year of the seafarer  singapore  president s r nathan on seafaring  broadband on board  sibcon 2010
WE PROVIDE
SAFETY AND SUPPORT AT SEA

With over 4,000 employees and a diverse fleet of more than 550 vessels, SVITZER provides towage, salvage and related marine services world-wide.

SVITZER Salvage serves the marine industry with extensive Emergency Response, Wreck Removal and Cargo & Oil Recovery services, and with a groundbreaking Prevention and Preparedness programme. We assist our clients to minimise risks and impacts of marine accidents, by all means.

- Prepare & Act for the safety of your operations
- Casualty response by constructive teamwork
- Wreck removal, preventing loss of assets and environmental damage

SVITZER Salvage Asia Pte. Ltd.
No. 4 Penjuru Lane
Singapore 609185

Phone: +65 622 49644
Phone 24 hrs: +31 255 562666
Fax: + 65 622 43569
svssin@svitzer.com
www.svitzer.com

A part of A.P. Moller - Maersk Group
CONTENTS

No: 13

04
SHIP’S LOG
NEWS AND EVENTS
AT MPA

10
MARITIME SERVICES
• NORTH GOES EAST
• SETTLE YOUR
DISPUTES HERE

16
PORT & STARBOARD
FUELLING THE WORLD’S FLEET

20
FEATURE
SEAFARERS:
HEROES OF
THE HIGH SEAS

26
TECHNOLOGY
AT SEA & ONLINE

28
COMPANY SPOTLIGHT
RIDING A SWELL

31
COMMENTARY
SINGAPORE PRESIDENT
S R NATHAN: CALL OF
THE SEAFARER

34
PERSONALITY
• PETER BRADY: THE SEAFARER’S KNIGHT
• GOH TEIK POH: STRONG
FOUNDATIONS

38
COMMUNITY TALK
REDUCING GHG EMISSIONS
FROM SHIPS

40
PORT & STARBOARD
FUELLING THE WORLD’S FLEET

42
MARITIME CAREERS
DEAL CHASERS

44
THE BACK PAGE
NAVIGATION GUIDES

executive editor
Lam Wee Shann

advisory committee
Lam Yi Young
Khong Shen Ping
Tan Beng Tee
Yee Cheok Hong
M Segar Abdullah
Toh Ah Cheong
Tan Cheng Peng
Cheong Keng Soon
Leanna Lim

managing editor
Gary Low

managing director
Dennis Pua

general manager
Christopher Tay

group editor
Joanna Lee-Miller

senior editor
Azreen Noor

contributing editor
Audrey Perera

sub-editor
Winnie Fong

associate creative director
Alex Goh

art director
Ginny Gay

group account manager
Charmaine Soh

manager
Mavis Liang

assistant manager
Azreen Noor

manager
Loo Pei Hwa

business development
Petrina Hui

senior coordinator,
publishing services
Wendy Ong

Singapore Nautilus is published quarterly
by SPH Magazines Pte Ltd (Registration No: 196900476M) for Maritime and Port Authority of Singapore (MPA). Copyright of the materials contained in this magazine belongs to MPA. Views expressed may not necessarily be those of MPA nor SPH Magazines Pte Ltd. All rights reserved. Enquiries should be directed to the Editor, Maritime and Port Authority of Singapore, 460 Alexandra Road, #19-00, PSA Building Singapore 119963. Tel: +65 6375 1600, Fax: +65 6276 8927, Email: SN_feedback@mpa.gov.sg. All information is correct at time of printing. Printed in Singapore by KHL Printing Co. Pte Ltd (Registration No: 197801823M). ISSN 2010-1120

For advertising enquiries, please email jrani@sph.com.sg
Sea Asia
12-14 April 2011
Marina Bay Sands®
Singapore

Conference theme
THE ASIAN VOICE IN WORLD SHIPPING
Includes other sessions on SHIP FINANCE, TECHNICAL DAY and OFFSHORE & ENERGY!

A Proven Platform that Connects You to the Global Maritime Community

Sea Asia 2011 on target to deliver:
13,600 sqm of exhibition space (gross)
12,000+ participants
380+ exhibiting companies

REGISTER YOUR INTEREST TODAY!

Tel: +65 6294 2280 | Fax: +65 6294 2780 | Email: info@seatrade-asia.com

www.sea-asia.com
FOREWORD

Working at sea

This issue of Singapore Nautilus draws inspiration from the International Maritime Organization’s theme for World Maritime Day: Year of the Seafarer. In our main feature, Heroes of the High Seas, we ask four seafarers how they feel about being a seafarer, and take a look at some of the initiatives Singapore has in place for seafarers.

In Commentary, we showcase excerpts from Singapore President S R Nathan’s book Why am I here?, a personal account of his work and struggles as a seaman welfare officer during Singapore’s formative years.

To give readers a better appreciation of the wide range of careers that are available in the maritime industry, as well as the people behind the job titles, we’ve introduced the new Maritime Careers section.

Your feedback is important to us. Do let us know your thoughts and suggestions on Singapore Nautilus so far, by writing to us at SN_feedback@mpa.gov.sg.

Wee Shann
executive editor
Visit by Chinese Ambassador to Singapore

Ambassador Wei Wei and delegation from the Chinese Embassy in Singapore with Mr Lam Yi Young, Chief Executive, MPA.

Visit by High Commissioner of India to Singapore

Mr T C A Raghavan, High Commissioner of India to Singapore, calls on Mr Lam Yi Young, Chief Executive, MPA.

Visit by Transnet National Ports Authority

Officials from the Transnet National Ports Authority, South Africa, visit MPA, led by Mr Khomotso Phihlela, Chief Executive.
Visit by German Parliamentary Group

MPA hosts the German Parliamentary Group at the Port Operations Control Centre (POCC2).

Visit by Zhejiang, China

Delegation led by Zhejiang Executive Vice Governor Chen Min'er visits MPA.

Visit by Thessaloniki Port Authority

Mr Stylianos Aggeloudis, Chairman and Managing Director, Thessaloniki Port Authority, Greece, calls on Mr Lam Yi Young, Chief Executive, MPA.

Visit by Israel Ministry of Defence

Delegation from the Israel Ministry of Defence, led by MG (Res) Ehud Shani, Director-General, visits MPA.
Gift of a Jewel

The Jewel of Muscat, a handmade 9th century dhow, completed a five month voyage from Oman to Singapore on July 3 this year. Presented as a gift from Oman to Singapore, the Jewel of Muscat had sailed to Singapore, making stops in India, Sri Lanka and Malaysia along its journey.

The ship will be the centrepiece of the Maritime Xperiential Museum at Resorts World Sentosa. The museum, scheduled to open after 2010, will showcase the sea trade that existed between Asia, the Middle East and Europe between the 9th and 19th centuries.

Hailed as a masterpiece of maritime engineering, the 18m-long ship was built without nails or screws. True to the original methods used, planks from India and Ghana were sewn together using coconut fibre rope. The outside of the hull was covered with a layer of goat fat, lime and crushed seashells, for additional protection from the water. The square sails are made from palm leaves, as they were centuries ago.

The crew used 9th-century navigation techniques, plotting the course with a kamal (a small block of wood connected to a piece of string that can calculate latitude), the stars and the sun. Changes in sky and sea colour, marine and bird life, and wind direction were used in navigation too. Modern instruments were used only as backup and to verify the accuracy of the traditional techniques.

The Jewel was designed based on historical sources and the findings of the Belitung Wreck, discovered in 1998 near Indonesia. It was this wreck which started the whole project.

The ship contained Chinese pottery, indicating that it was returning home from China when it sank. Its discovery proved that there was sea trade between Arabia and the Far East as early as the 9th century.

Singapore was presumably to have been a stopping point for this vessel. Historically, ships from Arab destinations stopped in Singapore or in ports nearby to await the change of the monsoons, before continuing their journey eastwards to China or in the opposite direction.

Fast forward to the present. Befitting such a special vessel, the Jewel of Muscat was welcomed in grand style when she docked at the Marina Keppel Bay – a toast to a rich shared history between Oman and Singapore, and a promise for the future.

For an industry that employs about 150,000 people and growing, it is vital that there are enough trained professionals year-on-year. Enter the joint MPA and Maritime Outreach Network (MaritimeONE) Scholarship Awards – a collaborative effort by MPA and MaritimeONE partners.

At the awards ceremony on August 3, 2010, 10 MPA Scholarships, two MPA Sponsorships, seven Tripartite Maritime Scholarships, one Seafaring Alternative... An Investment For Life (SAIL) scholarship and 21 MaritimeONE Scholarships were awarded for maritime-related studies. Almost 700 students applied for the scholarships this year, a sign of keen interest in maritime careers. This is good news, given the projected growth of Singapore’s maritime sector in the future.

Some of the scholarship awardees.
Singapore Korea MOU

An established relationship was formalised on paper on August 23 when MPA and the Ministry of Land, Transport and Maritime Affairs (MLTM), Republic of Korea, signed a Memorandum of Understanding (MOU).

The MOU will strengthen the good relations between the two countries in the maritime domain, and provide the platform for even closer cooperation between the two agencies.

The shared areas of focus include the safety of navigation and protection of the marine environment, through international forums such as the International Maritime Organization (IMO), the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and the Cooperative Mechanism on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore. MPA and MLTM will also share technical expertise through forums, workshops and seminars.

“This MOU is not only a reflection of the current close cooperation between MPA and MLTM. It’s also a new milestone for both as we seek to enhance our cooperation in promoting safety of navigation, protection of the marine environment, and maritime and port security,” said Mr Lam Yi Young, MPA’s Chief Executive.

