OFFSHOREMARINE

A newsletter of Keppel Offshore & Marine

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PV DRILLING V

KEPPEL FELS DELIVERS ITS 100TH JACKUP

Keppel Offshore & Marine

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Keppel Nantong Heavy Industry (KNHI) has made its first delivery to Keppel FELS since commencing operations in end-2013. Equipped with a 140-metre long slipway, loadout bay, jetty, panel line fabrication workshops and a 600-tonne gantry crane, the yard can undertake heavy offshore fabrication projects including jackup rigs, semisubmersibles and liftboats.

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Keppel FELS delivers its 100th jackup rig

PV Drilling VI is also the fourth KFELS B Class jackup rig delivered to Vietnam.



The management and directors of PetroVietnam, PV Drilling, PV Drilling Overseas and Keppel O&M celebrate the naming of PV Drilling VI and reaffirm their strong ties

Keppel FELS has delivered PV Drilling VI, a KFELS B Class jackup rig, to PV Drilling Overseas (PVDO), a subsidiary of PetroVietnam Drilling & Well Services Corp (PV Drilling) on time, on budget and with a perfect safety record.

It is the 100th jackup rig Keppel FELS has built since 1970, of which more than half are based on the KFELS B Class design. Developed by Keppel's technology arm, Offshore Technology Development, this design has a market share of about a quarter of all jackup rigs delivered since 2000.

The naming ceremony of PV Drilling VI was held at Keppel FELS on 27 February 2015 and witnessed by Guest of Honour Mr Nguyen Xuan Son, Chairman of PetroVietnam. Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine (Keppel O&M), said, "Keppel FELS is pleased to have reached this milestone of 100 jackup rigs built which reaffirms our position as the largest manufacturer of jackup rigs in the world. It is testament to our rich experience and expertise in delivering offshore rigs to our customers. Over the years, we have also developed innovative rig designs for the market.

"For instance, PV Drilling VI has been built to our awardwinning KFELS B Class design and is the ideal choice to meet the requirements for a wide variety of offshore environments including Vietnam. It is the fourth such rig to be delivered to Vietnam. Our long-standing partnership with PV Drilling has enabled us to continuously deliver projects to them more efficiently and safely each time."

The KFELS B Class rig is able to operate in water depths of up to 400 feet with a drilling depth of 30,000 feet. PV Drilling VI has been further enhanced with features like engines that meet more stringent emission standards, increased capacity for mud pit tanks, a secondary tensioning system, accommodation for 150 persons as well as a lower spud can bearing pressure for operation in areas with soft soil conditions.

Mr Pham Tien Dung, CEO of PV Drilling and Chairman of PVDO,

Continues on page 4...

said, "The high-specification and cost-efficient PV Drilling VI is PVDO's first jackup rig, and will play an important role in accelerating PVDO's drilling programme for South East Asia and beyond. We recognise the strength of the KFELS B Class rigs as the three rigs that are operating for PV Drilling have been performing very well. "Keppel FELS has a solid track record in delivering technologically advanced rigs with great quality and efficiency. Therefore, we are glad to have built this partnership and look forward to working together on many other projects to come."

BEHIND THE MILESTONE



PV Drilling VI is the 100th jackup rig to be delivered by Keppel FELS, a milestone that reaffirms the yard's position as the largest manufacturer of jackup rigs in the world

rig reaffirms Keppel FELS as the world's largest manufacturer of offshore rigs. This follows its recognition by Guinness World Records in 2014 as the 'Largest Manufacturer of Offshore Rigs' for delivering 21 rigs in a year.

Yet, when it first started out in 1967, the yard, which was then known as FESL, was a very basic yard which built only barges and tug boats. It had no expertise in building jackup rigs, even when it secured its first contract to build a jackup rig in 1969.

Against all odds, the team at FESL, which became Far East Levingston Shipbuilding (FELS), completed the JW McLean, becoming the first shipyard in Singapore and the region to build an offshore jackup rig in 1970. It managed to build up its expertise through a technical and service agreement with Levingston Shipbuilding Company of Orange, Texas, which was a leader in jackup rig design and construction.

Following FELS' success, other rig buidling yards began setting up in Singapore. Within five years, Singapore became the world's leading rigbuilding nation.

SEIZING OPPORTUNITIES

Things took a turn in 1984 when the industry was suddenly hit with a downturn and FELS was left without any work. While many yards around the world and in Singapore were forced to



Keppel FELS has come a long way since it delivered its first jackup rig, JW Mclean in 1970

shut down, the company stayed resilient and took a long term view to retain its main workforce and preserve its core competencies.

It decided to take a calculated risk and build on a speculative basis. FELS was the only yard in the world building a rig in 1986, which became the most advanced harshenvironment rig at that time.

The yard's decision to build the rig, named Monarch, paid off as there was a ready buyer when the rig was completed in 1986. The customer went on to order another four rigs from FELS.

PROPRIETARY RIG DESIGNS

Another bold but necessary move FELS made was the setting up of its first design and development company, Offshore Technology Development (OTD) in 1994.

OTD successfully developed a jacking system, along with a leg fixation system that greatly

reduced the weight of the rig platform on the pinion gears of the jacking system. By 1997, the same year that FELS was named Keppel FELS, OTD became a full-fledged jackup rig designer when Keppel FELS took the opportunity to buy the design and drawing rights for two jackup rig models, the Mod V and Mod VI.

This marked the beginning of Keppel FELS' suite of jackup rig solutions. It first built what would eventually become known as the KFELS A Class – a harshenvironment jackup rig – in 1998. The success of the KFELS A Class led to the even more successful KFELS B Class.

Today, there are more than 80 KFELS B Class rigs that have been delivered or are on order. Keppel FELS also expanded its suite of jackup rig designs to more than 10 to suit a variety of offshore conditions, from the benign waters to harsh environments and to the Arctic seas.

IMPROVING EFFICIENCIES

As new orders for Keppel FELS grew, one major factor that enabled the yard to accomplish more within a shorter time is its technique of building rigs in modules first and then joining them together. This way of building a rig turned the yard into an assembly line.

Modular construction also meant that some of the work could be

carried out in Keppel's overseas yards such as in Indonesia, the Philippines and China, fully utilising the resources of the group.

In addition to leveraging the synergy of Keppel's global yards, Keppel FELS has also continuously capitalised on the latest technologies combined with its own innovations and process improvements to enhance efficiencies.

PARTNERSHIPS, PEOPLE AND THE WAY AHEAD

On achieving the 100th jackup rig milestone, Mr Chow said, "This accomplishment is also a testament to the strong partnerships we have built with our long-standing customers. Over the years, we have delivered projects to regular customers in places such as Vietnam, Brazil, Mexico, the Caspian Sea and the Middle East.

"Through our *Can Do!* spirit, we have seized opportunities through acquisitions and innovations, as well as getting the right people and training them to grow our businesses with the aim of serving customers as a total solutions provider.

