



MARITIME SINGAPORE 2030



▶ taking a look at the future of maritime
singapore ▶ a herculean solution ▶ secrets
of sea asia's success

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SMALL SHIP,
BIG WORK

publisher



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FOREWORD

The future of Maritime

The background features a complex network of white lines connecting various glowing nodes. The nodes are represented by semi-transparent circles of varying sizes, some of which are larger and more prominent. The overall aesthetic is modern and technological, with a color palette transitioning from a light teal at the top to a warm orange at the bottom.

Singapore

Thinking about the future and what might lie ahead is sure to cause some anxiety, but it is always useful to be prepared for challenges to come. In this issue, we take a look at what might lie ahead for Maritime Singapore. We also speak with some prominent organisations in Singapore's maritime ecosystem, to gain some valuable insights from their views of Maritime Singapore's future.

In our Community Talk section, we speak to the Singapore Shipping Association, the Singapore Maritime Foundation and Seatrade about Sea Asia, one of the region's premier maritime events. Since its inception in 2007, the biennial event has grown in both size and reach over the years. Tune in to find out more about Sea Asia's success, and its plans for the future.

We also shine the spotlight on one of the world's most successful marine insurance providers, specialising in protection and indemnity (P&I) insurance. The Skuld Group is featured in Company Spotlight, so read on to learn more

about its return to Singapore and its strategy for coping with the challenges ahead.

A Herculean solution, aimed at providing faster air transport during any potential incidents at sea, presents itself in our Port & Starboard story. Oil Spill Response Limited, an industry-owned cooperative funded by over 160 oil and gas companies, has stationed a Hercules C-130 aircraft in Singapore to better respond to incidents that may occur.

I would like to sincerely thank all our contributors, partners, readers, and the *Singapore Nautilus* team, for showing so much support for our publication and helping it develop over the years. The magazine will certainly go on for many years to come. I will be handing over the Executive Editor post to Shirley Tan, and I wish her all the best at the helm.

Wee Shann
executive editor

Milestone in seafarers' welfare

► The 350m-long container ship *APL Yangshan* sealed its place in maritime history as it played host to special guests on Aug 20, 2013 – the day the International Labour Organization's (ILO) Maritime Labour Convention (MLC) 2006 entered into force for the first 30 states to ratify the convention.

The MLC 2006 – known as the “seafarers’ bill of rights” – establishes minimum working and living standards for all seafarers on ships belonging to ratifying countries. It also helps to ensure a level playing field for quality shipowners, who were previously undercut by their counterparts who were operating substandard ships.

Among those present on board were Dr Cleopatra Doumbia-Henry, Director of the International Labour Standards Department at the ILO, Captain Robin Foo, President of the Singapore Maritime Officers’ Union, Mr Daniel J.S. Tan, Executive Director of the Singapore Shipping Association, and Mr Mark Lim, Deputy Director (Shipping) of the Maritime and Port Authority of Singapore (MPA) and Chairman of the Tripartite Working Group (TWG) on the MLC.

The four, representing the ILO, seafarers, shipowners, and Singapore’s maritime administration, took part in an hour-long panel discussion to commemorate the convention’s entry into force.

The discussion was broadcast live over the Internet from the bridge of the Singapore-flagged *APL Yangshan*, owned and managed by Singapore’s national carrier Neptune Orient Lines.

The panel discussed the significance of the MLC on world shipping, what it means now that the convention is in force, and fielded questions received live via ILO’s Facebook page and Twitter account.

Significance of the MLC 2006

The comprehensive convention was adopted by government, employer and worker representatives at a special ILO International Labour Conference in February 2006. Currently, more than 45 countries – representing more than 50 per cent of the world’s seafarers and more than 75 per cent of the world’s gross tonnage of ships – have ratified the convention. For other countries, the MLC will come into force one year after their ratifications are registered.

The MLC covers all seafarers working on board ships flying the flag of ratifying countries, including those who are not involved in operating the ship, such as passenger service personnel on cruise ships. Now that the convention is in force, all commercially operated ships of 500 gross tonnage or more that fly the flag of any of these first 30 countries will (if they operate on international

voyages) be required to carry, among other things, two specific documents: a Maritime Labour Certificate and a Declaration of Maritime Labour Compliance (DMLC) to show that the ships are in compliance with the requirements of the convention.

The two documents will be subject to inspection when ships enter the ports of other countries that have ratified the MLC. Additionally, under the “no more favourable treatment” approach, ships flying the flag of countries that have not ratified the convention will also be subject to inspection with respect to working and living conditions

for seafarers when they enter ports of countries where the MLC is in force. This measure is to help ensure fair competition for shipowners that comply with the convention.

Extensive Planning

On why the convention took seven years to come into force, Dr Doumbia-Henry, who was responsible for its development, said that it was a realistic timeline for something so comprehensive. In order for it to come into force, it had to be ratified by at least 30 ILO member states with a total share of at least 33 per cent of the world’s gross tonnage of ships.

What does the MLC include?

- Minimum age and qualifications
- Recruitment and placement
- Employment agreements
- Manning levels and hours of rest
- Onboard medical care
- Accommodation and onboard recreational facilities
- Health and safety guidelines
- Food and catering
- Seafarers’ complaint handling
- Payment of wages

Tripartite Working Group Members

- Ministry of Manpower (MOM)
- Maritime and Port Authority of Singapore (MPA)

- Singapore Maritime Officers Union (SMOU)
- Singapore Organisation of Seamen (SOS)
- Singapore Shipping Association (SSA)
- Singapore Maritime Employers’ Federation (SMEF)

International Drop-In Centres

To help seafarers communicate with their loved ones back home, MPA collaborated with unions and seafarers’ missions to set up International Drop-In Centres equipped with phone and Internet facilities. These centres are located at the Jurong Port, Pasir Panjang Terminal, and Keppel Terminal.



She explained that in order for the convention to be effectively implemented, the governments of ratifying countries needed time to ensure that their national laws and legislations, as well as inspection systems, were in place to meet the requirements of the MLC.

Time was also required, she added, for shipowners to ensure that their ships complied with the convention based on the national laws of their flag states, as well as for employers to change their views towards the rights of seafarers.

Moreover, the entry-into-force requirements for the MLC were made particularly stringent to avoid it being seen as a paper tiger, and to ensure that it would result in real change for seafarers and shipowners. The ILO wanted the strong backing of the

Representatives of seafarers, shipowners, Singapore's maritime administration and the ILO at the panel discussion held in Singapore

maritime sector before it came into force.

Said Dr Doumbia-Henry: "With its twin objective of a seafarers' bill of rights and fair competition for shipowners, it is a win-win for all of the industry. We all now need to continue to work together to make it a success through effective implementation."

Singapore and the MLC

Singapore was among the first 30 states to ratify the convention. It was also the first to do so in Asia. As a major hub port with a sizable ship registry, Singapore recognises the important role of seafarers and is committed to the provision of seafarers' welfare. Being a strong supporter of the MLC,

MPA required all Singapore ships to comply with the MLC by Aug 20, 2013. In the run-up to the launch of the MLC, MPA also embarked on extensive preparations for the MLC by providing relevant training for its staff, as well as updating the industry on the MLC via shipping circulars and forums.

Mr Lim said, "We will continue to engage the ILO and other maritime administrations on MLC issues, and we were very encouraged that many of our shipowners had taken it upon themselves to prepare early, obtaining the necessary documents of compliance for all their vessels under the Singapore fleet."

Given the complexity of the MLC, Singapore's preparations were extensive, beginning right from the early discussions on the MLC at the ILO.

Even so, things were not smooth sailing all the way. One of the distinguishing features of the MLC is that it calls for ratifying states to consult with their respective shipowners and seafarers' organisations on various provisions of the MLC. Singapore thus established a TWG in 2004, comprising the various stakeholders and social partners. The variety of perspectives meant that extra time was needed to hear each party's views when determining Singapore's approach to the various MLC provisions. Many meetings were held, but with strong commitment from all sides, the TWG was

able to formulate Singapore's national determinations in a considered manner.

At the same time, MPA ensured that the industry was kept informed of developments on the MLC through shipping circulars and seminars. This allowed the industry to prepare itself in advance, and ensured smooth implementation of the MLC when the time came.

As the MLC is a new convention, member states are bound to experience teething problems and require adjustments along the way. However, the consultative approach that MPA advocates will ensure that feedback from the industry is taken into account as it moves forward with this important convention.

Mr Tan Suan Jow, Director of Shipping at MPA, said, "MPA will continue to work closely with our tripartite partners to facilitate the smooth implementation of the MLC and the continued protection of seafarers who provide a service that is essential to world trade and the global economy."

Mr Lim added, "With such a huge and diverse fleet, it was challenging to bring the different types of shipowners and unions together for the collective good of the seafarers, as there were various interest areas to address. I must add that it was also a most satisfying accomplishment to bring all together in this tripartite arrangement and make it work."

MPA and SP sign MOU for training



► The Maritime and Port Authority of Singapore (MPA) and Singapore Polytechnic (SP) signed a Memorandum of Understanding (MOU) on Aug 26 for the provision of Vessel Traffic Services (VTS) training to MPA officers.

Under the MOU, SP will conduct seven runs of training for VTS operators over the next three years, through its Singapore Maritime Academy (SMA). The first run was scheduled to start in September 2013.

MPA and SMA will work together to develop course materials and conduct the training. The two parties

will also jointly issue certificates to trainees upon course completion.

The VTS training will be conducted in accordance with the International Association of Marine Aids to Navigation and Lighthouse Authorities' (IALA) guidelines on "Standards for Training and Certification of VTS Personnel", also known as IALA V-103.

TOP: Attendees of the MOU signing, from MPA and Singapore Polytechnic.
 ABOVE: Captain Khong Shen Ping, Dean, MPA Academy and Mr Roland Tan, Director, Singapore Maritime Academy.

