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▶ making waves at SMW ▶ Futureship
for the present ▶ preserving maritime
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COME APRIL 2012,
PROBLEM STATEMENT
WILL BE UNVEILED:

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**NEXT
GENERATION
CONTAINER
PORT
CHALLENGE**

The Next Generation Container Port (NGCP) Challenge is seeking radical new proposals for a container port of the future. Open to all interested individuals and teams, participants stand a chance to win a top prize of USD 1 million. The problem statement for the NGCP Challenge will be unveiled during the Singapore Maritime Week in **April 2012**.

Register your interest today at www.maritimeinstitute.sg/portchallenge

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PERSONALITY
• NG YAT CHUNG
• SUN WEON PYO



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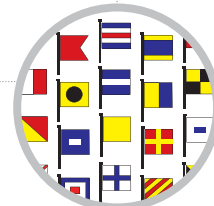
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publisher



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22-27 April 2012

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Maritime Singapore

Singapore Maritime Week (SMW) is once again upon us. On its seventh run this year, SMW continues to grow and attract a wide range of maritime conferences, dialogues and activities.

The headliner for this year's Singapore Maritime Lecture – a key highlight of SMW – is Mr Koji Sekimizu, the new Secretary-General of the International Maritime Organization (IMO). Many prominent international and local maritime industry leaders will gather at Fullerton Hotel on April 25 to listen to what Mr Sekimizu has to share.

Beyond the industry, there are also events in SMW for everyone. An exhibition with the theme "Walk through Maritime Singapore" will be held at VivoCity, with highlights such as selected entries from a container design contest held earlier. And, for a fun and fresh take on all things maritime, the Amazing Maritime Challenge will be held on April 22 in and

around the newly opened Maritime Experiential Museum & Aquarium. Teams of four will need to strategise and compete in various games centred on maritime themes.

In other segments of *Singapore Nautilus*, we have had the privilege to interview Mr Ng Yat Chung, Group President and Chief Executive Officer of NOL, and find out more about his plans to keep the maritime challenges of 2012 at bay in Personality. Our Commentary section also throws the spotlight on Mr Chung Chee Kit, an industry veteran who showcases his passion for Singapore's maritime heritage through art.

wee shann

executive editor



New signatories for Maritime Singapore Green Pledge



► The Maritime Singapore Green Pledge continues to receive positive response from the maritime industry as 15 more organisations gathered to sign it during the second Green Pledge signing ceremony.

The inaugural signing ceremony took place in April last year. To date, 27 companies have signed the pledge.

The 15 new signatories include classification societies and shipping lines, which have committed to be responsible members of the international maritime community by supporting and promoting clean and green shipping in Singapore.

The signing, facilitated by the Maritime and Port Authority of Singapore (MPA), was witnessed by Mr Choi Shing Kwok,

Permanent Secretary of the Ministry of Transport; Mr Lucien Wong, MPA Chairman and Mr Lam Yi Young, MPA Chief Executive. It took place at the Singapore Maritime Foundation's New Year cocktail reception at the Sheraton Towers in January this year.

At the ceremony, six Singapore-registered ships, which have met the conditions of MPA's Green Ship Programme, were also presented with Green Ship certificates.

Launched in July last year as part of the Maritime Singapore Green Initiative, the programme is targeted at Singapore-flagged vessels which adopt energy-efficient ship designs that reduce fuel consumption and carbon dioxide emissions.

Those which go beyond

Mr Lui Tuck Yew (left), Minister for Transport and Mr Lam Yi Young (right), Chief Executive, Maritime and Port Authority of Singapore.



the requirements of IMO's Energy Efficiency Design Index will enjoy a 50 per cent reduction of Initial Registration Fees and a 20 per cent rebate on Annual Tonnage Tax payable.

Said Mr Lam: "We are heartened to see the encouraging response from maritime companies to the Maritime Singapore Green Initiative, and are pleased to see more of them coming forward to sign the Maritime Singapore Green Pledge."

New MPA Board

► Twelve members to the Maritime and Port Authority of Singapore (MPA) Board were appointed by Mr Lui Tuck Yew, Minister for Transport and Second Minister for Foreign Affairs for the period Feb 2, 2012 to Feb 1, 2015. They are Mr Lucien Wong, Managing Partner, Allen & Gledhill

LLP (Chairman); Dato' Jude Benny, Managing Partner, Joseph Tan Jude Benny; BG(NS) Ishak Ismail, CEO, Defence Services, CWT Limited; Mr Lam Yi Young, Chief Executive, MPA; Mr Vincent Lien, Director, Wah Hin & Co (Pte) Ltd; RADM Ng Chee Peng, Chief of Navy,

Singapore commits to ReCAAP ISC for five more years



► Singapore reaffirmed its commitment to host the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) Information Sharing Centre (ISC) for another five years.

The new headquarters agreement was signed in March by Mr Lam Yi Young, Chief Executive of the Maritime and Port Authority of Singapore (MPA), and Mr Yoshihisa Endo, Executive Director of the ReCAAP ISC, and was witnessed by Mr Lui Tuck Yew, Minister for Transport and Second Minister for Foreign Affairs, and VADM Edmund Tan, Chairperson of the ReCAAP ISC Governing Council and Philippines Governor to the ReCAAP ISC.

Said Mr Lui: "As a global hub port and major flag state, Singapore is committed to combating piracy and armed robbery at sea. This new headquarters agreement will enable the ReCAAP ISC to strengthen its partnership with the government and industry towards safe and secure shipping in Asia."

Launched in 2006, the ReCAAP ISC has established itself as an authority on incidents of piracy and armed robbery against ships in Asia. It also contributes to anti-piracy capacity building and engages the industry

in measures to prevent piracy attacks. "The signing of the headquarters agreement today avails government and industry stakeholders added opportunities for strengthening cooperation towards ensuring safe and secure waterways for international shipping in Asia," said Mr Lam.

Mr Endo added: "We are grateful for the multilateral efforts and the increasing cooperation with our partner organisations and the maritime stakeholders. I will continue to lead the ReCAAP ISC and, together, we will aim to bring about a safer sea for all."



Republic of Singapore Navy; Mr Patrick Phoon, President, Singapore Shipping Association; Mr Thomas Tay, General Secretary, Singapore Maritime Officers' Union; Mr James Wong, Deputy Secretary (Policy), Public Service Division, Prime Minister's Office; Mr Wong Weng Sun,

President/CEO, Sembcorp Marine Ltd; Mr Norifumi Yamamoto, Managing Director, Celeste Holding Pte Ltd and Dr Robert Yap, Chairman and CEO, YCH Group.

Of the 12 members, the appointments of BG(NS) Ishak, Mr Lien and Mr Phoon are new.

Mr Bahren Shaari, Managing Director, Bank of Singapore Limited; Mr Andreas Sohmen-Pao, CEO, BW Maritime Pte Ltd as well as Mr Teo Siong Seng, ex-President, Singapore Shipping Association, have stepped down as of Feb 2, 2012.

MPA hosts WMU students



► The Maritime and Port Authority of Singapore (MPA) hosted a group of over 20 maritime officials from 14 countries from March 5 to 9. Currently pursuing their Masters in Shipping and Port Management at the World Maritime University (WMU), they were led by Mr Daniel Seong-Hyeok Moon.

The programme included visits to the PSA Institute, MPA's Port Operations Control Centre in Changi and its Integrated Simulation Centre. It aimed to give participants a better understanding of container terminal operations, port safety management and the application of technology in enhancing safety of navigation.

Student Zamig Ismayilov said: "The opportunity to meet and listen to the advice of professionals from various port management disciplines is both invaluable and unforgettable, as these are the people who make Singapore one of the best-performing ports in the world."

Singapore Celebrates Two Billion Gross Tons in Annual Vessel Arrival Tonnage



The Port of Singapore reached a new milestone in December 2011, when it crossed the two billion gross tons (GT) mark in vessel arrival for the first time. A ceremony was held at PSA's Pasir Panjang Terminal, with Mr Lui Tuck Yew, Minister for Transport and Second Minister for Foreign Affairs, as the guest of honour. The vessel that crossed the two billion GT mark was MV APL Washington, a container ship of 75,582 GT. At the ceremony, the Master of MV APL Washington and the Group President and CEO of NOL were presented with mementoes by Mr Lui.

MPA Workplan Seminar 2012



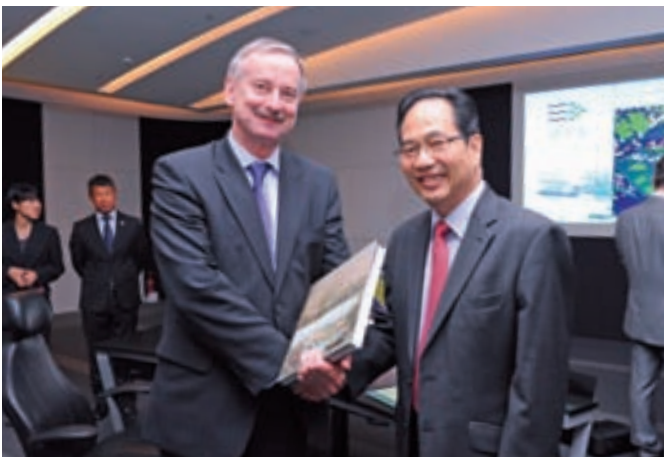
MPA organised its annual Workplan seminar at Mapletree Business City in February this year, with Mr Lucien Wong, Chairman of MPA, as the guest of honour.

MPA 10th Bunkering Forum



MPA held its 10th Bunkering Forum at the STI auditorium in March this year.

Visit by European Commission



HE Siim Kallas, Vice-President of the European Commission and Commissioner for Transport, paid a visit to MPA's Port Operations Control Centre in Changi.

Visit by Qatar Ports



Delegates from Qatar Ports, headed by Mr Abdulaziz Al-Muftah, Director, Ras Laffan Industrial City (Qatar Petroleum), paid a visit to MPA.

