, breekt tijdens de proefvaart het wereldrecord snelheid voor passagiersschepen: 24 knopen/uur.

Tussen de jaren 1934 en 1936 bijvoorbeeld worden 3 mailboten opgeleverd; dubbelschroevers, door dieselmotoren voortgestuwd. Het zijn de snelste mailboten tot dan toe gebouwd — waar ook ter wereld. Hun topsnelheid bereikt 25,25 knopen/uur. Na de fusie met „The Antwerp Engineering Company" in de dertiger jaren, beschikt Cockerill na de tweede wereldoorlog over een totale terreinoppervlakte van ruim 22 ha.

Onmiddellijk na W.O. II is Cockerill maximaal actief. Er wordt een nieuw droogdok gebouwd voor schepen van 115 meter lengte en 12 meter breedte. De hellingen worden opgevoerd tot 4. In 1946 worden opnieuw 2 nieuwe droogdokken gebouwd, en in 1950 kan het bedrijf aanspraak maken op het bezit van de grootste lasloods in Europa: 156 bij 152 meter, in 6 hallen verdeeld.

De werf te Hoboken heet nu nog altijd „Société Anonyme John Cockerill", en is een afdeling van de gelijknamige firma te Seraing, bij Luik. Onder die benaming worden o.m. de zeer luxueuze pakketboten „Vera Cruz" en „Santa Maria" gebouwd.

In 1957 fuseert het bedrijf te Seraing met het staalconcern N.V. Ougrée-Marihaye en neemt van dan af de naam „S.A. CockerillOugrée" aan. Ook de werf te Hoboken krijgt deze benaming op het briefpapier, en in deze periode — die zal duren tot eind 1964 — worden o.m. de „Caltex Nederland" en de „Caltex Madrid" gebouwd, beiden ruim 31.000 ton dw. In november 1964 besluit de beheerraad van Cockerill-Ougrée de scheepswerf te Hoboken als zelfstandige naamloze vennootschap op te richten onder de naam „N.V. Cockerill Yards Hoboken". Begin 1971 wordt nog een nabijgelegen terrein van nagenoeg 5 ha. aangekocht, zodat de werf zich momenteel over een totale oppervlakte van meer dan 35 ha. uitstrekt. Onder de huidige leiding zijn prominente schepen gebouwd, o.m. het m/s „Dart Europe" dat het grootste containerschip ter wereld was toen het in 1970 in de vaart kwam, alsmede de LASH-schepen „Bilderdyk" en „München" — zijnde de eerste in Europa gebouwde lichterschepen.

In de brochure „Een Sterk Verhaal... 1873-1973 — Cockerill Yards Hoboken", is een lijst opgenomen van de vaartuigen die gedurende een eeuw door de werf gebouwd zijn. In 1873 begint dat met bouwnummer 183, type passagiersschip — opdrachtgever Riesta, Manilla — Phillipijnen. Eindigend met 1973 is dat bouwnummer .874, type bulkcarrier, opdrachtgever GATX Bulkcarriers Belgium N.V. In die honderd jaar werden niet minder dan 259 zeeschepen gebouwd voor 22 verschillende landen — met daartussen een haast ontelbaar aantal kleinere vaartuigen. Het oudste schip te Hoboken gebouwd, en nog steeds in de vaart, dateert van 1913.

Naast het bouwen van schepen is de werf door haar installatie uiteraard ook geschikt voor het uitvoeren van grote industriewerken en het realiseren van offshore-projecten.

