

BRANCH NEWS



News & Views

Newsletter of the Nautical Institute

- New Zealand Branch -

November 2004, Issue 95

CHAIRMAN'S MESSAGE

Greetings to you all from a rather turbulent Indian Ocean where your Chairman is nearing the end of a busy and eventful South East Asia deployment. The ENDEAVOUR has transferred over 3000 cubic metres of fuel to warships from four different nations, has visited eight different ports and will have effectively circumnavigated Australia by the time we arrive home. The events which have challenged the ship have been numerous but the lifeboat accident in Sydney was particularly traumatic. You will be pleased to know that the four sailors who we sent home are about fully recovered and the rest of the crew have showed true spirit in keeping the ship going. A steering gear failure in the Saigon River is something to discuss over a beer at a future meeting and the replacement of a cylinder head whilst drifting 200nm north of Manila made for an anxious 12 hours.

I trust you enjoyed the Captain's Column articles which were fairly representative of a day at sea. I certainly do not get bored. I look forward to returning to NZ waters and once again enjoy the clean seas, clean air and wonderful coast line.

Yours aye

David Hedgley, FNI

The August meeting of the New Zealand Branch was held on 16 August in the Maritime Museum. On special request of a number of members a last minute change to the format of the meeting saw us participate in the Southern Octopus series of lectures conducted at the museum. The scheduled talk by Captain Robert Weber was postponed and a new date for his lecture on their innovative mooring system will be scheduled in 2005.

The launch of the local branch website was well received and we have received a number of positive comments. Although it is still early days and much of the website is still in development we are pleased with these early results.

Similarly we are very pleased with the response of many NZ members to have their News & Views delivered via cybernet. This will ensure that the newsletter will follow him or her onboard and allow us to be in closer communications.

New Zealand Branch website activated

It is still early days and much of the site is still in development, we would like to ask for your input on what you would like to see or find on this website. There is a direct link to the main Nautical Institute website and we do not want to copy information that is available from that site – however we envisage that this website should provide the New Zealand point of view. We would like to work through our Port Liaison Officers to update you on activities in each major port area and we would like to hear from you if you have a personal message for a message board (or for this newsletter) – these could be messages of promotion, change of business or developments in your business, career changes or any other issue related to the objectives of the Institute.

www.nautinst.org.nz

The human element in seafaring is close to our heart. In this newsletter several closely linked issues are highlighted. The issue of port safety had every one's attention only a few short months ago and indeed our November meeting will focus on this issue. Directly linked is the issue of seafarer's biometric I/D cards. Ratification of the ILO convention means that all countries are scrambling to enact this legislation. Later on in this newsletter Captain Tim Wilson, Director of the New Zealand Maritime School, reports on the worldwide shortage of qualified officers and the difficulties New Zealand Cadets face to find a spare bed to complete their studies. He ends with a request for any company who may be able to provide training berths to contact the school (this can be done via your NZ NI secretary).

At this time I would also like to acknowledge the input from Captain Michael Pryce, Port Liaison Officer Wellington. He ensures that all interesting articles from both Fairplay and Lloyd's list are forwarded for review in News & Views.

AROUND NEW ZEALAND

Upgrade for Orions

The airforce's six Orion maritime patrol planes are to get an upgrade costing up to \$350 million. The upgrades will cover the Orion's mission system and communication and navigation equipment. The mission systems will include new imaging radar gear, video and infrared cameras and mission management systems. The upgrades are due to be completed by the end of 2010. *The NZ Herald, August 2004*

Fate of reclaimed land adds gravity to seabed row

The latest row over the proposed Foreshore and Seabed Bill appears set to be one of the hardest to solve and of huge public and economic interest. In its present draft form, the Bill proposes that reclaimed land – usually costing tens of millions of dollars – will not, as of right be given to its developers. Instead, the land will pass to the Department of Conservation, which

will return it to the organisation, on a fifty-year lease with no right of renewal. Aside from a combined submission by 13 port companies, 4000 submissions are lodged on the issue. Acting Prime Minister Michael Cullen has said that the Government was sympathetic to those making submissions and would listen to them carefully. "But there is a stronger case where we're dealing with past actions where there have been past commitments entered into by governments legitimately." Two of the burning issues are what happens to ports such as Port Otago, which have historical "expectation" of gaining ownership of completed reclamations and have applied for title ownership. And what of the ports that are in the process of reclamation but are yet to apply for title and ownership? Dr Cullen's reference to "past commitments" mirrors the term "expectations" expressed by port companies which understood they had a deal to apply for and receive outright ownership of the land. Paying a lease would mean passing on costs to exporters already at breaking strain with freight charges up 50% - 70% during the past two years. *Otago Daily Times, 10.08.2004, via Port Liaison Officer Stan Kirkpatrick.*