To further encourage the development of quality maritime manpower in Singapore, three new manpower development schemes will be introduced to the MPA’s MCF.

They are Training@Maritime Singapore, Talent@Maritime Singapore, and InvestManpower@Maritime Singapore. These enhancements will allow maritime organisations and individuals to benefit from more supportable training and development activities.

In-house training will now be eligible for funding under the Training@Maritime Singapore scheme to encourage maritime enterprises to provide customised training in Singapore. Talent@Maritime Singapore aims to support the grooming of local talent for management and leadership positions, while the third scheme, InvestManpower@Maritime Singapore, supports enterprise-specific and industry-wide training.

This scheme encourages maritime companies to invest in training infrastructure or adopt human resource tools and processes to develop their talent pool. Accredited maritime certification programmes and the establishment of training facilities are also potential projects under this scheme.

“The Singapore MI and the enhancements to the MCF are initiatives aimed at bringing maritime R&D and manpower capabilities in Singapore to the next level,” said MPA Chief Executive Mr Lam Yi Young. “These initiatives are important in building a sustainable pool of talent to support Maritime Singapore’s growth, and are in line with MPA’s mission to develop Singapore as an international maritime centre.”
It's about raising the level of professionalism in maritime policy, academic and R&D capability, and grooming the next generation of maritime talent. These are the aims of the Singapore Maritime Institute (MI), a joint effort by MPA, the Agency for Science, Technology and Research (A*STAR) and the Economic Development Board (EDB), in partnership with local institutes of higher learning.

MPA has committed up to $200 million over the next 10 years, while further research funding may come from A*STAR and EDB.

Speaking at the Singapore Shipping Association's 25th anniversary gala dinner, Deputy Prime Minister and Minister for Defence Teo Chee Hean announced the initiative.

“The Singapore MI will adopt a holistic approach to developing Singapore’s maritime education. It will drive research and development in key areas such as shipping, port, maritime logistics and operations, as well as marine and offshore engineering. It will also attract renowned academics and researchers to Singapore, and groom the next generation of local maritime talent,” he said.

Mr Teo Siong Seng, President of the Singapore Shipping Association and Managing Director of Pacific International Lines (Pte) Ltd, will be the inaugural Chairman of the Singapore MI Steering Committee.
TIME TO NAME THE BEST
CALLING THE MARITIME COMMUNITY IN SINGAPORE – THE 2011 EDITION OF THE SINGAPORE INTERNATIONAL MARITIME AWARDS (IMA) IS OPEN FOR NOMINATIONS

INTERNATIONAL MARITIME AWARDS 2009
Last year’s IMA was held in April, and the awards went to:

- International Maritime Centre Corporate Award: BW Group, for its strong support of Singapore’s IMC through its expansion of activities here.
- International Maritime Centre Individual Award: Mr Choo Chiau Beng, Chief Executive Officer of Keppel Corporation and Chairman of Keppel Offshore & Marine, for his numerous contributions to developing Singapore as a leader in the offshore and marine industries.
- Excellence in Training Development Award: Nanyang Technological University, for the expansion and continuous enhancement of its various maritime-focused undergraduate and graduate courses.
- SRS Shipowner of the Year Award: Ocean Tankers (Pte) Ltd, for its excellent Flag State and Port State Detention Records.
- Bunker Award: Global Energy Trading for its strong reputation as a safe, reliable and diversified bunker supplier.
- Maritime Service Provider Award: Standard Asia for its exceptional professional performance and contribution to the maritime sector.
- Offshore and Marine Engineering Award: Keppel Offshore & Marine for its leadership in the design and construction of rigs and FPSO conversion, as well as its strong maritime manpower development and R&D.

It’s the Singapore maritime industry equivalent of the Oscars. The prestigious IMA recognises individuals and companies for outstanding contributions to the country’s development as a premier global hub port and international maritime centre.

It will present awards in seven categories, namely:

- International Maritime Centre (IMC) Award (Corporate and Individual)
- Excellence in Training Development Award
- Outstanding Maritime R&D and Technology Award
- SRS Shipowner of the Year Award
- Bunker Award
- Maritime Service Provider Award
- Offshore and Marine Engineering Award

Nomination forms and assessment criteria for the IMA 2011 are available at www.mpa.gov.sg, and nominations will close on December 22, 2010.

IMA 2011 will be held in conjunction with the 6th Singapore Maritime Week (SMW), the country’s iconic maritime show.

SMW, the most important maritime event in Singapore, gathers international industry players together for a week of conferences, dialogue, exhibitions and social events.

The activities and events are organised by MPA, corporations, and research and educational institutions. The cosmopolitan profile of participants reflects the diversity of Singapore as an international maritime centre, and the range of issues discussed is a major draw for decision-makers, as are the many business networking platforms.
Adequately servicing a growing regional membership and working in a stable local economy are paramount to marine liability insurer North of England (North) Protection and Indemnity (P&I) club. The firm found both in Singapore — a fact North manager Iain Beange, who helped pioneer the Singapore setup, much appreciates.

“We were getting more business in Singapore. We also needed a bigger Asian presence to look after our members... to handle claims and general enquiries, too.

“Shipowners from India, Japan and Europe were moving into Singapore to take advantage of the Approved International Shipping Enterprise (AIS) scheme because of the stable economy. We needed a Singapore office to complement the one in Hong Kong.”

North set up shop in Singapore in May 2007. Today, both its Hong Kong and Singapore offices jointly manage the Newcastle-based club's Asian operations.

“There is no strict demarcation of Asia between us. We work closely with the Hong Kong office, and together cover the area from India to the US west coast.”

The firm's Hong Kong office focuses on the SAR, China and Korea, while the Singapore operation covers Malaysia, Indonesia, Australia, Japan and Singapore — a particularly important market.

“We have the largest membership percentage in any concentration in the region in Singapore, be it in terms of ships entered through the Singapore branch office, or shipowners with offices here.”

North members include Singapore-based shipowners with Singapore-flagged vessels, foreign shipowners and ship chartering companies. These include Ocean Tankers, BW Maritime, Pacific International Lines, Rickmers Maritime, Norden Tankers and Bulkers, U-Sea Bulk, Tanker Pacific and Mercator Lines.

Beange notes that the biggest perk of being in Singapore is the sheer volume of shipowners with a presence here. “Singapore has become a major maritime hub, and we've got a growing book of business in Asia.”

He lets on that Singapore's growing role as a port of call attracts not only shipowners, but support services companies, too. These include marine insurers, shipping banks, maritime lawyers and ship brokers. For Beange, the country's stable economy, safe environment and well-organised and structured financial
sector further enhance its attractive qualities as a regional springboard. "In light of these and the assistance we knew we'd get from the Singapore authorities, it was clear — there was no reason for us not to come to Singapore, and every reason to do so." The Maritime and Port Authority of Singapore (MPA) and the Monetary Authority of Singapore (MAS) have been particularly helpful, he reveals. "The relationships we developed with MAS and MPA even before we opened were very encouraging," says Beange, citing the training and business development support the company received. North — with its 150-year history, an "A" ranking from Standard & Poor's, and a membership of 120 million GT — carefully considered the situation before deciding on Singapore. "The directors decided that if we were to go to Singapore, we go to stay. We were not going on a trial basis; we were going to settle here."

He points out that just as shipowners have made a commitment to grow in Singapore and Asia, P&I associations should do likewise. "Shipowners come out here and make a very big commitment to the region, in establishing offices in the size and the manner they have. They've set a good benchmark for forward-thinking P&I clubs. We see Singapore and Asia in general developing strongly. Considering Singapore's drive to create a maritime hub, the benefits to major maritime liability insurers like North are obvious."

Finding the right people

With this upbeat outlook, North plans to expand its local operations. Its Singapore office currently has three staff handling P&I claims, two on freight demurrage and defence, and two support staff. "The recent recession slowed things down a bit. Still, we have firm views about expanding our business in Asia, and it's a natural correlation that the staffing in Singapore will expand."

Although there is no formal recruitment drive, Beange says North is always on the lookout for qualified and accomplished staff. "We don't generally use recruitment agencies, but go through personal contacts.

We're always looking for experienced people with a strong connection to the maritime industry, be they maritime lawyers, insurers or even former seafarers."

Beange, who has some 15 years of seafaring experience, says the shortage of manpower in shipping also affects supporting industries. The former ship master, who came ashore in 1993, notes: "The shortage of experienced qualified sea staff has a knock-on effect because ultimately, there will be a shortage of good people in the operations and technical departments of shipowners and government offices." The Singapore government has created an environment where people can run a business and make money, with reasonable certainty of a stable environment. Because business needs manpower, the government has also created an environment that supplies this manpower. "The Singapore government has created an environment where people can run a business and make money, with reasonable certainty of a stable environment. Because business needs manpower, the government has also created an environment that supplies this manpower."

The government, partnering the industry, needs to find ways to make employment in the latter more attractive to young people. This means educating them on the maritime industry and its employment prospects.

"Singapore, to help itself grow as a maritime hub, may need to do more..."
of this because it will be expected to provide labour for these companies.”

It’s heartening, notes Beange, that the country is aware of the issue and taking the necessary steps. Among its initiatives is the Maritime Outreach Network (MaritimeONE), which serves as a key platform for maritime stakeholders to collectively raise awareness of the industry and attract quality manpower to it.

Jointly launched in 2007 by the MPA, Singapore Maritime Foundation, Association of Singapore Marine Industries and Singapore Shipping Association (SSA), its programmes include MaritimeONE scholarships and partnership activities such as student outreach events and NetworkONE reception events.