Singapore-IMO celebrate 15 years of cooperation

► To mark the 15th anniversary of Singapore's cooperation with the International Maritime Organization (IMO) on the Third Country Training Programme (TCTP), a commemorative book was launched on July 10 at the 63rd session of the Technical Co-operation Committee at the IMO in London by Mr Lam Yi Young, Chief Executive, Maritime and Port Authority of Singapore (MPA). Entitled *A Bridge to Our Future*, the book tells the story behind the Singapore-IMO TCTP, and of the men and women dedicated to advancing the IMO's objectives of safe, clean and efficient global shipping.

In 1998, a Memorandum of Understanding (MOU) on the TCTP – the first of its kind at that time – was signed between Singapore and the IMO. Under the MOU, Singapore agreed to conduct and contribute to the funding of training programmes for developing IMO member states, on matters relating to maritime safety and the prevention and

control of marine pollution.

The Singapore-IMO TCTP currently reaches out to countries in the Asia-Pacific, the Middle East, Africa, Latin America, and the Caribbean. To date, more than 1,400 participants from over 70 countries have attended a wide range of courses conducted under the Singapore-IMO TCTP.

Said Mr Lam: "We would like to express our sincere appreciation to the IMO and other member states for their continued support over the years. Fifteen years on, Singapore remains committed to providing technical assistance and training programmes to developing countries through the Singapore-IMO MOU on the TCTP."

Apart from its contributions under the Singapore-IMO MOU on the TCTP, MPA also provides technical assistance through bilateral and other initiatives that aid the maritime capacity-building efforts of other countries.



Courtesy Call by US Coast Guard



RADM Cari Thomas, US Coast Guard District 14 Commander, called on Mr Lam Yi Young, Chief Executive of MPA, in August 2013.

Visit by Ghana Port Authority



Dr Mustapha Ahmed, Minister for State and Development Authorities, Ghana, led a delegation from the Ghana Port Authority on a visit to MPA in July 2013.

Learning Journey Visit by Dunman High School



MPA hosted a group of students from Dunman High School, who visited the Singapore Maritime Gallery and MPA's Port Operations Control Centre at PSA Vista.

SMG 1st Anniversary



MPA's Singapore Maritime Gallery celebrated its first anniversary with a carnival, held from Sept 7 to 15, 2013. Visitors to the gallery enjoyed free guided tours, balloon sculpting, bubble shows, storytelling sessions, and face painting.

MPA Annual Innovation Festival



MPA's annual Innovation Festival 2013 saw participants following a trail around the Marina Bay area. Teams competed through a series of games, quizzes and activities aimed at encouraging creative thinking and innovation.

THE HERCULE



STATIONING A HERCULES C-130 AIRCRAFT IN SINGAPORE ALLOWS OIL SPILL RESPONSE LIMITED (OSRL) TO PROVIDE FASTER AIR RESPONSE DURING EMERGENCIES IN THE REGION.

BY SOL E SOLOMON

Oil Spill Response Limited (OSRL) is an industry-owned cooperative funded by over 150 oil and energy companies. Aimed at responding effectively to oil spills anywhere in the world, OSRL currently has a track record of having attended to more than 390 spill incidents around the world in the past 28 years.

In June 2013, OSRL moved its Asia-Pacific base in

Singapore from Jurong to Loyang, a relocation that aims to significantly enhance its ability to mount effective emergency responses to incidents in the region, whether by land, air or sea.

The Loyang Offshore Supply Base is strategically located within a dedicated oil and gas supply facility with wharf access and deepwater jetties. It is also close to Changi Airport,

AN SOLUTION



where an array of sophisticated air logistics services exists, and Seletar Airport, where OSRL has a Hercules C-130 aircraft on standby for wide-area high-volume aerial dispersant spraying operations. The Hercules can also be used to transport oil spill response equipment to incident sites.

“The ready availability of a long range, all-weather aerial dispersant spray aircraft is

considered the backbone of our members’ oil spill response and contingency plans,” says Declan O’Driscoll, Asia-Pacific Regional Director for OSRL.

“The speedy application of dispersant can help significantly reduce the impact of an oil spill. Locating the Hercules in Singapore demonstrates the industry’s commitment to having this capability in the region.”

The aircraft is leased from International Air Response (IAR), a US-based company whose crew operates it. Onboard is IAR’s proprietary Rapid Installation and Deployment Spray System (RIDSS) aerial dispersant system. In flight, the cockpit controls and adjusts the dispersant’s spray patterns and rates, thereby improving the overall effectiveness of a

dispersant operation.

The Hercules can also provide up to Tier 3 global operational support for spills. Tier 3 refers to a spill that requires international resources for support.

Although the aircraft’s RIDSS is designed to be permanently fitted, it can be removed within an hour so that the Hercules can be used to transport equipment and personnel.

Deploying the Hercules

If an incident occurs among OSRL members, OSRL will dispatch a technical advisor to provide onsite assistance. The advisor will provide an assessment of the situation, recommend appropriate response strategies and identify the resources necessary to combat the spill. Factors like time, location, quantity, oil type and weather conditions determine the choice of strategies. The aim is to respond as quickly as possible so as to reduce the scale and

impact of the spill. The decision to deploy the Hercules C-130 aircraft will be made in this context, says O'Driscoll.

"In general, the Hercules will be most likely deployed when the spilled oil is suitable for dispersant application, and when the spill is further away from the shore, meaning that it will take more time for response vessels to reach the incident site."

Dispersants to the rescue

Oil emulsifies when mixed with water. This can increase

the oil's volume or create what is commonly dubbed as a thick "chocolate mousse" that may be damaging to the environment. Oil dispersants mitigate a spill's impact by preventing this emulsification.

Dispersants break down oil into smaller droplets that move from the surface into the water column (to a maximum depth of 10m). This makes the oil more accessible to naturally occurring microorganisms that use it as a food source.

OSRL keeps a stockpile of Corexit 9500 and 9527,

Finasol OSR52, and Slickgone EW, LTSW and NS. These dispersants are the most widely used ones approved by governments around the world. The type of dispersant chosen in each case depends on its particular effectiveness with the chemical properties of the spilled oil.

To prevent or minimise the effects of the dispersants on the environment, OSRL employs the Net Environmental Benefit Analysis (NEBA), says OSRL's Asia-Pacific Operations Manager Kiew Hock Thiam.

BY THE NUMBERS

26,933
LITRES

THE AMOUNT OF
FUEL THE HERCULES
CAN HOLD

6

HOURS

OSRL'S RESPONSE
CAPABILITY
FOR LAUNCH
OF DISPERSANT
OPERATIONS

4

CREW MEMBERS

are required to
operate the Hercules:
captain, first officer,
flight engineer and
loadmaster

NEBA allows OSRL to assess which response technique to apply that will result in the biggest environmental benefit from an impact mitigation perspective.

"In addition, we use dispersants responsibly, ensuring that environmental conditions allow for natural biodegradation of the oil to occur," says Kiew. "Application is carried out in accordance to the manufacturer's guidelines and approvals from respective countries."

30

FULL-TIME OSRL OIL
SPILL PERSONNEL
STATIONED IN
SINGAPORE

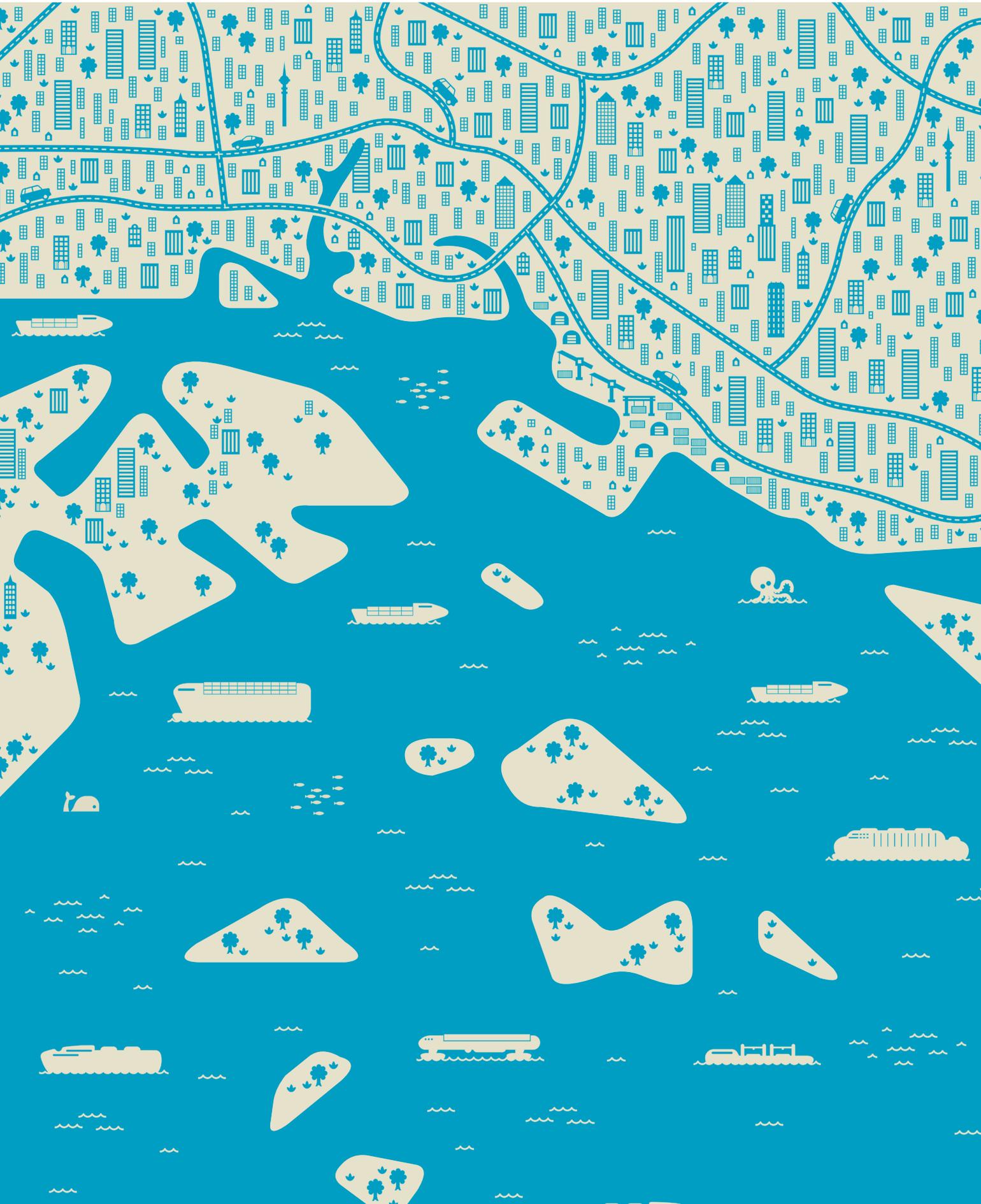
12,303
LITRES

The amount of dispersant
the Hercules can carry



"Having the C-130 based in Singapore lets OSRL provide faster response via air transport to its members during emergencies in the region."