"We are able to meet and exceed industry demands by differentiating ourselves with our execution excellence and focus on technological innovation. Our accomplishments today have demonstrated the success of our strategies and it will stand us in good stead in the future."

Stellar start and completion

Keppel Offshore & Marine's yards in Brazil continue to deliver bearing their hallmark of quality when projects kicked off to a good start or were successfully completed in the beginning of the year.

STRONG START

BrasFELS, Keppel FELS Brasil's shipyard located in Angra dos Reis, Rio de Janeiro, made good progress in its integration of topside modules for two Floating Production Storage and Offloading (FPSO) vessels with the successful completion of their first lifting campaigns in January.

The first lifting campaign for FPSO Cidade de Itaguai MV26, BrasFELS' third project with MODEC and TOYO Offshore Production Systems Pte Ltd (MTOPS), a joint venture company between MODEC, Inc and Toyo Engineering Corporation (TOYO), was completed on 25 January 2015, 12 days ahead of schedule.

For their stellar performance, BrasFELS Shipyard's project team received a commendation from Mr Richard Matten, MODEC's project manager, who said, "I would like to thank the BrasFELS' team for an excellent performance that has enabled 10 modules to be lifted and placed on board safely and without lost time incidents in just 13 days! This is a truly excellent start to the project."

Mr Kwok Kai Choong, CEO and President of Keppel FELS Brasil, said, "The great start to this topside integration collaboration with MTOPS is a testament to the rapport we have built over the years. Let us keep up with the good work and complete the project while adhering to our four Golden Pillars: safely without lost time incidents, within schedule, within budget and within agreed quality standard."

The second lifting campaign for Cidade de Itaguai MV26 was also successfully completed within the same month. All modules were lifted using a floating crane.

Similarly, the first lifting campaign was successfully carried out for Petrobras FPSO vessel, P-66, in January. BrasFELS' 2,000-tonne gantry crane was utilised to carry out the lifting for the modules. The project is on schedule for the second and third lifting campaign in February and March respectively. In addition to the installation and integration of topside modules, BrasFELS also fabricated some of the modules.



BrasFELS completed the first lifting campaigns for two Floating Production Storage and Offloading (FPSO) vessels in January



The first lifting campaign for Cidade de Itaguai MV26 was completed 12 days ahead of schedule



 $\mathsf{BrasFELS'}$ 2,000mt gantry crane was utilised to carry out the first lifting campaign for P-66

SUCCESSFUL SIX

Keppel Singmarine Brasil has successfully completed a series of six harbour tugboats for REBRAS – Rebocadores do Brasil S.A. (SMIT Rebras).

The fifth unit, SST Paiter, was delivered on 4 December 2014,

while the sixth unit, SST Parintins, was delivered on 28 January 2015.

Mr Lee Yoong Hoong, GM of Keppel Singmarine Brasil, said, "Through the succession of collaborations with SMIT Rebras, we have built up strong mutual trust and understanding between the two companies.



SST Parintins is the sixth in a series of harbour tugboats that Keppel Singmarine Brasil has successfully completed for REBRAS – Rebocadores do Brasil S.A. (Smit Rebras)

"With the unflagging dedication of the Keppel Singmarine Brasil project team, and leveraging our experience in earlier tugboat projects, both the SST Paiter and SST Parintins projects had progressed safely and smoothly from start to finish. Completed with great care and attention to quality and details, I am certain that both harbour tugs will be meaningful additions to SMIT Rebras' fleet."

Keppel Singmarine Brasil, located in Navegantes, Santa Catarina, Brazil, specialises in the construction of offshore support vessel and specialised ships. Acquired by Keppel Offshore & Marine in 2010, Keppel Singmarine Brasil has been building up its people and infrastructure since.

The yard's ongoing projects include two Platform Supply Vessels (PSVs) that are being built to Keppel's proprietary MTD-9045P-DE design.

Refreshed vision



Keppel Shipyard successfully completed refurbishment works for floating production storage and offloading vessel, Ningaloo Vision

Keppel Shipyard celebrated the sailaway of Ningaloo Vision on 7 February 2015 with its owner, Apache Energy, after the successful completion of refurbishment works that included steel and piping systems renewal, coating works, equipment overhauling, and installation of new equipment.

Ningaloo Vision returned to Keppel Shipyard for the refurbishment works in 2014, five years after departing the yard as a newly converted floating production storage and offloading (FPSO) vessel for deployment in the Van Gogh field in offshore Northwest Australia.

This was the first time Keppel Shipyard had worked directly with Apache Energy on a FPSO refurbishment and upgrading job.

Previous collaborations between the shipyard and Apache Energy were conversion projects, starting with floating storage and offloading (FSO) Dampier Spirit which was delivered in 1998, FPSO Ningaloo Vision delivered in 2009, and FPSO Armada Claire in 2014. Both project teams demonstrated strong teamwork and a shared commitment to safety, achieving more than 2.5 million safe man-hours without lost-time incidents.

Besides participating in all of Keppel Shipyard's safety initiatives, Apache Energy also contributed to the development of the Keppel Safety Training Centre and the East Yard Workers' rest area building.



Keppel Shipyard celebrating the sailaway ceremony of Ningaloo Vision together with Apache Energy and its joint venture partner INPEX

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Strong support for workplace wellness

As one of Keppel Shipyard's longstanding customers, Apache Energy has built up a strong rapport with the shipyard over the years, sharing the same deep commitment to the safety and well-being of the workers at the yard.

Apache Energy recently demonstrated that commitment when it contributed US\$922,500 in support of Keppel Shipyard's safety and workers welfare initiatives, such as the Safety Training Centre and East Yard Workers' Rest Area at its Tuas Yard.

The generous contribution marks the successful and safe completion of refurbishment works for Apache Energy's Floating Production Storage & Offloading (FPSO) vessel, Ningaloo Vision, which achieved



Craig Harrison (second row, second from left), Chief Construction Superintendent from Apache Energy presenting the safety incentive bonus to the Keppel Shipyard project team



Mr Michael Chia, MD (Marine & Technology), Keppel Offshore & Marine, presenting a plaque to Mr Brett Darley, Region Vice President (Australia Region) and MD of Apache Energy, for their contribution to the East Yard Workers' Rest Area and Safety Training Centre



The East Yard Workers' Rest Area, which was officially opened in January 2015, can accommodate more than 2,000 workers, providing a clean and comfortable place for workers to rest properly in during meal times

over 2.5 million safe man-hours without lost-time incidents.

Roger Lewis, Manager (Project Execution) of Apache Energy, said, "One key factor contributing to the safety achievement was the collaborative effort that Keppel Shipyard, Apache Energy, and our joint venture partner, INPEX, have put in to develop a robust Heath, Safety and Environment (HSE) Incentive scheme with a sharp focus on leading key performance indicators.

"To further build on our joint efforts to create a safe and comfortable workplace for the workers and other stakeholders, Apache Energy and INPEX are pleased to contribute towards the enhancement and setting up of the Safety Training Centre and Workers Rest Area buildings."

