

OFFSHORE MARINE

A newsletter of Keppel Offshore & Marine

10 YEARS OF
EXCELLENCE

March – April 2012

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**PREFERRED PARTNER
FOR FLOATEL'S FLEET**

Keppel Offshore & Marine

CONTENTS

Boosting Floatel's fleet	3
FPSO orders from repeat customers	4
Jacked up for Mexico	5
Quick turnarounds	6
School of hard knocks	9
Choice ship repair yard	13
Expert in rig repairs	14
Model employees	27
From ground up	31
Beyond earth hour	33
Building lives	34

CENTRESPREAD

Celebrating 10 years of Excellence	18
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TECHNOLOGY & INNOVATION

Riding on technological waves	24
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Centrespread

18

Formed exactly 10 years ago, Keppel O&M celebrated its 10th anniversary on 1 May 2012, at its annual cocktail party held during the Offshore Technology Conference in Houston. The highly anticipated party saw over 1,000 customers, business associates, partners and friends turn up to mark the occasion with the Board of Directors and senior management from Keppel.

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Boosting Floatel's fleet

Keppel FELS entered into a Letter of Intent on 28 March 2012 with returning customer, Floatel International Ltd (Floatel), to build a new generation harsh environment accommodation semisubmersible (semi) for delivery in July 2014.

This will be Floatel's fourth accommodation semi with Keppel FELS after the delivery of Floatel Superior and Floatel Reliance in 2010 and the order of Floatel Victory in 2011.

The new semi will be based on the Floatel Superior design, a DSS™ 20NS design developed by GustoMSC and Keppel FELS' Deepwater Technology Group. Equipped with Dynamic Positioning (DP) 3 capability, it will meet the most stringent rules and regulations for worldwide operations including the Norwegian Sector.

The new vessel will be based on the DSS™ 20NS design. The first unit built to this design, delivered by Keppel FELS to Floatel in 2010 and has been successfully working for Statoil in Norway's Oseberg field

Mr Wong Kok Seng, MD of Keppel FELS, said, "Keppel-built and designed accommodation semis have proven their worth wherever they have been deployed. We are proud to note that all our semis for Floatel have been chartered with good performances and are pleased to support them as they grow their fleet to become a leading operator in their niche. We look forward to provide yet another highly capable accommodation semi to Floatel safely, on time and within budget."

Mr Peter Jacobsson, CEO of Floatel, added, "We continue to build our fleet of highly capable accommodation vessels such as Floatel Superior to meet global demand for safe and cost efficient service. The DSS™ 20NS has been a proven design for us, with Floatel Superior achieving excellent performances wherever she has

operated; first for ConocoPhillips Australia in the Timor Sea and presently for Statoil in Norway's Oseberg field.

"In growing our fleet of next generation accommodation semis to meet the needs of the market, Keppel FELS has been a good partner for us in terms of reliability and quality, with an established track record of delivering on time and on budget."

When completed, the new semi will be able to accommodate 440 persons in single bed cabins with ample recreation areas as well as office amenities. Well equipped with a host of modern facilities, the vessel is ideal for construction support during new construction, maintenance activities or for decommissioning projects of offshore oil and gas installations.



FPSO orders from repeat customers

Reputed for safe, reliable and prompt turnarounds, Keppel Shipyard remains the preferred partner for Floating Production Storage and Offloading (FPSO) conversions globally.

The company has recently secured two FPSO upgrading projects from its long-term customers, SBM Offshore N.V. (SBM Offshore) and Bumi Armada Berhad (Bumi Armada).

Mr Nelson Yeo, MD of Keppel Shipyard, said, "We thank SBM Offshore and Bumi Armada for reinforcing their trust and confidence in us with these FPSO contracts. Drawing on our experiences from previous collaborations, we strive to continuously improve our performance as we move forward."

For SBM Offshore, Keppel Shipyard will refurbish and upgrade an existing vessel, FPSO Xikomba, with work expected to be completed by 3Q 2013.

Mr Bruno Chabas, CEO of SBM Offshore, said, "Long-term business partnerships are key to our performance, our ability



Since 2000, Keppel has delivered 14 FPSO/FSO conversion projects to its longstanding customer SBM Offshore

to deliver and our ambition in furthering our lead in the FPSO market. We value our proven partnership with Keppel Shipyard. The award of the FPSO Xikomba is another milestone in this deep long-term relationship."