Close-knit community
“One of the biggest benefits of a maritime community such as Singapore’s is that it’s condensed. You have a large community in a small area with regular opportunities for networking. As Singapore has a very close-knit maritime community, it’s easy to maintain a presence and also to stay in touch with your clients,” says Beange.

He adds that the SSA, for instance, does a good job in collating vested interests in various venues and forums to network and exchange ideas.

This sense of community is one of the things Beange misses most about Singapore. He returned to North’s UK head office in September for family reasons, but still makes business trips here. James Moran, who has worked in the club’s Hong Kong and Singapore offices for four years, is now in charge of the local office.

“Considering Singapore’s drive to create a maritime hub, the benefits to major maritime liability insurers like North in setting up here are obvious.”

Singapore Nautilus is the quarterly corporate publication of the Maritime and Port Authority of Singapore. Reaching out globally, the magazine covers the latest maritime-related news and initiatives in Singapore, and provides a platform for thought leaders to share ideas on international maritime trends and developments. You can sign up for a free subscription to Singapore Nautilus by e-mailing us at SN_subscribe@mpa.gov.sg
SETTLE YOUR DISPUTES

WHY FLY ACROSS THE WORLD TO LONDON WHEN YOU CAN RESOLVE A MARITIME DISPUTE RIGHT HERE IN SINGAPORE? BY VINCENT WEE
The shipping world is in many ways a contradictory one, being at the forefront of global trade while still being bound by many antiquated traditions and ways of doing business. Perhaps one of the most stark examples of this contradiction is in the area of maritime arbitration.

While there has been a perceptible shift toward Asia in the shipping industry, many industry players still look to London and the London Maritime Arbitrators Association (LMAA) as the basis of their dispute resolution process. This is an anomaly that Singapore Chamber of Maritime Arbitration (SCMA) Executive Director Lee Wai-Pong would like to correct.

SCMA underwent a pivotal change last year when it became a separate entity from the Singapore International Arbitration Centre (SIAC). Previously, the chamber was a part of it. Feedback from the shipping community indicated that they were not comfortable using the SIAC’s rules and clauses because they were too different from what they were used to. SCMA’s rules now follow the approach of the LMAA, providing greater familiarity to shipping players.

The resultant change has been a key turning point for SCMA. It has about 20 cases on its books since last May, compared to just a handful in the five years before this, from 2004 when it was initially formed. While this is a significant improvement, it is still far off from the estimated 2,500 cases which the LMAA handles. Lee is working hard to raise awareness about what SCMA can offer — and hopefully, the number of cases too.

Ripe for resolution

There is already a large shipping community in Singapore as a rapidly growing international maritime centre. More shipowners, charterers and ancillary shipping services companies are setting up here. “The centre of gravity of shipping has moved perceptibly towards the Far East and even owners that are not based here have seen it necessary to open satellite offices here,” Lee notes.

The Republic’s encouragement through its various incentive schemes has meant that the whole range of shipping segments — from charterers and commodities traders, to shipyards and ship managers — are actively making deals and entering into contracts on an increasing scale out of Singapore with international clientele.

The corollary to this, though, is that there must be some attention paid to the dispute management process in order to reduce management time and expense should a dispute arise down the line. “The maritime cluster here is blooming and because of that, I would say the environment is very rich for dispute resolution to be centred here more than anywhere else,” says Lee. SCMA provides the forum, platform and physical infrastructure for people to practise their craft, he adds. These very people, though, may not be aware of the change in the way SCMA is now run, and this is Lee’s first target group. To “secure the home ground first” as he puts it, with the emphasis first on principal players such as shipowners, charterers/cargo interests, ship managers and shipyards.

There is also a pressing need to work closely with the arbitrators themselves, together with the lawyers and defence clubs — all of whom play pivotal roles in ensuring a fair and just outcome from the actual arbitration process, and in promoting Singapore’s attraction as a seat of arbitration to an international audience.

The other major players he is reaching out to are the burgeoning new Asian
shipping powers of China and India and others within the region. "For all these parties, Singapore represents a neutral venue for dispute resolution," says Lee.

Right place, right time
The concentration of shipping companies with offices in Singapore and in the region means that in many cases, it makes more sense for arbitration to be done here instead of in other centres. But because of a variety of factors, such as old contracts which were never revised, or foreign staff who prefer to maintain the status quo, London or New York are often automatically written into contracts as the default seats of arbitration.

Lee points out that this can lead to a somewhat extreme situation such as in a recent case in which two parties with offices in Singapore, just streets away from the SCMA’s office in Maxwell Chambers, are looking at flying halfway across the world to New York to resolve a dispute simply because it has been written into their contract without anyone taking prior note that there was a more convenient alternative.

But apart from convenience for regionally-based companies, SCMA also offers many other advantages, Lee says.

Prime among these is its adaptability and responsiveness to members’ needs. With dynamic global trading conditions, rules need to evolve periodically to stay relevant and accurately reflect and support prevailing trade practices. SCMA gives its members an opportunity to be part of the policymaking process through involvement in its various committees.

Other positive factors are Singapore’s geographical position and time zone, infrastructure, travel links and service facilities, all of which make it an ideal seat of arbitration for claimants and respondents based in the Asia Pacific.

In addition, Singapore law (which traces its roots to English law), its courts’ efficient application of the rule of law, and English being the country’s official language are also big plus points. The Singapore government is openly supportive of the arbitration process and the courts have a proven track record in giving the necessary support to ensure the swiftness in finality and closure that arbitration is supposed to deliver.

SCMA, working closely with Maxwell Chambers, has ready access to a full menu of world-class facilities, including 14 customised hearing rooms, 12 preparation rooms, and translation, audio recording and video conferencing services. It has 45 local and foreign arbitrators on its panel, providing a broad spectrum of shipping and legal experiences for different needs.

Lee sees SCMA as being at a “unique moment in time where the window is open” for changes that will enable the arbitration process to come into its own as a dispute resolution mechanism for the shipping industry.

“It’s an exciting place to be, exciting times to be in, and I’m glad to be a part of it,” he says.
VISIONARIES, THOUGHT LEADERS AND DECISION-MAKERS WILL GATHER AT SIBCON 2010, THE WORLD’S LARGEST MARINE FUELS CONFERENCE, TO BE HELD IN SINGAPORE FROM OCTOBER 27 TO 29. BY VINCENT WEE

The recovery of the global shipping industry this year from the dark days of 2009 provides the backdrop for one of the biggest and most well-known events in the bunkering industry — the Singapore International Bunkering Conference and Exhibition, or SIBCON. Just as Singapore has developed its position and reputation as the top global bunkering port, SIBCON, now in its 16th year, has moved in tandem.

The 2010 edition, which takes place from October 27 to 29, will see a prestigious line-up of industry experts and trailblazers networking, speaking and debating at an exciting new venue: Resorts World Sentosa.

Over 1,000 delegates from 50 countries are expected at SIBCON 2010, with more than half of them senior management and decision-makers. The overall number of delegates and decision-makers has been increasing every year — proof of the perceived value of this event.

SIBCON 2010’s emphasis will be on thought leadership, with keynote speeches from industry leaders, ship owner forums, an industry-wide strategy to manage new regulations, and many new features to keep the programme updated and value-added for delegates.
Among the new highlights at this year’s event is the SIBCON Visionaries in Shipping Forum. CEOs from the world’s leading shipping companies will discuss emerging trade routes, and forecast the markets for container, dry bulk and tanker sectors, and their implications for marine fuel demand. Among the panel members are A. P. Moller-Maersk Group Vice President Niels-Henrik Lindegaard and G.S. Choi, Executive Vice President and Chief Executive, Hanjin Shipping (Terminal Business Unit).

The new benchmark ISO 8217 standard will enjoy lively discussion at another of the new additions to the programme, the SIBCON Industry Think Tank. Made up of industry experts such as DNVPS Managing Director Tore Morton Wetterhus and Intertek ISO 8217 convenor Wanda Fabriek, the group will discuss scenarios and the need for collaboration in the post-ISO 8217 era.

The third new feature to look out for is Marine Fuels Market Watch, in which CEOs and business heads discuss and debate demand trends, market opportunities and security of supply.

This year, the topics across the board reflect the growing optimism in the
SIBCON 2010’s emphasis will be on thought leadership, with keynote speeches from industry leaders, ship owner forums, an industry-wide strategy to manage new regulations and many new features to keep the programme updated and value-added for delegates.

Take your pick
The conference programme is broken up into five main sections: shipping markets forecast, marine fuels market watch, regulation and fuel quality, the changing landscape for fuel measurement and the spotlight on carbon dioxide — alternative scenarios and implications.

Each section, spread over two days, will highlight areas of concern experienced by industry players and place itself under the microscope for discussion. For example, in the marine fuels space, the looming low sulphur fuel oil dilemma will be examined, while other related issues such as emissions control will be discussed from the regulatory perspective in the section on regulation and fuel quality.

There will also be a one-day pre-conference workshop focused on bunker operations and trading risk management in the new era. This is aimed at bunker traders, suppliers and procurement executives in shipping companies and industry consultants.

While it will deal with the daily practicalities that these executives face, it will also focus on risk management strategies in the face of new fuel standards and sulphur control laws.

The Joint Oil Spill Exercise, a feature of SIBCON, will take place on the last day of the conference. Timely, and in line with MPA’s commitment to protecting the marine environment, this is the time when participants will get a chance to experience practical issues associated with managing an oil spill.