Apache Energy has always been an active partner in Keppel Shipyard's HSE initiatives. The exploration and production company is represented on Keppel Shipyard's Safety Plus Steering Committee and Safety Champions Team, regularly offering advice and sharing experience.

Such strong support from its customer proves to be encouraging for Keppel Shipyard in its journey towards HSE excellence.

Perfect record

For completing the upgrade and repair of the arctic semisubmersible rig, Polar Pioneer, with a perfect safety record, Transocean awarded the Keppel FELS project team with a safety bonus of US\$413,000 – one of the highest amounts ever received by the yard.

Mr Anant Shukla, Senior Project Manager, Keppel FELS, said, "Work on Polar Pioneer was intricate as it required a very thorough refurbishment and upgrading to meet DNV's Ice-Class notation to make it suitable for operations in sub-zero climates. It was with close teamwork with Transocean and the strong vigilance demonstrated by both teams that we were



Celebrating the Polar Pioneer's remarkable safety achievement are: (from L-R) Mr Sam Beverland, Rig Manager, Transocean; Mr Yong Chee Min, Director (HSE and Special Projects), Keppel O&M; Mr Chris Ong, ED, Commercial, Keppel FELS; Mr Wong Kok Seng, MD, Keppel O&M (Offshore) and Keppel FELS; Mr Doug Sloan representing Shell; Mr John Dawson, Project Manager, Transocean; Mr Anant Shukla, Senior Project Manager, Keppel FELS; Mr Bulic Ilija, Construction Manager, Transocean; Mr Daun Winslow, Operations Manager, Transocean-Alaska; Mr Tan Ek Kia, Board Safety Chairman, Keppel Corporation; and Mr Keith Teo, GM, Marketing, Keppel FELS

able to maintain high standards throughout the project and achieve zero lost-time incidents (LTI)." The rig, which arrived at the Keppel FELS yard in July 2014, was delivered to Transocean on 24 December 2014.

Century crossing

Nakilat-Keppel Offshore & Marine (N-KOM) reached its 100th project milestone for liquefied natural gas (LNG) carrier repairs with its successful handover of Dukhan to MOL LNG Transport on 2 February 2015.

N-KOM achieved the milestone as it strode into its fifth year of operations, affirming its position as the Middle East region's leading service provider for gas carrier repairs and gas-related solutions.

Mr Chandru Rajwani, CEO of N-KOM, said, "This achievement within the short span of four years is testament to the quality delivery and solutions that N-KOM can provide. Moving forward, the shipyard will continue to deliver in a safe, high-quality and timely manner to our customers, as we strive to become not only a centre of excellence for gas carrier repairs but also the preferred shipyard for delivering sustainable marine solutions."



Senior management and project teams from N-KOM and MOL LNG Transport came together to mark the completion of N-KOM's 100th LNG carrier repair project

Maersk Integrator delivered

Keppel FELS has delivered a third XLE jackup rig – the world's largest jackup – 30 days early to Maersk Drilling.



Lady sponsor Ms Margareth Øvrum (seated), Executive Vice President, Technology, Projects and Drilling, Statoil, checking out the control room of Maersk Integrator with (standing from L-R) Mr Loh Chin Hua, CEO, Keppel Corporation and Chairman, Keppel O&M; Mr Claus Hemmingsen, CEO, Maersk Drilling; Sussane Hemmingsen; Mr Chow Yew Yuen, CEO, Keppel O&M; Mrs Beate Myking, Senior VP, Statoil; Mr Geir Ove Eikill, VP, Statoil; Mr Tong Chong Heong, Senior Advisor, Keppel O&M and Mr Lim chin Leong, Board Member, Keppel O&M

Keppel FELS has delivered the ultra-harsh environment jackup rig, Maersk Integrator, to Maersk Drilling, a wholly owned subsidiary of A.P. Moller – Maersk A/S, thirty days ahead of schedule, on budget and with a perfect safety record.

The rig was named at a ceremony on 14 February 2015 in Keppel FELS by Ms Margareth Øvrum, Executive Vice President, Technology, Projects and Drilling, Statoil.

Maersk Integrator is an XL Enhanced (XLE) harsh environment jackup rig and the third in the XLE series delivered to Maersk Drilling. It has been customised for operations in the North Sea and has been chartered on a four year term by Statoil for development drilling in the Gina Krog field in the Norwegian sector of the North Sea.

Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine (Keppel O&M), said, "This is the world's largest rig and the third one in the series we have delivered to Maersk Drilling. Our achievement in delivering it ahead of schedule is the result of our execution excellence, good teamwork with Maersk Drilling and process improvements over three repeat projects. We have developed a strong partnership with Maersk Drilling, having built eight jackups and four semisubmersibles for them over the years."

Collaborations between Keppel and Maersk Drilling span some 30 years and include the design, engineering, repair and construction of a variety of rigs and ships.



Maersk Integrator is the third in the XLE series delivered to Maersk Drilling by Keppel FELS

Mr Claus V. Hemmingsen, CEO of Maersk Drilling and member of the Executive Board in the Maersk Group, added, "With Maersk Integrator, we now have three of the world's largest, ultra-harsh environment jackup rigs which enable us to offer a suite of strong solutions to the Norwegian jackup market.

"The XLE rigs we have in operation now are performing very well; Maersk Intrepid at the Martin Linge field for Total Norway and Maersk Interceptor at Ivar Aasen for Det norske oljeselskap ASA. The early delivery and good performance of Keppel FELS is one of the reasons why we continually partner with Keppel. They have been able to consistently provide value-added services while delivering products of the highest technical abilities to our satisfaction.

"This particular rig saw an outstanding safety performance of zero lost-time incidents during its construction. That is a magnificent result and one that we treasure. I also want to take the opportunity to pay tribute to the leadership of Keppel FELS through the years. We have fostered a solid business relationship and partnership between Keppel and the Maersk Group. In addition, many personal friendships have grown from our cooperation.

"We have indeed completed many

projects together and every time, we have moved boundaries in rig capabilities and been able to achieve efficiency and reliability gains in offshore drilling all the way back to 1993 with Maersk Gallant. More than half of our operating fleet is built by Keppel. With this rig, we close one chapter and I am confident that we will open another chapter to work together on another magnificent drilling machine in the future."

The XLE rig has a leg length of 206.8 metres (678 feet) and is designed for year round operations in the North Sea, in water depths up to 150 metres (492 feet).

Maersk Drilling is the largest drilling contractor in Singapore and the Maersk Group has more than 100 ships and over half of their rigs flying the Singapore flag.

Added Mr Hemmingsen, "In terms of flag states, Maersk Singapore is our second home. Through the years, Singapore has given us the opportunity to grow our company and played an instrumental role in the development of our technologies, as the many competencies we required through our growth phase can be found in Singapore. Furthermore, the country has always welcomed us with open arms, and it has been a pleasure to work here."

Forging ahead as one



Key executives of Keppel Offshore & Marine met over two days on 12 and 13 February 2015 to discuss ways for the group to forge ahead in the current volatile environment.