Leased by Eni Angola S.p.A for 12 years for the development of Block 15/06, offshore Angola, FPSO Xikomba is jointly owned by SBM Offshore and Sociedade Nacional de Combustíveis de Angola, E.P. (Sonangol), Angola's national oil and gas company.

The other project secured by

Keppel Shipyard is the modification and upgrading of Bumi Armada's FPSO Armada Claire. Upon completion in 4Q 2013, FPSO Armada Claire will be deployed in the Balnaves Field, north-west Australia.

Mr Hassan Basma, ED and CEO of Bumi Armada, said, "With the trust and collaboration of committed and capable business partners, we have grown and enhanced our fleet of quality FPSO vessels. The Armada Claire project is our tenth major collaboration with Keppel Shipyard, and we are confident that it will be professionally executed."

In 2011, Keppel Shipyard delivered FPSO Armada TGT 1 (in image) and FSO Sepat to Bumi Armada



Jacked up for Mexico



Keppel AmFELS completed a similar rig, Tuxpan, for Perforadora Central in 2010 and is currently constructing another jackup, the Papaloapan

Keppel AmFELS, Keppel O&M's yard in Brownsville, Texas, scored a contract with Mexico's Perforadora Central to build a repeat jackup rig on 2 April 2012.

Slated for delivery in 1Q 2014, this latest high specification unit will be based on the LeTourneau Super 116E design with leg lengths of 511 ft and the capability to drill wells up to 30,000 ft at a water depth of 375 ft.

Mr Tan Geok Seng, President of Keppel AmFELS, said, "Keppel AmFELS has had a great

relationship with Perforadora Central that dates back to 2002. We are honoured to be building another jackup, our fourth, for Perforadora Central and are grateful for their continued trust and confidence in us.

"We have endured the post-Macondo challenges well. Having recently secured the Ocean Onyx semisubmersible major upgrade and a series of repairs, this newbuild jackup adds to a healthy workload through 1Q2014. We also continue to pursue projects from Pemex and we are optimistic about our chances."

In keeping with its tradition of safe, on-time and within-budget deliveries, Keppel AmFELS completed Tonalá, an ultra premium KFELS B Class jackup rig for Perforadora Central in 2004, followed by Tuxpan, a LeTourneau S116E rig in 2010. The Papaloapan jackup, which was ordered by Perforadora Central in March 2011, is under construction and on track for delivery in 1Q 2013.

Perforadora Central added, "With each successive project, Keppel AmFELS has reaffirmed its expert project management and construction capabilities, as well as commitment to the highest standards of safety and quality.

"Our Tonalá and Tuxpan jackups are turning in excellent performances for PEMEX in Mexico while construction of Papaloapan is ahead of schedule. We are just as confident that our latest newbuild by Keppel AmFELS will be another exceptional product to boost our track record and establish us as the foremost provider of drilling solutions in Mexico."

Mexico is the world's seventh largest producer of crude oil and is among the 15 largest natural gas producers. PEMEX, Mexico's national oil company announced an overall exploration and production budget of approximately US\$18.36 billion in 2012. Perforadora Central is a Mexican company providing offshore and onshore drilling service mainly for PEMEX.

Quick turnarounds

With a record number of new orders, Keppel FELS is demonstrating its ability to deliver these orders through its enhanced processes, infrastructure upgrades and productivity improvements.

Besides the execution of new projects, the yard has recently completed substantial repairs and upgrading work on Transocean's GSF rig 140 within 54 days. GSF rig 140, a semisubmersible rig which arrived at the yard on 10 January 2012, was successfully delivered on 3 March 2012 on time and with zero lost-time incidents. It has since returned to work in offshore India.

Mr Bob McKechnie, Transocean's Director of Upgrade Projects, congratulated the team, "Keppel FELS has once again delivered on their promises! You should consider changing your tagline from

'Can-Do!' to 'Just did it....again'. I would like you to know that Transocean very much appreciates the strong management effort that Keppel FELS has put into all of our projects."

SMOOTH UNDOCKING

The yard's clockwork construction capability was further demonstrated in its undocking of Transocean's two KFELS Super B Class Big Foot jackup rigs, B326 and B327, safely and on schedule on 20 March 2012.

Despite being larger than a typical KFELS B Class jackup, the twin rigs completed their drydock assembly in 45 days, the same time it would normally take for a KFELS B Class rig. The rigs were then floated out of the drydock in a day-long operation to the quayside for further integration.