Talking and tee-ing off
The conference would not be complete without some serious networking opportunities for participants. Besides the reception held on the second day, the SIBCON IBIA Golf Challenge tees off at the Tanah Merah Country Club on the last day.
FLOWING TOWARDS MASS METERING

CURRENT WAYS OF MEASURING BUNKER FUEL RELY ON GAUGING TAPES, TEMPERATURE-READING EQUIPMENT, THE HUMAN EYE AND MATHEMATICAL CALCULATION. THEY MAY NOT BE THE MOST TRANSPARENT OR EFFICIENT OF METHODS, WHICH IS WHY EXXONMOBIL’S MASS FLOW METER TRIAL IS A WELCOME DEVELOPMENT IN THE INDUSTRY.

The use of mass flow metering solutions for measuring bunker fuel may soon see light, with ExxonMobil Marine Fuels testing the waters with trials that were recently conducted on one of its systems.

Results of the tests will be shared at SIBCON 2010 at a panel discussion on this new approach to bunker custody transfer. At the discussion, industry perspectives will be sought, with the aim of crafting a draft national standard on the application of mass flow metering.

The metering system tests were conducted by ExxonMobil, Emerson, APL and the working group. This particular trial exercise conducted in July 2010 involved a loading test in which ExxonMobil’s exclusively time-chartered barge Leadership (operated by Hong Lam Marine) loaded the bunker fuel from ExxonMobil’s berths in Pulau Pesek and then delivered it to the APL Tennessee, anchored in Singapore waters, the following day. Both the loading and delivery operation were recorded using the Coriolis meter as well as tank-gauging.

While the technology is not new, the drive to adopt the use of onboard mass flow meters started to gain momentum among the major operators in recent years, largely due to technology improvements that have enabled its application on high-viscosity fuels.

According to ExxonMobil Marine Fuel’s Global Technical Operations Manager Steve Walker, current methods of measuring bunker fuel involve gauging tapes and temperature-reading equipment, and may result in inconsistencies as they are assessed by the human eye.

The advantage of mass flow metering systems is that they can measure mass directly and consistently. They also provide automated measurement traceability for each loading and delivery operation as they can measure the mass of fuel passing through the pipe at all times. Measuring instruments currently used cannot provide continuous reading of data through the operation.

Thanks to technological advancements in this area, the mass flow meter is seen by many in the industry as a natural progression in improving measurement integrity.

Commenting on the recent tests, Walker said: “Coordinating the trial operations was challenging. We had to ensure the meter results were compared in the context of current measurement methods.

The results were compared in the context of current measurement methods.

The results are encouraging, but further trials and adjustments will be needed to ensure that all aspects of the measurement system are tested.”

He reiterated that there was a need to conduct careful and extensive testing, to ensure that the use of mass flow meters will enhance measurement integrity and flawless operations.

Singapore, as the world’s largest bunker centre and a major shipping hub, is widely known for its process integrity. It was a natural fit for the test to be conducted here, explained Walker.

He added: “ExxonMobil strongly believes in safety and operations integrity. We see the mass flow meter as a technological way forward to enhance measurement integrity by eliminating the inconsistencies that can occur with current fuel measurement methods.”
THE IMO HAS DECLARED THIS THE YEAR OF THE SEAFARER, IN TRIBUTE TO THE VITAL AND UNIQUE ROLE THAT SEAFARERS PLAY IN WORLD TRADE, A FACT NOT OFTEN RECOGNISED OR ACKNOWLEDGED.

BY ANGELIA SEETOH
The world as we chart it, and our material lives as we know them, would be vastly different if not for seafarers. Many of the earliest conquerors and explorers could not have changed the course of history had they not been supported by seafarers who dared to brave the unknown with them.

Today, some 1.5 million seafarers keep global shipping going in order to serve the daily needs of more than 6.5 billion people on the planet. In announcing the decision to dedicate this year to these men and women, International Maritime Organization (IMO) Secretary-General Efthimios E. Mitropoulos said: “Our intention is to pay tribute to you... for the unique, and all too often overlooked, contribution you make to the well-being of all of us.

We will do so with deep appreciation, in recognition of the extraordinary service you render every day, frequently under dangerous circumstances, in delivering... the wheat that makes our daily bread, the gas and oil that warms our homes or moves our vehicles and the gifts we share with our families.”

Seafarers the world over, he said, deserve respect, recognition and gratitude, and in 2010, “we at IMO are resolved to ensure the world takes notice of your exceptional role and contributions, and of the special debt that all of us owe to you.”

His statements are all the more poignant in the light of piracy attacks which have, in recent years, increased in certain parts of the world, with seafarers in the front...
line. And when times are bad, irresponsible shipowners facing financial difficulties would rather leave seafarers abandoned in foreign ports.

The life of a seafarer is not easy. Apart from contending with the elements out at sea, they work with crews of different cultures, master advanced technology, and adapt to the laws and customs of host ports. Months away from home mean that family ties cannot be nurtured as they typically would, and the lack of contact with loved ones can result in an intense sense of isolation.

While seafarers plying the world’s oceans for months on end see these challenges as part of the path they have chosen, more can be done to enhance the overall social, psychological and medical support for seafarers. These challenges, as well as a misinformed public perception of the career, have resulted in a shrinking world pool of seafarers. Despite enhanced remuneration, better technology, safer vessels and a range of opportunities for a post-seafaring career, the industry is facing what has been described as a “looming shortage of ship officers”, which would result

“After sailing for 21 years, I still miss it. I like the long passages, where it’s 10 days of open sea and it feels like the world belongs to you. But I can now contribute more here. At sea, I’m contributing to one ship, but at the office, I’m contributing to the company’s fleet of over 40 ships.”

Capt Stanley Siaw, Director of Safety and Training, Technical Services, APL

“When I’m on the ship, all I can think of is going home. And when I’m home, I start missing the ship. Mental strength is the most important thing. You need it to overcome the loneliness, the pressures of the job and the conflicts between nationalities.”

Chong Gi Kian, 3rd Officer, PACC Ship Managers
in implications for the security and safe passage of vessels. Recognising this, the IMO and maritime agencies worldwide, including the Maritime and Port Authority of Singapore (MPA) have been taking steps to address the shortfall, such as boosting support services and facilities for seafarers, and enhancing the breadth and depth of maritime studies among young people. The aim is to make seafaring a career of choice.

**Seafarers in Singapore**
In Singapore, some 12,000 seafarers arrive from all over the world every year. While the IMO’s Year of the Seafarer pays tribute to their contributions, MPA’s initiatives have always focused on providing them the comforts of home. Teaming up with the unions and seafarer missions, MPA helps to ensure seamen who stop in Singapore experience hospitality, while addressing their social, spiritual and emotional needs.

Recognising that tight schedules or immigration controls make it difficult for seafarers to leave the port area to connect with their families and friends back home, MPA and the missions in Singapore set up three International

**“I went to sea when my first child was four months old. I don’t see him and my other children much. The money I make is good enough for a comfortable life in Indonesia, and I take care of my family this way.”**

Samsul Arffin, Bosun, Pacific International Lines

**“To know that the job I’m doing is vital to world trade brings me a lot of satisfaction. An office job holds little appeal, and as a seafarer, I’ll travel the world and gain new perspectives on different countries, cultures and peoples.”**

Shone De Silva, Cadet, Singapore Maritime Academy
SEA TRADE FACTS

- About 90% of world trade is carried by the international shipping industry. Without it, the import/export of affordable food and goods would not be possible — half the world would starve and the other half would freeze!

- There are more than 50,000 merchant ships trading internationally, transporting every kind of cargo. The world fleet is registered in over 150 nations, and manned by seafarers of virtually every nationality. Container ships carry most of the world’s goods and products.

- There are 1.5 million seafarers in the world, serving the daily needs of more than 6.5 billion people globally.

- Shipping is the least environmentally damaging form of commercial transport and is a comparatively minor contributor to marine pollution from human activities.

Drop-In Centres for Seafarers within the port areas of Keppel Terminal, Jurong Port and Pasir Panjang Terminal. The centres offer a respite where seafarers can access the Internet, call home, and take a rest in the lounge before getting back on board. Counselling sessions with chaplains are also available.

During the annual World Maritime Day, MPA and the local seafarer unions mark the occasion by distributing hampers to some 600 ships in port, a gesture that has been made every year since 2003. At this year’s presentation, Lucien Wong, Chairman of MPA, said: “Seafarers often lose touch with their families, friends and the wider world when they’re out at sea. We recognise their many sacrifices.”

This year’s event was held at the MPA-run Singapore Mariners’ Club (SMC), a facility appreciated by seafarers on shore leave in Singapore. Here, they can enjoy affordable accommodation, a safe and friendly environment close to the city, postal and medical services, telecommunication facilities and recreation.

SMC organises outings to places of interest and shopping districts, but perhaps the most anticipated activity at the club is its annual International Sports Week. Held in May, some 1,500 visiting seafarers compete in sports such as football, basketball and athletic events.

Boosts for seafarers

Singaporean seafarers, said Wong, can tap on a number of schemes that address various needs and contingencies. Beyond that, he added, MPA works closely with the industry and local seafarer unions to enhance the development of maritime manpower in Singapore, and ensure our seafarers continue to be trained with support from the MPA-administered Maritime Cluster Fund.

The initiatives are paying off, as young people like Cadet Navigation Officer Shone De Silva join the ranks. He is proud to be in the profession on which Singapore’s prosperity is founded.

He is aware that beyond the challenges and goals which lie ahead, there is also the unpredictability that lies in the risks he faces.

Despite more attractive remuneration and working conditions, the global shortage of skilled and experienced seafarers suggests its popularity as a profession is waning.