Mr Declan O'Driscoll, Asia-Pacific Regional Director, OSRL





MARITIME SINGAPORE 2030

WHAT ARE THE KEY TRENDS AND DIRECTIONS THAT AWAIT THE INTERNATIONAL MARITIME INDUSTRY IN THE DECADES AHEAD? *SINGAPORE NAUTILUS* LOOKS AT SOME POTENTIAL DRIVERS OF CHANGE, AND ASKS MARITIME PLAYERS FOR THEIR PLANS ON TACKLING THE CHALLENGES THAT MIGHT LIE AHEAD. BY LEDIATI TAN

“It is always wise to look ahead, but difficult to look further than you can see.”

Winston Churchill

▶ Predicting the future may be the stuff of fantasy. But you don't need a clairvoyant's crystal ball to be prepared for what lies ahead. What you do need is the ability to look at the information on hand and identify future trends, and to turn potential challenges into an advantage.

The global economy and international maritime industry will continue to face complex demands due to changing population demographics, economic and urban development, trade, technological advancement, environmental issues, and resource limitations.

First, the world's population is set to rise rapidly to a projected 8.2 billion by 2030. Developing countries will account for most of this growth, while developed nations will see a declining and ageing population.

A report by the United Nations Population Fund and HelpAge International predicts

that by 2050, seniors older than 60 will outnumber children younger than 15 for the first time in history.

The Global AgeWatch Index report also states that the world population might be ageing too quickly for countries to support their swelling numbers of elderly people.

Another global driver is the continuing trend toward urbanisation – an inevitable progression in today's world. Developing nations such as China and those in South-east Asia will experience exponential growth in urbanisation, while further expansion of cities will take place on every continent.

The future will also likely see the emergence of new economic powerhouses such as China, India and Brazil. The Global Marine Trends 2030 report, released in April 2013 by Lloyd's Register, QinetiQ and the University of Strathclyde, predicts a seaborne trade increase for China's maritime

industry, from 9 billion tonnes annually to between 19 and 24 billion tonnes every year. By 2030, China is also expected to be contributing 20 per cent of the world's collective Gross Domestic Product (GDP).

With the possibility of new economic powers emerging and a projected rise in the world's GDP per capita, more countries will see incomes rise, increasing the demand for food, energy, infrastructure, and consumer goods.

Trade and shipping activities are projected to increase like never before, thanks to growing demand from developing countries such as China, Indonesia, and Vietnam.

Future maritime trends

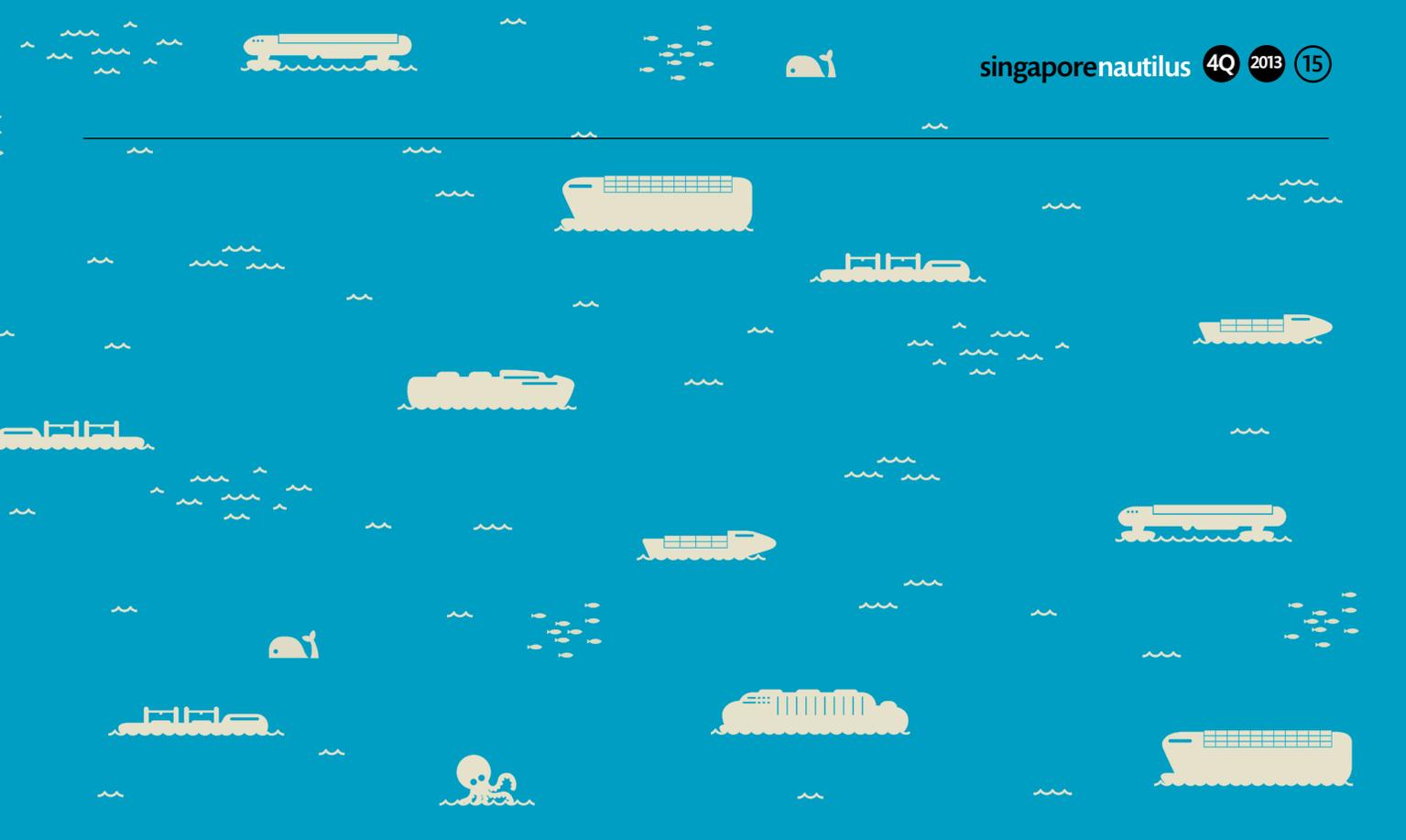
With shipping accounting for some 90 per cent of world trade, and with intra-regional and worldwide merchandise trade booms on the horizon, the result could be strong growth for the maritime sector, leading up to 2030.

Analysts predict that the continuing rise of trade blocs will also help to boost seaborne trade activity, which will be especially dominant in the Intra-Far East. This includes trade blocs between Oceania and the Far East, the Far East and Latin America, and the Far East and the Middle East.

Asia is also touted to be a strong player in the global seaborne trade in the next two decades.

Urbanisation and all its after-effects also plays a major role in boosting a nation's maritime industry. There is a symbiotic relationship between infrastructure development and the port: Growing cities need a gateway for importing and exporting goods – a port, in other words – which is why most of the world's major cities are also port cities.

In addition to urbanisation, a burgeoning middle class means a higher demand for resources in the future. The Global Marine Trends 2030



report predicts that China's demand for oil will triple in the next two decades, along with formidable increases in natural gas and coal consumption.

The report also identifies other areas with a similarly high demand for resources, such as the US, Europe, the Middle East, and India.

With so much of the world looking to the shipping sector to support increases in world trade, the world fleet might also be affected.

Many analysts predict that ship types – including bulk carriers, tankers, container ships and LNG carriers – are expected to grow in numbers and total tonnage.

Maritime Singapore's future

Maritime Singapore is affected by global trends as well as local challenges, such as land and population changes.

There is a need to deal with limited land space and develop a strong, quality workforce

that takes full advantage of the dynamic job opportunities that are available in the maritime industry.

Singapore is a small country, with no natural resources except its people, who form the heart and core of society. That is why ensuring a skilled population has always been at the forefront of Singapore's domestic policy, such as what was outlined in the Population White Paper, *A Sustainable Population for a Dynamic Singapore*.

To maintain its continuing success, Maritime Singapore is set to persist with three key strategies: developing new infrastructure, boosting maritime research and development (R&D) capabilities, and growing a core of local maritime talent.

First, port capacity will continue to grow ahead of demand. The expansion of Pasir Panjang Terminal is on track – the first set of new berths will be ready next year. Upon

its completion, it will increase Singapore's port capacity by 50 per cent, to 50 million TEUs per annum.

Second, maritime policies and schemes are slated to be sharpened continually, so they remain relevant to maritime companies. For the maritime sector to remain competitive, productivity-driven growth must also be ensured. One way to do this is by promoting maritime R&D to support businesses as they innovate and develop new capabilities.

Finally, Maritime Singapore will grow and maintain a core of local maritime talent. Maritime training opportunities will be broadened, along with professional knowledge and skills upgrading to meet the industry's evolving needs.

Today, Maritime Singapore employs more than 170,000 people. The challenge in the future is to continue attracting talented individuals to take up the varied job opportunities within the industry.

With a land area of 715 sq km, Singapore will continue to face challenges in balancing different needs in housing, infrastructure, transport, and other urban developments.

Land needs from Maritime Singapore's diverse range of businesses and services will compete against those of the Republic's population, as well as of the other industries within the economy.