COOL CR

THE NEW PURPOSE-BUILT PATROL VESSELS THAT THE MARITIME AND PORT AUTHORITY OF SINGAPORE HAS ACQUIRED CAN KEEP SINGAPORE WATERS SAFE AND POLLUTION-FREE WITH GREATER EFFICIENCY.

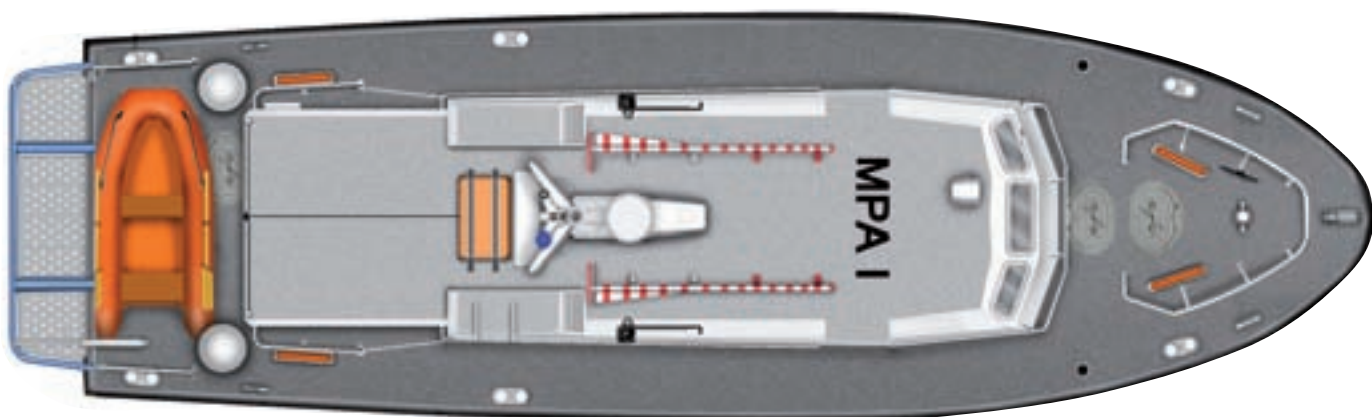
BY GERALDINE KAN

► They are speedier, greener and more efficient. Recently acquired by the Maritime and Port Authority of Singapore (MPA), these six purpose-built patrol craft keep port waters safe and pollution-free. Unveiled in February this year at an inauguration ceremony held at Marina South Pier, the new fleet was commissioned at \$19 million for a five-year contract.

MPA Chief Executive Lam Yi Young says: "I am confident that, with our new patrol craft, we will be well placed to ensure safety of navigation and protection of the marine environment in our port waters, even as the Port of Singapore continues to grow as a premier global hub port."

With one of the world's busiest harbours, Singapore sees some 130,000 port calls annually. The enhanced

features and functionality of the new fleet are a boost to MPA's team of port inspectors, who patrol local waterways round the clock to enforce MPA's regulations on navigational safety and marine environment protection, and respond to any marine incidents.



AFT



THE SIX NEW CRAFT WERE DESIGNED AND CONSTRUCTED SPECIFICALLY TO SUIT MPA'S NEEDS. HERE IS THE LOWDOWN:

DECK PLAN

Wider and more spacious walkways: These make it easier for the inspectors to board other boats more quickly.

EXTERIOR

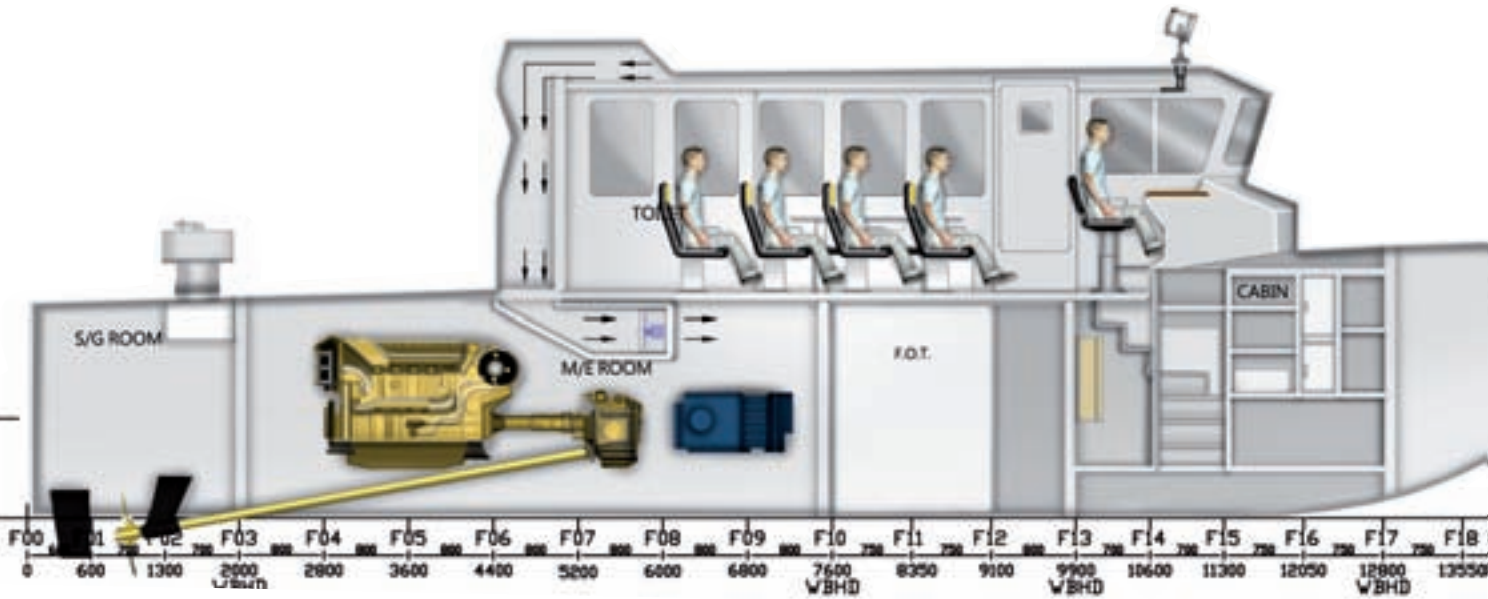
Larger: The boats are bigger than their predecessors, with a breadth of 2.8m and a depth of 2.2m.

Faster: The new patrol vessels are capable of reaching a top speed of 20 knots with reduced energy consumption – which means port inspectors can respond more easily to incidents within 30 minutes.

Greener: The craft have low-emission engines and the hulls are coated with environmentally friendly marine paints.

Enhanced manoeuvrability: The innovative hull design allows the inspectors to navigate with greater ease through the often narrow and shallow channels in Singapore waters.

10 PORT & STARBOARD ◊ PURPOSE-BUILT PATROL CRAFT

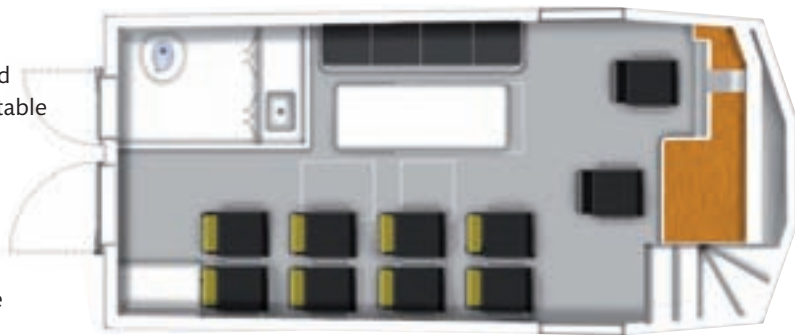


INTERIOR

Greater comfort: The seats are wider and more ergonomic, making it more comfortable for the inspectors who are on the vessels for almost 12 hours at a time.

Less noise: Specially formulated polyurethane polymers, layered with isolation materials, are installed to reduce the level of noise in the wheelhouse.

Better integration: The vessels' new, integrated navigation system puts electronic sea charts, radar information, a differentiated global positioning system, a vessel automatic identification system and echo sounders into a single display – making it easier for inspectors to assess situations at a glance.



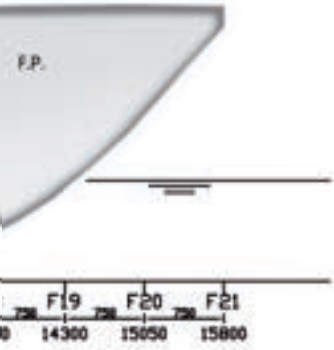
EMERGENCY RESPONSE

New equipment: The dispersant system and dispersant storage tank allow inspectors to be the first responders to combat oil spills during incidents.



HELPING TO KEEP OUR PORT WATERS SAFE AND POLLUTION-FREE IS MPA'S TEAM OF PORT INSPECTORS.

Senior port inspector Mohd Noor Noordin, 50, who has been at the job for 16 years, tells *Singapore Nautilus* (SN) about his work.



The new boats are faster – which makes it easier for us to respond to incidents.

SN: What is the role of a port inspector?

Noordin: We are the “eyes and ears” of the port master, and the first responders to incidents at sea, enforcing MPA regulations and keeping Singapore waters safe and pollution-free. In short, we’re tasked with saving lives and protecting property and the environment.

We make sure there are no illegal activities, pollution or small craft and fishing vehicles in the fairway. We also ensure navigation aids like beacons and buoys are in order. Often, we need to board other vessels for inspection and check that they are following the law. This includes examining crude oil carriers to ensure they’re following bunkering regulations. We always have to be prepared to deal with a crisis that might happen, including boats running aground, oil spills during oil transfers and collisions.



SN: How has the job of a port inspector changed over the years?

Noordin: When I first started, we mostly reacted to incidents. Now, we also do oil sampling, for example, on bunker barges, and carry out bunkering quality inspection and more detailed investigations into incidents. Hence, we need to make sure we learn and plan forward more.

SN: What is a typical patrol like?

Noordin: Typically, I’d report for work at the West Coast Pier and do necessary follow-ups via e-mail for about half an hour before setting off.