The top executives of Keppel Offshore & Marine (Keppel O&M) and its 20 yards worldwide gathered in Singapore on 12 and 13 February 2015 for the bi-annual Keppel O&M Strategy Meeting to review the group's business performance and chart the way forward.

Despite Keppel O&M facing nearterm challenges due to declining oil prices, the mood remained positive throughout the meeting, with management focused on leveraging core competencies that the group has built up over the years through ups and downs in the industry.

Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, said, "While we are facing headwinds, we must continue to look to our collective strength, and focus on what we have been doing well. This will stand us in good stead as we weather the storm ahead. Working closely together as a team, we will emerge stronger."

Mr Chow Yew Yuen, CEO of Keppel O&M, outlined five key thrusts that Keppel O&M will prioritise. Firstly, safety performance will



nent and to seek growth opportunities

continue to be improved, with the goal being zero lost-time incidents. Secondly, the group will continue to complete projects for customers in line with Keppel's hallmark "on time, on budget" mantra.

In addition, Keppel O&M will continue with its research and development activities to provide innovative solutions to the market. As customers are also facing challenges, the company will stay nimble and agile to better meet customers' needs in this fastevolving environment. Finally, Keppel O&M will seize growth opportunities when they present themselves.

Over the years, such strategy meetings have served as a useful platform for Keppel O&M's key executives to exchange ideas and information. This recent meeting was no different, with management teams from the various business units engaged in robust discussions on new ideas. Along the way, good suggestions were shared and collaborations were formed across the business units, which will keep Keppel O&M ahead of the game.

Keppel FELS delivers Floatel's fourth accommodation rig



Celebrating the naming of Floatel Endurance are the management of Keppel, Floatel and Clough including (first row, from L-R) Mr Tomas Hjelmstiema, CFO, Floatel International; Mr Chow Yew Yuen, CEO, Keppel O&M; Lady Sponsor, Mrs Jill Miller; Mr Robert Miller, Project Director, Clough; Dr Lee Boon Yang, Chairman, Keppel Corporation

Keppel FELS has delivered the fourth high-specification accommodation semisubmersible (semi) to Floatel International Ltd (Floatel) on time, on budget and with a perfect safety record.

The rig was named Floatel Endurance on 31 January 2015 at Keppel FELS and will be deployed to work for Chevron in Western Australia in 2015 before proceeding to work for Statoil in the Gina Krog field in Norway in 2016. Floatel Endurance is an accommodation and construction support semi capable of meeting the most demanding regulatory requirements for operating in the harshest environmental conditions in the world. It is built to the DSS™ 20NS design which was developed by Keppel's Deepwater Technology Group (DTG) and Marine Structure Consultants (MSC).

Mr Wong Kok Seng, MD (Offshore) of Keppel Offshore & Marine (Keppel O&M) and Keppel FELS, shared, "This is the fourth consecutive accommodation semi we have delivered to Floatel and we are proud to be able to provide them with a fleet of robust and high specification rigs, delivered on time and on budget. The fifth rig that we are currently building for Floatel is progressing just as well and we look forward to continuing our win-win partnership.

"We have a strong track record as a market leader in the design and construction of accommodation semis, having delivered eight such vessels which are now successfully operating around the world. We have a comprehensive suite of semi designs that we are able to leverage to meet the needs of our customers."

Equipped with an accommodation capacity of 440 persons in single bed cabins, Floatel Endurance is built in accordance with DNV class and is in full compliance with all the latest rules and regulations within the Norwegian sector of the North Sea. The unit features full health, safety and environment (HSE) compliance including strict noise level requirements, free fall lifeboats and escape chutes. Facilities onboard include a galley and mess room for 220 people in one seating, as well as recreational amenities such as a cinema, internet café, games room, gymnasium and sauna.

A telescopic gangway ensures the safe transit of personnel to and from the serviced installation. The multi-purpose semi also



Floatel Endurance is built to Keppel's innovative DSS™ 20NS design which is able to work in the North Sea while at the same time remaining a cost-effective support semi wherever it is deployed

has a large payload and deck area in combination with dual cranes, making it ideal to support construction, maintenance or decommissioning activities.

Mr Peter Jacobsson, CEO of Floatel, said, "Floatel Endurance adds to our fleet of highly capable accommodation semis. This innovative DSS™ 20NS design is a robust design enabling it to work in the North Sea while at the same time remaining a costeffective support semi wherever it is deployed. Our three other accommodation semis which are built to Keppel designs have all proven to be successful wherever they have operated.

"All of our rigs have been chartered with high utilisation rates and we continue to see strong demand in the market for them. By partnering with Keppel, we have been able to provide our customers with high quality rigs that meet their schedule and requirements."

The three rigs Keppel previously delivered to Floatel are Floatel Superior, Floatel Reliance and Floatel Victory. Floatel Superior is also built to the DSS™ 20NS design and is currently being mobilised to work for BP in the Magnus field in the UK North Sea. Floatel Reliance and Floatel Victory are built to Keppel's proprietary SSAU™ designs and have been chartered to Petrobras in offshore Brazil and Chevron in the United States Gulf of Mexico respectively.

Strength in deliveries

Keppel Offshore & Marine's yards in Nantong, China, crossed significant milestones, continuing to strengthen their delivery track record.

FIRST DELIVERY

Keppel Nantong Heavy Industry (KNHI) has made its first delivery to Keppel FELS since commencing operations in end-2013.

Thirteen blocks of completed pontoons and spud cans set sail from its yard for assembly in Singapore on 11 January 2015.

These blocks of pontoons and spud cans were fabricated by KNHI for a floating accommodation platform and a jackup rig that Keppel FELS is building for Floatel and Gulf Drilling International respectively. The delivery was made on time and with a perfect safety record. Located adjacent to Keppel Nantong Shipyard (KNS) in Nantong, China, KNHI supports Keppel O&M's construction work from China by producing up to 32,000 tonnes of steel structures annually. Leveraging the synergy of Keppel O&M's global network of yards, Keppel FELS is on track to delivering the floating accommodation platform and jackup rig successfully in end 2015 and early 2016 respectively.



KNHI project team celebrating their first delivery to Keppel FELS



Keppel Nantong delivered its first two submersible barges, Giant 5 and Giant 6, on budget and with perfect safety records to Smit Shipping Singapore

Instrumental in making KNHI an effective satellite yard for Keppel O&M are new facilities such as the 600-tonne gantry crane which has enabled the yard to take on heavier and more complex construction work.

Following the delivery of pontoons, a 5,400-tonne upper hull that KNHI has built for the same Floatel unit was delivered on 14 February 2015.

Before the establishment of KNHI, such hulls were built in three separate blocks. Upon receiving the upper hull in blocks, Keppel FELS had to assemble them before integration with the rest of the components of the rig.

With KNHI's newly established facilities, a complete upper hull can now be built and delivered in one single megablock, saving both time and cost for Keppel FELS.