Bouwers van 259 zeeschepen voor 22 landen

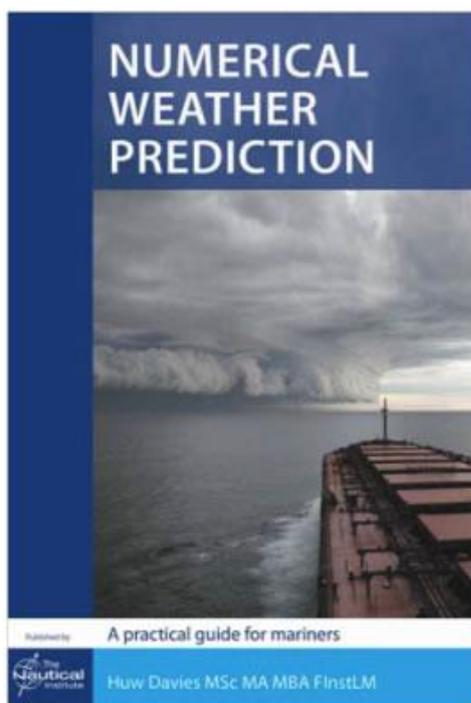


6.
1 December 1971 had bij Cockerill Yards de stapelloop plaats van bouwnr. 859, het lichterschip „Bilderdijk“ — het eerste vaartuig van dit type dat op een Europese werf gebouwd werd. Opdrachtgever was de Holland Amerika Lijn te Rotterdam. Voor de Combi Line-groep bouwde Cockerill ook het tweede LASH-schip, „München“, voor rekening van de Westduitse combinatie Hapag Lloyd. Deze schepen kunnen 83 geladen lichters van elk 460 ton vervoeren.

De volgende Cockerill-eeuw is intussen begonnen met een groot project. Om aan de toenemende vraag voor het bouwen van steeds grotere schepen te kunnen voldoen, zal — met financiële hulp van de Belgische Staat — een nieuw vast

droogdok gebouwd worden met een lengte van 450 meter en een breedte van 60 meter, geschikt voor schepen tot 225.000 ton dw. Geraamde kostprijs ruim 1 miljard BFr. Deze uitbreiding zal het aantrekken van ca. 700 nieuwe werknemers tot gevolg hebben.

De blauwe wimpe Feb 1974



Inséré le 21/12/13 BOEKEN LIVRES Enlevé le 21/01/14

NWP has significantly improved the accuracy of weather forecasts and enabled the development of services specifically for mariners, including routing advice and forecasts as ECDIS overlays. However, statistics from the International Union of Marine Insurance (IUMI) indicate that the leading cause of total loss of shipping between 1996 and 2010 was weather. Between 2006 and 2010, weather accounted for 45% of total losses. Author **Huw Davies** MSc MA MBA FInstLM explained that “insurers, mariners and shipping companies have not responded to the improvements in weather forecast accuracy or adjusted their procedures and expectations.” In order to close that gap, mariners need to be able to recognise when they are being presented with NWP, establish its source and the characteristics and performance of the particular NWP model and make

informed judgements on suitability and use. This practical guide “cuts through the jargon and complexity to provide mariners with the confidence and knowledge to exploit all of the advantages of modern meteorology and to avoid the pitfalls,” he said.

Effective use of weather forecasting offers the possibility of improving both safety and commercial efficiency. The publication of this guide is in line with The Nautical Institute’s Strategic Plan for 2011-2015, which identified the needs of the seafarer as key to the development of eNavigation. David Patraiko, Director of Projects at the Institute, pointed out that the IMO has initiated this concept to ensure the harmonised exchange of information between ship and shore to support decision-making. “Information should be reliable and in a format that supports decision-making. This guide should help mariners to make the best use of the technology in a practical and professional way,” he said. Huw is a World Meteorological Organization accredited weather forecaster and a former Commander in the Royal Navy with extensive experience in marine and aviation meteorology and oceanography both at sea and ashore. He currently advises the UK government, European Commission and a number of FTSE 100 companies on the marine environment and sits on the European Commission Maritime Borders Working Group.