First, we check that everything on the boat is in order. Then, we proceed to places such as Sungei Pandan and Jurong Fairway. We need to be very careful as there are many vessels there, such as tankers.

SN: How do the new patrol craft help you in your work?

Noordin: The new vessels are larger and easier to manoeuvre. Wider walkways make it easier to get around and board other boats. We’re on them for almost 12 hours, so it’s great that they are quieter and smoother, and their seats wider and more comfortable. The new boats are faster – which makes it easier for us to respond to incidents.

SCALING GREATER HEIGHTS

SINGAPORE MARITIME WEEK 2012
CELEBRATES THE COUNTRY'S VIBRANCY
AS A MAJOR INTERNATIONAL
MARITIME HUB. BY THAVA RANI



► Singapore Maritime Week (SMW) is an annual offering from the Maritime and Port Authority of Singapore (MPA). Since it started in 2006, it has become a leading maritime event, gathering the international maritime community for a week of conferences, dialogues, exhibitions and social events. This year's SMW will be held from April 22 to 27.

Strength to strength

SMW is based on the key principles of People, Ideas and Opportunities, and this is held true each year. Through the years, SMW has brought in industry experts to helm dialogues and discussions, and hosted a wide range of maritime events.

Besides the significant increase in the number of seminar participants, the introduction of public exhibitions and outreach programmes has also helped boost participation numbers for SMW.

PEOPLE

SMW reaches out to the public through various outreach events to raise awareness of Maritime Singapore.

The Amazing Maritime Challenge is one such event held during SMW 2012. Featuring a unique series of games and quizzes centred on maritime themes, the challenge will be held in and around the newly opened Maritime Experiential Museum & Aquarium. This contest is jointly organised by MPA, the Association of Singapore Marine Industries, the Singapore Maritime Foundation and the Singapore Shipping Association.

Participants of the Maritime Learning Journeys – held annually as part of SMW – will also experience first-hand what being out at sea is like, and witness port operations during a three-part tour. These learning journeys are aimed at giving students an insight into what Maritime Singapore

comprises, as well as the range of career opportunities in the industry.

2012 also marks Singapore's 40th anniversary of containerisation. Selected entries from the pre-SMW outreach competition, Your Colourful World of Containers, will be showcased at a public exhibition held at VivoCity from April 17 to 22.

IDEAS

True to MPA's aim of establishing Singapore as a thought leader and platform for meaningful discussions, SMW consists of events that facilitate the conception of ideas for the maritime industry.

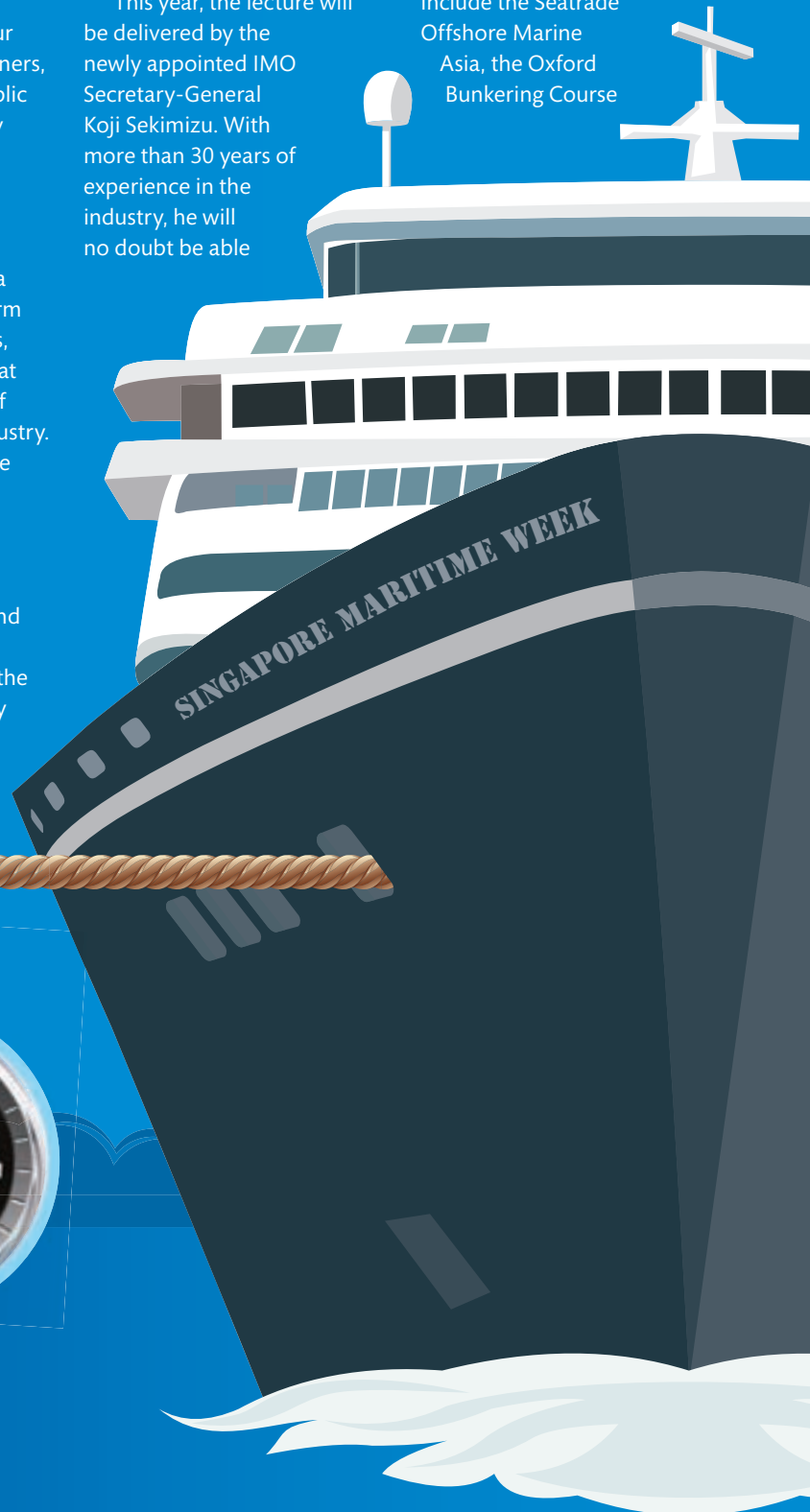
The Singapore Maritime Lecture (SML) is a central component of the SMW calendar, which sees a prominent speaker every year delivering a lecture and facilitating discussion on pertinent topics affecting the industry. Since the delivery of the inaugural lecture

by former Prime Minister Lee Kuan Yew in 2007, prominent members of the global maritime community have headed the SML over the years.

This year, the lecture will be delivered by the newly appointed IMO Secretary-General Koji Sekimizu. With more than 30 years of experience in the industry, he will no doubt be able

to shed strategic insights on international maritime issues.

The members of the community also have a slew of diverse events to look forward to at SMW 2012. These include the Seatrade Offshore Marine Asia, the Oxford Bunkering Course



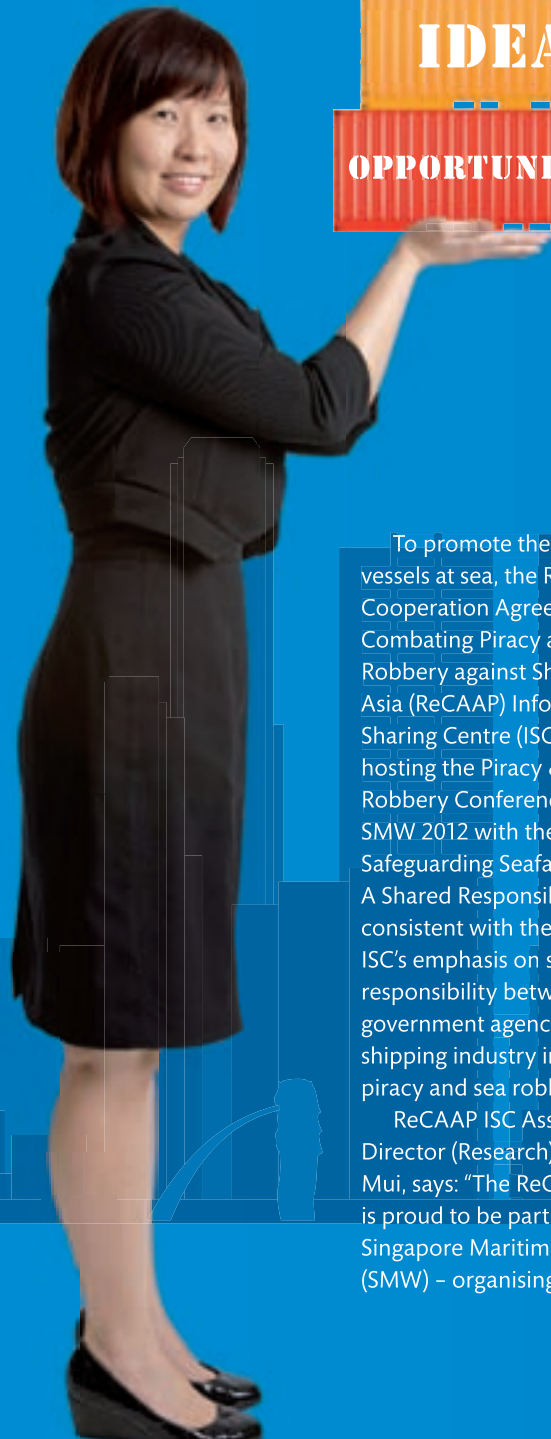
“Through the various outreach activities before and during the Singapore Maritime Week, we hope to enable more people to discover Maritime Singapore and learn more about the exciting maritime industry in a fun and engaging manner.”

MPA CHIEF EXECUTIVE LAM YI YOUNG

(Advanced), the consultative Shipping Group meeting, the Singapore Yacht Show and more.

This year, the Baltic and International Maritime Council (BIMCO) is holding its AGM in conjunction with SMW. The AGM's theme is Innovation – pitched as the key to sustainable shipping for the future.