EMERGING GIANTS

Keppel Nantong Shipyard (KNS) recently celebrated the deliveries of two submersible barges, Giant 5 and Giant 6, to Smit Shipping Singapore, a wholly-owned subsidiary of Royal Boskalis Westminster Group (Boskalis), on 20 December 2014 and 20 January 2015 respectively. Giant 5 and Giant 6, which were delivered on budget, ahead of schedule and with a perfect safety record, are the first two barges KNS built for Boskalis. KNS is currently building its third submersible barge for Boskalis, which is scheduled to be completed in 2H 2015.

For the safety achievements made on both barges, Boskalis presented KNS with a bonus reward of US\$15,000 each for the two projects during the delivery ceremonies.



Roll-on operation for the 5,400-tonne upper hull block to be loaded onto the barge for delivery to Keppel FELS



 Keppel Nantong Shipyard and Keppel Nantong Heavy Industry – or collectively known as Keppel Nantong – have a total yard space of 43 hectares and are capable of taking on the construction work of a wide range of vessels and offshore structures;
Keppel Nantong's quayside is equipped with a 140-metre long slipway;
A 600-tonne gantry crane is part of the newly installed facilities in Keppel Nantong

Nantong yards of excellence

Established in 2005, Keppel Nantong Shipyard (KNS) is a 19-ha yard facility with extensive berths, advanced mechanical transfer and launching systems, and comprehensive workshops. The shipyard was accorded the Industrial Excellence and Safety Excellence award by the Nantong Municipal People's Government for three consecutive years in 2010, 2011 and 2012.

As part of ongoing plans to expand its production capacity to build bigger offshore support vessels and take on more offshore projects in China, Keppel established a new yard, Keppel Nantong Heavy Industry (KHNI), next to the existing shipyard in 2011, increasing total yard space of KNS from 19 hectares to 43 hectares.

CENTRESPREAD



Keppel Nantong's panel line workshop can fabricate up to 25,000 tonnes of steel annually;
Singapore Education Minister Mr Heng Swee Keat (second from right) officiated the inauguration ceremony of Keppel Nantong's panel line workshop in 0ctober 2013;

6.Keppel Nantong is the first shipyard in Nantong to set up a training centre that focuses on safety

Equipped with a 140-metre long slipway, loadout bay, jetty, panel line fabrication workshops and a 600-tonne gantry crane, the yard can undertake heavy offshore fabrication projects including jackup rigs, semisubmersibles and liftboats. In 2014, KNS became the first shipyard in China to be awarded the highest grade of safety certification from the Chinese State Administration of Work Safety, and also the first shipyard in Nantong to set up a training centre that focuses on safety. Located within the shipyard, the training centre will provide safety induction courses to KNS and KNHI's yard workers, including those employed by their subcontractors.

Striking start



Celebrating the strike steel ceremony are (from the left): Mr Alex Taveira, ABS; Mr Shawn Yeo, Project Manager, Keppel FELS; Mr Thomas Tan, ABS; Mr Chris Ong, ED (Commercial), Keppel FELS; Mr Mohd Sahlan, ED (Operations) Keppel FELS; Mr Keith Teo, GM (Marketing), Keppel FELS; Mr Chow Yew Yuen, CEO, Keppel O&M and Mr Doug Brown, Transocean Project Manager

Construction work on the fourth of the five jackup rigs that Keppel FELS is currently building for Transocean has begun. A strike steel ceremony was held for the rig, known as B367 or Transocean Cetus on 2 February 2015.

Tailored to suit Transocean's requirements, the rig is being built to Keppel's proprietary KFELS Super B Class design. The highspecification rig can operate in 400-feet water depth and drill to 35,000 feet.

With a two million pound drilling

system and a maximum combined cantilever load of 3,700 kips, the KFELS Super B Class is equipped with tremendous horsepower during drilling operations.

Keppel FELS and Transocean have shared a long-standing relationship spanning several significant projects.

In 2013, the yard delivered three KFELS B Class jackup rigs – Transocean Siam Driller, Transocean Andaman and Transocean Ao Thai – safely, on time and within budget. Mr Shawn Yeo, Project Manager of Keppel FELS said, "We have a long-standing partnership with Transocean and a strong track record of delivering to their satisfaction.

"Our strong teamwork and rapport with them has enabled us to kick start this next project smoothly and we are confident of delivering another series of high quality rigs to their schedule and requirements."

New appointments

As part of its ongoing efforts to put in place a strong leadership team, Keppel Offshore & Marine (Keppel O&M) announced two new appointments on 1 February 2015.

Mr Edmund Lek has been appointed as Executive Director (Operations) of Keppel Singmarine. Concurrently, he will continue his role as President of Keppel Nantong Shipyard and Keppel Nantong Heavy Industry.

In his 17-year career with Keppel, Mr Lek has held various senior management positions across Keppel O&M in Singapore and overseas. Mr Lek started his career in Keppel Shipyard in 1998 as a



Mr Edmund Lek

Superintendent and has previously held appointments in the Keppel Group, including Production System Manager of Keppel Shipyard and Yard Manager of Keppel Singmarine.

Mr Toh Ko Lin, Executive Director



Mr Toh Ko Lin

of Keppel Singmarine, will be re-designated as Executive Director (Commercial) of Keppel Singmarine. Starting his career as a Corporate Development Manager with Keppel Corporation in 1989, Mr Toh has been with the Group for 25 years.

Close collaboration

Keppel FELS' Long-standing customer, Stena Drilling, recently sent their semisubmersible drilling rig, Stena Clyde, to the yard for its five-yearly special periodic survey (SPS). The rig departed on 23 February 2015 upon the successful completion of its SPS which included mooring winch system replacements and lifesaving equipment upgrade.

During the period that Stena Clyde was docked at Keppel FELS, Stena executives had paid visits to the yard on two occasions – the first



Reaffirming Keppel and Stena's strong partnership are (from the left) Mr Wong Kok Seng, MD of Keppel FELS; Mr John Banks, Managing Director of Stena Drilling Asia Pacific; Mr Erik Ronsberg, Engineering Manager of Stena Drilling; Mr William Olsson, Deputy Director of Stena; and Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine

being led by Mr William Olsson, Deputy Director of Stena, on 2 February 2015; and the second by Mr Tom Welo, CEO of Stena Drilling, on 13 February 2015.

Both groups of visitors were hosted by Mr Chow Yew Yuen, CEO of Keppel Offsore & Marine and Mr Wong Kok Seng, MD of Keppel FELS, and taken on a tour of the yard where they saw firsthand the smooth progress on Stena Clyde.

This is the fourth time Stena Clyde had come to Keppel FELS for its SPS, having conducted its survey at the yard in 2000, 2005 and 2010.