The IMO’s campaign to attract entrants into the shipping industry has been well-received, but one of the barriers remains the reality of being a seafarer. They may spend most of their professional lives out of sight, but they are certainly not out of mind. Apart from their families who miss them on their long voyages, government, unions and industry organisations constantly monitor ways to enhance their welfare. For young Singaporean seafarers like De Silva and his seasoned counterparts, Singapore’s robust system of personal and professional support brings confidence that their important contributions to world trade are valued.
SEAFARER SUPPORT

IN SINGAPORE, ORGANISATIONS WHICH AIM TO ADDRESS ALL THE NEEDS OF SEAFARERS LOCAL AND FOREIGN INCLUDE THE MPA, THE UNIONS AND THE MISSIONS.

MPA

MPA’s focus is on providing a strong network of support, from education to retirement.

To attract new entrants to the industry and foster a qualified and long-serving workforce, MPA administers scholarships, education grants and long-service awards.

It also offers welfare schemes such as conciliation services, relief funds, financial assistance, compassionate payments and repatriation of seamen aboard Singapore-registered vessels that are stranded in foreign ports.

This repatriation empowers the Director of Marine to make arrangements for and to meet the cost of repatriation of the crew, so as to ease the hardship of crew members, if employers, due to unforeseen circumstances, fail to fulfil their responsibilities. MPA also grants $100,000 annually to support the work of the missions.

Apart from cooperating on crew agreements and labour issues, MPA partners with unions and missions on initiatives such as the International Drop-in Centres that include a chaplain’s office, a library and reading room, telephone and Internet facilities, television and a kitchenette for quick, light refreshments.

Two main scholarship schemes – the Tripartite Maritime Scholarship Scheme (TMSS) and the Seafaring Alternative… An Investment for Life (SAIL) Scholarships – are funded jointly by MPA, Singapore Maritime Officers’ Union (SMOU), Singapore Organisation of Seamen (SOS) and individual shipping companies.

MPA also operates the state-of-the-art Integrated Simulation Centre at Singapore Polytechnic’s Dover Road campus, a full mission ship simulator for training.

UNIONS

Singapore’s two maritime unions take care of seafarers’ welfare throughout their careers, working between individuals and shipowners, management companies and the government.

SOS and SMOU manage industrial relations between member seafarers and their employers, and promote skills upgrading. While targeted mainly at local seafarers, the unions also aid foreign seamen in receiving fair wages if they are stranded in local waters.

An example of this was in January this year, when an all-Indian crew was stranded on board a North Korean registered vessel anchored off Bedeck. SOS, SMOU and MPA formed a support group that helped the crew get home and receive wages owed to them since December 2007.

With strong links in the international maritime community, the unions’ focus on education sees the introduction of scholarships and training courses.

MISSIONS

Time at sea at can bring stress, anxiety, fatigue and a sense of isolation. Sometimes all a seafarer needs is someone to talk to and a way to reconnect with his spiritual beliefs.

Five foreign seafarers’ missions in Singapore – International Lutheran Seafarers’ Mission, Mission to Seafarers, Danish Seamen’s Church, Norwegian Seamen’s Mission and Stella Maris Catholic Seamen’s Mission – cater to the needs of seamen of various Christian denominations who make a stop in Singapore.

Their services include providing opportunities to attend church services and social events. Time constraints at port sometimes make it difficult for conversations with the Chaplains, so ship visits can be arranged and problems referred to a Chaplain in the next port of call. The Stella Maris Catholic Seamen’s Mission is also known to provide foreign fishermen with financial assistance and temporary accommodation.
Web connectivity at sea can be so costly and cumbersome to implement, many ship owners forego it. Bandwidth-hungry work applications — such as attachment-heavy e-mails, online database access and e-navigation — are rarely considered. For crew, being on a ship without web connectivity can mean being out of touch with friends and family for a long time.

But Singtel has developed a solution — at least for ships in Asia and the Middle East. The telco’s new Big Value Maritime Broadband Solution aims to boost operational efficiencies and improve crew welfare by enabling high-speed Internet broadband access at sea.

Using a ship’s existing on-board satellite technology, such as TVRO (TV Receive Only) — which most vessels already have — the solution is then combined with Inmarsat’s Fleet Broadband service. This allows vessels at sea to receive high-speed broadband services within the covered area.

“Some companies have been hesitant to put out a huge capital outlay for broadband, so we needed to start with something more affordable,” says Tay Yang Hwee, Business Director, Singtel Satellite. “Smaller companies, especially, knew the benefits of broadband, but found it too costly.”

The price of this offering that was announced in March 2010 starts at US$1,999 (about S$2,700) a month for unlimited broadband connectivity. This makes it possible for shipping companies on modest budgets to use bandwidth-hungry applications.

Previous solutions included low-bandwidth, pay-as-you-use options averaging US$1,500 (about S$2,030) a month. To keep costs down, usage was usually limited to faxes and simple e-mails. At the high end, deploying a Maritime VSAT (Very Small Aperture Terminal) solution costs about US$120,000 (about S$162,000) over a ship’s lifetime. While it has a vastly larger coverage area, it is expensive, takes eight to 10 days to install and consumes valuable space on ships — making it an option only for larger companies.

Singtel’s offering, says Tay, is a viable “starter” high-speed broadband option — especially for smaller companies that previously found it too costly.

AT SEA & ONLINE

AN INEXPENSIVE, HIGH-SPEED BROADBAND SOLUTION EQUALS A HAPPIER CREW. BY GERALDINE KAN
According to Northern Sky Research (NSR), maritime broadband adoption in Asia shows the greatest potential for growth, with a forecasted compound annual growth rate (CAGR) of 20.4 per cent between 2007 and 2018 — higher than North America and Europe. While Tay cannot name current users of the solution, he includes oil tankers as his customers.

Productivity And Staff Benefits
The solution offers shipping companies and tankers the potential for improved ship-to-shore communication, better security, and more efficient ship maintenance because they can get help from onshore colleagues more easily and thus incur less downtime. Singtel is also offering applications that run on its broadband solution. These include e-surveillance, fleet management, managed security services, navigation and remote monitoring.

Because crew retention is a growing issue in the shipping industry, welfare benefits are crucial, too. “Always-on” high-speed Internet access means crew can now communicate easily and regularly with their families — something that was too costly in the past.

Apart from e-mail, video and voice calls, entertainment such as movies and video-on-demand are now additional options. So too is distance learning, something Internet-savvy crew members will surely value.

In designing and developing the solution, which was co-funded by the Maritime and Port Authority of Singapore’s Maritime Innovation & Technology (MINT) Fund, Singtel had three goals.

“We wanted to reduce costs, allow for quick deployment and minimal downtime, and save real estate on ships,” says Tay.

“Tank operators and ship owners have been very receptive to the solution.”

Singtel decided to start with Asia as this is where the telco’s traditional strengths lie. The Middle East has also been identified as a growing market. The next target sector is pleasure craft.

“Right now, pay-as-you-use options are the only solutions available to private yachts,” notes Tay. “Many ships already have TVROs — our solution would allow them to do so much more.”
It began with just two container feeder vessels, Maersk Mango and Maersk Tempo. That was in 1978. Today, A. P. Moller Singapore (APMS) — the ship-owning arm of worldwide conglomerate A. P. Moller-Maersk Group in Singapore — owns 77 vessels and operates another 248 with a total gross tonnage of 5.1 million tonnes, making it one of the largest shipowners in Singapore.

With an average vessel age of four years — less than half that of the world’s merchant fleet — the APMS fleet comprises container vessels, pure car and truck carriers, very large crude carriers, product tankers, chemical tankers and liquefied petroleum gas carriers.

Speaking to Singapore Nautilus in his office at Harbourfront Tower, Bjarne Foldager, Managing Director of APMS, shares his company’s plans to further increase the number of vessels under the Singapore flag.

“We intend to flag more than 30 new vessels in Singapore from now till 2013,” he says. “We are looking forward to celebrating the registration of our 100th ship in Singapore.”

And APMS has good reason to celebrate. The A. P. Moller-Maersk Group posted a US$2.5 billion ($3.3 billion) profit in the first half of this year, compared to a loss of US$0.5 billion ($657 million) in the same period in 2009.

“In addition to growing the business, the other major drive within the group has been to reduce our carbon footprint.
The group has been adopting many innovative measures, including redesigning hulls and engine rooms to become more eco-friendly, in order to reduce our carbon footprint by at least 10 per cent,” says Foldager.

Global challenges
With a large fleet of ships, APMS remains focused on staying competitive. But the global shortage of trained seafarers and piracy across the Gulf of Aden are among the major challenges facing the company — issues that trouble most other shipping companies.

Piracy is one of the biggest risks for global trade, and the fact that a substantial amount of world trade passes through the Gulf of Aden across Somalian waters has only made it more challenging. In this regard, the group works closely with the International Maritime Organization (IMO) to evaluate safety measures and precautions.

The increasing reluctance of the younger generation to choose seafaring as a career poses another serious problem. “Maintaining the quality of seafarers is a challenge,” Foldager admits. To overcome this, APMS has developed its own training programme, over and above working with various universities.

In January this year, the Group’s global crewing headquarters set up shop in Singapore, where it now drives its global crewing activities. Foldager, who is also Head of Maersk Crew Management, reveals that the company currently manages some 12,000 seafarers, including officers, ratings and cadets.

The administration for the group’s international cadets is also operated from here. Possessing one of the biggest cadet pipelines, it has more than 2,000 cadets of various nationalities in training.

APMS and Singapore
Singapore is the place, Foldager shares, where the A. P. Moller-Maersk Group will continue to invest and consolidate its ship management business in the Asia Pacific. Besides having one of the largest and best ship registers in the world, Singapore has the distinct advantage of a very stable and supportive government. He says: “It is quite evident that government agencies are serious about improving the overall business environment when they engage the industry and seek suggestions.”