Says BIMCO Secretary-General/CEO Torben C. Skaanild: “The growing diversity of Singapore’s shipping community made BIMCO’s decision to conduct several events and meetings during Singapore Maritime Week a natural choice – particularly as BIMCO’s main event, Perspectives in Shipping: Survival Through Innovation, draws upon the expertise of professionals from a wide range of fields such as ship finance, ship design and shipboard management. Singapore’s International Maritime Centre has succeeded in drawing a critical mass of key players representing all shipping sectors. It reflects the high level of economic activity in Asia and the importance of Singapore as a regional maritime cluster and one of the largest ports in the region.”



and Sea Robbery Conference for four consecutive years. The conference will provide a platform and an excellent opportunity for prominent speakers, experts and key stakeholders from the shipping industries, government organisations and academic institutions to come together to exchange views and share new ideas. Each one of them can make a difference. I look forward to another fruitful and enlightening conference put together by the ReCAAP ISC, along with our co-organising partners, namely BIMCO, INTERTANKO and RSIS.”

OPPORTUNITIES

Filled with various opportunities for their participants, SMW’s social events, such as the Singapore Maritime Academy 50th Anniversary Dinner and SeaAsia 2013’s launch party, help connect the maritime community and pave the way for new partnerships and ideas.

Seeking radical new proposals for a container port of the future, MPA has teamed up with Singapore Maritime Institute to drive the Next Generation Container Port (NGCP) Challenge. Participants worldwide are encouraged to submit innovative proposals on how to plan, design and operate the next generation of container ports that exemplify performance, productivity and sustainability.

To promote the safety of vessels at sea, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) Information Sharing Centre (ISC) is also hosting the Piracy & Sea Robbery Conference at SMW 2012 with the theme Safeguarding Seafarers: A Shared Responsibility. It is consistent with the ReCAAP ISC’s emphasis on shared responsibility between government agencies and the shipping industry in combating piracy and sea robbery.

ReCAAP ISC Assistant Director (Research), Lee Yin Mui, says: “The ReCAAP ISC is proud to be part of the Singapore Maritime Week (SMW) – organising the Piracy

TRADE BOX

As Singapore celebrates 40 years of containerisation, *Singapore Nautilus* finds out more about the freight container's impact on global trade and transportation.

What is a container?

It is a large box made of aluminium or steel, and is used to transport various dry cargo. It comes in a few standard sizes, so it can be easily stacked and moved seamlessly between ships, trucks and trains. The two most commonly used sizes today come in 20ft and 40ft lengths. They are usually 8ft wide and 8ft to 9.5ft deep. A 20ft container is also known as a twenty-foot equivalent unit (TEU) – which has become the industry's standard reference.

What are the different containers used for?

Standard dry cargo containers are most commonly used.

They can transport general cargo that is not perishable, such as furniture, vehicle parts and clothes. Other kinds of containers can be specifically outfitted to carry certain types of cargo. Open tops, for instance, are useful when loading logs, machinery and odd-sized goods, while flat racks make transporting vehicles, machinery or industrial equipment easier. Tank containers, on the other hand, allow liquids such as chemicals, wine and vegetable oil to travel the world. Some containers have open sides that can transport less fragile fruits and vegetables. For more fragile items like meat, dairy products, fruits,

vegetables, chemicals and pharmaceuticals, refrigerated containers known as reefers are used.

How were goods transported before the advent of containers?

Shipping goods across the oceans was not an easy process before containerisation. The loading and unloading of individual goods – often roped together in nets, sacks, barrels, cartons or crates – made for very labour-intensive work. These individually loaded goods, known as break bulk cargo, were tied down in the hold of ships, using pieces of wood called dunnage to keep the cargo out of water.

Containerisation has revolutionised the way cargo is handled. Their uniform sizes make loading and unloading between ships, trucks and trains quicker and easier.



Who invented the container?

In 1955, North Carolina trucking entrepreneur Malcolm McLean came up with the idea of lifting entire truck trailers, each with its cargo completely intact, from a truck to a ship. The whole logistical process became simpler and quicker as no unloading of the trailer contents was required.

Why do we need containers?

Containerisation has revolutionised the way cargo is handled. Their uniform sizes make loading and unloading between ships, trucks and trains quicker and easier. Cargo

volume per shipment has also increased as the standardised sizes of containers make stacking possible. Cranes at ports can now also be built to a single standard size to handle containers more efficiently.

Enhanced cargo security is an added advantage too. As container doors are sealed upon closing, risk of theft or loss is reduced. Goods are also less likely to get damaged.

As every container has its own unique unit number, or box number, tracking and accountability issues have been ameliorated. A container's whereabouts is easily ascertained, as is the identity of the container owner or user.

DO YOU KNOW

WHAT CAN BE FOUND IN CONTAINERS?

Singapore's history of containerisation

Back in the 1960s, when containerisation was still a relatively new concept in Asia, Singapore embarked on a bold journey to build a container berths, let alone ports, was controversial even in the US and Europe then.

In fact, when Singapore decided in 1966 to build its first container terminal, not a single

shipping line had committed to building container ships for the Europe-Far East run. There were lengthy discussions with the World Bank, and a loan was secured to begin work on the East Lagoon container complex.

In 1968, construction of three container berths commenced at East Lagoon, which is now known as the Tanjong Pagar Terminal. Following its official

TIMELINE FOR CONTAINERISATION IN SINGAPORE



The first container ship to arrive in Singapore was *M.V. Nihon*.

1968

Singapore embarks on construction of three container berths at East Lagoon (now known as Tanjong Pagar Terminal)

1972

Arrival of the first container ship, the *M.V. Nihon*, at the Port of Singapore on June 24

1975

Singapore becomes the first country to offer container shipping to Australian trade

1982

Singapore handles one million TEUs in a single year

1987

Dredging and widening of Tanjong Pagar Terminal to allow for simultaneous arrival and departure of container ships

1990

Singapore exceeds five million TEUs in a single year and becomes one of the world's largest container ports

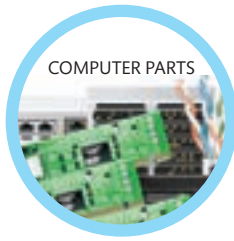




FRUITS AND VEGETABLES



COSMETICS



COMPUTER PARTS



PHARMACEUTICALS



VEHICLE PARTS

launch in 1972, the terminal welcomed its first container ship, the *M.V. Nihon*.

The dawn of containerisation

Hauling 300 containers and greeted by more than 1,000 port workers and officials, the *M.V. Nihon* arrived from Rotterdam on June 24, 1972. That made Singapore the first port in South-east Asia to receive a third-generation

container vessel, making it an important link in the new chain of global container ports. Back then, Tokyo was the only other Asian container port.

Container trade got off to a gradual but sure start in the 1970s. But it was the rapidly expanding world trade in the 1980s that provided a great boost to Singapore's ambitions as a global container port.

Back in the 1960s, when containerisation was still a relatively new concept in Asia, Singapore embarked on a bold journey to build a container port.

- | | | | | | | |
|---|---|--|--|--|---|---|
| <p>1991
Operations at second terminal (Keppel) start. World's first double-stacked trailer is introduced to carry four 20ft containers</p> | <p>1994
Singapore achieves 10 million TEUs in a single year for the first time</p> | <p>1998
Total container volume of the Port of Singapore cumulatively reaches 100 million TEUs</p> | <p>2000
Pasir Panjang Terminal officially opens</p> | <p>2003
Total container volume of the Port of Singapore cumulatively reaches 200 million TEUs</p> | <p>2007
The Pasir Panjang Terminal (PPT) Phases 3 and 4 development project kicks in to contribute an additional annual handling capacity of more than 14 million TEUs upon completion</p> | <p>2011
Singapore is one of the top container ports in the world, handling more than 29 million TEUs in 2011</p> |
|---|---|--|--|--|---|---|

COLOURFUL CONTAINERS

A COMPETITION FOR SMW 2012 CHALLENGES PARTICIPANTS TO DESIGN CONTAINER FACADES.

► Meet Natasya Sunarto and Williana – design students at the Nanyang Academy of Fine Arts (NAFA), who have recently participated in SMW 2012's Your Colourful World of Containers design competition.

The contest, organised by MPA in partnership with NAFA, is part of the various outreach activities for SMW 2012.

Open to the public, with a separate category reserved for students from NAFA's Department of Design & Media, the competition presented participants with a challenge: to create a design for the exterior of a shipping container with inspiration from items that are typically transported in it.



Design muse

Final-year student Sunarto, 21, adopted a fanciful style to illustrate her entry. Her piece is a result of 10 hours of labour, and comprises an elaborate web of things that containers carry in a whimsical style.

The graphic design major explains: "To many people, a container is just a big box. I wanted to change that perception by showing that it is actually very complex because of the variety of goods it carries. I also wanted to convey how containers bring parts of the world closer together by having a flow

in the design – every item is somehow connected to another in the picture."

Her intricate design has incorporated a window on one side to suggest the notion of looking out into the world from within a container.

For Williana, 21, simplicity is key. Her 10 hours of work yielded a different result – a minimalist design that plays on different shades of purple. Says the graphic design major: "It's actually a very simple design that experiments with typography. It was important for me to portray the subtle along with the obvious. I wanted to show that there are many aspects to a container's

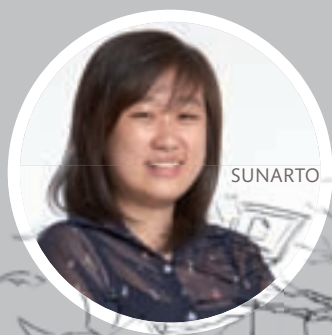
role besides just transporting heavy-duty items."

She is happy with the opportunity to inject some creative life into such a functional object. "We're so used to a container being plain and functional. But, now, we're able to put our own spin on it, and the best part is we can be as creative as we want," she adds.

The competition

Cash prizes of more than \$10,000 will be awarded to top submissions in the open category and the special NAFA category. Selected entries will also be displayed at the SMW 2012 Exhibition, held at VivoCity from April 17 to 22.