Four ships diverted from Auckland

A four-day strike at the port of Auckland this week involving about 260 members of the Maritime Union is expected to result in the port missing out on four scheduled vessel visits. Throughput of about 3500 containers will consequently be lost to the port company, as one of the scheduled vessel callers bypasses Auckland altogether, another diverts to Tauranga and two divert to Wellington. *Shipping Gazette, 11.09.2004*

Port Otago's long-serving joint ceo resigned to become infrastructure manager for fierce competitor Lyttleton Port Company. Mr Rene Bakx has spent almost 11 years with Port Otago, beginning in 1993 as technical-services manager, and was appointed sole chief executive in 1997. Nine months ago the position was split in two and Mr Bakx was joined by Mr plunket, who became joint chief executive. *Otago Daily Times, 13.08.2004, via Port Liaison Officer Stan Kirkpatrick.*

SUPERFLYTE out of action for several weeks after Gulf fire

Maritime inspectors are today investigating a fire onboard Superflyte which resulted in more than 300 passengers being evacuated yesterday. The Fullers ferry Superflyte is likely to be out of action for several weeks after the blaze, believed to have been caused by an electrical fault, damaged the engine room and controls as the vessel was sailing from Waiheke Island to Auckland. After the fire was spotted and extinguished, the ferry continued briefly under its own power but the (steering) controls were affected, forcing the skipper to transfer the 311 passengers to other ferries which arrived within eight minutes of the emergency being declared. *Lloyds list, 23.08.2004*

Southern Moana

Salvors have started to lighten the container vessel Southern Moana, which has been stranded on a reef off the South Pacific island of Futuna since 28 July. Helicopters brought in by United Salvage began today to remove the containers on board, said spokesman Paula Wilson. Local authorities confirmed that 110 containers would be lifted off. The 512 TEU capacity Southern Moana is carrying a full load of empty containers, plus a few laden boxes. It is not yet clear why the ship became stranded on the reef. Preliminary reports suggest the weather could have been a factor. Once the lightening operation is completed, the tugs Dretia and Austral Salvor will be used to re-float the vessel. Wilson said the current plan is to attempt to refloat the vessel on Saturday. The container vessel is owned by Beluga Shipping in Germany and on time charter to local operator Pacific Direct Line. It was built in China in 2000. *Lloyd's List 24.08.2004*

Southern Moana was finally re-floated last Friday, 27 August. "This is the successful end of this story, which saw the vessel remain stuck on these rocks for exactly month. It is a miracle she did not break up," a local ship agent said. The ship was towed away from the rocks at 0400 on Friday morning, during a favourable tide. While initial reports suggested the vessel's hull could have been damaged by the reef, hull integrity

seems to have been maintained and the vessel was allowed to leave under its own means. The ship is expected to carry out inspections and permanent repairs in Fiji or in New Zealand. *Lloyd's List 01.09.2004.*

HOW DO WE CONTACT YOU

If you do have an email address I would like to hear from you at nznisec@xtra.co.nz Other than receiving the quarterly newsletter via email, you will be updated on other activities and information that involves the Institute, quite often on very short notice. An advantage of emailing the newsletter is that it can follow you to your ship. The onus will be with each member to update me on your change of address upon embarking and disembarking from the ship. Initially there will be duplication, a hard copy as well as an email copy of the newsletter will be mailed out to you. If you do no longer wish to receive the hardcopy please let me know, in order to save the Branch some money for printing and postage.

Subrinsky Operations sold to Australia.

The Subritzky sea transport dynasty has sold its ferries and routes in the Hauraki Gulf to an Australian company that runs ferries to Kangaroo Island, off South Australia. The sale executes a plan to transform the ferry operator, best-known for its car ferry to Waiheke Island, into a tourism company. "At the moment ferry revenue is 100 per cent of the business but in three to five years we would like to see that somewhere between 50 per cent and 60 per cent with balance in tourism," said Michael Moore, grandson of company founders Bert and Mona Subritzky, who is staying on as chief executive. Another grandson, Brett Subritzky, is staying on in an operations role. They plan to tailor tourism packages into the Hauraki Gulf for international tourists travelling to Adelaide, capitalising on direct flights between Adelaide and Auckland. International tourists to New Zealand can also buy packages to Kangaroo Island, an eco-tourism destination. The Adelaide call centre will

be able to take over from Subritzky's call network late in the day. A priority will be to develop Great Barrier Island as an eco-tourist destination. Moore said Kangaroo Island was remote and about the same size as Great Barrier. SeaLink transported about the same amount of people and cars to the island as travelled to Waiheke. *New Zealand Herald 02.09.2004*

Site to sink frigate gets all-clear

The proposed site for sinking the decommissioned frigate Wellington has been given the all-clear in a special study by the National Institute of Water and Atmospheric Research. The Sink F-69 Trust, which wants the frigate as a Wellington dive attraction, asked Niwa to check the seabed at the proposed site, 450 metres off Elsdon Point between Houghton Bay and Island Bay. Trust spokesman Marco Zeeman said Niwa's data confirmed the place was ideal: "It's perfect sandy seabed." Because of wave action there was little marine life on the seabed 26 metres below the surface. However, the presence of the ship would change things, and fish and other species would soon move in.