“The Singapore register is highly regarded not just regionally but globally as well,” adds Foldager. Apart from providing international access, Singapore has also been one of the first countries to ratify IMO legislation and set benchmarks for best practice. Singapore does not accept single-hull tankers anymore, for instance, and is very particular about regulations and the quality of ships. These are signs of a very good-quality register, he points out.

Being part of the Singapore register — which has no nationality restrictions — has also helped APMS attract the best available talent. “In this region, the main competition for Singapore comes from Hong Kong,” says Foldager, adding that there are areas in which Singapore is doing better and some where more could be done.

Foldager tips his hat to the responsiveness of the Maritime and Port Authority of Singapore (MPA) for boosting efficiency. Citing an example, he says the paperwork and communication between APMS and MPA have increased manifold with the growth in business and number of ships. So, the two organisations agreed to go electronic with all communications and invoicing, saving a lot of effort and time.

APMS has also been working closely with MPA and other agencies to increase the depth of industry innovation in the local maritime cluster. Foldager points to Singapore’s eco-system of universities, research institutions, related services and supporting frameworks as a key factor that will propel many initiatives.

Having just completed two years in office, Foldager knows there is still a lot of work to be done. But he can sleep easier knowing that APMS is in safe waters here in Singapore.

“We intend to flag more than 30 new vessels in Singapore from now till 2013. We are looking forward to celebrating the registration of our 100th ship in Singapore.”

Bjarne Foldager, Managing Director of A. P. Moller Singapore
Why Am I Here?

It was during such trying times of the early years of the PAP Government that an occasion arose for me to seriously consider giving up my job. I seriously felt it best to find something else to do, where my contribution would be better appreciated. As I was already married and my wife had an income, I thought I could take a risk. It followed an unfortunate encounter with a young seaman with the most unreasonable demand. He had gone to complain to Mr Lim Chin Siong, Political Secretary to the Minister of Finance. I ended in a very depressed mood and was looking gloomily at the ceiling when in marched Father Fox, Representative Chaplain of the Stella Maris Missions to Seamen. He used to be a regular visitor to my office, often seeking help for some foreign seaman or other in need of help. Seeing me in that state of mind, he asked me...
what the trouble was. I narrated to him the situation I was confronting and the particular case that I was attempting to solve, and for which I received no appreciation or understanding from the powers concerned, but abuse and threats. I felt that I was doing a thankless job. Having heard me and after a few minutes of silence, he asked me: “Have you ever asked yourself why you are here?”

“Why?” I responded, turning the question back to him, and asking what relevance it had to my particular predicament.

He responded with a remark that made me understand the import of his question.

He said: “Over the period that you have worked in this job, how many have walked through that door, relieved that you had solved their problems, or helped them face their difficulties? Perhaps they have not shown their gratitude, but in their heart of hearts, they would have left in the belief that there was someone like you to turn to in times of need. You must understand that it is not in the nature of man to be grateful. So in whatever you or I do for others, we must never expect gratitude. If we do, we will only be disappointed. Just because of one instance — where an ungrateful man has acted improperly, and your superior has not viewed the matter fairly — you want to leave the job? My boy, think through this question — why am I here? If you think deeply, you will get your answer. It will come through your conscience.”

After saying that, he left abruptly. It is a question I have asked many times in the course of my career, ever since. He has taught me to think of the larger purpose always. I would remember Father Fox each time I was confronted with having to ask that question.

“I found a strong sense of camaraderie among seamen, whatever their race or religion. Being close to nature, they generally took things philosophically and stood up for each other. They also displayed a strong sense of loyalty to each other as seafarers and cherished the bond with people they had worked with, who came to their aid or stood by them in times of need... There were many occasions when a seaman would call to ask for an arrangement to be made for a monthly allotment out of his salary to be paid to the wife of a fellow seaman who had died. At times, they knew little of the widow or had no contact with her. Their reason for doing so centred on the friend having left a few children and his wife with no other means of income, other than the husband’s monthly remittance from his seafarer’s salary... they displayed a deep sense of loyalty towards fellow seafarers and their dependents.”
had been working at sea all their lives and away from their homes in China, who could not continue working due to serious ill health. With no relatives or friends in Singapore to support them, their distress was painful to witness. Their boarding housekeepers were quick to push them out onto the streets and they did not know who to turn to for help. The state’s public assistance scheme was not of much help as eligibility was determined by means tests and based purely on technical grounds. My resort was the Mercantile Marine Fund, which had a scheme of payments for distressed seamen. The sum paid was nothing much, but it helped reassure boarding housekeepers of a steady monthly flow of income which could go some way to pay for the men’s bare upkeep. But these men needed care and attention. Conditions in these boarding houses were appalling.

Those from Hainan, who could find some place to relax and wash up in their clan houses in the Middle Road area were better off. Many had local homes and families in the Changi area. A few who were really infirm did not want to remain in Singapore and pleaded to be sent back to their village in Hainan, though they knew of no relatives there. My only resort was to write to the authorities of whatever town or village to seek their help. The letters were handed to travel companies in business with China. The Chinese authorities were usually quick to respond with assurances that they would receive the seamen concerned and see to his reunion with his village. The letters were in Chinese and usually warm and reassuring. In such cases all I needed was to get the necessary passage money, and see to the man’s repatriation by sea. The Mercantile Marine Fund was my source for funds. There were one or two Chinese travel companies in Singapore dealing with travellers to China. They helped me see to their travel.

There were also occasions when I had to face cases of desperate helplessness from those who sought my help. Many of these pained me and affected me emotionally, although my training advocated that I should be detached and not be emotionally involved. I was supposed to help the parties find a solution without undertaking to resolve their problems personally. Having to put theory into practice was something I encountered very often. Many a time, I had to find ways, unconventional by any measure, as I sought to solve them.

*Why Am I Here? Overcoming Hardships of Local Seafarers* was published by the Centre For Maritime Studies in 2010.
THE SEA
Excited about the facilities at the Integrated Simulation Centre at Singapore Polytechnic, Rear Admiral Peter Brady remarked that the technological sophistication of today’s maritime industry was absent when he was training. “It was very rudimentary years ago. Now, we can harness new technologies to maximise results from training and enhance the professionalism of our people,” he says.

The Maritime Authority of Jamaica is currently undergoing a review. It is looking to Singapore’s model as a maritime administration and port authority. “Singapore has tremendous experience in rationalising and streamlining their operations as a maritime nation, and has continuously looked ahead,” he says. “Plans are not just aspirations here — they actually get implemented and this is very inspiring.”

Rear Admiral Brady spent years in senior management in the military, serving as the Chief of Defence in the Jamaica Defence Force from 1990-98. He has held multiple roles at the International Maritime Organization (IMO) since 2003, and is the Chairman of the IMO Standards of Training and Watchkeeping Subcommittee.

Challenging the status quo
Rear Admiral Brady is a man on many missions. One of his top priorities is to make seafaring the career of choice for the present generation. Attracting youth is a big issue. While the compensation and perks are attractive, the fact remains that mariners have to be away from home for long periods of time.

“We are not attracting enough young people to choose seafaring as a career. Even after they go out to sea, we need to keep them motivated to stay there. One way is to provide amenities such as easy on-board access to the Internet so seafarers can keep in touch with their families,” he says.

Citing Jamaica as an example, he says that although the country is a maritime state, few young people understand what it really means. The challenge is to make the industry more appealing and educate Jamaican youth about the contribution seafarers make to the economy.

“We are competing with seemingly more glamorous industries in attracting manpower. And a potential bulk of that manpower, the young, look for the conveniences they’re used to enjoying. Young people today are far more communicative than they were a few generations back, and it’s necessary to provide them with similar facilities on board to meet their needs,” he says.

Piracy and communication
Next on Rear Admiral Brady’s agenda is the issue of maritime security. He notes that the piracy problem off the Horn of Africa is primarily land-based and did not originate at sea. “Until there is political stability on land, the problem of Somali pirates at the Gulf of Aden will be difficult to contain,” he says.

Having said that, he points out that the IMO has established measures ships can follow in case of eventualities. For instance, whenever a ship crosses the Gulf of Aden, it is required to contact the coordination centre to notify naval forces patrolling the area. With 30% or more of the world’s seaborne trade passing through that corridor, the IMO is in constant consultation with ship owners and industry players, he said.

“It is a very complex situation. As an industry, we can’t accept that the law of averages will play out and that the number of incidents is relatively insignificant. Even one incident creates a problem and confidence is lost. Many shipowners have started providing armed security on board. While this has been fairly effective, it raises the chances of more violence. Seafarers are not trained in warfare.”

Reflecting on the industry itself, Rear Admiral Brady feels that the international maritime media can lead in educating the global mass media. Describing it as relatively “inward-looking”, he says that more effort is needed to communicate with the outside world. This would educate and hopefully reduce instances of the global media blowing minor incidents out of proportion.

What keeps this former man in uniform occupied when he is not travelling? “I like to be with my family. I travel so much that whenever I’m home, I just want to make the most of it.” Rear Admiral Brady is a cricket and soccer enthusiast, but it’s easy to see where his strongest passion lies — along the sea lanes of the world’s many oceans.
For a professional who has seen many dimensions of the maritime industry over three decades, Goh Teik Poh comes across as someone who remains keen on tackling challenges. “It may sound unbelievable — especially to the young — to stay in the same company for one’s whole career, but NOL has constantly provided me with challenging assignments,” says Goh, President, South Asia, APL.