Says Tan Yee Noh, Deputy Head of Department of Design & Media at NAFA: "The contest is actually a very good way for our students to gain the experience of working for clients. They had to learn to work within the constraints of the creative brief, which will be a useful skill when they work on their future projects."



SUNDAY APRIL 22	MONDAY APRIL 23	TUESDAY APRIL 24	WEDNESDAY APRIL 25	THURSDAY APRIL 26	FRIDAY APRIL 27
MORNING/AFTERNOON EVENTS					
Singapore Maritime Week Exhibition (April 17-22)			Maritime Learning Journeys		
Amazing Maritime Challenge			MARTECH/MARSIM 2012		
Singapore Maritime Week Launch		BIMCO Annual General Meeting			
			International Sportsweek for Seafarers (April 25-28)		
			Consultative Shipping Group Meeting		
			6th Singapore Maritime Lecture		Launch of Next Generation Container Port Challenge
		Oxford Bunkering Course (Advanced)			Singapore Yacht Show (April 27-29)
		3rd Asia Green Shipping Summit		ReCAAP ISC Piracy & Sea Robbery Conference 2012	
		3rd Annual Floating Production Storage and Offloading (FPSO) Summit		The Singapore Shipping Conference 2012	
		4th Annual Offshore Support Vessels		Sustainable Shipping Initiative	
		Singapore Maritime Institute International Advisory Panel Meeting		Seminar on CSR Activities for the Shipping Industry	
		SeaAsia 2013 Launch Party	Seatrade Offshore Marine Asia		
			Asia Superyacht Conference		
EVENING/NIGHT EVENTS					
	Seatrade Asia Awards	BIMCO Reception (co-hosted with MPA)	Consultative Shipping Group Welcome Dinner	MARSIM 2012 Conference/SMA 55th Anniversary Dinner	

Events held in conjunction with the 7th Singapore Maritime Week

Events organised wholly or in part by the Maritime and Port Authority of Singapore, Association of Singapore Marine Industries, Singapore Maritime Foundation and Singapore Shipping Association

IN CONTROL

CHIEF EXECUTIVE OF NEPTUNE ORIENT LINES (NOL) NG YAT CHUNG SHARES HIS PLANS TO STEER THE COMPANY THROUGH AN INDUSTRY SLOWDOWN. BY JAMIE EE

You have been the chief executive at NOL since October last year. What have been your immediate priorities?

My immediate priority is to ensure the firm continues to thrive, even as the whole container shipping industry goes through what looks like a prolonged downturn.

NOL enjoys a good reputation in the market. It has many good things going for it, but there is always room for further improvement, especially in this fast-changing market landscape.

For our container shipping arm, we are looking at how to retain APL's reputation as a quality service provider, while we work at improving our cost position. At the same time, we are also exploring opportunities to invest in our logistics business through APL Logistics, which has been consistently profitable.

What are some of the key challenges facing the maritime sector?

The industry has not wholly recovered from the 2009 financial crisis. Demand is growing, but at a much slower rate, resulting in industry oversupply due to huge investments before the crisis. This is driving freight rates down at a time when bunker fuel cost has skyrocketed. Hence, many container shipping companies have lost money. For the industry, the challenge is the route back to profitability.

You were in the military for 28 years and served as the former Chief of Defence Force in the Singapore

Armed Forces. What lessons did you learn that are most applicable to the corporate world?

The one lesson I took away was how to manage a group of people with different expertise. A successful transportation business requires people of various expertise – from those who run the ships to the accountants and sales personnel – to work together as a team. Our greatest asset is our employees, and they come from different geographies and cultures, with different skill sets.

We need to unite such differences in a disciplined manner, with high operating standards that are efficient, safe and profitable. It's a complex organisation and my experience in running the military helps me do this.

Who inspires your personal or business philosophy?

I make it a point to learn from different people whom I have had the privilege and honour of working with – such as my first platoon commander, my first unit commander, as well as my bosses and colleagues in the SAF, Temasek Holdings and NOL. What I have picked up are the key principles of managing people, which are to lead by example, maintain high standards, give people space but make sure they are accountable for their own actions, provide assistance when necessary and stretch people with talent. These are the principles I use to run this company.

What books have you enjoyed lately?

Recently, I have been reading books related to the last financial crisis, such as *Too Big to Fail* by Andrew Ross Sorkin, and *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism* by George A. Akerlof and Robert J. Shiller. I have also been reading books related to the industry, one of which is *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger* by Marc Levinson.

On a lighter note, I read the first few books from the *Harry Potter* series to understand what the younger generation, like my daughter, nieces and nephews, is interested in.

What do you do in your free time?

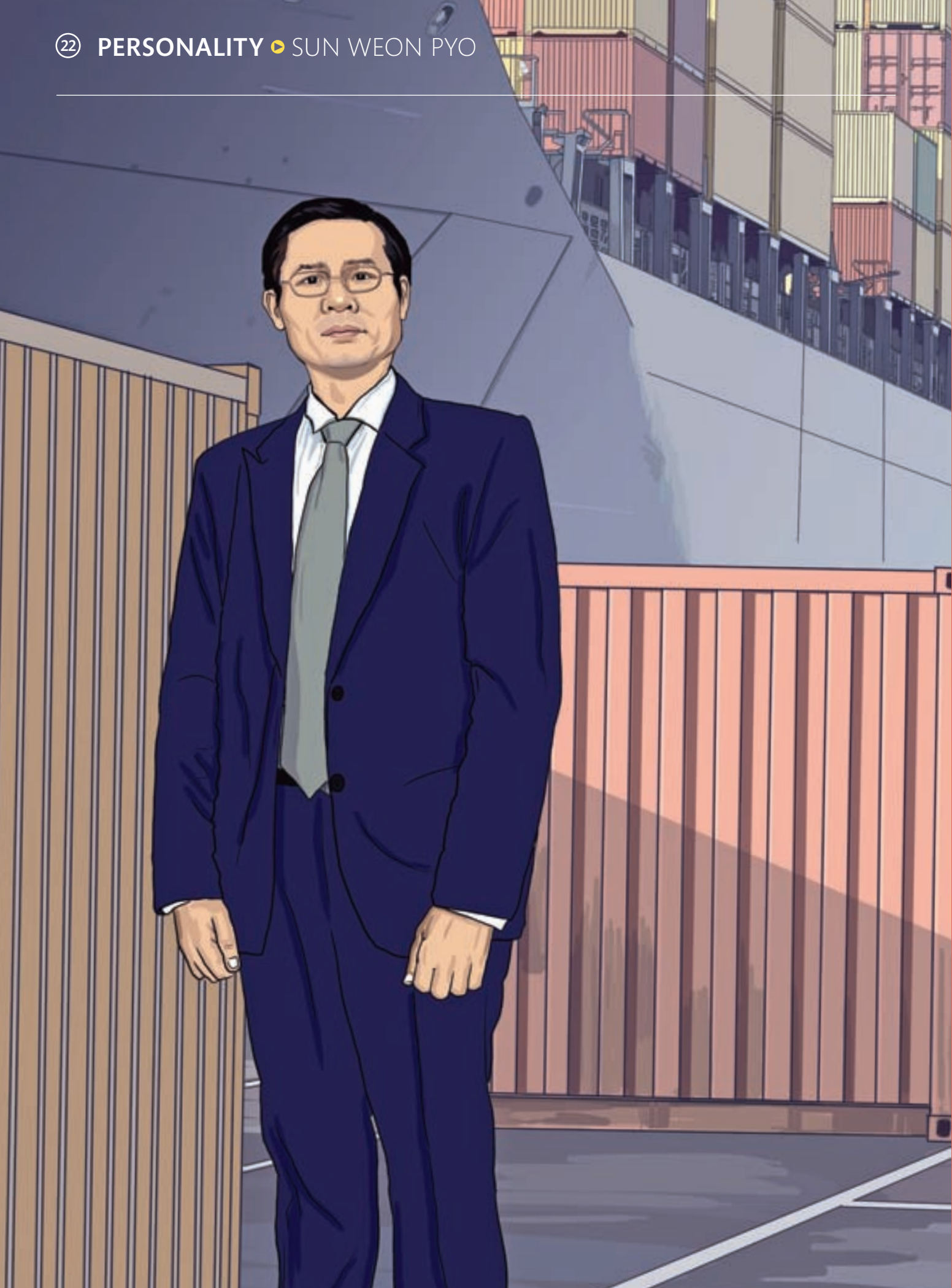
I play video games and golf. But since taking on the demands of my new role, these leisure activities have had to take a back seat.

Name one person whom you would like to meet. What would you talk to this person about?

I would like to talk to people who have had to make momentous decisions, so I can understand what went through their minds and what kind of considerations they had. If I could turn back the clock, I would like to meet Deng Xiaoping to understand his decision to open up China and how he managed to do it.



“For our container shipping arm, we are looking at how to retain APL’s reputation as a **quality service provider**, while we work at improving our cost position.”



► For Sun Weon Pyo, working in the maritime industry is a natural progression as he grew up near the coast. His love for the sea helped guide his decision to join the navy after finishing high school.

After attending the Republic of Korea's Naval Academy, he went on to serve for seven years in the navy, where he took on commanding roles in provinces such as Incheon and Yeosu. After that, he wanted to do more to serve his country in the maritime arena and joined the civil service with a role in the Maritime Port Administration about 24 years ago. The organisation later became part of the Ministry of Land, Transport and Maritime Affairs (MLTM) of the Republic of Korea, where he currently works as Director-General of the Maritime Safety Policy Bureau.

his DVP experience that he hopes to develop a similar programme back home.

His key impressions of Singapore include its clean and green environment, and the scale and efficiency of the port. "Before I left the Republic of Korea, I knew Singapore was one of the leading container ports in the world. I was excited to visit the container terminals and see the facilities that are able to handle these large volumes," says Sun. Following his visit, he notes that there are many similarities between the ports in Singapore and the republic.

Working together

During his visit to MPA's Port Operations Control Centre in Changi, Sun notes that many of the systems he saw were similar to those in the Republic of Korea. "Both

(ReCAAP) Information Sharing Centre. Sun is personally involved as the Vice-Chairman and the Republic of Korea's Governor in the body's Governing Council.