A proposal for the navy to hand the Wellington over to the trust is now unlikely to get approval till later in the year. But the project was on track for the ship to be sunk in November 2005. Wellington ministers Annette King and Marian Hobbs supported the proposal. He said the navy was comfortable with the proposal as it was spending thousands keeping the ship tied up at Auckland's Devonport naval base since it was decommissioned in May 2000. Wellington City Council had underwritten the project to the tune of \$600,000. *Dominion Post, 01 September '04*

PERSONAL

Congratulations to **Captain John Mansell**, General Manager Maritime Operations, MSA, who recently graduated with Distinction from the Law Faculty of the University of Wollongong as Master of Maritime Studies.

Congratulations also to Deputy Director of MSA **Tony Martin** who is retiring after 40

years working in the maritime sector. He has been with MSA since its inception 11 years ago.

Captain Geoffrey John Keyse, one of Port Otago's longest serving shipping pilots and a veteran of Atlantic and Pacific service in World War 2, has died aged 77. The former harbourmaster for Port Otago was a well-known and respected member of the nautical fraternity and Nautical Institute member until his retirement in 1987.

MSA UPDATE

Info obtained from the MSA quarterly news letter.

A wake up call for fatigued seafarers

In October TAIC published the findings of two recent accidents: one collision in the entrance to the Port of Tauranga and one grounding just north of the Manukau harbour. Both were due to fatigued crew. Recent MSA research in the incidence of and behaviour towards fatigue among seafarers shows that these two accidents are the result of a systemic problem that faces on average one in five seafarers. An MSA-led working group is now talking with industry to provide guidelines and policy for owners, operators and employees to better manage fatigue. The guidelines will include practical methods for managing fatigue, and will be used as a basis for fatigue management training and education. Owners, skippers and crew all have clear and serious responsibilities to manage and identify fatigue under the Maritime Transport Act 1994, and the Health and Safety in Employment Act 1992:

- Employers are required to have a systematic approach to identifying fatigue-related issues and how to eliminate or minimise their impacts.
- Employees are required to take all practicable steps so they do not become unsafe through fatigue, to themselves and others in the workplace.
- Owners are required to provide adequate resources and shore-based support to enable others to meet their responsibilities, under the New Zealand Safe Ship Management code.

Fatigue is a hazard under the Health and Safety in Employment Act 1992. If fatigue is considered an issue on a vessel, the MSA can require the owner to take action to resolve any fatigue problems identified. The MSA can use a variety of enforcing options, including prosecution.

False alerts keep RCCNZ busy

In the first three months that the Rescue Coordination Centre NZ opened its staff have coordinated more than 130 incidents throughout NZ. The large majority of distress beacon activations were either false alerts or inadvertent activations. But all activations must be treated seriously and presumed to be the real thing until proven otherwise. Therefore it is very important that anyone who realises their beacon has been inadvertently activated informs the RCCNZ as soon as possible to ensure that valuable search assets are not tasked for a non-distress situation.

Health and Safety book to be released

The MSA is publishing a booklet about Health and Safety in the maritime workplace within the next couple of months. This booklet will be available at www.msa.govt.nz.

Safety improvements on way for Port & Harbour operations

In September MSA released the New Zealand Port and Harbour Marine Safety Code and Guidelines. The new Code addresses the quality of information, operating procedures and safety supervision. Implementation of the Code will begin immediately. Regional councils are requested to complete harbour risk assessments by June 2005 which will include an assessment of port-related marine operations in the regions. Once MSA has approved these risk assessments, councils are required to develop safety management plans by June 2006.

Stay on top campaign launched

The Maritime Safety Authority launched its summer 2004/05 campaign in October. The failure to check and act on the marine weather forecast before heading out in the water is a key cause of more than 40% of recreational boating fatalities. The new campaign is all about raising

awareness about the importance of checking and understanding the marine weather forecast and pointing people in the right direction to obtain a forecast. Staying on top of the weather means checking the marine weather forecast for your area. It also means understanding the conditions and if in doubt – not going out. The MSA was thrilled when rugby legend Colin Meads agreed to be part of the campaign to get people wearing lifejackets. As one of the “hard men” of NZ rugby Colin represents the ultimate “Macho Kiwi Bloke” – and this made him the obvious choice for the ad. *(for further information see the website: www.stayontop.org.nz)*

For further information and details on these reports, please visit the MSA website www.msa.govt.nz

IMO CORNER

From IMO website and other sources

ILO seafarer I/D card to go ahead

A new International Labour Organisation convention (No 185) involving the issue of new biometric identity cards to 1.2M seafarers and maritime workers will come into force from **9 February 2005**. The go-head follows ratification of the convention by Jordan and France, meeting the necessity for two member states to support it before it comes into force. The convention was agreed in June 2003 and is seen as a move that will further improve security in the global shipping industry. Several other countries are expected to ratify the convention soon, including Nigeria, Philippines and India. The US has written to the ILO stating that it recognises the convention as an important contribution to seafarer security.