Geared up on innovation

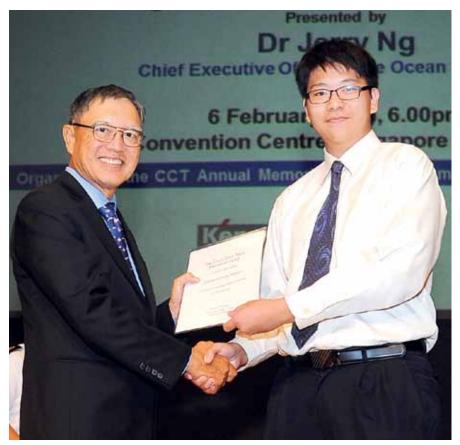


Dr Jerry Ng (left), CEO of Blue Ocean Solutions, takes questions from the floor during the 29th Chua Chor Teck Memorial Lecture and dialogue on innovations in marine technology. The dialogue session was moderated by Mr Kenneth Kee (right), Immediate Past President of the Society of Naval Architects and Marine Engineers Singapore

"Technology is no longer just a lubricant in the 21st century. It is a vital gear that drives our industry," emphasised Dr Jerry Ng, CEO of Blue Ocean Solutions, at the 29th Chua Chor Teck Memorial Lecture held on 6 February 2015 at Singapore Polytechnic.

Organised annually since 1986 in remembrance of the late Mr Chua Chor Teck, MD of Keppel Shipyard and one of the pioneers of Singapore's marine industry, the Chua Chor Teck Memorial Lecture has become a valued platform for industry leaders and experts to share their insights on a variety of offshore and marine-related topics.

Over the years, the lecture has benefited thousands of industry professionals and students keen to glean pearls of wisdom from experienced counterparts.



Mr Choo Chiau Beng, Senior Advisor of Keppel Corporation and former Chairman of the Chua Chor Teck Memorial Fund, presents a certificate to one of the Chua Chor Teck Memorial Fund-MaritimeONE scholars

Dr Ng addressed a 270-strong audience at this year's lecture, and spoke on the topic "Innovations in marine technology – nothing is impossible, only improbable". He noted that various key innovations and technologies have arisen in the offshore and marine industry over the past 50 years, from more fuelefficient engines and propulsion systems to fully-automated remote-controlled ships.

Dr Ng called on members of the audience, comprising a mix of students as well as engineers and management, to be more creative and take risks in order to grab hold of the latest opportunities in the industry.

This year's lecture also saw certificates being presented to four outstanding recipients of the Chua Chor Teck Memorial Fund-MaritimeONE scholarship.

Keppel Corporation supports the Chua Chor Teck Memorial Fund, established in 1986 in honour of the late Mr Chua.

In addition to funding the Chua Chor Teck Memorial Lecture, the fund provides scholarships to polytechnic and university students with the desire to work in the marine industry.

Cause for reunion

About 40 Keppel Offshore & Marine (Keppel O&M) alumni members reunited over tea before the start of the Chua Chor Teck Memorial Lecture.



It was a reunion to remember as Mr Chow Yew Yuen (second from left), CEO of Keppel O&M, Mr Loh Chin Hua (third from right), CEO of Keppel Corporation and Chairman of Keppel O&M and Mr Tong Chong Heong (second from right), Senior Advisor of Keppel O&M, mingled with alumni members



Dr Lee Boon Yang (second from left), Chairman of Keppel Corporation and Mr Choo Chiau Beng (centre), Senior Advisor of Keppel Corporation, sharing a laugh with Mr Tan Chin Hwee (left), non-executive independent Director of Keppel REIT, Mr Roland Tan (second from right), Director of Singapore Maritime Academy and Mr Tan Choon Sian (extreme right), Principal and CEO of Singapore Polytechnic



Mr David Chin (right), Chairman of Chua Chor Teck Memorial Lecture Working Committee, catching up with old colleagues and friends

Sparking innovation

Keppelites at BrasFELS were recognised for their innovation projects at an award ceremony in December 2014. The projects were part of the Inove Programme, which spurs ideas to reduce costs and enhance productivity, product and service quality, and employee health.

Eighteen projects were initiated under the Inove Programme in 2014, and seven of the most promising ideas were further developed and highlighted at the ceremony.

The top honours, or "Star Trophy", in 2014 went to team Engenhoca



The team from BrasFELS' Painting section was recognised for developing the best innovation project of the year

da Pintura, comprising members of BrasFELS' Painting section, for its ideas on how to reduce and improve the use of sanding discs. The team was guided by engineer Camila Valero. The winners received medals, certificates and gift vouchers. Second place went to team Vitória Brás for its project to reduce the time needed to assemble handrails.

All projects presented at this third successful run of the Inove Programme have been implemented at BrasFELS.

Developing the workforce

Keppel AmFELS, in collaboration with Texas Southmost College, the Texas Workforce Solution Cameron and Brownsville Independent School District, launched a welding programme that offers entry-level job certification for high school students in late 2014. Held at

Keppel AmFELS Training Centre, the nine-week programme aims to equip students with the skills and knowledge needed in welding operations.

The programme's first cohort of seven students graduated



Mr Simon Lee (third from left), President of Keppel AmFELS, together with Dr Lily Tercero (fourth from left), President of the Texas Southmost College, celebrates the graduation of the first cohort of students from Keppel AmFELS' welding programme

in January 2015 and received a certificate of completion from Keppel AmFELS. Some of these graduates have since gone on to pursue their careers with the company.

Mr Simon Lee, President of Keppel AmFELS, said, "At Keppel AmFELS, we believe in working with communities to achieve a sustainable future together. Developing and training the local youth is our long term commitment to Brownsville and our future workforce. We congratulate the first graduating class of welders and look forward to supporting the growth of more students through this programme."

Loyal heroes



Senior management of Keppel O&M led by Mr Chow Yew Yuen (centre, in blue), CEO of Keppel O&M, celebrated the contributions of Keppel stalwarts at a long service awards presentation ceremony

Long-serving Keppelites from Keppel Shipyard and Keppel Singmarine were recognised for their dedication during a long service awards presentation ceremony held at the Keppel Shipyard Convention Hall on 14 January 2015.

A total of 211 recipients received

awards from Keppel Offshore & Marine (Keppel O&M) senior management for their years of contribution to the company, ranging from ten to 40 years.

Thanking Keppelites for their steadfast dedication, Mr Chow Yew Yuen, CEO of Keppel O&M, said, "Each of you bring with you a pool of knowledge, experience and wisdom that must be retained in our system so that it can be passed on to succeeding generations. The award you are receiving today recognises your experience, and that you have much more to contribute towards the Group."

Pitch perfect

BrasFELS' soccer team has emerged champions of the third PAM (Mutual Aid Plan) Soccer Championship, scoring six goals without reply in the final match.

The BrasFELS sportsmen also won two trophies for their exceptional performance. The first trophy was awarded to goalkeeper Wellington Lima, a worker in the Structure section, while the second went to Felipe Nascimento Correa, who works in Outfitting, for netting 13 goals to emerge top scorer.

The Mutual Aid Plan comprises a few companies which provide

support in emergency situations and act to prevent accidents in the Costa Verde region, where BrasFELS' Angra dos Reis yard is located.