Cooperation in this area was one of the important points of discussion during the second bilateral meeting under the Memorandum of Understanding (MOU) on maritime cooperation between MPA and MLTM. This was also hosted by MPA in conjunction with the DVP. Indeed, Sun feels that the bilateral consultation mechanism established under the MOU is an excellent platform for the two countries to collaborate on issues of mutual interest.

Sun also sees another key area of cooperation in the port state control operations of the two countries. Due to the nature of Asian trade, many Republic

JOINT FORCES

FORMER MILITARY MAN AND CURRENT DIRECTOR-GENERAL, MINISTRY OF LAND, TRANSPORT AND MARITIME AFFAIRS OF THE REPUBLIC OF KOREA, SUN WEON PYO, LOOKS TO GREATER COOPERATION BETWEEN THE REPUBLIC AND SINGAPORE. BY VINCENT WEE

Military man

Speaking to Sun, it is clear – from the commanding way he carries himself – that his roots lie in the military. He readily admits he prefers to get his hands dirty, rather than observe from afar. "Because of my experience in the navy, my approach is more of a commander's than a strategist's."

Sun was visiting Singapore as part of the Maritime and Port Authority of Singapore's (MPA) Distinguished Visitors Programme (DVP), which seeks to engage senior maritime personalities who are key opinion makers in the international maritime community. The programme also aims to promote good relations between the personalities and their organisations, as well as strengthen bilateral ties. Sun was so satisfied with

the republic and Singapore stand out in terms of port infrastructure because they are major global ports," he shares. "In the future, it would be beneficial to start an exchange programme, where port operations control officers from both countries can learn the best practices from each other."

In fact, Sun points out that there are many areas where the two countries can cooperate for mutual benefit. One of the main areas is in the Straits of Malacca and Singapore, where a substantial number of vessels from the Republic of Korea pass. The republic currently contributes to maritime safety in the region through its participation in the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia

of Korea-flagged vessels call at the Port of Singapore, while many of the ships registered in Singapore also tend to visit the republic's ports. Sun adds: "In terms of port state control, it is necessary for both of our countries to provide convenient access to the visiting vessels."

Close ties between Singapore and the republic also mean they will be able to work together within international entities such as the International Maritime Organization. Sun points out the importance of cooperation and support at multi-party meetings. He surmises: "A united front on advancing the maritime safety agenda at both international and regional levels, as well as promoting marine environment protection, is one of the major advantages of the relationship."



► Danish firm NORDEN believes in a people-centric business approach. “This is a company that is more about people than about ships. I don’t think we are simply shipowners, but also managers of risk who just happen to be in shipping,” says Peter Borup, Managing Director and Senior Vice-President of NORDEN.

Established in 1871, the firm is one of the world’s oldest listed shipping companies. To date, it

operates close to 240 dry cargo and product tanker vessels, and its fleet is among the most modern and competitive in the industry.

Borup says: “We decided to set up in Singapore as it was the obvious choice for our activities in the product carrier markets. It is also geographically close to important dry cargo markets. Seeing how such markets in the Asia-Pacific have grown, the choice seemed even more straightforward. Singapore

has a nimble regulatory framework, too, which has made it an attractive home for a growing part of NORDEN’s fleet.”

Despite the challenges of the world’s shipping markets, NORDEN is currently undergoing a growth phase. It plans to grow its cargo business with established global mining and commodity companies, energy producers, construction groups and commodity-intensive industries.

Being people-centric

To NORDEN, grooming quality talent is essential for growth. To build a team that is forward thinking and open-minded, Borup looks for empathy and ambition in new recruits. He also prefers people who possess a keen hunger for success.

He enthusiastically shares his alternative perspective on recruiting and grooming talent. The ability to offer unique opinions and take calculated risks are the

NORDEN SHIPPING (SINGAPORE) SEES GROOMING TALENT AS THE KEY TO FUTURE GROWTH. SINGAPORE NAUTILUS FINDS OUT WHY BOOT CAMPS WORK FOR NEW TRAINEES THERE.

BY JACQUELINE CHIA

PEOPLE POWER

traits he wants to see in his Singapore team.

He observes that culture plays a large part in behaviour in a professional environment, noting that while some employees are more likely to speak their minds with ease, others exercise caution and are reserved about making their opinions known. He reasons: "You shouldn't let that fool you into thinking that they don't have opinions or don't want to change things.

They just need to find a different voice."

Borup also points out that it is not enough to be ambitious; one must also learn empathy – an important core value at NORDEN – to be truly successful. "Empathy comes in when we try to predict customers' needs and make sure we deal with potential problems before anything else. Listening is key, and a certain work culture and its individuals are required to support and

sustain this approach."

In fact, Borup feels that NORDEN's growth in Singapore owes a lot to its ability to temper its ambitions with empathy. Its team strives to achieve the best for itself and its clients. "What we like to say to our clients and new staff is that when we draw up a contract, we will be annoyingly detailed about what we want and how we want it. And, after signing the paperwork, we would deal with issues on their own

terms rather than pull the contract back out and debate the black and white."

NORDEN's unique outlook influences the organisation's search for new talent and the way in which they are groomed. Every year in February, NORDEN opens applications for interested individuals to join the company's two-year Shipping Trainee Programme (Singapore). The one or two successful applications a year to this highly competitive

“I want interesting people who have their own lives and ideas, and are not afraid of being themselves.”

Peter Borup, Managing Director and Senior Vice-President, NORDEN

programme will get to learn on the job within the firm’s two main arms of business: ship chartering and operations. In fact, three former trainees are now heading NORDEN’s international offices.

Borup also recruits graduates in maritime studies from Nanyang Technological University (NTU) to work in the organisation.

Applications to NORDEN are open to NTU graduates from January to March every year, and each new employee goes through a two-year training programme similar to the company’s Shipping Trainee Programme.

Borup feels that the reliability of the NTU programme lies in its ability to attract a good number of quality students. The graduates are knowledgeable about the maritime industry and clear about what they want and the firms they hope to work for. Besides academic achievements, he is pleased with their personalities.

“They are real people. While it’s great to have those who can do discounted cash flows blindfolded or rattle off the latest changes in accounting laws, what I need are people whom I’d like to sit down and have a cup of coffee with. I want interesting people who have their own lives and ideas, and are not afraid of being themselves.”

Every year, NORDEN also gathers staff from around the globe, who are under the trainee programme, for a few weeks of tough training in order for the teams to build closer relationships with one another. At the boot camp, the teams are kept very busy

and on their toes as they learn to deal with challenges together. Borup believes that having them work together under such a demanding setting will help foster familiarity and build a close-knit environment within the organisation.

As new recruits become more experienced, Borup is already looking at ways to challenge and encourage them to showcase their best qualities. The firm also grooms them to be the next leaders of Singapore’s maritime industry. “I’m very aware that the first challenge is to recruit well, but it’s quite another to develop people and succeed in doing so.”





Job Postings on the Maritime Careers Portal

Maritime companies can now look to the Maritime Careers Portal (www.maritimecareers.com.sg) as a platform to publicise career opportunities in their organisations, without charge.

The Portal sees over 5,000 visits every month and aims to provide jobseekers and fresh graduates with career information on the Singapore maritime industry. It is an initiative under MaritimeONE, a platform for the Maritime and Port Authority of Singapore (MPA), Association of Singapore Marine Industries (ASMI), Singapore Maritime Foundation (SMF) and Singapore Shipping Association (SSA) to collectively raise awareness of the maritime industry and attract new entrants.

The Portal is supported by JobsCentral, one of Singapore's largest online job portal with a database of more than 800,000 jobseekers and job postings would appear on the Maritime Careers Portal as well as on JobsCentral.



40% off rack rates for Singapore maritime companies!

	<i>Basic job post service</i>	<i>Premium job post service</i>
Job Posting Fee	Free (Cap of 10 job ads at any time)	Fee varies depending on package for no. of jobs for post (Premium job ads typically generate 6 to 10 times better application rates compared to basic listings)
Duration per job posting	30 days (Job postings expire when it reaches a cap of 10 job postings live at any one time, or if it receives more than 10 applications)	30 days
Character limit	600 characters	No limit
Priority listing	No	Yes
Job alert emails	No	Yes (Sent to jobseekers who opt to receive updates on the latest job postings)

For companies interested in the premium service with additional features, there is also an exclusive arrangement for maritime companies in Singapore to enjoy **40% off** JobsCentral's rack rates.

Companies keen to post jobs may contact JobsCentral at **(+65) 6778-5288** or email enquiry@jobscentral.com.sg for enquiry.



FUTURE SHIPS

CLASSIFICATION SOCIETY GERMANISCHER LLOYD RECOGNISES THE NEED FOR INNOVATION, AND HAS SET UP A NEW CONSULTANCY OFFICE TO CATER TO RISING DEMAND FOR MARITIME ENERGY-SAVING SOLUTIONS. BY JAMIE EE

Germanischer Lloyd (GL) may be well known in the maritime industry for being one of the world's oldest and biggest classification societies, but the 145-year-old company is now charting a new course in the sector with its consultancy subsidiary FutureShip.

In 2009, on the back of growing demand for energy-efficient solutions from marine companies, GL set up FutureShip to focus on enhancing ships' fuel efficiency in their design and operation.

Classification remains GL's core business. As an inspection authority for ships, it is authorised by many flag states to perform certification of materials and components, as well as technical assessments of vessels in service. Close to half of the world's container fleet uses GL classifications.

"The classification business will always be in demand because of the need to meet statutory requirements, but this area of business is also very competitive. Our expertise in consultancy is another strength we are leveraging on," says Khorshed Alam, Vice-President of FutureShip.

With a growing team of about 100 experts, FutureShip is helping vessel owners, shipyards and designers in Europe, Asia and other parts of the world improve fuel efficiency, find green solutions and increase profitability.

In January this year, FutureShip opened its fourth office in Singapore, which is headed by Alam, a local shipping industry veteran. The other three offices are in Hamburg, Potsdam and Shanghai.