Extra radar transponders on ro-ro passenger ships

Amendments to SOLAS chapter III-regulation 26 require liferafts carried on ro-ro passenger ships to be fitted with a radar transponder in the ratio of one transponder for every four liferafts. The regulation is made applicable to existing ships as well as new ships.

Women in the Maritime Sector

The IMO programme for the Integration of Women in the Maritime Sector (IWMS) is now in its 15th year of operation. A key event in the last 12 months has been the regional seminar on the role of women in the maritime sector: opportunities and challenges, in Apia, Samoa, in October 2003. The guest speakers included a number of women holding senior posts in the maritime industry in the region, whose presentations provided an invaluable insight into the impediments which face women who are seeking to train or to work in the maritime sector. The New Zealand representative, Louise Deehan-Owen spoke on the challenges and opportunities for women in the maritime industry in the South Pacific. Louise pointed out that even though there may be opportunities for women in this industry, both genuine and contrived, in order to meet the challenges and hurdles you need to possess a great passion for ships and the sea.

Lifeboats maintenance guidelines published

Amendments to SOLAS chapter III, regulations 19 & 20 and guidelines for periodic servicing and maintenance of lifeboats, launching appliances and on-load gear published as MSC circular 1093 (June 2003)

Working group on Fair treatment of Seafarers

IMO's Legal Committee in its 89th Session formed a joint IMO/ILO Ad Hoc Expert Working Group on the Fair Treatment of Seafarers in the Event of a Maritime Accident and nominated eight IMO Member Governments to represent the Organization at the Group's first meeting, scheduled for 17 to 19 January 2005 at IMO Headquarters. IMO, in co-operation with ILO, will consider the development of appropriate guidelines based not only on the principles of UNCLOS but also on the fact that unwarranted detention is a violation of basic human rights.

New Ocean Passages of the World

The 5th edition of the UKHO's Ocean Passages for the World has just been published. Tried and tested since it first appeared in 1895, NP136 has

consistently been a best seller ever since, proving that over a century of users can't be wrong.

No compulsory pilotage in Torres Strait yet

Following a request from the Marine Environment Protection Committee (MEPC) and the Subcommittee on Safety of Navigation (NAV), the IMO's Legal Committee reviewed the legal aspects of compulsory pilotage in a strait used for international navigation. Although there was agreement that IMO is the competent international organization to adopt measures such as the one proposed by Australia and Papua New Guinea to extend the existing Great Barrier Reef compulsory pilotage scheme to the Torres Strait. The Committee remained divided and was unable to resolve the issue of the legality of adopting requirements for compulsory pilotage in straits used for international navigation.

PIRACY REPORTS

Pirates target senior crew

Crew kidnappings, especially of senior officers, are on the rise in the Malacca Strait. The latest incidents, involving kidnapping of Masters and Chief Engineers from two tugs boats, took place in the northern part of the Strait in Indonesian waters near the port of Belawan. According to the IMB since May this year there have been no less than seven such attacks in the Strait. Twelve crew members have been taken hostage. "Many other incidents may have gone unreported as the owners prefer to pay and keep silent as lives are involved" according to Noel Choong, regional manager of IMB in Kuala Lumpur. Ships have been advised to be "extra cautious" due to the sudden increase in "kidnap and ransom" cases. There is a pattern to the attacks, raising suspicions that pirates may belong to a militant group. The pirates are armed with automatic weapons and target small vessels or tugs that move slowly because of barges they tow. Using fishing boats, they approach the vessels at high speed with rifles blazing, forcing the crew to stop. Once they are on board they smash the navigation equipment, threaten the crew and make away with hostages and valuables. The Belawan attacks on 30 September and 2 October were similar. In the first incident the Master and Chief Engineer of a Tuvalu

reistered tugboat were kidnapped, while in the second a Singapore-registered tug was attacked and the Master and Engineer kidnapped. The ransom amount can range from a few thousand dollars to a considerable sum. A Singapore based owner paid \$100,000 in January this year to obtain the release of six crew held hostage by Indonesian pirates. Coordinated patrols by Indonesia, Malaysia and Singapore that began in June (*see next report, ed*) seemed to have arrested piracy somewhat, but the latest incidents indicate that even more effective measures are necessary. *Fairplay, 14.10.2004*

JAKARTA, Aug 6 (Reuters) - Thailand will join three other Southeast Asian navies in patrolling the vital Strait of Malacca shipping lane to combat piracy and terrorism, Indonesia's military chief said. The development came after Admiral Sir Alan West, Britain's top navy officer, said in an interview published on Thursday that intelligence showed Osama bin Laden's al Qaeda planned to target merchant shipping to disrupt world trade. Ports and strategic sea lanes such as the Strait of Malacca posed the biggest risks as ships stack up in numbers, West was quoted as saying by Lloyd's List maritime newspaper.