One solution that optimises land and sea space is the long-term plan to consolidate all container port operations at a new terminal in Tuas, with the first berths to be completed within the next 10 years. The target capacity for this terminal is up to 65 million TEUs a year – nearly double the total container handling efficiency of Singapore's existing container terminals.

To gain insight on the challenges that lie ahead, *Singapore Nautilus* speaks with players from various sectors in Singapore's maritime industry:

SHIPPING

“Superior infrastructure, global connectivity, a skilled workforce and a stable government are some of the factors that have contributed to Singapore’s success as an international maritime hub. However, compared to other industries like financial or technology services, the shipping industry does not appear as attractive. It is therefore an ongoing challenge to draw more talent into the maritime industry. At Neptune Orient Lines, we invest in attracting, training and retaining the best talents. Without the right talent base, we cannot take the business forward. We look forward to a continued collaboration with industry partners, educators and Maritime Singapore in developing and attracting talents into the maritime industry.”

Ng Yat Chun, CEO,
Neptune Orient Lines

“Maersk is confident in the maturation of emerging growth markets, several of which are located in South-east Asia, and we are well positioned to capitalise on their growth due to our strong and long-term market presence. With its strategically located trans-shipment hub port, Singapore will likely benefit from the increased trade flows between these countries. The maritime industry in China and these fast-growing neighbouring countries will develop over time, and new trade lanes may open up. Singapore will need to maintain her attractive value propositions for international shipping companies.

More environmental regulations are expected for the maritime industry, with growing awareness of sustainability. Maersk has already been advocating this through initiatives such as using more energy-efficient ships, eco-retrofits, and slow steaming. It will be a boost to the industry if Maritime Singapore can have more green programmes that incentivise or reward shipowners that are more environment-friendly in their business operations.

Thomas Riber Knudsen, CEO,
Asia Pacific region, Maersk Line

“The bulk and tanker shipping markets are volatile and will remain volatile. The important factor is the ability to adapt and optimise within the marketplace – Norden has shown the ability to achieve this. Norden always strives to have a new and efficient fleet, and has ordered a number of fuel-efficient eco ships in recent months. Singapore – a global dry cargo and shipping epicentre – is Norden’s second home, and it remains an important jurisdiction as a flag state. It is also important that we participate in Singapore’s ever-growing shipping community, to serve our customers across the Asia Pacific region.”

Jakob Bergholdt, Group Vice
President and CEO,
Norden Shipping

“The strength of the world’s financial markets is a good indicator of the condition of global shipping. The last five years have been economically challenging, which is reflected in the depressed state of shipping across all sectors. Yet, Singapore has maintained a positive and expansive position, which will only increase as markets improve. The many maritime initiatives – in addition to the proactive approach of the Maritime and Port Authority of Singapore with the assistance of the Singapore Maritime Foundation – have enabled ICAP to grow our business in Singapore. With its strategic location and the Government’s decision to make Singapore a shipping and commodity hub, everything points to a very healthy future, which ICAP aims to play a major part in.”

Tim Madley, CEO, ICAP Shipping
Asia Pacific



“High fuel costs have incentivised the maritime industry to strive to save energy. In a way, the high costs of marine fuels are a blessing, because if fuel prices were low, there would be much less effort exerted by shipowners to reduce consumption. Another trend is the global shipbuilding overcapacity, which will be with us for many years. Many small yards have had to close down, but 90 per cent of the dead weight capacity is still there, albeit partly utilised. Capacity has turned out to be quite elastic, which means that mothballed facilities are reactivated fairly quickly once prices move into the profit zone. This will put a natural cap on shipbuilding prices, but this will also mean that there will be ample potential capacity for many years to come. Oldendorff Carriers is focusing on fuel-efficient eco newbuildings to expand our dry bulk core fleet. These vessels give us better earnings in our cargo contracts, and we also need them in order to remain competitive in what looks set to remain a challenging market.”

Henning Oldendorff, Chairman,
Oldendorff Carriers

“As an ocean transporter of petroleum, we see major changes to our business over the coming two or three decades. Developing Asian countries will become the new global consumers, while new energy finds – including tight oil and deep offshore fields – will dramatically alter current trading patterns. New economies (particularly China) will place a greater emphasis on vessel ownership, resulting in associated maritime services migrating eastwards to enhance centres such as Singapore and Shanghai. Environmental considerations will become paramount, affecting how vessels are designed, fuelled and operated. LNG, fuel-cell technology and other innovations will test the adaptability of the shipping sector.”

Capt Sachithananthan A.,
Director, Technical Services
& Development, AET
Shipmanagement (Singapore)

OFFSHORE AND MARINE ENGINEERING

“In recent years, we have seen a growing trend of exploratory activities moving into deeper water and harsh environments. This demanding work in turn requires larger, more technologically advanced equipment.

There is also a strong expectation that the shipping industry must reduce its environmental impact. The fact that more customers prefer using modern vessels helps to address this issue – new vessels are typically more fuel-efficient and incorporate more environmentally-friendly features.

Some countries have increased their expectations and requirements for operators to demonstrate high levels of local content. To support these requirements, operators in these countries will need to form partnerships with local companies, develop local manning solutions, and in some cases, change their vessel flag to ensure continued presence and growth.

The issue of cabotage is more difficult to resolve in the short term. With the likelihood that some vessels may switch from flying the Singapore flag to flying the relevant nations' flags in order to gain access to certain offshore markets, Maritime Singapore will need to continue its good work in attracting new tonnage to the Singapore registry, in order to maintain its strong footing.”

Neil Glenn, Managing
Director, Swire Pacific
Offshore (SPO)



PORT

“Mega container ships and mega alliances are setting the trends for the future. With this comes the need to manage more complexity, such as multi-party sharing of vessel space and extensive slot sharing. Terminal operators will have to enhance their capabilities and work even more closely with their customers.

PSA has invested in infrastructure, equipment, technology, systems processes and human capital to meet our customers' changing needs. Existing facilities have been upgraded, and the development of Pasir Panjang Terminal Phases 3 and 4 is on track. When completed, by the year 2020, we will have an annual capacity of 50 million TEU. These preparations will keep us relevant and competitive, to better serve our customers' needs into the future.

We will continue to leverage on our strengths in innovation and continuous improvement, and our belief in human capital development, to seek breakthroughs in productivity, terminal efficiency, as well as care for the environment.”

Tan Puay Hin, Regional CEO Southeast Asia, PSA International

“Jurong Port's throughput consists mainly of bulk cement and steel products, which are closely related to Singapore's construction industry. The construction projects that will take place or are expected to take place in Singapore till 2030 are expected to bring healthy throughput growth to Jurong Port. Our business prospects look promising because of this, but we must make sure that our handling capacity can continue to manage the throughput volumes efficiently.

Jurong Port has put in place long-term strategic plans for the development of its port infrastructure and rationalisation of its businesses, to address its long-term capacity requirements. Some of our plans include upgrading berths and yards to higher capacities, constructing new facilities and infrastructure, and intensifying the use of port land.”

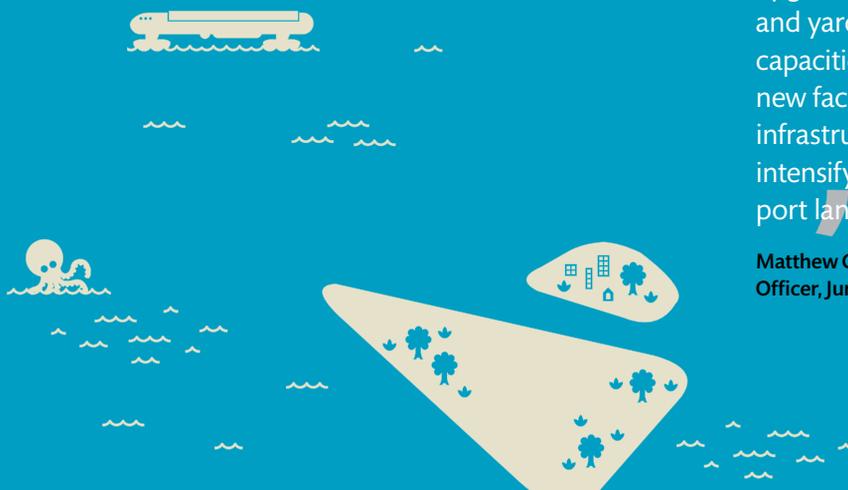
Matthew Chan, Chief Executive Officer, Jurong Port

“We see three key trends and challenges that will affect our business. Firstly, cruise ships will become bigger and more innovative to cater to the growing popularity of cruising in the region. At the same time, we expect that cruise liners will be offering more differentiated products, such as smaller, boutique-sized ships to cater to niche client segments. We are fully capable of welcoming many of these ships at HarbourFront.

While working within a fixed footprint at HarbourFront, we have been constantly improving ourselves and our offerings to both embarking and disembarking passengers. But, while we have carved out an additional 26 per cent of space after last year's S\$14 million renovation, space will always be a challenge to our growth. To overcome this challenge, we are improving efficiency through innovative initiatives and embracing technology, such as in the areas of passenger clearance, baggage delivery, transport facilities and security.

As the cruise industry grows, cruise liners will expect even higher standards of customer service, to meet the more discerning needs of cruise vacationers. The challenge in Singapore will be the tightening labour market, especially in the hospitality segment. At Singapore Cruise Centre, we have been addressing this by sending our customer service personnel for training in hospitality and tourism.”

Christina Siaw, CEO, Singapore Cruise Centre



COMMERCIAL SERVICES

“Asia will be the centre of capital market activities by 2030, with half of the world’s IPOs and one-third of bond issues happening in the region. Singapore is not only an international financial centre and the largest foreign exchange trading centre in Asia – it is also the top global maritime and logistics hub. Singapore and SGX are therefore ideally positioned as the venue for the world’s maritime and offshore services companies to access our global investor base with US\$2 trillion (\$2.5 trillion) of assets under management. Central to this is our robust regulatory framework, which created the requisite high level of trust in our marketplace.”

Magnus Bocker, CEO, Singapore Exchange

“Some of the key trends affecting the shipping industry and the P&I sector by 2030 will be adhering to new maritime regulations and legislation, dealing with the shortage of experienced seafarers and embracing green technologies to minimise the industry’s impact on the environment.