The book explains the NWP production process and examines the accuracy and characteristics of the main meteorological and wave models. Subsequent chapters demonstrate how mariners can evaluate the added value of the many digital weather products and services on offer and also create their own forecasts using freely available NWP sources and free viewers. In his Foreword, Admiral (Retd) Sir Ian Forbes KCB CBE RN commented that the “capable and fast-moving technology” surrounding NWP “and the mass of information it provides, is only as good as the user’s ability to interpret and deploy it to best effect. And to know how such predictive data was arrived at and by whom.” He acknowledged that when presented with the vast array of new applications and possibilities it offers, “it is all too easy to settle for a less than optimum set of actions and outcomes that fall short of what technology can deliver.” In commending the book, the latest of The Nautical Institute’s practical guides, he stressed that it is written by a mariner for the use of mariners and will inform, educate and ensure the best use of equipment. In a presentation at the launch, Andrew Paul, Manager Projects and Research, Corporate Maritime Policy at Carnival Corporation, stressed the importance to the shipowner of the continued evolutionary development of NWP. “Accurate meteorological forecasting enables mariners to use their judgement to decide on the most appropriate route to optimise safety and efficiency. Improvements to NWP mean improved support for the Master.”

Numerical Weather Prediction – a practical guide for mariners is available from **The Nautical Institute** price: £30; ISBN: 978 1 906915 40 7 <http://www.nautinst.org/pubs>
For more information and review copies please contact Bridget Hogan, Director of Publishing and Marketing, The Nautical Institute +44 (0)20 7928 1351, bh@nautinst.org

Inséré le 23/12/13 NIEUWS NOUVELLES Enlevé le 23/01/14

Oil Theft, Piracy: FG To Impound Erring Ships

In a bid to deepen its strategy for fighting piracy, oil theft and other criminal activities in the nation’s waters, the federal government is to begin impounding vessels that enter Nigeria’s territorial waters without prior notification to the respective government agencies in line with extant laws. This is coming on the heels of incessant reports of pirates attacks on ships on Nigerian waters, most of whom have been discovered to have entered the country illegally for criminal activities. The senior special assistant to the president on maritime matters, Olugbenga Leke Oyewole, made the

disclosure yesterday, on the sidelines of a sendoff for 655 qualified student cadets organised by the Nigerian Maritime Administration and Safety Agency (NIMASA).

The presidential adviser told journalists that the federal government was making arrangements to ensure that vessels no longer loiter on the local water. Rather they were taking measures to observe immediate anchorage.

“If a ship is coming to Nigeria, there is no point loitering on the waters, but should come to the anchorage which is being secured by the Nigerian Navy.

“The fight against piracy is beyond shooting guns,” he said.

According to Oyewole, Nigeria has been having a sustained piracy records on tanker ships and none on cargo ships, pointing out that most of the affected tankers were not even captured in the list of ships that reported their arrival into the Nigerian waters in order to perpetrate oil theft and other criminal activities.

He said, “Piracy do not happen to cargo ships in Nigeria; it’s been happening to tanker ships. It is either the mother ship that wants to evade payments to the Nigerian government that loiter in the water to avoid being captured by the Nigerian Ports Authority (NPA) or NIMASA, or somebody is trying to steal oil. Those are the two classes of people to which these attacks happen. What we need to do is ensure all mother vessels coming to Nigeria reports at a particular place, which is the anchorage. We only need NPA and NIMASA to ensure all ships coming to Nigeria are being captured, if not we get the customs after them.

“It’s in the Customs Excise Duties and Management Act (CEMA) law that if a ship comes to the country without report, it’s an illegal ship. We reserve the right to impound such ships. By the time we impound one or more ships, we are talking about equipment worth \$50 million dollars. Then nobody anywhere in the world will risk that anymore.”

He noted that the Nigeria Customs Service (NCS) presently has a limited presence offshore but are now acquiring capacity to begin to go offshore to enforce the new regime of impounding non compliant vessels.

He said government was making sure there was synergy among all the government agencies that has a responsibility to carry out a duty on ships entering the country. These include NIMASA, Customs, NPA, and Nigeria Immigration Service (NIS) “We need to ensure there is synergy to ensure they do what is needed on every vessel that enters the country. The need for a forum for them to discuss is what is important. There is need to have a total surveillance of our maritime space, where all of them can begin to analyse and address issues. These are the only areas where we need to tidy up; Government is doing very well about that,” he said.