More than 50,000 commercial vessels sail the 800-km (500-mile) channel each year. General Endriartono Sutarto said Indonesia, Malaysia and Singapore, which launched joint patrols in the strait in July, were open to offers of help from other countries. "Last week, we expanded with Thailand to conduct coordinated patrols. We are still open to other countries outside the current four if they want to offer assistance," Sutarto told reporters late on Thursday night. A top Thai navy officer said Bangkok and Jakarta were still in consultations over patrols in overlapping waters in the Andaman Sea at the Western entrance of the Strait of Malacca and there were no plans actually to enter the strait. Any agreement would need approval from both governments. "But this is a major positive development in relations of the Thai and Indonesian navies," Captain Wasinsan Chantawarin, head of the Thai Naval Operations Task Force, said on Friday.

Recent suggestions by the United States that its forces play a more active role in strait security sparked opposition from Malaysia and Indonesia, whose officials said they could take care of the matter. Singapore seemed more open to the idea.

Since the issue emerged, the littoral states have moved to increase activities, with the coordinated patrols. The narrow strait between Malaysia and Indonesia, with Singapore at its southern entrance, carries more than a quarter of world trade and almost all oil imports to Japan and China. Piracy has plagued the strait for centuries, but has worsened in recent years and since the Sept. 11, 2001 attacks on the United States the possibility of terrorist strikes has emerged. Terrorism experts say the al Qaeda-linked regional Jemaah Islamiah militant network was also seeking to strike ships in the strait. "There is no discounting the threat is real ... It seems to be a terrorist incident waiting to happen," said Andrew Tan of the Institute of Defence and Strategic Studies in Singapore.

The International Maritime Bureau recorded 445 pirate attacks last year, the second-highest since it began compiling data in 1992. Of those attacks, about one-third took place in Indonesian waters, including in the Strait of Malacca.

AROUND THE WORLD

Shore leave for seafarers contribute to safety.

The shipping industry has formed a united front to call on governments and authorities worldwide for cooperation when dealing with seafarers in the context of tighter maritime security, Intertanko advises. The Round Table of international shipping associations stands alongside the ITF in a campaign highlighting the right to shore leave. The IMO chose Maritime Security as the theme of this year's World Maritime Day on September 30. On that day, seafarers, their employers and their trade unions unite to ask governments worldwide to allow mariners the hard-earned rest they need when they spend a few hours ashore after weeks or months confined on board their ship. The temptation is there for security enforcement authorities to go for the easy way out by refusing seafarers the right to go ashore and threatening dire consequences if anyone so much as sets foot on

shore. This has been seen in practice, especially in the US, since the July 1 enforcement of the ISPS code. The shipping industry is therefore actively encouraging authorities to work together with the ships arriving in their ports, rather than treating visiting seafarers as potential terrorists. – *Asia Pacific Shipping, October 2004.*

It seems that the predicted shortage of senior maritime expertise is now being felt in much of the traditional maritime world. Anecdotal evidence suggests that many employers in Europe, Australasia and even in many Asian countries are facing significant difficulties in filling senior positions on ships and ashore with mariners of the expertise they are traditionally accustomed to. The bottom line is that too few people have been trained in the last two decades to replace the aging senior pool, let alone meet the needs of an expanding fleet. In many cases, those who have been trained have been selected for their cost benefit and not with a view to developing future leadership and management for an essential industry.

These thoughts have appeared consistently in the industry's journals and conferences for years. The situation should therefore be of no surprise and few could reasonably argue that the situation facing the industry has not been self-inflicted. It is also difficult not to agree with those who predict that the shortage will be significantly worse in the next decade. The BIMCO/ISF Manpower Study is to be updated next year and many will be awaiting the results with apprehension rather than keen anticipation.