North will continue to do everything possible to assist its members in overcoming these challenges. The organisation is currently in the process of increasing our staffing levels and enhancing the capabilities of all our offices, particularly those in Singapore, Hong Kong and Japan. North will also continue to work and cooperate with Maritime Singapore in an effort to provide the best possible training, information, advice and support for its members.”

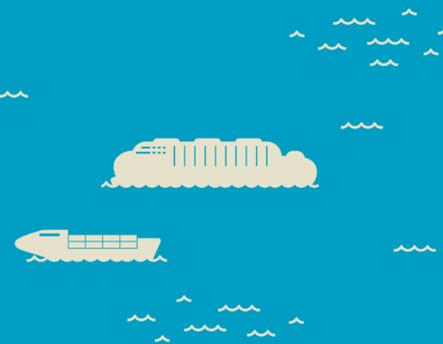
James Moran, Manager,
North Insurance Management

“There will be a shift of maritime arbitration work towards Asia, to serve the needs of Asia-Pacific maritime powerhouses. The development of tailor-made and tiered dispute resolution processes, like providing users with a wide choice of arbitration, and commercial court proceedings, will be necessary.

To tackle future challenges, Maritime Singapore must have closer collaboration and consultation with our stakeholders, and be in step with the development of maritime jurisprudence.

More Asian parties should also be persuaded to take ownership of this opportunity to have a seat at their doorstep, encouraging them to collaborate in developing processes, setting global standards for cultural and industrial sensitivity, and cost effectiveness.”

Lee Wai Pong, Executive Director,
Singapore Chamber of Maritime
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PORT

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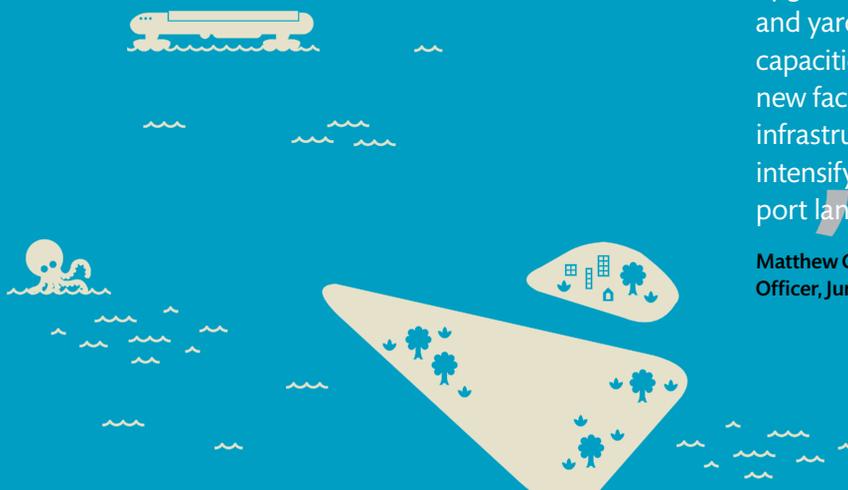
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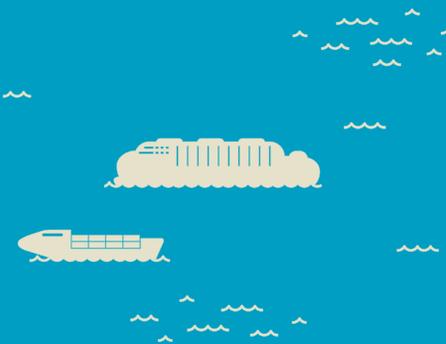
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FORGING AHEAD WITH INNOVATION

SINGAPORE NAUTILUS SPEAKS TO SIX TEE ENGINEERING GROUPS ABOUT WHAT MAKES GOOD ENGINEERING DESIGN, AND THE CORE VALUES THAT HAVE GOVERNED THE HOMEGROWN ORGANISATION SINCE ITS ESTABLISHMENT IN 2002. BY DESMOND NG

► Homegrown marine and offshore engineering firm Six Tee Engineering Groups is a company that welcomes the challenges of new technology and changes. This is one reason it was among the top 14 finalists for the Emerging Enterprise Award 2012, which recognises outstanding Small and Medium Enterprises (SMEs) in Singapore.

James Zhang, executive director of Six Tee Engineering Groups Pte Ltd, says: "We believe in doing our jobs right, in time, and in a highly professional way.

"Six Tee is a pioneer among local design firms in our use of finite element analysis and other advanced technologies. This has led to the success of our engineering design business."

A success story

Established in 2002, Six Tee provides consultancy services

in mechanical, structural and process engineering for marine and offshore-based industries all over the world. It also provides a wide range of services including project management, feasibility studies, and conceptual/detail/production engineering design and analysis.

Six Tee has about 200 employees in China and Singapore, and has been growing steadily over the years. According to a *Business Times* report, it had a turnover of S\$11 million in 2011.

Part of Six Tee's success is also due to a strong emphasis on standardisation and efficiency. The company decided to seek an ISO accreditation in 2005 because they felt that there was a need for a standard process, and documentation of all activities carried out – especially where the work involves different disciplines and engineers.

Design & innovation

The company's name – Six Tee – is an affirmation of their core values (Success, Innovative, flexibility, Trust, Efficiency and Endeavour). Zhang explains: "These are important to us as we constantly build relationships with our internal customers (employees) and external customers (clients) based on these core values."

Zhang and co-founder Lin Qing believe that good engineering design and technological innovation should lead the growth of offshore facilities. To them, good engineering design begins with a thorough understanding of clients' requirements.

Zhang says: "Six Tee believes that engineering refers to the technical expertise required to develop the solution that meets the technical requirement.

"Design is then the development of that solution,

to be actualised by fabricators or constructors – all to meet the requirements of the clients and to fulfil classification rules.

“Investing in advanced engineering and design software is also important.”

Six Tee has also differentiated itself by providing innovative solutions. Through research collaborations with Nanyang Technological University and the Maritime and Port Authority of Singapore, as well as a separate research project with the University of Western Australia (UWA), Six Tee has pioneered research in design solutions such as the chain stopper innovative design. The company also provides funding for and cooperates with UWA in explosion studies for offshore platforms.

Notable projects

Six Tee is most proud of two recent projects that they believe have contributed indirectly to Singapore’s maritime community.

In one project, they were in charge of the marine and hull detail design engineering and 3D modelling of the Floating Production Storage

and Offloading (FPSO) vessel *Cendor II*.

“It was the first project we undertook that encompassed all the engineering disciplines. It was a significant milestone for us in terms of providing engineering services to the FPSO market,” says Zhang.

The second project involved the conversion of a drilling semi-submersible to an accommodation semi-submersible. Six Tee handled the basic designs for all the engineering disciplines involved in this project.

Zhang adds: “These two projects showcase the ability of Singapore’s small and medium enterprises to undertake challenging engineering work in offshore markets.”

Challenges ahead

There has been increasing demand for good engineering design and support as well as modern practical project management systems for the building of offshore facilities.

Zhang says that this demand stems not only from new yards building offshore facilities, but also from experienced offshore yards seeking to improve their productivity.

He adds that the current trend is for drilling facilities to move further offshore. As such, Six Tee is gearing up its capabilities in deep water areas such as hydrodynamic simulation and global structure design.

“We are also seeking to further develop the CFD (computational fluid dynamics) application in the maritime industry,” says Zhang.

“We are cooperating with research institutes and a number of universities from Singapore and overseas.”

“Six Tee is a pioneer among local design firms in our use of finite element analysis and other advanced technologies. This has led to the success of our engineering design business.”

INSURING



A FUTURE

FRANCIS KAN LEARNS HOW SKULD'S RECENTLY OPENED SINGAPORE OFFICE IS A CLEAR DEMONSTRATION OF THE GROUP'S SUCCESS AT DIVERSIFYING ITS BUSINESSES.

► The Skuld group is one of the world's most successful marine insurance providers, specialising in protection and indemnity (P&I) insurance. Based in Oslo, Norway, the group opened an office in Singapore in early 2013, marking the Scandinavian company's return to the Republic, which previously had a one-person representative office here until 2008.

Kjell-Ake Augustsson, Senior Vice President and the head of Skuld's operations here in Singapore, was tasked with setting up the entity, which received its insurance license from the Monetary Authority of Singapore in January 2013.

"Singapore is an important hub for Norwegian ship owners, so there are currently several Norwegian P&I members who operate out of Singapore. We are also very pleased with the support we've received from the maritime community in Singapore so far," he explains of the decision to expand the group's operations.

The Singapore office will also be the key to the insurer's expansion into South-east Asia, as its Hong Kong office oversees North Asian markets like Taiwan, Korea and China. It currently has seven staff, and Augustsson is looking to grow the headcount further.

Covering all bases

Augustsson credits the group's success to diversification. Skuld has sought to mitigate the risk of massive insurance claims by creating different businesses lines to meet varying demands. The group consists of three main market brands: Skuld P&I,

Skuld Offshore, and Skuld 1897 – a syndicate at Lloyd's.

Skuld P&I is the company's largest business line, having enjoyed consecutive surpluses for the past 10 years. Unlike conventional insurance, P&I does not involve the payment of premiums.

Instead, clubs are formed where members contribute a certain amount to a pool every year. Claims from members who meet with maritime incidents will be taken out of this pool. P&I clubs generally provide insurance for third-party liabilities, such as war risk and environmental pollution, which most marine insurance companies will not cover.

The two key initiatives in the group's diversification strategy have involved re-entering the offshore energy sector (Skuld Offshore) and establishing a syndicate at Lloyd's (Skuld 1897). The offshore business was restarted in 2008, and has since begun to generate surpluses for the group.

Meanwhile, the Skuld group is also an investor in its own syndicate at Lloyd's, which is being used as a vehicle to offer a range of insurance products to its customers that the P&I club is not licensed to do.

This diversification has allowed the Skuld group to have different income streams as its traditional P&I business faces fresh challenges. The business volumes of the new businesses are already "exceeding expectations", Augustsson reveals.