Singapore's vision of becoming a maritime hub and the influx of shipping

firms into the region was what drew FutureShip to the republic's shores, explains Alam. "GL realised there was huge potential here. Many emerging companies are locating themselves in Singapore, and there is a growing research and development scene here."

Singapore's emphasis on green initiatives also makes it suitable for growing FutureShip's services. Last year, the Maritime and Port Authority of Singapore (MPA) introduced the Green Ship Programme for Singaporean-flagged ships as part of the Maritime Singapore Green Initiative, which sees vessels that go above and beyond current requirements of the International Maritime Organization's Energy Efficiency Design Index receive significant reductions in fees and tax payments.

The interest in energy efficiency is not

“FutureShip also helps its clients **increase fuel efficiency by providing technical and management support in areas such as strategy, conceptual design and ship operations.”**



Khorshed Alam, Vice-President, FutureShip

surprising. Rising fuel cost and decreasing freight rates, as well as a stronger emphasis on environmental sustainability, are making many shipping firms relook their energy consumption, says Alam. He explains: “There are dual benefits. Energy use makes up between 30 and 60 per cent of a shipping company’s operating costs. If it can reduce its energy consumption by just a little, it can then make significant reductions to its total operating costs and cut down on greenhouse gas emissions.”

Vessels also operate in very different conditions today. “In the past, container ships used to go at a maximum speed all the time and they were optimised to run at a single pace. With an operation matrix, we can now find out how much time the ship runs on moderate speed, and how much on high speed. Based on these, we can optimise its energy use,” he adds.

FutureShip also helps its clients increase fuel efficiency by providing

technical and management support in areas such as strategy, conceptual design and ship operations. One critical area of energy optimisation is in a vessel’s design. Alam shares: “If you design a ship well, you’ll enjoy the benefits throughout its life span. For example, we can help the client optimise the ship’s hull design at the building stage, which plays a very big role in how much fuel it burns. Boxed shapes generally create a lot of resistance, while streamlined designs would cut through water easily. For a single hull design, FutureShip iterates 15,000 different variations through computational fluid dynamics, before coming to a decision on an optimised design.”

Existing ships can also be further optimised by changing their operations. FutureShip offers software applications, such as the ECO-Assistant, which deliver the optimum trim angle for a specific vessel when provided with a few simple operational parameters. Adjustment to a ship’s trim, which is the difference between the forward draft and after draft, helps reduce energy consumption.

To enhance its services, FutureShip is working with Iceland-based Marorka – a provider of real-time energy monitoring systems. Both firms will integrate each other’s product portfolios in the field of fuel efficiency, energy management and related consultancy.

But helping companies increase fuel efficiency is only half the battle won, Alam also aims to influence the mindsets of ship-owners and operators – to get them to embark on innovative solutions.

Says Alam: “Companies may envision a ship for the future, but they don’t have to wait for the future to get it. FutureShip has the capabilities to help them do so today.”



IT HAPPENS HERE!

About the Singapore Maritime Week

Singapore Maritime Week (SMW) is the leading maritime event in Singapore. Driven by the Maritime and Port Authority of Singapore (MPA), SMW gathers the international maritime community in Singapore for a week of conferences, dialogues, exhibitions and social events in celebration of all things maritime. The range of activities and events organised by MPA, the industry, and research and educational institutions, as well as the cosmopolitan profile of participants, reflects the vibrancy and diversity of Singapore as a major international maritime centre.

SMW has grown in size and significance since the inaugural event in 2006, and is attracting more participants and event organisers from around the world. Participants can experience something new every year, as activities are added to the line-up, and as eminent speakers share their insights and participate in dialogues on topical maritime issues. This dynamism and the good range of issues discussed during SMW are major draws for maritime decision-makers, as are the many business networking platforms.

This is why Singapore Maritime Week is all about PEOPLE, IDEAS and OPPORTUNITIES for the maritime community.

SHIPPING
INDUSTRY
VETERAN CHUNG
CHEE KIT SEEKS
TO PRESERVE
SINGAPORE'S
RICH MARITIME
HISTORY
THROUGH HIS
PAINTINGS.
BY JAMIE EE



MARITIME MEMORIES

► Singapore may be one of the world's busiest ports, but few Singaporeans are aware of its rich maritime culture and history.

This irony is not lost on Chung Chee Kit, a shipping industry veteran of more than 40 years.

"Singapore's maritime sector is a very important industry, but the average Singaporean might not have a sense of its depth or history," says Chung, Director of Learning and Research at East West Learning Enterprises – a learning development arm of IMC Pan Asia Alliance.

The 62-year-old puts this down to a lack of exposure. "The ports and ships in Singapore are not something the average Singaporean encounters every day," he says. "If people remain disconnected, the maritime industry will not appeal to many of them."

To bring maritime culture closer to shore, Chung

has been capturing scenes of historical ships, ports, terminals and shipyards through his art, using different techniques like oil, acrylic, gouache, water colour and charcoal.

A self-taught artist, Chung has a collection of over 50 paintings, created mainly in the last decade. In January this year, he held a private exhibition of some of his works at the Command House as a tribute to Asia's maritime history.

An eye for beauty

Chung's first encounter with a ship – the famous *Tjiwangi* – was in the 1950s, when he sent his mother off to China. As a young boy, he was struck by the beauty of the passenger cargo liner, which sailed between Australia and Asia.

His interest in vessels was further developed through regular reading of naval war comics. In school, he developed a reputation as



To bring maritime culture closer to shore, Chung has been capturing scenes of historical ships, ports, terminals and shipyards through his art, using different techniques like oil, acrylic, gouache, water colour and charcoal.

BELOW, FROM LEFT: *SS Kedah* with its trademark blue funnel; King's Dock at Keppel Shipyard; Keppel Group's bulk carrier, *Nan Feng*; pen-and-ink sketch of tug in a dry dock – done before Telok Blangah yard's closure.

the class expert in ships, and his exercise book sketches of battleships, cruisers and torpedo boats were highly demanded by his classmates.

After he graduated in naval architecture from the University of Newcastle upon Tyne, UK, the Colombo Plan scholar returned to Singapore and worked as an engineer at the Keppel Shipyard, where he came into close contact with ships, tug boats and oil rigs.

"Looking past the dust and noise of the shipyard, I felt there were many

striking scenes. It would have been a shame if they were not captured on canvas."

Later, his work as the general manager of Keppel Shipyard's shipping arm took him to different countries and opened his eyes to many maritime museums, historical ships, ports, terminals, shipyards and offshore facilities.

While painting has always been a hobby for Chung, he began to take it more seriously when he was asked to contribute his works to the Zheng He museum, which operated for several years in Mohamed Sultan Road.



Painting maritime history

Among Chung's most significant works is an oil painting of the *SS Kedah* – a flagship of the Straits Steamship Company, which was later incorporated as part of Keppel Corporation.

The ship, with its trademark blue funnel, was considered to be the fastest and one of the most beautiful in South-east Asia during the 1940s. It also bears a historical

significance, as it was the headquarter ship which Lord Louis Mountbatten used to lead the British back to Singapore after the Japanese surrendered in World War II.

"After Keppel bought the Straits Steamship Company, I went to its boardroom and discovered there was no painting of its most famous ship in its history. So I went to the library, looked up the archives and found a photograph of the *SS Kedah*. It took me about three to four days to paint it, and

I later gave it as a personal gift to its former chairman C. N. Watson," he says.

Other nostalgic pieces include a pen-and-ink sketch of a tug in a dry dock, done shortly before the closure of Keppel's Telok Blangah yard.

To promote the shipping industry, Chung believes the focus should go beyond economic value to highlight its rich culture. He points to maritime cultural centres like London, which have maintained their eminence despite losing some of their economic shine in recent years.

"Singapore is perfectly positioned to be at the centre of research into maritime heritage and culture," he says.

"How many places have had regular visits by Arab dhows, Chinese junks, Portuguese galleons, Indian sailing vessels and Indonesian prahus? Singapore has a very rich maritime heritage that is representative of Asia. My paintings are my humble contribution in preserving some of our maritime history and heritage. Let's hope many more artists can do the same," he adds.



BEGIN SIMULATION

SINGAPORE MARITIME WEEK 2012 WILL PLAY HOST TO THE MARINE SIMULATION CONFERENCE, WHICH BRINGS TOGETHER INDUSTRY LEADERS, ACADEMICS AND RESEARCHERS FROM ACROSS THE GLOBE. BY JAMIE EE

► A global marine simulation (MARSIM) conference is set to hit Singapore's shores this April. It aims to act as a platform for maritime industry leaders, academics and researchers from across the world to share the latest research and development in this field. There will also be exhibitions to showcase the latest in maritime simulation training, communication and technology.

Held in conjunction with Singapore Maritime Week 2012, the conference will be hosted by Singapore Maritime Academy (SMA) – Singapore Polytechnic (SP), in cooperation with the International Marine

Simulator Forum (IMSF), a global organisation which initiated simulator operator standards.

About 300 speakers and participants from Singapore and countries like the US, UK and Japan are expected to attend the five-day conference held at SP, home to SMA.

The event will be held in line with SMA's own biennial maritime conference and exhibition, MARTECH, which brings together local decision-makers, academics and related interest groups to address pressing issues in the maritime world.

How it started

Back in the late 1970s, marine simulators became a popular training tool for vessel safety and productivity. In 1978, the IMSF organised and established compatible languages and formats for ship equations of motion, and initiated simulator operator standards.

Since then, it has held meetings and workshops on marine simulation and training yearly at various simulator locations worldwide. Every three years, the IMSF also organises the MARSIM conference, where papers are presented.

The event has been hosted by cities like Southampton, Amsterdam, Panama City and Tokyo in the past.

"The significance of MARSIM lies in its aim to introduce new ideas, practices, software, hardware and applications of simulation. We decided on Singapore as it is a maritime hub to which training and, thus, simulation are very relevant," says IMSF Chairman Professor Stephen Cross.

MARSIM in Singapore

Captain Gopala Krishnan, Chairman of the MARSIM 2012 organising committee, says it is significant that Singapore has been awarded the hosting rights for this year's MARSIM, as it shows the country's commitment and focus in the use of marine simulation for training.