Despite this there have been promising signs. Certainly there appears to have been some increase in training. There has also been increased agreement from industry leaders at recent international conferences that we need to ensure the development of our industry managers. Unquestionably, non-mariners can be trained to fill some or even most of the positions ashore traditionally occupied by those with senior seagoing experience. The time and cost involved in so doing however continues to be debated through the industry. Unquestionably

there are also positions where seagoing experience is absolutely essential. The current state of the order books should be further increasing industry concern. Certainly we appear to be looking at an era of extremely rapid promotion for young qualified officers. Yet even today we have many ships with vacant cadet cabins and companies making minimal effort, if any, to invest in their own long-term future. Many reasons for this are offered but few provide reassurance that manpower planning in the industry as a whole looks much further out than a few years at best. Compounding the problem in the so-called traditional maritime countries is the widely reported difficulty in recruiting and retaining young people of the calibre of the past. It also appears that training subsidies may have distorted the situation in individual countries to the point where many more people are being trained than can be offered positions after training.

The situation in New Zealand is very different on both accounts. Many more young people than can be accepted seek the limited number of cadetships available. Others put themselves through parts or all of their initial two years of training in anticipation of finding a berth to obtain the required seatime. Again, finding these berths is very difficult. Yet those who do qualify are highly sought after and there are normally many more job offers from international shipping and manning companies than there are graduates. This is a frustrating situation for New Zealand Maritime School Director, Captain Tim Wilson who advises that the school's front ended training ensures that companies do not have to meet any shore based training costs. They can also be assured before they hire that a cadet has demonstrated commitment to the industry, received hundreds of hours of simulator training and already passed virtually all of the academic and examination requirements for an officer of the watch certificate. This has both significantly reduce the cost and the risk for employers. Finding the sea-time required to qualify is still, however, a difficult challenge for many students. Captain Wilson welcomes contact from any companies who may be able to provide training berths and is very confident that companies will not be disappointed in the quality of the cadet and officer they get. *Asia Pacific Shipping*

How seafarers are taking the strain

Research into the impact of seafaring on family life has raised alarms at the worrying numbers of crewmembers who commit suicide. The 135-page report published by the Seafarer's International Research Centre in the British Centre at Cardiff University suggests some 5% of death in the British, Hong Kong and Singapore fleets between 1981 and 1995 were suicides. And the researchers warned of a "particular striking" high proportion of suicides among seafarers in the British merchant fleet – 27 such deaths between 1990 and 1996 – when compared with other industries. Two of the 15 officers interviewed by the researchers had contemplated suicide whilst at sea as a result of relationship problems and three had said they had been so concerned about their psychological well-being that they had sought professional help once ashore. Titled "lost at sea and lost at home: the predicament of seafaring families" the report was produced with the help of NUMAST and a number of members and their partners. The researchers aimed to shed some light on the neglected issues of the effects of seafaring work patterns on family life. It examined the coping strategies used by seafarers and their partners and changes that could be made to improve the situation. Seafaring is an inherently psychologically demanding job, the report points out, long working hours, fast turn-round times and reduced crewing levels all reducing the opportunity for social contact. Research in Australia found 60% of seafarers suffering moderate to high stress levels, while a Dutch study had identified loneliness, homesickness and "burn-out syndrome" as the three main psychological problems among seafarers. The SIRC investigation aimed to explore the way in which repeated and prolonged absences from home and family may create adverse effects on seafarer's emotional well-being. "Seafaring schedules, whether involving trips of weeks, months or even years, will involve a constant process of change, readjustment and translation for both seafarers and their families" the report points out. "Unlike workers in many other occupations, the majority of seafarers do not, and indeed cannot, return home at the end of the working day, or even the

working week. Seafaring means a life of constant partings and reunions." In this context, the report stresses the importance of good ship to shore communication – with regular communications enabling seafarers and their partners to remain emotionally close and offering an opportunity for seafarers to participate in family decisions and events while at sea. Many seafarers and their partners said email had dramatically improved the connection between home and sea, giving an immediacy and a detail to communications that had not been possible previously. However, some seafarers also spoke of the way in which improved communications also made them feel frustrated about not being able to help with problems and more aware of their separation. The report warns that the shipping industry has been slow to utilise computers and telecom facilities, with email access often restricted and call charges sometimes being prohibitively high – often curbing the length or frequency of communication. Improvements in communication technology have been counteracted by a corresponding reduction in shore-based telephone points to call home and major reductions in time spent in port. Contact with home has become increasingly important because of developments in seafaring which have created additional social isolation, the study points out. "Changes in crewing patterns meant that relationships at sea were often limited to "onboard acquaintances" and, where relationships did develop, geographical separations and unsynchronised leave periods made the maintenance of these relationships problematic" it adds. Shipboard culture seems to frown on "problem-sharing" or "emotional talk" and Masters and senior officers told the researchers how rank can also prevent such discussions. The nature of the job also makes it hard for seafarers to sustain friendships ashore, with many reporting that they are dependent on their partners and their partner's friendship networks for social contact and support. Most of the seafarers in the study spent most of their time ashore in home-based or couple or family-oriented activities. Even worse, many seafarer's partners complained of social isolation and a feeling that their problems were not always appreciated by women whose partners worked ashore. Both seafarers and their partners also spoke of the pressures created by children – limiting the