He adds: "Shipping is becoming more complex and we need to adapt and be able to provide cover for risks that

are not standard. We have had to diversify to create more income streams, because the cost of very large claims has a big impact on results."

Challenges ahead

When asked about some of the challenges on the horizon, Augustsson feels that there will be a need to deal with changing legislation pertaining to oil pollution, as well as growing compensation claims by crew members.

Augustsson also identifies another challenge in the form of the Maritime Labour Convention (MLC) established by the International Labour Organization in 2006, which protects the rights of seafarers to decent working and living conditions at sea. The convention came into force in August this year. Within two weeks of its commencement, a vessel had already been detained for non-compliance.

"MLC 2006 is an example of how liabilities are increasing for

shipowners. As a P&I club, we will need to continue adapting to these challenges," he says.

While diversification has helped keep Skuld at the forefront of the maritime insurance industry, Augustsson feels that the group will have to continue building on its decades-long track record as an organisation that delivers quality service to its customers.

"Over the last 20 to 30 years we have proven our ability to handle large and spectacular cases. We believe that this track record will be able to keep us around for many more years to come," Augustsson says.

BELOW, FROM LEFT: Singapore office staff Kjell-Ake Augustsson (Senior Vice President, Head of Office), Gregory Thomas (Senior Vice President, Global Head of Skuld Offshore), Janice Choy (Claims Executive), Christian Ott (Vice President, Head of Claims), Binoy Kumar Dubey (Senior Executive, Claims and Risk Management), Kay Kaur-Williams (Office Manager). NOT IN PICTURE: Shenny Lim (Executive Assistant).



SERVICE



STANDARDS

THE WALLEM GROUP CREDITS THEIR LONGEVITY IN THE MARITIME INDUSTRY TO THEIR EMPHASIS ON PROVIDING A DIVERSE RANGE OF QUALITY PRODUCTS AND SERVICES.

► With a global network of 47 offices and over a century of experience in the shipping industry, the Wallem Group is a seasoned and well-known maritime solutions provider.

Servicing clients for 110 years in areas such as technical and commercial vessel management, freight and logistics, and shipbroking, the group relies on its rich heritage and extensive network of maritime professionals to deliver its solutions.

Wallem has 400 vessels and over 7,000 seafarers under its management, making it one of the biggest ship managers in the world today.

The group has 26 offices in Asia, which helps it to provide full port agency service to all Asian ports, as well as handle liner agency and freight

forwarding services.

In early 2013, Wallem opened its first integrated office in Singapore, with its main focus as a regional hub to consolidate its diversified maritime solutions.

Its recent significant senior management announcements, and the establishment of two offices in South Africa, are a clear indication that the group is eager to expand its global footprint and remain a leader in providing solutions to numerous maritime-related industry segments.

In an interview with *Singapore Nautilus*, Wallem shares its thoughts on business success, labour conventions, and the push for the shipping industry to go green.

We strive to be a progressive company that delivers a diverse range of value-added services to our customers, setting us apart from competitors.

What are some of Wallem's success factors?

We are celebrating 110 years of delivering maritime solutions this year, and we believe that our rich heritage and success can be credited to our friendly professional staff who are skilled and knowledgeable

in their fields of expertise. We strive to be a progressive company that delivers a diverse range of

value-added services to our customers, setting us apart from competitors. These attributes have built Wallem's good reputation in the shipping industry, and we will go on to offer a wider range of services to our customers.

What are some of Wallem's new initiatives of note?

In a push to increase the breadth of our services, we introduced a lifeboat servicing and testing company called



SeaSafe Marine which provides services in maintenance, inspections, repair, servicing and testing of marine safety equipment installed on ships. SeaSafe Marine aims to improve safety standards on ships while reducing vessel downtime and operational costs. We also provide procurement services to third-party ship owners and

other maritime businesses via our Marine Buying Services (MBS). MBS lowers a company's operational costs by using economies of scale derived from planned project purchasing, while allowing ship owners to remain in control of all decision making.

What is your take on the Maritime Labour Convention (MLC) of 2006, and how do you think this will impact your company and the industry?

Our full compliance with MLC 2006 has made us all very proud. We always keep the well-being of our seafarers as a top priority. The convention gives established companies an opportunity to showcase existing policies which

protect seafarers' employment conditions. From requirements for contract length and complaints processes, to the language used in contracts to protect seafarers, Wallem has aimed to be consistently steady in our compliance, and are proud to continue offering this to all our seafarers. All our vessels have now received their MLC 2006 certificates.

Any thoughts on the new Singapore office?

Wallem's new integrated office in Singapore will provide our clients in the South-east Asian region with better access to our services and staff. Captain Deepak Honawar is leading the office, and will spearhead our efforts in expanding our client base in the region by providing a cross section of shipping services. We feel that Wallem's unique offering to customers is our capacity to draw on a range of expertise to provide service solutions that our competitors cannot.

What are Wallem's future expansion plans?

We are developing other locations for integrated offices and we hope to announce these locations before the end of 2013. We are also evolving more manning locations. In recent years, our crew have come predominately from India, the Philippines and China. We plan to strengthen our presence in Eastern Europe, Sri Lanka and Myanmar, as well as other countries where there is a young educated workforce who are looking for interesting and stable careers.

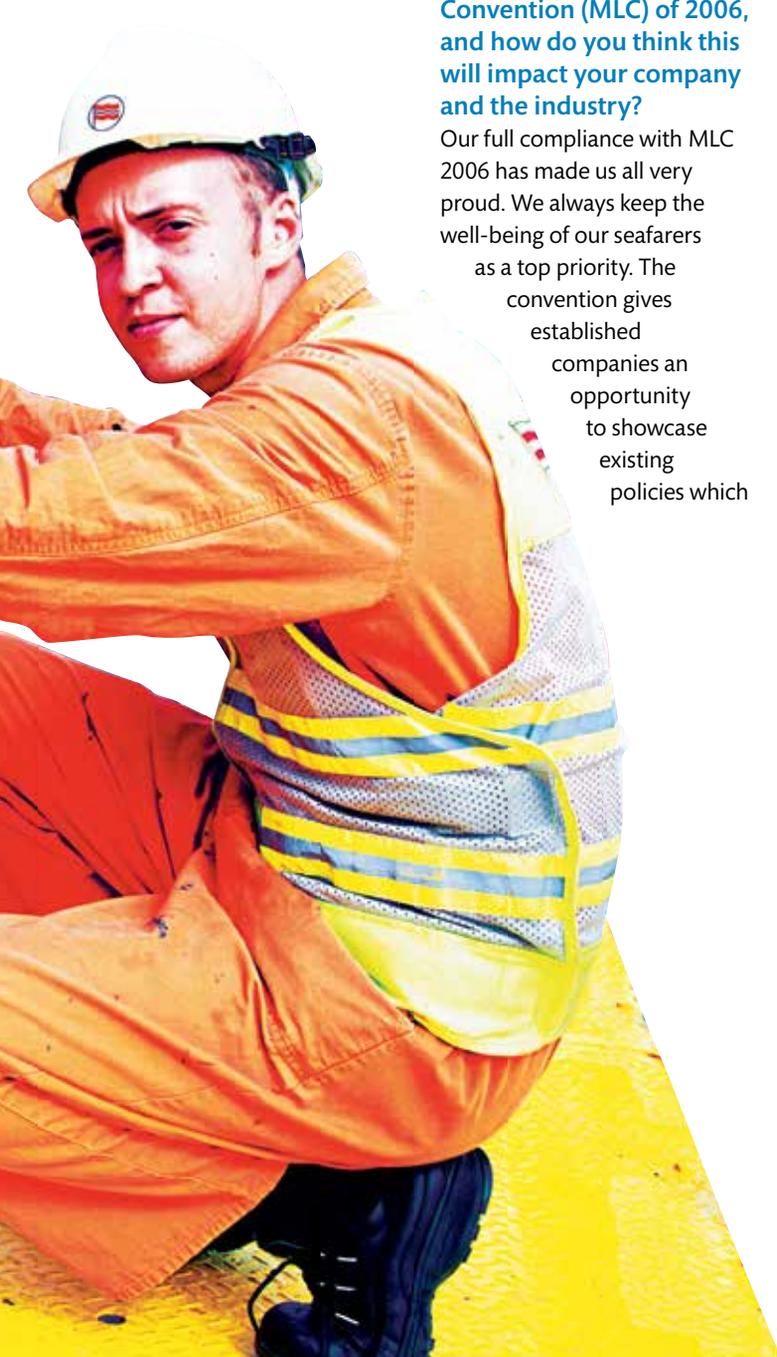
How does Wallem take on some of the challenges that the global maritime industry faces, such as the pressure to go green?

Our focus is on building a sustainable shipping industry, encompassing finances, people, and the environment. We have tight protocols for the conduct of our staff at sea regarding pollution and garbage, and this is the case in our offices around the world. We believe in meeting international standards for financial management and governance, which is why we hold the Sarbanes-Oxley certification for financial management – a requirement for all companies providing services to US-based organisations.

Quality crew are an important resource, and crewing is the number one challenge facing the shipping industry. We invest in our crew through training via our eight training centres. We also provide them with support by opening offices close to their homes. We look to continuously improve their welfare by providing quality food and Internet access.

Do you foresee a change in industry trends in the next few years?

We don't, as the shipping markets will still be recovering from financial lows. This is where shipping services companies like Wallem provide clients with opportunities to achieve higher efficiency, as well as build partnerships that will help the industry emerge from the current slowdown.





► For a man charged with the critical task of overseeing China's international transport cooperation with other countries, Yang Zan is a surprisingly humble man.

During an interview with *Singapore Nautilus*, the Director-General of the Department of International Cooperation in the Ministry of Transport readily says that it was a fortuitous mix of serendipity and sheer hard work that led him to the helm of China's Department of International Cooperation.

"I've always believed in taking things as they come, and working hard at every stage in life," says the 55-year-old of his success.