Source : leadership.ng

Inséré le 25/12/13 DOSSIER Enlevé le 25/01/14

What about the human suffering caused by pirates?

by Captain Bjorn Haave, individual member, Vice President, IFSMA

Seafarers are not soldiers. They are ordinary people doing a job like any other worker and should have the same right to be protected against criminals at their workplace as any worker ashore.

During the past few years piracy has become a nightmare for seafarers and their families. 'Everybody', including the UN, is working to protect ships from being hijacked, but who is working on the protection of seafarers' health and sanity after they have been released from hostage situations?

We know that seafarers are being treated very badly whilst being held hostage. We also know that they can face a lack of food and water. Seafarers have been killed both while their ship has come under attack and while being held hostage.

This is something that gets little coverage in the news unless it is a pleasure craft that has been taken. We have seen an English couple taken hostage, the brutal murder of Americans and now the taking hostage of a Danish family.

While I have sympathy for the situation these people find themselves in I do not understand why the yachtsmen sailed into an area that is known to be infested with pirates. The people on the yachts were all aware of the piracy problems in the Indian Ocean and Somalian waters, so why on earth did they risk their lives and sail into the area? That is a mystery to me. I am sure that the people themselves have been wondering why they took such a decision. The main thing is that they get a lot of attention from the press. That is good, but when it comes to seafarers who are out there to make a living for themselves and their families, one rarely reads a word about their situation. No one seems to care when it comes to merchant seafarers.

I do think it important to mention that the only way for the criminals to get their money is to take the ships with the crew on board. Without the crew no money will be paid, so it is not the ship and cargo that the criminals are after but the people on board. The funny thing about this is that the insurance companies do not pay a ransom for a crew but for the release of a ship and its cargo.

At the moment more than 800 seafarers from a number of countries are being held hostage by criminals from Somalia - criminals that the world now likes to call pirates. These criminals are nothing but a gang of well armed murdering bandits who take merchant seafarers hostage to make money. They are no better than bank robbers or kidnappers anywhere in the world. Yet international society finds it very difficult to agree on the way in which to solve the problem, and in the meantime more merchant seafarers are being taken hostage.

The worst part of hostage taking, in addition to the risk the seafarers take when they enter such waters, is the uncertainty of their fate after being taken.

I would like to call upon international society to start thinking of the stress and fatigue the seafarers live with and of the seafarers' families and friends. We know that hostages are given no way to communicate with their families, or vice-versa. A hostage situation can last a long time, a period during which neither the seafarer nor the seafarer's family has any idea of the other's general wellbeing. Worse still, the family ashore won't even know if the seafarer is alive.

The world at large seems to carry on as usual. No one seems to care about how important seafarers are and that they are essential for the successful transportation of goods around the world. Even those people who should know better seem to shut their eyes to the seafarers' situation. What do shipowners, insurers and administrations around the world do in the aftermath of such a situation? Do they follow up with the seafarer to make sure that he or she will be able to take care of themselves and their families? Do they know if the seafarer is going back to sea? Do they really care?

I am concerned that there will be many seafarers and their families who will suffer great mental stress in years to come and I am also sure that nobody will do a thing to help if we cannot get the public's attention regarding this situation. A study carried out in Bulgaria last autumn indicated that as many as 50 per cent of seafarers who had been held hostage did not go back to sea. Some of them felt forced to go back due to their economic situation but one can also expect some to leave the sea in the near future due to the post-traumatic stress caused by the hostage situation they experienced.

This is a very short paper and it is meant to be. It is just an attempt to bring forward what I think is the worst effect of this criminal behaviour called piracy.

My question to you my fellow shipmasters is this: How do we put the spotlight on the human aspect of piracy and hostage taking? How do we work to protect seafarers and their families from the

mental stress they suffer in the aftermath of a hostage situation? Can we do anything more than just talk about it?

IFSMA