Brought up in Penang, Goh was exposed to ships and the maritime industry early, as his father worked in the government’s Marine Department. With a burning desire to see the world and lacking interest in a regular 9-to-5 job, Goh decided on a career in seafaring, joining Neptune Orient Lines (NOL) as a deck cadet in 1980 at the age of 20. As he looks back, he feels that his decision led him down the right path.

“Having begun my career as a seafarer helped me appreciate the immense contribution by seafarers not just to the maritime industry, but to the global economy too,” he says.

During this time, Goh built up his knowledge of ship operations and the team effort needed to run everything smoothly. He also developed a better understanding of working with people of different cultures and work backgrounds. Goh says that being out at sea gave him the chance to see the raw power of Mother Nature, from her most beautiful and soul-stirring to her most terrifying. “It was a very humbling experience.”

After six years at sea, he chose a shore-based assignment to learn about that aspect of the maritime industry. Sponsored by NOL, he earned his BSc (Honours) in Maritime Commerce from the University of Wales, Cardiff in 1989. He then started worked in the marine operations department, which, he says, was a perfect transition from sea to shore.

After a stint in NOL’s corporate planning department, which entailed setting up agency operations across the region, Goh was sponsored by NOL to pursue his MSc in Transportation at Northwestern University in the US. Then he received an assignment for which he remains grateful to this day.

**Taking Off**

In 1994, Goh was asked to head NOL’s business in India. “Today, India is one of NOL’s biggest markets, but back then we were still trying to make our presence felt,” he says. The major achievement came three years later when NOL became the No. 1 carrier from India to the US. Recounting the achievement, Goh credits his passionate and energetic team which worked tirelessly to achieve that milestone.

That same year, NOL made waves by acquiring APL, an industry leader in container shipping. The acquisition of APL in 1997 created one of the world’s largest companies involved in global transportation and related services. The acquisition was also the biggest ever made by a local company. It more than doubled the size of NOL globally.

This set Goh on a new career path. In 1998, he was appointed APL’s Vice President of Equipment Management, and was posted to Oakland, California. Five years later, he assumed the position of Senior Vice President of Global Operations and Network, and was also appointed Chairman of Neptune Shipmanagement Services Pte Ltd, a wholly-owned subsidiary of NOL.

Then he became NOL’s Chief Human Resources Officer in 2008, handling all aspects of the NOL Group’s global human resource function which covers about 11,000 employees.

In June 2009, he was appointed to his current role as APL’s President, South Asia. Based in Singapore, he is...
responsible for managing and developing APL’s business activities in 27 countries including Australia, South-east Asia, the Indian subcontinent and the Middle East. “We want to be the carrier of choice, recognised for delivering value and being a reliable operator – and No. 1 in the South Asia region,” he says.

Looking back

Goh looks back fondly on the lighter moments of his seafaring days, recalling the time they were anchored for three weeks in Busan waiting for their container ship to be delivered to a new owner. “We converted a cargo hold into a playing field, playing soccer after working hours,” he says with a smile.

The friendships formed among seafarers are strong ones. Long voyages spent together, at times facing trials as a team, build a unique bond, Goh shares. He is still in contact with the friends he sailed with, many of whom, like him, remain in the maritime industry.

Between spells of hectic travel, Goh, a father of three, treasures the times with his family over a simple meal. These are his quiet spaces — the safe and soothing harbours — before he heads out to take on new challenges.

“It may sound unbelievable — especially to the young — to stay in the same company for one’s whole career. But NOL has constantly provided me with challenging assignments.”
REDUCING GHG EMISSIONS FROM SHIPS

WHAT CAN THE MARITIME INDUSTRY DO TO REDUCE GHG EMISSIONS? WILL IT BE PART OF THE SOLUTION OR PART OF THE PROBLEM?

Andreas Chrysostomou  Sveinung Oftedal  Christian Breinholt
International shipping is currently estimated to have emitted 870 million tonnes of CO2 in 2007, no more than about 2.7% of the global total for that year. That said, estimates show that by 2050, those emissions could increase by up to three times if efforts are not made to address them. Efforts are in fact under way at the IMO to develop GHG reduction measures, but can the industry do more?

**SINGAPORE NAUTILUS**: Has shipping been complacent in addressing GHG emissions since it has been described as the most efficient form of transport and enabler of international trade?

**BREINHOLT**: "Complacent" is a rather strong word. I would say that the industry has perhaps not fully realised the potential for higher energy efficiency. When it comes to addressing GHG emissions, we have all had to go through a process to understand and grasp the magnitude of what is one of the greatest challenges for mankind. In recent years, addressing environmental challenges has been high on the agendas of both the regulatory bodies and individual shipping companies, with many initiatives enacted. Because shipping is a prime example of globalisation, it has to respond to current issues, and a major issue is to think "green". There are some fundamental structural difficulties in addressing GHG emissions because of the way international shipping works, and this calls for concerted action by and for the industry.

**CHRYSTOYMOU**: Shipping is the most efficient mode of transport and as such, is a lower emitter of GHG compared to other modes of transport. Having said that, taking into account the fact that the international community is trying to reduce GHG from all sectors, it is my opinion that shipping is relatively complacent about addressing GHG emissions and is behind in contributing to global efforts. One way shipping can bolster its environmental efforts is by striving to be more fuel-efficient.

**OFTEDAL**: It is normal that many industries focus on positive results rather than what needs to be done. I think shipping is at a turning point, one that is needed in order to limit climate change. There is now increasing industry focus on energy efficient designs, technologies and operation. Shipping has some natural advantages, created by the laws of physics, regarding the potential to be energy efficient. If all players took the attitude that more can be done, it is more likely that shipping would achieve its real potential and be a part of the solution to climate change. I think it would be demonstrated that there are more benefits to being a front runner in emission reduction than a latecomer.

**SN**: Does international shipping have the potential to voluntarily reduce emissions?

**BREINHOLT**: There is great potential to increase your fuel efficiency voluntarily, but there are a number of preconditions. One of them is that in a business environment, you have to demonstrate a positive business case. But the company does also need to have the necessary competences and resources to...
This is demonstrated by the fact that even though some owners assume they have already arrived at the best means to reduce fuel, other forward-looking owners have identified new measures that can save significantly more.

It is also important to differentiate between increased energy efficiency (relative reduction) and reduction in absolute terms. A reduction in absolute terms within the industry is not possible since even a significant improvement in fuel efficiency will be outbalanced by the growth in trade demanding more transport capacity. This means that offsetting some of the emissions from shipping elsewhere is necessary. In my view, there is no single magic solution in the case of shipping. We need a bouquet of tools to reach the needed emission reductions and regulatory intervention is therefore necessary.

CHRYSTOSMOMOU: In all fairness to international shipping, the answer to the question should be yes, shipping has the potential to voluntarily reduce emissions. Every sector or industry is capable of self-discipline and shipping has shown that in many instances. But the globalised nature of shipping might not allow the same levels of reductions if the effort only remains voluntary. This voluntary effort should be undertaken collectively and adhere to a common aim that is subscribed to by all. Regulators have the right and responsibility to impose compulsory measures to help the industry attain that common aim.

OFTEDAL: Several studies have demonstrated the potential for emission reductions. The challenge is to release that potential to a greater extent than what is done by the market today. Some reductions can be achieved by new forms of contracts and changing attitudes. I have seen some very good examples, for instance, in the company Solstad Offshore. Through its project Climate Neutral Operations, it has achieved significant emission reductions through a campaign among its employees, through dialogue with partners and through a systematic approach within the company. A true forerunner!

SN: Will the introduction of a market-based measure be effective and equitable for curbing emissions?

BREINHOLT: The introduction of a market-based measure though the International Maritime Organization (IMO) is the only comprehensive way to ensure that the shipping industry does its part to reduce GHG emissions and thereby help reduce the negative impacts of climate change. The measure has to be implemented through the IMO because it builds on the “no more favourable treatment” clause that is vital to ensure that the shipping industry actually contributes to the reduction of GHG emissions. If a measure is not applied in a flag-neutral way, the door would be open to carbon leakage and we would not address the issue. A market-based measure is not only necessary but
measure is not only necessary but certainly also equitable. The alternative — to do nothing — would be letting down those who are most vulnerable to the ramifications of climate change.

CHRYSOSTOMOU: Although no one can accurately predict the end result of the introduction of a market-based measure, such a measure would have the ability to bring about a culture change and enact an effective and equitable curbing of emissions within a short period of time. Discussions on such measures are still at an early stage, and I believe that as proposals mature and the international community debates the solution, the answer to the question will naturally surface.

OFTEDAL: The answer is clearly yes. Some market-based measures have demonstrated that they are effective in aiding GHG reductions. While it is difficult to establish robust technical and operational requirements for emission reductions within the sector, a market-based measure can limit the total emissions from shipping without limiting the need for shipping to serve world trade. It is possible to design a market-based measure in a fair and robust way. There are challenges in the development of a market-based mechanism for shipping — there are divergent views globally on this issue — but I believe that an emission trading system for shipping can be developed to the satisfaction of all.

SN: What are the potential opportunities for the industry amid the efforts to reduce emissions?

BREINHOLT: I have actively participated in a number of presentations around the world that propose solutions to combating GHG emissions. This has given me the opportunity to deliver what I believe is an important message to the industry, and has given me the opportunity to hear about many of the efforts which are underway. The effect of the IMO coming up with a formula for an energy efficiency design index is immense. Ship owners are already calculating the attained index for their existing fleets. Existing ships have been upgraded, operations scrutinised and new builds ordered to optimise energy efficiency at actual operating conditions. So far, our actions have been a win-win situation. The important thing is to keep the momentum on all aspects — not least the international regulatory efforts.