partner's ability to work and socialise and adding to the emotional difficulties of absence from home. Particular problems were reported by seafarers before and after the start of coming home. A study among Australian seafarer's wives found 83% reporting some degree of stress when their partners were due home or due to return to sea and almost one in ten were taking medication to cope. Many of the partners told the SIRC researchers that they found it hard to readjust when seafarers came home. Some women complained about their partners making them feel like junior officers and the tensions arising from the return of a partner after they had successfully been managing the household. Similarly some seafarers said they felt "redundant" in a home that functioned well without them and they also complained of the challenges in unwinding after being at sea – with sleeping problems frequently mentioned as a difficulty. The SIRC report also shatters the stereotype of the promiscuous seafarer, finding that the majority of those in the study remained sexually monogamous and were resigned to long periods of abstinence while at sea. Several of the seafarers and their partners expressed frustration about the length of these breaks in their sexual relations and a lot of the women spoke of how they missed physical contact such as hugs and kisses. Some of the women however, even saw these periods of sexual abstinence as a benefit of the seafaring lifestyle and both seafarers and their partners spoke of the difficulties in re-establishing such relationships after the break. Trust, frequent communications and good social support networks were identified as crucial "coping" strategies for dealing with the seafaring lifestyle. Wives most frequently mentioned "keeping busy" – through work, social activities, child care and domestic duties – as the best way of mitigating their husband's absences. Seafarers and their partners came up with a number of suggestions to improve their lives. Shorter tours of duty and increased access to cheaper or subsidised communications topped the list. Company support to get seafarers home at times of crisis was also seen as important, along with opportunities for partners and families to go to sea. Contact with other

seafaring families – perhaps through company-arranged social events – was also suggested. The report points out that seafarers from developing countries are likely to face far more severe problems.

TECHNOLOGY CORNER

Satellite tracking moves closer

Commercial vessels heading for US ports on both the Atlantic and Pacific oceans are to be kept under continual surveillance from satellites, with information being fed to the US Coast Guard. Fairplay Daily News reported yesterday that the US was considering going it alone in long-range vessel tracking. But it appears now that that decision is moving forward, with a plan to have US-bound merchant ships under surveillance from 2,000 n-miles at sea. Dana Goward, chief of programs and architecture for the Coast Guard's maritime domain awareness programme, told Fairplay the first such satellite had already been contracted and will be launched by the end of 2005. The balance will be put up within 10 years. The orbiting trackers will be able to monitor Automatic Identification System transmissions from vessels and pass that data along to a central location. Goward says the 2,000 n-mile range is based on how far the average vessel travels during the existing 96-hour notification rule. He said log and port information is important, but that the Coast Guard wants to know if any vessels deviate from their announced routes. *Fairplay, August 2004*

Synchronous rolling

In October 1995 the IMO, through its Maritime Safety Committee, published circular 707 highlighting a number of dangerous situations that may occur when sailing in following and quartering seas that could cause great damage to the vessel and its cargo, and in ultimate scenarios might lead to the loss of the vessel. In the past, when planning ocean voyages we have focussed on the vessel's speed and the economical impacts of delayed arrivals. When adverse weather was encountered the ships behaved accordingly and ship's speed was reduced or a different course steered. With today's modern, fast and very large container vessels and cruise ships

deterioration of weather conditions can creep up on you unnoticed until it is too late. Standing on the bridge of one of these ships towering above the crests of the waves, even fairly high waves seem insignificant and don't seem to have any impact on the ship until it is too late.

Looking at the statistics may indicate that heavy weather damage occurs only on containerships and some observations indicate that the shape of the ship's hull may contribute significantly to the damage. In particular the high flare angles of this type of ship appears to exaggerate the vertical and lateral motions in the ship. However we find the same characteristics in a large number of modern cruise ships, their only saving grace is the less dramatic sailing areas and the smaller total numbers of ships. Yet those cruise ships that do venture across the Atlantic in the fall or winter do share in the damage.

The question is what is the cause of the heavy weather damage? Is it the ship's construction, the chosen route or the ship's course and speed? In this series of articles we will give you some tools on how to recognise the circumstances that may lead to heavy weather damage and ways to safely manoeuvre out of the dangerous situation.

In this issue of News and Views we shall look at the phenomena of synchronous rolling. Synchronous rolling occurs when the natural rolling period of the ship coincides with the encounter wave period, resulting in large rolling motions of the ship. This may happen when the transfer stability of the ship is large, thereby causing a shorter natural roll period of the ship, while sailing in high quartering or beam seas.