As a teenager, Yang was given a place at the Dalian Maritime University, one of the largest and best maritime universities in China, to study navigation. It turned out to be a serendipitous fit: He went on to earn his masters and doctorate degrees - with his research focused on the maritime industry. He later became his alma mater's dean of the College of Transport

"If you have too many goals and ambitions in life, you might never be fulfilled. But if you keep things simple, you might end up happier."

Yang Zan, Director-General of China's Department of International Cooperation, on his philosophy of life

Management, then vice-chancellor of the university.

In 2007, he joined China's Ministry of Transport as Deputy Director-General of its Department of Water Transportation, before moving to the Department of International Cooperation in 2010. Yang assumed his current post last August.

Success has not changed him. He is still a simple man at heart who loves watching action dramas and Chinese period comedies in his free time. Yang says his philosophy in life – and work – is to be contented in every situation. He reasons: "If you have too many goals and ambitions in life, you might never be fulfilled. But if you keep things simple, you might end up happier."

Managing bilateral relations

Yang was invited to Singapore in July for a three-day visit under the Maritime and Port Authority of Singapore's (MPA's) Distinguished Visitors Programme.

During his stay, Yang co-chaired the 8th China-Singapore Senior Officials' Committee Meeting, a platform to chart the direction of maritime cooperation between China and Singapore

in areas such as port management, maritime training, and maritime research and development.

The meeting was formalised under a Memorandum of Understanding (MOU) signed in 2004 on Maritime Cooperation, which Yang says has advanced cooperation between the two countries in areas such as trade, research and governance.

"China has always sought to promote cooperation with Singapore in the maritime field, not only in governance, but also in business management.

"There is a lot we can learn from Singapore's expertise in managing a global port, to further our own business opportunities," he says.

Singapore and China are both member states of the International Maritime Organization (IMO), and enjoy exchanging views on a wide range of issues such as piracy and maritime environment, Yang notes. "With common strategic aims and cultural similarities, cooperation is made even easier between our two countries."

Finding common ground

Yang admits that this does not come so easily with other countries. He says: "One of

the biggest challenges is trying to resolve and deal with different countries' views on their respective environmental responsibilities. We try to emphasise that each country has its own responsibility and part to play in the solution."

Yang modestly admits that he is still learning the ropes of handling these difficulties, but is undaunted by the challenge. "Each country has its own culture and view, so the work becomes even more multifaceted and complex. I try to be flexible, but without losing my own principles in dealing with cooperation issues," he says.

Choppy waters ahead

On the shipping outlook, Yang believes that the global industry will continue to face many challenges. Already, the decline in global trade has caused freight rates and vessel values to fall sharply.

"Insufficient global demand will cause shipping firms to face an oversupply," he says.

"As the economy improves, the industry will also recover, but this recovery will not be determined by the shipping industry alone."

BUILDING COOPERATION

YANG ZAN, DIRECTOR-GENERAL OF CHINA'S DEPARTMENT OF INTERNATIONAL COOPERATION, MINISTRY OF TRANSPORT, SEEKS COMMON GROUND WITH OTHER COUNTRIES AMIDST A SEA OF VIEWS. BY JAMIE EE

▸ A key figure in the Indonesian maritime sector, Captain Bobby R. Mamahit was in Singapore for the Maritime and Port Authority of Singapore's (MPA) Distinguished Visitors Programme in August. We speak to the Director General for Sea Transportation, Ministry of Transportation of the Republic of Indonesia, during his recent two-day trip to Singapore, to find out more about his perspectives on the industry.

What drew you to the maritime industry?

My father was a seafarer, and ever since I was a child, I wanted to follow in his footsteps. I had a professional career as a seafarer on board many vessels, and later decided to work in the government to do my part in building and developing Indonesia's maritime industry. And now, in this line of work, I do get excited when I hear that our sea transportation system can compare favourably with others around the world.

How would you describe the state of Singapore-Indonesia maritime relations?

From an administrative and geographical point of view, it is vital that good relations are maintained between both countries. As the Straits of Malacca and Singapore, bordered by the three littoral states (Indonesia, Malaysia and Singapore),

are a very important trade route, we can further cooperate in other areas to enhance the region's maritime business.

What other areas of cooperation with Singapore are you looking at?

We are looking to cooperate with Singapore on issues like the Maritime Labour Convention (MLC) 2006 and the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).

Indonesia is currently in the process of ratifying the MLC, and we hope to work with Singapore to encourage all ASEAN members to do the same.

Both Singapore and Indonesia are also parties to the MARPOL 73/78 Annex II, which deals with preventing marine pollution. I feel that this is an important area in which ASEAN states can hopefully come together and cooperate.

What are the key issues facing the maritime industry in Indonesia, and what is being done to overcome them?

Some of the issues we are looking at are competition, performance, productivity, efficiency, and keeping costs low. To solve this, we need to strengthen the domestic market and develop entrepreneurship, as well as increase the application of information technology.

We are also looking to expand the

maritime industry's development outside of Java, through the development of economic corridors, in the framework of the Masterplan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI).

There are other challenges facing our maritime industry. The application of the Republic of Indonesia Presidential Instruction No. 5 of 2005 on the National Shipping Industry Empowerment (calling all players to play the principle of cabotage in a consistent manner and formulate policies that would empower Indonesia's national shipping industry) has had a positive impact on the progress of the national shipping industry over the last eight years.

However, at the end of 2012, the market share of national shipping for overseas sea freight amounted to only 9.86 per cent of the total 532.5 million tons. The challenge for us is in increasing this share. Also, I feel that we have to look into transporting other types of commodities, such as crude palm oil and coal, to boost our fleet numbers.

How has the growth of the Indonesian maritime industry been?

After the implementation of the cabotage principle, there has been a 99.42 per cent increase in the size of the national commercial fleet between March 2005 and March 2013. We can certainly build on this and look towards a programme that we can implement beyond cabotage.

STRAIT PARTNERS

CAPTAIN BOBBY R. MAMAHIT BELIEVES THAT INDONESIA AND SINGAPORE CAN PLAY KEY ROLES IN ASEAN'S MARITIME INDUSTRY. BY **SATISH CHENEY**

Indonesia is currently in the process of ratifying the MLC, and we hope to work with Singapore to encourage all ASEAN members to do the same.



A "CYBERSEA"

► Manpower is a critical challenge that the maritime industry faces. In particular, we are facing difficulties in attracting young people to jobs at sea, and in retaining those who do embark on such careers. To address this talent crunch, BIMCO and maritime training specialist Videotel Marine International launched an e-learning Diploma Programme (BeDP) in 2011. The programme comprises and is delivered via a highly focused, web-based, e-learning package.

For several decades, BIMCO has offered conventional classroom-type programmes aimed at people new to the business who had taken shoreside jobs. The e-learning initiative will now also help to support careers in shipping that begin at sea.

As such a career path becomes more visible, and we hope, more attractive, the BeDP will serve well to enhance the training available to personnel in both ship and shore capacities.

KNOWLEDGE AT YOUR FINGERTIPS

The web-based training makes learning much more convenient and efficient, bringing curriculum, quizzes and examinations to students' fingertips. Online course meetings are held at designated times, with highly-qualified tutors providing guidance.

The system's innovative Learning Management System (LMS) also gives students an

overview of the module by consolidating all learning materials in one place. Here, participants can find e-books, the library, discussion forums, a list of fellow students, and links to the webinars.

Participants are divided into study groups, and meet online in three teaching sessions with their tutor and fellow students. Webinar recordings

are available for viewing, so that participants can go online at any time to catch up on a session they missed, or to remind themselves of what the tutor said earlier in the course.

Self-assessments form an integral part of each module, to ensure that students have a thorough understanding of the key issues as they progress through the course.

MEETING THE DEMANDS OF THE FUTURE

BIMCO believes the demand for effective training and education within the maritime industry has never been greater, and will continue to grow. Videotel's web-based e-learning technology makes it possible to deliver this knowledge in a practical and affordable way.

The BeDP is in many ways a groundbreaking initiative for the industry. For one thing, participants can earn credit points recognised by a

number of selected maritime universities that collaborate with BIMCO, while longer BIMCO courses provide further accreditation. Students who receive the BeDP Certificate and BIMCO Diploma can also be exempted from some relevant courses if they participate in a Masters and/or MBA programme at the Shanghai Maritime University or the School of Law, Shanghai Maritime University or at the

School of Law, Dalian Maritime University. The most innovative aspect of the programme is perhaps its web-based delivery system. Participants can access coursework on Videotel client vessels via the company's unique comprehensive onboard computer training system. Using the new system, maritime students will be able to receive online training from experts in the shipping world specially selected by BIMCO.

EDUCATION

RECENTLY RETIRED BIMCO SECRETARY-GENERAL TORBEN SKAANILD BELIEVES THAT THEIR E-LEARNING DIPLOMA PROGRAMME CAN HELP ADDRESS THE MARITIME INDUSTRY'S TALENT CRUNCH.



A POSITIVE RESPONSE

Since its launch, the response to BeDP has been encouraging, with participants from all over the world enrolling for the programme, which reflects the global nature of the industry. More importantly, participants have given positive feedback on completing various modules, and the positive word-of-mouth endorsements have resulted in colleagues

and associates joining the programme.

This programme, as well as similar ones offered elsewhere, will no doubt beef up the maritime industry's collective skills, knowledge and expertise. Since the 2009 downturn, every shipping company has come to realise that efficiencies must be maximised across the board. An ill-trained workforce will

ultimately make costly mistakes and waste valuable time.

The BeDP is an attractive option for employers as it presents an affordable and effective training opportunity that will enhance work processes. This unique programme should not be seen as a training cost, but as an invaluable investment in efficiency.



A HOLISTIC PROGRAMME

Each training module comprises approximately three months of training followed by a final written examination, leading to the award of a BIMCO Certificate. Four certificates can be combined to achieve the BIMCO Diploma, which is recognised by a number of maritime universities.

In addition to learning modules, the programme is accompanied by online forums and workshops that provide networking opportunities for young shipping professionals.