In fact, Singapore was one of the early pioneers in the Asia-Pacific region to set up a large-scale simulation structure at SMA, he says.

In 2001, the academy set



up the Integrated Simulation Centre (ISC) with the Maritime and Port Authority of Singapore (MPA). ISC houses a 360-degree and 240-degree projection, a 240-degree rear projection, three 240-degree plasma and four single visual channel Dynamic Positioning fitted bridges. There is also a full-size engine room simulator and 10 PC-based engine room and liquid cargo-handling simulators.

SMA is also in the midst of building more simulation bridges. The academy joined the IMSF as a member in 2006. Since then, it has pushed for significant changes to simulation classifications. For instance, it got the organisation to

accept the use of plasma screens for simulators when the use of projectors was still the norm. Now, plasma is used widely in marine simulation training.

"If we want to raise standards, we must make simulation affordable and readily accessible, so people in the field can utilise it more. Plasma has alleviated both maintenance and space constraints, and is convenient to be set up anywhere. Training value, in terms of student-equipment ratio, has also improved," says Capt Gopala, who is also a senior manager at SMA.

Evolution of simulation

Capt Gopala notes that simulation training has

"The significance of MARSIM lies in its aim to introduce new ideas, practices, software, hardware and applications of simulation."

IMSF Chairman Professor Stephen Cross

advanced over the years, not just in terms of technology, but also in the training process. "Back in the '70s, we had simulation training but with no visuals. It was a purely tactical or desktop type of environment. When personal computers became popular, people started to write gaming software and that's when simulation really progressed," he adds.

Now, simulation is mandatory even for navigation or engineering

officers. Noting that "simulation training" has become a buzz phrase in the industry lately, Capt Gopala feels there is great potential for research in this field. Besides training, simulation can be used in ship modelling.

He says: "With this conference, we want to showcase the enormous capability of simulation. Through the interaction with more experienced researchers and experts, we hope the local scene will take off."

singaporenautilus



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► With the Port of Singapore being one of the world's busiest waterways, vessel traffic officers like Hafizah Abdul Rahman sees to it that traffic information is provided accurately to assist mariners in a timely manner and ensure the efficient flow of sea traffic to avoid collisions.

There are a total of 16 stations at the Port Operations Control Centres in Changi and Tanjong Pagar, and she is qualified to sit at nine of them. She tells *Singapore Nautilus* why keeping a cool head is important in her challenging job.

What is a typical day at work like?

The start of our workday depends on which shift we are allocated. There are

fascinated by the vibrant shipping scene at the Port of Singapore, so I pursued a Diploma in Maritime Transportation Management at the Singapore Maritime Academy in Singapore Polytechnic. I have been working with the Maritime and Port Authority of Singapore (MPA) since my graduation about seven years ago.

What are the best parts of your job and why?

As a vessel traffic officer, I am part of a big team at Singapore's Vessel Traffic Information System (VTIS). We are responsible for the safety and efficiency of vessel traffic operating in one of the world's busiest ports and straits. Our function includes ensuring that traffic information is provided accurately to assist

What are the challenges of a vessel traffic officer?

I have not sailed on a ship before, so the immediate challenge upon joining was to understand how ships manoeuvre.

We were given first-hand exposure to ship manoeuvres out at sea to help us understand the constraints faced by the "drivers behind the wheel".

As ships are different from cars in the way that they need sufficient time to take any action, I have to constantly stay on my toes and anticipate a vessel's movement to be able to respond efficiently to any situation at hand.

It is important to be able to multitask, especially when a few situations are happening at once, and I

How do you deal with such challenges?

We handle more than a thousand vessel movements of all types and sizes in the shipping lanes on an average day. Close encounters between ships are not uncommon and a developing situation could potentially escalate into a collision, resulting in collateral damages and affecting the livelihood of coastal communities.

NAVIGATIONAL

VESSEL TRAFFIC OFFICER HAFIZAH ABDUL RAHMAN IS RESPONSIBLE FOR SHIPS' SAFETY AND EFFICIENCY IN SINGAPORE'S BUSY SHIPPING LANES.

three shifts. We perform our monitoring duties for two hours before taking a short break, followed by a rotation to another station overlooking a different area.

Why did you choose this profession?

I was looking for a unique job that was not desk bound. I have always been

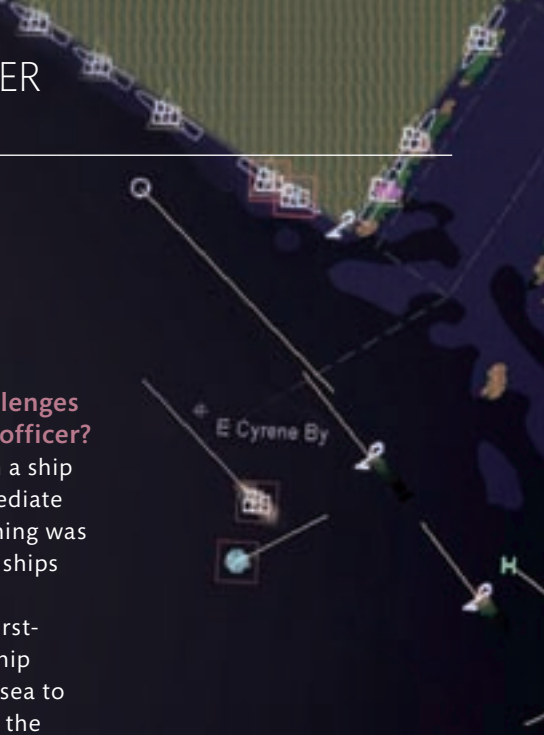
mariners in a timely manner and ensure the efficient flow of traffic navigating the busy waterways.

Given the unpredictable nature of sea traffic conditions, the diverse types of vessels and different nationalities of the mariners, each workday is different and that is rather exciting for me.

have to prioritise which of these is the most pressing.

The other challenge is the communication barrier – we have to deal with hundreds of ships daily, manned by mariners of different nationalities, including non-native English speakers. It took me a while to get used to the accents and jargon.

Due to the critical nature of my job, it is very crucial to maintain my composure, in order to think rationally and handle potential situations effectively. I constantly remind myself of the importance of my role in the provision of critical information to assist mariners in maintaining situational awareness.



AID

There were many occasions when I had to assist ship captains in critical traffic situations and reassure them. It always makes my day when they thank me for my services, and that is definitely part of what keeps me coming to work every day.

How do you manage your time between family and work?

My duties end with the shift and there is no work

to take home. This allows me to give full attention to my baby daughter when I'm off duty.

My husband also has shift duties and, although our working hours differ occasionally, we do make the effort to spend time together.



SHORT SIGNALS

▶ Maritime signal flags are used at sea by ships to communicate short messages with each other. Drafted in 1855 and later published in an international and a British volume in 1857, it has since been gradually adopted by most seafaring nations. The colours used on the flags are red, blue, yellow, black and white, as they are easily distinguished at sea. On ceremonial and festive occasions, these signal flags are also used to decorate ships.



ALFA
KEEP CLEAR. DIVER BELOW (WHEN STATIONARY)



BRAVO
I AM TAKING ON, DISCHARGING OR CARRYING DANGEROUS CARGO



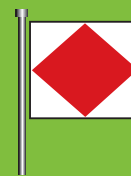
CHARLIE
"YES" OR "AFFIRMATIVE"



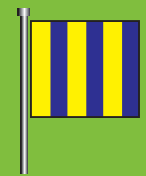
DELTA
KEEP CLEAR. I AM MANOEUVRING WITH DIFFICULTY



ECHO
I AM ALTERING MY COURSE TO STARBOARD



FOXTROT
I AM DISABLED, COMMUNICATE WITH ME



GOLF
I REQUIRE A PILOT



HOTEL
I HAVE A PILOT ON BOARD



INDIA
I AM ALTERING MY COURSE TO PORT



JULIET
KEEP CLEAR. I AM ON FIRE AND HAVE DANGEROUS CARGO, OR I AM LEAKING DANGEROUS CARGO



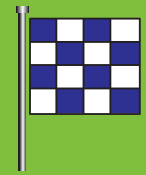
KILO
I WISH TO COMMUNICATE WITH YOU



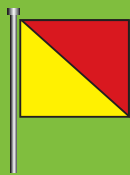
LIMA
YOU SHOULD STOP YOUR VESSEL IMMEDIATELY



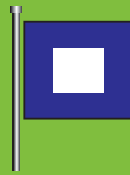
MIKE
MY VESSEL IS STOPPED



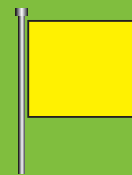
NOVEMBER
"NO" OR "NEGATIVE"



OSCAR
MAN OVERBOARD



PAPA
ALL PERSONNEL SHOULD RETURN TO SHIP AS IT IS ABOUT TO PROCEED TO SEA (USED AT A HARBOUR)



QUEBEC
MY VESSEL IS HEALTHY. REQUEST CLEARANCE INTO PORT



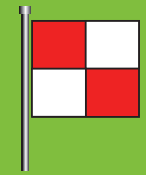
ROMEO
NO MEANING (PREVIOUS MEANING: THE WAY IS OFF MY SHIP. YOU MAY FEEL YOUR WAY PAST ME)



SIERRA
I AM OPERATING ASTERN PROPULSION



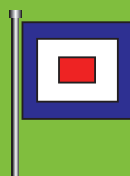
TANGO
KEEP CLEAR. I AM ENGAGED IN PAIR TRAWLING



UNIFORM
YOU ARE RUNNING INTO DANGER



VICTOR
I REQUIRE ASSISTANCE (NOT IN DISTRESS)



WHISKEY
I REQUIRE MEDICAL ASSISTANCE



XRAY
STOP CARRYING OUT YOUR INTENTIONS AND WATCH FOR MY SIGNALS



YANKEE
I AM DRAGGING MY ANCHOR



ZULU
I REQUIRE A TUG



Information taken from International Maritime Organization, *International Code of Signals*, London, 1987.

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