To understand synchronous rolling we must first look at some basic definitions on waves:

- the wave period is the time in seconds from wave crest to the next wave crest (T);
- the wave length is the length between two successive wave crests.
 - wave period relates to the wave length $\lambda = g.T^2/2\pi$ or $T = 0.8\sqrt{\lambda}$;
 - wave period relates to the wave velocity $C = g.T/2\pi$ (therefore

waves with long periods move faster than waves with short periods).

- The encounter period is the period in which the ship meets the waves (period of the pitching of the ship in seconds), it is depending on
 - Wave velocity
 - Ship's speed
 - Relative heading of ship into the sea

For beam seas the encounter period is equal to the wave period; for head waves the encounter period is shorter than the wave period and for following seas the encounter period is normally* larger than the wave period (*with low wave period and high ship's speed the encounter period can be higher when the ship overtakes the waves).

- The natural rolling period of the ship: imagine you heel the ship to a certain angle and then release it again. When you release the ship it will roll in its own natural roll period. The natural rolling period of the ship depends on amongst others the shape of the underwater ship (including bow flare and flat stern) and therefore on the GM. It can be estimated by the formula:

$T_{roll} = 2\pi \cdot 0.4B/\sqrt{g \cdot GM}$ and is dampened due to:

- Forward speed
- Bilge keels
- Active stabiliser fins

When the natural rolling period of the ship approaches the encounter wave period, the roll motions of the ship will be amplified. Depending on the effectiveness of damping mechanisms on your vessel, such as bilge keels and active stabilizer fins, the roll angle can quickly resonate to angles of 50° or more. This is most likely to occur in high quartering and beam seas. Considering the periods of big waves between 10 - 15 seconds, depending on the beam of the ship, the natural rolling periods of light loaded or ballasted panamax and post-panamax container ships and cruise ships are well within the probable occurrence range for these waves. Tank trials indicate that the lighter the conditions (the larger the GM) the higher the rolling angle.

To prevent synchronous rolling to occur, you should be aware of the natural rolling period of your vessel and the wave periods en-route. The ownship's natural rolling period should be measured in calm water after each loading or unloading port, while wave periods are measured by a stopwatch and the wave direction is estimated by visual observation or watching radar image. While planning the voyage, wave-period prognosis should be used to determine the best route.

For example a panamax cruise ship (B = 32m) with GM = 6.5m has a natural rolling period of 10 seconds. When this ship is sailing in a wave pattern with a period of 11 seconds, this vessel would experience synchronous rolling conditions when steering a course parallel to the wave crests: For beam seas the encounter period is equal to the wave period irrespective of speed. The only option to the Master to change the encounter period in this case is to alter course.

Another example for a light post-panamax container vessel (B = 42m) with GM = 3.6m and a natural rolling period of 18 seconds in the same wave pattern with a period of 11 seconds, can expect the highest (synchronous) rolling to occur with stern quartering seas, when sailing with a speed of 20 knots. In this case the Master can either alter course or speed to change the encounter period, and therefore out of the synchronous rolling conditions.

NEXT MEETING

TUESDAY 16 November 2005

18.00 for 19.00

Venue

Volunteers Room

The New Zealand National Maritime Museum
Hobson Wharf

the ISPS CODE

Initial & Ongoing impact on operations

JIM BEGG, Acting General Manager Maritime Security, MSA will talk on the challenges that MSA faced for a timely implementation of the code, with an update to current state of affairs.

MICHAEL GLADMAN, Ports of Auckland Port Facility Security Officer, will give us an impression of the impact of the ISPS code on the operations in the Port of Auckland.

MIKE MCDONNELL, Master ms "Saga Wind" will tell us how the ISPS code has affected the onboard operations.

Entry via "The Waterfront" where bar and refreshments are available.

You are invited to a free seminar with

MALCOLM LOWLE

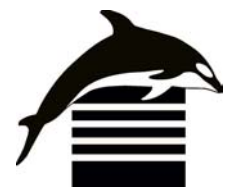
"Loss due to the Human Element"

Malcolm, a former Master with Shell Tankers, is currently safety advisor to Silver Fern Shipping. He came ashore in 1987 first as Head of Ship Inspections for Shell and later as Safety Advisor. After several prominent tasks and functions within Shell he finally became HSE Manager for Shell International Trading & Shipping (STASCO). Most recently he was a major participant in the recent development and publication of the ICS code on Ship Recycling. The seminar will be held on

26 November 2004

from 10.00 - 15.30 hrs, at the New Zealand Maritime School, level 3, 132 - 138 Quay Street, Auckland.

RSVP to your secretary



The New Zealand Branch of the Nautical Institute wishes to acknowledge the assistance of the New Zealand Maritime School in printing this newsletter. For enquiries on all courses please call +64 9 379 4997, email maritime@manukau.ac.nz or visit the School at <http://maritime.manukau.ac.nz>