The diploma course is aimed at a cross section of existing

and potential talent, including students entering a trainee or internship programme, staff from shipping companies or financial institutions, and even government entities that wish to learn more about the industry. The BeDP will also benefit shipping practitioners who wish to refresh and revise their shipping knowledge, as well as seafarers looking to broaden their knowledge.

One key attraction of the e-learning programme is its affordability. The virtual nature of the learning process means that classroom costs

and travel and hotel expenses are eliminated, making the training much more affordable. Employees of BIMCO member companies will also receive discounts.

The BeDP has also been included by the Maritime and Port Authority of Singapore (MPA) as one of the pre-approved certifiable programmes supported under the Maritime Cluster Fund's Training@MaritimeSingapore scheme in 2013. The co-funding support level is 70 per cent off the course fee (excluding GST), subject to a cap.

To find out more about the BeDP, visit bimco.org.

ASIA'S MARITIME FORUM

REPRESENTATIVES FROM THE SINGAPORE MARITIME FOUNDATION, SINGAPORE SHIPPING ASSOCIATION AND SEATRADE DISCUSS THE SUCCESS OF SEA ASIA, ONE OF THE REGION'S PREMIER MARITIME EVENTS, AND THE IMPORTANCE OF ITS EXISTENCE.

Patrick Phoon



FROM LEFT: Patrick Phoon, President, Singapore Shipping Association; Michael Chia, Chairman, Singapore Maritime Foundation; and Chris Hayman, Chairman, Seatrade.



SINGAPORE NAUTILUS (SN): What prompted the inception of Sea Asia?

MICHAEL CHIA (MC): Sea Asia was first organised in 2007 to advance Singapore's position as a premier international maritime centre. A co-organiser of this iconic maritime show, the Singapore Maritime Foundation (SMF) has always envisioned Sea Asia as a strategic forum for global maritime leaders to congregate and share insights on pertinent issues in the industry.

CHRIS HAYMAN (CH): During a meeting at Posidonia 2004, the iconic maritime exhibition of Greece, the then Chief Executive of the Maritime and Port Authority of Singapore (MPA) and board member of

SMF, Rear Admiral (NS) Lui Tuck Yew, told us that he wanted to see a maritime event of similar stature held in Singapore to reflect the country's leadership role in Asia, and SMF was tasked to implement this.

Seatrade was confident of achieving such a goal as we had vast experience in running major exhibitions and conferences for shipping and cruise sectors all over the world. We were delighted when our proposal was accepted, and have enjoyed working closely with SMF as co-organisers in developing Sea Asia.

SN: How has Sea Asia fared so far?

MC: Sea Asia 2013 ended on a high note, with a record

Michael Chia



Chris Hayman





“The reception to Sea Asia demonstrates that the show is fast becoming one of the **must-attend maritime events on the global maritime calendar.”**

Michael Chia, Chairman, Singapore Maritime Foundation

number of 13,167 participants from 68 countries and about 700 delegates from 39 countries, exceeding all attendance figures clocked during previous editions of the show.

The reception to Sea Asia demonstrates that the show is fast becoming one of the must-attend maritime events on the global maritime calendar.

CH: Sea Asia is the fastest growing maritime exhibition in Asia, and we have been consistently meeting all the targets we have set for it in terms of development. Gross exhibition space has more than doubled over the four events.

PATRICK PHOON (PP): In 2010, Sea Asia 2009 was conferred the Exhibition of the Year award at the Singapore Experience Awards Ceremony. I remember this clearly as I collected the award on behalf of the SMF board. Winning this award is a milestone achievement for

Sea Asia – it testifies that the show is on the right track to becoming a quality maritime event, showcasing Singapore’s maritime capabilities and its role as the maritime gateway to Asia. In the long run, we hope to grow the show in the likes of Nor-Shipping in Norway and Posidonia in Greece, as well as establish Singapore’s standing as a key thought-leader in maritime issues.

SN: How has the Sea Asia–Singapore Maritime Week (SMW) partnership worked for the show?

MC: SMW has proven to be a successful formula for bringing together maritime luminaries from all over the world. By tapping on the popularity of this initiative, Sea Asia can effectively deliver a strong line-up of prominent thought leaders to speak at

the event's conferences.

PP: Both events seek to attract cosmopolitan participants, so it's only natural that Sea Asia be held during SMW. It is a perfect fit and both parties can only benefit from this.

CH: Sea Asia's goals are to bring the maritime world to Singapore, to hear cutting edge opinions from outstanding speakers, to see a dynamic range of products and services, and to network with new contacts from around the world. SMW has, under the leadership of MPA, become the world's most successful cluster of maritime events, and Sea Asia adds to the vibrancy of the whole event.

SN: [How can Sea Asia](#)

help address some of the pertinent issues that the maritime industry faces?

MC: The maritime industry has grown in recent years, driven by strong demand from the offshore industry. With Singapore's dominant share of the world's rig building and Floating Production Storage Offloading (FPSO) vessel conversion market (in addition to ship repair), the introduction of Sea Asia Offshore Day during the 2013 show – to address pertinent issues in this sector – was most timely and well received. Moving forward, we will be organising a one-day Sea Asia Offshore Marine event during the even years to meet the industry's needs and

sustain its momentum.

PP: A unique strength of the Singapore maritime community is the strong camaraderie and partnership that the Government, trade associations and industry players have developed over the years. Its key members have fuelled the evolution and growth of Sea Asia by sharing their "finger on the pulse" insights on the industry, to ensure that the programme aptly addresses the pertinent issues at hand. I can safely say that with each new edition of Sea Asia, delegates can look forward to something even more exciting!

CH: Sea Asia aims to present the future of the industry. The international advisory panel

and the committees all provide valuable input.

The massive potential in the offshore services sector was reflected at Sea Asia this year, with the introduction of Offshore Marine Day. This brought in new exhibitors, visitors, and fresh thinking in the offshore conference sessions. Seatrade's offices around the world have been building the international profile of the exhibition, with a growing number of national pavilions at each event. This process will continue, as more companies around the world recognise the importance of Singapore as an international maritime centre, and Sea Asia's role as the natural meeting place for maritime leaders.

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PRECISION DOCKING

THERE IS LITTLE MARGIN FOR ERROR IN HIS JOB AS A DOCK ENGINEER, BUT MUHAMMAD SYAZWAN HASSAN TELLS SATISH CHENEY THAT HE IS RELISHING THE CHALLENGE.

► Muhammad Syazwan Hassan, a dock engineer for Sembcorp Marine's subsidiary Jurong Shipyard, says the passion for his occupation was instilled in him through workplace visits with his mother, who worked in the maritime industry when he was a child.

"I always knew that my future career would involve the sea and ships," he says.

"When I grew older it dawned on me that I was very interested in this industry. And I wanted to be doing something hands-on and not be desk bound."

Other than his mother, Syazwan's cousins too are employed in the maritime sector, and some of them even work at shipyards close to where he is based.

The 27-year-old is part of a team responsible for manoeuvring ships and rigs safely into a dry dock – a giant basin where water can be pumped out to facilitate repair works or modifications.

Syazwan's job is to ensure that this is done as quickly and safely as possible, and that these megastructures do not sustain damage when entering or leaving the dry dock.

Syazwan likens his job to that of an air traffic controller – but in the water. He needs to be aware of all environmental (both natural and human) factors involved in guiding a ship or rig into dock, as one small hiccup could affect the schedule of other projects entering the dock. Sometimes, the work is made more challenging when multiple dockings are carried out simultaneously.

His working hours can vary with the circumstances, like adverse weather conditions that affect the docking process.

"When conditions are good, we can bring in a vessel or rig to a dry dock in about two hours. Sometimes, however, when the forces of nature are against us, more time may be required," he says.

But Syazwan says he gets

plenty of help and enjoys great camaraderie with his colleagues; they work together effectively to ensure that operations are smooth sailing.

The young go-getter loves the challenges his job poses. He says: "Every day is different because you never know what to expect, and I find the satisfaction really rewarding."

Syazwan, who is getting married at the end of the year, unwinds by playing soccer and spending time with his loved ones when he is off work.

"This is how I recharge and stay energised," he says.

Before starting his career as a dock engineer, Syazwan took a diploma in Marine & Offshore Technology at Ngee Ann Polytechnic, and obtained his Bachelor of Engineering with Honours in Naval Architecture via a two-year course – thanks to a collaboration between the Singapore Institute of Technology and the University of Newcastle upon Tyne.

But besides formal qualifications, Syazwan says

that in order to be successful as a dock engineer, one needs to be able to focus on the task at hand and think quickly on one's feet.

He adds, "You also need to be driven and focused, as full concentration is required to ensure safety during docking. I also believe that being humble will make more people willing to help you with their own experiences and invaluable advice."

Syazwan says he wants to pursue his career with the company for as long as possible. There is good scope for career advancement and progression for dock engineers.

For the next phase in a dock engineer's career, one can go on to become a manager in charge of more complex assignments.

In order to become a dock master, controlling the overall docking system in the shipyard, one has to undergo special courses and obtain licenses from the Maritime and Port Authority of Singapore.



SMALL SHIP,



LEFT: A model of a semi-submersible drilling rig built by Sembcorp Marine's subsidiary Jurong Shipyard at the recent Singapore Maritime Week 2013 Exhibition. Ship models like this one can take up to four months to build.

BIG WORK

▶ They may be small, but the amount of effort and detail that go into building commercial ship models are formidable.

One ship modeller that *Singapore Nautilus* spoke with says that there are generally three stages to building a model ship – Body, Deck House and Fitting.

Commonly exhibited in

maritime companies, these model ships are custom-built according to client specifications. This means that every part of the ship, from the hull to the cranes and the tiny chimneys, are painstakingly crafted from scratch.

The most challenging part of building process is the last phase where all the intricate

parts and decks have to be fitted with precision.

According to AE Models, a veteran in the commercial ship modeling business in Singapore with over 30 years of experience, this is the most time-consuming segment and can take up to two months – almost half the duration of the whole project.

Manpower

It takes six to eight workers to complete a model ship.

Cost & Time

Depending on the scale and complexity of the project, models can cost anywhere between S\$5,000 and S\$20,000, and require about four months to complete.

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