BrasFELS' soccer team were champions of the third PAM (Mutual Aid Plan) Soccer Championship

Driving energy efficiencies



Mr Chow Yew Yuen, CEO of Keppel O&M, addressed attendees of the inaugural Keppel O&M Energy Saving Initiatives Workshop on 30 January 2015

With round-the-clock operations at 20 yards worldwide, Keppel Offshore & Marine (Keppel O&M) is keenly aware of the need to be energy efficient.

Over the years, Keppel O&M's business units have implemented a wide variety of energy-saving initiatives such as energy-efficient lighting in yards and offices, as well as electric instead of diesel-powered equipment.

In line with the Keppel Group's commitment to a 16% decrease in carbon emissions by 2020, Mr Chow Yew Yuen, CEO of Keppel O&M, articulated his wish for all yards across the group to seek new areas for saving energy as part of ongoing efforts to raise productivity.

Towards this objective, Mr Abu Bakar Mohd Nor, MD of Keppel Singmarine, together with the Keppel Group Energy Efficiency Committee, organised an inaugural Keppel O&M Energy Saving Initiatives Workshop on 30 January 2015. The event was attended by over 100 management and staff from across the various business units in Singapore.

Mr Chow shared, "This workshop aims to provide a platform for Keppel O&M to consolidate our energy-saving ideas, and for all levels of management and teams to pledge our commitment to drive and cascade these ideas across the Group. I hope that this series of workshops will raise awareness of the need to save energy and dispel barriers in integrating new initiatives."

The National Environment Agency was invited to the workshop to provide an update on Singapore's Energy Conservation Act as well as several national energy management requirements.

To inspire new ideas to save energy, Keppel O&M's business units gave an overview of their energy-saving initiatives over the years.

Some of these initiatives include replacing conventional incandescent lights with more efficient compact fluorescent lamps at Keppel FELS; installing electric air compressors instead of diesel ones at Keppel Shipyard, which saves close to two million litres of diesel a year; and implementing a coordination control plan for Keppel Singmarine's 250-tonne gantry crane, which saves more than 12,000 kWh of energy each year.

The workshop ended with a brainstorming session where Keppel O&M employees were challenged to think out of the box and suggest possible energy-saving ideas.

The new ideas generated will be evaluated for feasibility by a taskforce led by Mr Abu Bakar.

Most importantly, the attendees were reminded of the benefits of being energy efficient and pledged their commitment to Keppel O&M's energy-saving journey.

Energy saving initiatives



Keppel FELS has been making use of more natural lightings in covered workshops at the yards as part of its efforts to reduce energy usage



Keppel Shipyard achieved significant energy savings by installing regenerative energy systems in the yard cranes



By relooking at the operations of its gantry cranes, Keppel Singmarine was able to make use of improvement in its work processes to achieve energy and costs savings

LEVERAGING NATURAL LIGHT

At Keppel FELS, a Carbon Management Team was formed since 2009, with Mr Mohd Sahlan Bin Salleh, ED (Operations), as Programme Sponsor and Mr Alvin Lim, Yard Manager (Facility), as Programme Lead. The team had since implemented a number of energy saving initiatives across the yards at Keppel FELS. Apart from replacing conventional incandescent lights at its yards with compact fluorescent lamp, Keppel FELS had also installed skylights at selected workshops, achieving more than 30,000kWh electricity savings per year. Skylights allow natural daylight to penetrate through the translucent roofing and illuminate the work spaces, hence reducing the need for electric lightings.

RECOVERING LOST ENERGY

Since 2009, Keppel Shipyard has achieved significant costs and energy savings from the many initiatives it implemented. One successful initiative was the installation of regenerative energy systems in their cranes after seeing how there is significant energy loss whenever the cranes brake. Through the regenerative energy systems, the energy that used to be lost due to braking action can be recovered and converted into usable energy to power other electrical devices at the yards such as lightings.

IMPROVING WORK PROCESSES

At Keppel Singmarine, apart from installing more power saving lightings and equipment, it has also revisited its current work process to identify areas which can save energy and raise productivity at the same time. The company achieved these twin benefits by installing a smaller tonnage gantry crane to take over smaller lifting work from its existing 100-tonne gantry crane. With a smaller capacity 10-tonne gantry crane, Keppel Singmarine was able to use it for drydock lifting activities, while the larger capacity 100-tonne crane can then focus on heavier lifting operations. This change has enabled Keppel Singmarine to achieve over 90% energy savings for the yard.

Celebrating strong partnership



Toasting to continued strong partnership are the management of Keppel FELS and the subcontractors

Keppel FELS' symbiotic relationship with its subcontractors has enabled the company to achieve tremendous growth over the years. The annual Keppel FELS Subcontractors Executive Council (KSEC) dinner, held on 11 February in 2015 this year, reaffirmed and celebrated this partnership.

Speaking at the event before the games and performances began, Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine said, "Many subcontractors have been with Keppel for decades, going through ups and downs together with us to emerge stronger. Given the challenging market environment today, we have to work even harder to find innovative ways to be more cost-effective and productive while maintaining our safety and quality standards. Giving customers value-adding solutions is our competitive advantage and we all have to continue working hand-in-hand to achieve this."



The Keppel FELS Subcontractors Executive Council has actively fostered a strong partnership between Keppel and its subcontractors

Mr Chow also encouraged subcontractors to take the opportunity to upgrade their workers through the over 80 training programmes organised by Keppel O&M's training centre, and to also look beyond Singapore and partner Keppel in their regional yards in places such as Bintan in Indonesia, and Nantong in China. Concurring, Mr Ng Joo Kheong, Chairman of KSEC, said the subcontractors were ready to rise up to the macroeconomic challenges and welcomed the opportunity to streamline their processes and work in tandem with Keppel FELS.

Welcoming the new year

There was plenty of shaking and shimmying across the Keppel Offshore & Marine Group as the various business units celebrated the end of a fruitful year in 2014 and welcomed 2015 in style. From showing off slick dance moves to showcasing musical talents, Keppelites had fun making merry with their colleagues.

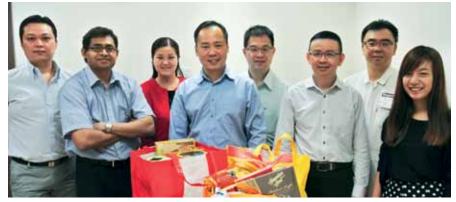


1: Management and employees from Keppel FELS and Keppel Offshore & Marine celebrated achievements and feats of 2014 2&3: Over at Keppel Shipyard, Keppelites grooved into the New Year 4: Keppel Singmarine celebrated in rousing style

Packing in cheer



Yeo Sio Muay (second row, second from left), Principal Contract Officer, Keppel FELS, rallied her friends and colleagues in the Commercial team to join her in donating food and festive gifts to needy children and their families from the KK Women's and Children's Hospital (picture courtesy of Bernard Tey from Keppel FELS)



Helping to spread the cheer from Keppel FELS' Commercial management team were (from the left): Johnny Ng, Manager, Subcontract; Jay Singham, GM, Estimation & Analysis; Pauline Tan, Manager, Purchasing; Chris Ong, ED, Commercial; Keith Teo, GM, Marketing; Ke Ching Hock, Senior Commercial Manager, Estimation & Analysis; Lim Kian Guan, Senior Manager, Logistics

On Valentine's Day, a group of Keppelites from the Commercial team at Keppel FELS helped to spread cheer to underprivileged children and their families from the KK Women's and Children's Hospital by preparing goodie bags as festive gifts for them.