CHRYSOSTOMOU: The reduction in emissions requires shipping to increase efficiency and therefore, the opportunity for better cost effectiveness is there. The efforts of the industry to reduce its carbon footprint will provide more advanced ship designs and propulsion systems, allowing the industry to operate a new generation of ships.

In an effort to use alternative sources of energy, international shipping will be provided with the opportunity to use technologies that would probably not have been otherwise made available. The use of different sources of energy also provides the opportunity of streamlining energy use with better logistics and route planning.

OFTEDAL: There are a number of studies which identify the opportunities and present estimates for emission reductions. It is difficult to identify this clearly, because the assumptions may differ. For example, what cost estimates should be used? My message to the industry is: Constantly seek out green solutions. If that is done, I think that shipping will demonstrate that it is a part of the solution to climate change.

If all players took the attitude that more can be done, it is more likely that shipping would achieve its real potential and be a part of the solution to climate change. I think it would be demonstrated that there are more benefits in being a front runner in emission reduction than a latecomer.

Sveinung Oftedal, Chairman of IMO Bulks, Liquids and Gases Sub-Committee (BLG)

Disclaimer: The views expressed herein are the contributors’ own and are true to the best of their knowledge and belief. The views do not necessarily represent the views of their respective organisations.
One of the fundamental activities of the international shipping industry is shipbroking. The go-between for ship owners, charterers and other parties, a shipbroker does many things depending on his area of speciality, which can include the transport of goods and commodities, the employment of a vessel, and the sale and purchase (S&P) of vessels for clients. Some specialise in one area, while others cover more.

An S&P broker is an independent contractor who acts as an agent for a party intending to sell or buy a ship. Usually involving a second-hand ship, S&P brokers are usually appointed by both buyers and sellers. Sometimes, one broker acts as the only intermediary between buyer and seller.

Darin Wong works at Clarksons, the largest shipbroking house in the world today, with a shipbroking heritage harking back to the mid-19th century. He speaks to Singapore Nautilus about his profession:

What drew you to take up a career in shipbroking? Broking as a career always attracted me, in particular the role of connecting with the people involved in a particular business and adding value for a successful outcome. My strong interest in shipping made me focus on shipbroking in particular.

What does your job as an S&P shipbroker specifically entail? We spend most of our time building relationships with our clients, the ship owners, as well as other brokers around the world.
We are constantly striving to ensure we have the most up-to-date and important market information. By keeping our clients apprised of current developments or likely future trends, we are able to assist them in their decision-making. Our clients look to broking companies such as Clarksons to be their eyes and ears. You would be surprised how quickly things can change in shipping.

Once our clients have decided on their course of action, such as to sell or buy tonnage, our role as S&P brokers is to find the best deal for them. On the buying side, this involves finding the most technically suitable ship for their intended trade, at the most attractive price. Once such a ship has been found, we arrange for the buyer to inspect it. If it is acceptable, negotiations begin. On the selling side, we try to achieve the best price and ensure we have a reliable counterparty. During negotiations, our clients are constantly looking for our guidance and opinion to help them make the right move. They make the decisions, but the role of the middleman in facilitating the transaction and protecting their interests is very important.

**What are some qualities a successful shipbroker should possess?**
You have to be continuously hungry for business and approach tasks with determination. Shipbroking is a very competitive industry, so you must be determined to always be the first to provide the most relevant and current information to your clients. Because it is an international industry, we often work outside normal working hours in order to do business with countries such as Greece, UK and US. As with all aspects of shipping, you have to be willing to work hard and not always at fixed times. If there is something that needs attending to, it usually can’t wait.

A broker’s efforts to conclude business may not always be successful even when considerable work has been put in, so you have to be “thick-skinned” and persevere. Good social skills are vital as well, because you have to speak to many parties of different nationalities. People generally need to like and trust you before they choose you as their broker.

**What is your advice to someone interested in a shipbroking career?**
Be proactive. Write to various shipbroking companies and follow up with a phone call or visit. The management likes people who take the initiative. It will be an advantage to have shipping experience, but most well-known companies like ours would have a trainee programme to familiarise and train newcomers.

**What do you enjoy about your job?**
Travelling, meeting new people, solving challenges and addressing the needs of our clients. I love the adrenaline rush of working a deal and the satisfaction of closing it, knowing that my client received the best possible outcome.

**What do you like to do outside of work?**
Photography, kickboxing, archery and night driving in Singapore and Malaysia.

**CHASERS**

We are constantly striving to ensure we have the most up-to-date and important market information. By keeping our clients apprised of current developments or likely future trends, we are able to assist them in their decision-making. Our clients look to broking companies such as Clarksons to be their eyes and ears. You would be surprised how quickly things can change in shipping.

Once our clients have decided on their course of action, such as to sell or buy tonnage, our role as S&P brokers is to find the best deal for them. On the buying side, this involves finding the most technically suitable ship for their intended trade, at the most attractive price. Once such a ship has been found, we arrange for the buyer to inspect it. If it is acceptable, negotiations begin. On the selling side, we try to achieve the best price and ensure we have a reliable counterparty. During negotiations, our clients are constantly looking for our guidance and opinion to help them make the right move. They make the decisions, but the role of the middleman in facilitating the transaction and protecting their interests is very important.

**What are some qualities a successful shipbroker should possess?**
You have to be continuously hungry for business and approach tasks with determination. Shipbroking is a very competitive industry, so you must be determined to always be the first to provide the most relevant and current information to your clients. Because it is an international industry, we often work outside normal working hours in order to do business with countries such as Greece, UK and US. As with all aspects of shipping, you have to be willing to work hard and not always at fixed times. If there is something that needs attending to, it usually can’t wait.

A broker’s efforts to conclude business may not always be successful even when considerable work has been put in, so you have to be “thick-skinned” and persevere. Good social skills are vital as well, because you have to speak to many parties of different nationalities. People generally need to like and trust you before they choose you as their broker.

**What is your advice to someone interested in a shipbroking career?**
Be proactive. Write to various shipbroking companies and follow up with a phone call or visit. The management likes people who take the initiative. It will be an advantage to have shipping experience, but most well-known companies like ours would have a trainee programme to familiarise and train newcomers.

**What do you enjoy about your job?**
Travelling, meeting new people, solving challenges and addressing the needs of our clients. I love the adrenaline rush of working a deal and the satisfaction of closing it, knowing that my client received the best possible outcome.

**What do you like to do outside of work?**
Photography, kickboxing, archery and night driving in Singapore and Malaysia.
Since our brains don’t come with built-in compasses, we’ve always had to rely on tools and common sense to navigate – from the earliest, most basic sun-moon-stars methods to today’s Google Maps and GPS.

Undertaking one of the most challenging navigational tasks are seafarers, especially the pioneers who crossed vast oceans without knowing where they would end up.

Sailors have always had to ascertain their ship’s position on the north-south axis (latitude) and the east-west axis (longitude). At first, they calculated latitude by observing the sun, moon and stars, but the real challenge was the longitude. To find it, they had to work out the time in different parts of the world.

They eventually identified the Pole Star, which appeared directly “above” the North Pole and seemed not to move. This made it a reliable aid.

The Vikings used sun compasses and shadow boards to work out how far north or south they were, also studying the swells and wind direction. The Polynesians calculated direction using currents and wind direction, and made maps made of sticks and shells based on the positions of the brightest stars.

From the 15th and 16th centuries, navigational accuracy continued to elude even the most famous adventurers such as Da Gama, Magellan, Columbus and Drake. The “wealth of nations” depended on accurate navigation, as competition for territories and trade monopolies intensified between Britain, France, Holland and Portugal.

Pre-18th century, safe passage depended on estimates of the ship’s location. By the late 18th century, there was a host of navigational aids including the astrolabe, the backstaff, the octant, the compass, lunar tables, the chronometer, the nautical almanac and the sextant, which is still used today.

There has been debate over the years regarding the value of ensuring that seafarers know how to use the sextant, even in this age of satellite communications.

But satellite signal strength can be non-existent, weak or sporadic, and it is the good old-fashioned sextant – invented in 1731 – which still offers real certainty.
Environmental issues are top priority for DNV. Our vision is "Global impact for a safe and sustainable future." DNV is already serving the industry extensively within this field, and we are spending considerable resources to develop state-of-the-art competence and services. We are pleased to service the shipping industry with a wide range of environmental services and contribute to sustainable development that benefits all of us. Let us see how we can support you in developing your competitive edge.
Nanyang Business School

NANYANG EXECUTIVE MBA
Global Leadership for the Asian Century

NBS's flagship MBA programme ranked #1 in Singapore and #27 Worldwide.
[2010 Financial Times Global MBA Rankings]

EXECUTIVE MBA in Shipping, Offshore & Finance

The Executive MBA in Shipping, Offshore & Finance is developed jointly by BI Norwegian School of Management, Norway and NTU Nanyang Business School, Singapore, in close collaboration with industry experts. This programme gives you the edge in meeting up to the challenges of the shipping and offshore industry.

- Get two internationally-recognised MBA degrees - one from BI Norwegian School of Management and one from Nanyang Technological University
- Modular format, 6 segments of 2 weeks every quarter:
  - 3 segments in Oslo, Norway, 3 segments in Singapore

The objectives of the programme are to:
- Develop strategic leadership skills in the shipping and offshore sectors
- Identify business opportunities within a company's value chain
- Gain thorough understanding of the global shipping and offshore business

Attend our information session. For more information, please visit www.execed.ntu.edu.sg/emma

For more information, please contact:
Louis +65 6790 4042 or Ramona +65 6592 2407 or email execmba@ntu.edu.sg