It began with Yeo Sio Muay, Principal Contract Officer, Keppel FELS who heard from colleague Julien Ng that the Keppel Volunteers were bringing needy children to the Transformers exhibition at the Science Centre on Valentine's Day. To make the excursion extra special for the children, Sio Muay rallied friends and colleagues in the Commercial team to join her in donating food and festive gifts for presenting to the families. "I wanted to show support to Julien, a committee member in Keppel Volunteers. I was surprised that many of my colleagues readily came forward with their donations. We just have to take a small step for a good cause and others will follow," shared Sio Muay.

Sio Muay also had the support of her leaders including Johnny Ng, Subcontracts Manager, and Mr Chris Ong, ED of Commerical.

"Championing such worthy causes bonds the team as we share ideas and encourage each other to do well and do good," shared Johnny.

Chris added, "We can support the Group's community outreach programme by participating in the activities or thinking of ways to further help through these activities, and really show that Keppel is a company who cares."

Joyous giving

Keppelites from BrasFELS bid farewell to 2014 with Christmas celebrations and outreach programmes to the community.

PROMOTING LITERACY

Through storytelling, games and gift giving, volunteers from BrasFELS brought smiles to children from communities around the yard in Angra dos Reis, Rio de Janeiro, Brazil.

On 5 December 2014, Keppelites from BrasFELS attended the Student Reader Ceremony at the municipal school Cornelis Verolme. During the event, volunteers recited and acted out a much-loved children story, "Quem é Linda?" ("Who is Linda?"). Mr Low Tiau Tong, Director (Special Duties), BrasFELS, presented prizes to avid student readers to encourage their love for reading.

GIFTS OF LOVE

On 22 December 2014, volunteers from BrasFELS brought joy to children and youths from Morro da Cruz, Enseada, Promorar and neighbouring communities around the yard.

The volunteers came bearing Christmas gifts donated by Keppelites. The gifts were handed out at a learning and recreational centre at Morro da Cruz for a non-profit programme to provide educational, cultural and social activities for children and youths.



Mr Low Tiau Tong (right), Director (Special Duties), BrasFELS, presented prizes to avid student readers to encourage their love for reading



Keppelites from BrasFELS brought festive cheer to the children and youth at a learning and recreational centre at Morro da Cruz

Seeing it through in Subic

In January this year, Keppel Subic Shipyard completed the fabrication and pre-commissioning of the Depletion Compression Platform (DCP) for the Malampaya Deep Water Gas-to-Power project Phase 3 development.

Assistant Project Manager Liang Yibin felt immense pride and satisfaction at the project's success as he had spent three years working on it, starting from the bidding process when he was a Project Manager with Keppel Shipyard's commercial team. Yibin's main responsibility back then was to tender for new projects and one of them was the DCP contracted by Shell Philippines Exploration B.V. (SPEX) for Malampaya Phase 3.

Even before the contract was awarded, the late Mr Nelson Yeo, then-MD of Keppel Shipyard, had asked Yibin if he was interested in relocating to Subic, the Philippines, where the DCP would be constructed, to see the project through as its Assistant Project Manager. With three years of working experience at Keppel Shipyard under his belt, Yibin was only too ready to take on the challenge of an overseas posting.

When transitioning from a commercial role to one in which he had to manage and coordinate the resources to construct the mammoth DCP – the first of its kind to be fully constructed in the Philippines – Yibin initially found the going tough.

"It was not easy at first as I needed

to work with many stakeholders – the Shell team, our subcontractors, and the local authorities – in an environment that I was unfamiliar with. To facilitate my work, I had to put in more effort to gain the trust and confidence of our clients and subcontractors, and even my own project team," he shared.

Adding to the challenging atmosphere was the fact that Yibin had to concurrently focus on the upgrading of Keppel Subic Shipyard's infrastructure, including the installation of a 1,500-tonne goliath crane – one of the biggest gantry cranes in Southeast Asia. As these new facilities were crucial to the development of the DCP project, any delays in their installation would affect the progress of the latter.

Yibin managed to surmount these myriad challenges through the excellent teamwork and rapport that he had built up with the project teams. It also helped that English is the common working language in the Philippines, and that Filipinos are naturally warm and friendly, he explained.

While Yibin misses Singapore, he laments the fact that his posting with Keppel Subic Shipyard will be coming to an end this February.

"One of the things I will miss most is having at my doorstep the fantastic shipwreck diving sites that Subic Bay is home to. This is where I first picked up diving," he said.

"Therein lies the beauty of furthering your career in different parts of the world. When stationed in a foreign land, one gets to enjoy the experiences and advantages associated with that place, and a career with Keppel is able to provide just that."



Liang Yibin (second from the left), Assistant Project Manager of the Depletion Compression Platform project, celebrating its completion with his team

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Contract win for ice-class vessel



Keppel Singmarine has been contracted to build an ice-class multi-purpose vessel for New Orient Marine Pte Ltd

Keppel Singmarine has secured a contract from New Orient Marine Pte Ltd, a subsidiary of Luxembourg-based Maritime Construction Services SA (Maritime Construction Services), for an ice-class multi-purpose vessel.

Scheduled for completion in the middle of 2017, the vessel will be built to the proprietary design of Keppel Offshore & Marine's (Keppel O&M) ship design and development arm, Marine Technology Development (MTD).

Mr Abu Bakar Mohd Nor, MD of Keppel Singmarine, said, "We are glad to have the opportunity to support new customer Maritime Construction Services by building their first ice-class multi-purpose vessel. Over the years, Keppel Singmarine has built up a strong track record in specialised vessels, and we are pleased that Keppel's proprietary design in ice-class vessels remains in high regard within the industry. Moving forward, we will continue to invest in technology and work with MTD to be a leading solutions provider in this market."

Mr Knut Reinertz, Director of Maritime Construction Services, said, "There is a demand for modern ice-class multi-purpose vessels in the market and we believe this new state-of-the art vessel we are building with Keppel Singmarine is ideally suited to meet this need. We are able to leverage our experience as operators and charterers, together with Keppel Singmarine's expertise and track record in the design and construction of ice-class vessels, to expand our service offerings with this kind of specialised vessel."

Designed to operate in ambient temperature as low as minus 30 degree Celsius, the vessel will have an Ice Class Arc 5 notation and capabilities such as Class 3 dynamic positioning and diving support functions.

Keppel Singmarine is a leading shipyard in the design and construction of ice-class vessels, having built seven ice-class vessels for the Arctic and Caspian regions. In addition to the contract from Maritime Construction Services, it currently has three more on order, bringing the number of ice-class vessels in its orderbook to a total of four.