Acknowledging the work put in by the teams, Mr Ray Campbell, Transocean's project manager said, "I would like to thank the respective teams for a job well done. Getting both B326 and B327 out of the drydock in the short time frame required outstanding commitment, planning and performance. Most importantly this was accomplished while upholding a very high safety standard and without a recordable incident."

Being built simultaneously, progress on the two rigs is on track for delivery in 2H 2012. Keppel FELS also received a safety bonus of US\$10,000 for achieving a total of four million man-hours without lost-time incidents for the construction of these two rigs.



Keppel FELS' clockwork construction capability was demonstrated in its undocking of Transocean's KFELS Super B Class Big Foot jackup rigs, B326 and B327, safely and on schedule on 20 March 2012

Steady and safe progress for FPSO Berantai



Steady progress on FPSO Berantai, the first FPSO conversion project between Keppel Shipyard and Petrofac



Mr Nelson Yeo (right), MD of Keppel Shipyard, and Mr Tong Chong Heong, CEO of Keppel O&M, share on Keppel Shipyard's safety journey with (from left) Lady Sponsor Puan Hatijah Abdul Latiff and guest-of-honour Encik Ramlan Abdul Malek, VP, Petroleum Management, PETRONAS

After months of hard work, the first Floating Production Storage and Offloading (FPSO) conversion project between Keppel Shipyard and Petrofac is nearing completion.

At a ceremony held at Keppel Shipyard on 14 April 2012, FPSO Berantai was named by Lady Sponsor Puan Hatijah Abdul Latiff, wife of Guest-of-Honour, Encik Ramlan Abdul Malek, VP, Petroleum Management, PETRONAS.

Mr Tong Chong Heong, CEO of Keppel O&M, said, "While this is the first time Keppel Shipyard is working directly with Petrofac on a conversion job, we are glad to see good teamwork and understanding between the project teams of our two companies. The teams have shown full commitment to safe,

high quality and timely execution throughout the project."

The FPSO will be deployed by oil field operator, Berantai Risk Sharing Contract (RSC) Joint Venture (JV) – which comprises Kencana Energy, Sapura Energy Ventures and Petrofac Energy Development – in the Berantai field in offshore Peninsular Malaysia.

At the ceremony, the Berantai RSC JV handed out Health, Safety and Environment (HSE) awards to recognise exceptional safety performances.

Keppel Shipyard and Petrofac project teams have collaborated closely to progress the project steadily and safely, with more than four million safe man-hours clocked to-date.

Keppel Shipyard was presented with the HSE Appreciation Award for its efforts to ensure an incident-free workplace. Mr Burt Loh, GM (Operations) and Mr Goh Tong Woo, Senior Project Manager at Keppel Shipyard received the award on behalf of the company.

Over the years, Keppel Shipyard has delivered a number of FPSO and Floating Storage and Offloading (FSO) units to Malaysia. For instance, FSO Sepat, which was delivered last year, has been deployed by Petrofac in the Sepat field. Besides FPSO Berantai, Keppel Shipyard's other ongoing conversion project for Malaysia is the LNG FSU Tenaga Empat project, which involves the conversion of a liquefied natural gas (LNG) carrier to a LNG Floating Storage unit.

People progression

Keppel O&M grooms the next generation of leaders to ensure sustainable growth for the Group.



Dr Foo Kok Seng



Mr Aziz Amirali Merchant

With technology playing a larger role in Keppel O&M's business, Keppel Offshore & Marine Technology Centre (KOMtech) is expanding to

increase its scope of research and development activities. It has been restructured and elevated to become the Technology Division of Keppel O&M. This

Division will be responsible for R&D, product development and commercialisation as well as Process Technology aimed at improving productivity in Keppel O&M yards.

In view of the restructuring and expansion in KOMtech, Dr Foo Kok Seng has been re-designated as ED (Shallow Water Technology) of KOMtech with effect from 19 March 2012. He will concurrently hold his appointment as ED of Offshore Technology Development.

Mr Aziz Merchant has also been appointed as ED (Deepwater Technology) of KOMtech and is re-designated as ED (Engineering) of Keppel FELS. He will concurrently hold his appointment as ED of Deepwater Technology Group.



Mr Chandru Sirumal Rajwani



Mr Yan Naing Myint

Separately, Mr Chandru Sirumal Rajwani, GM (QA/VQE/Commissioning) of Keppel O&M has been appointed as the President for Caspian Shipyard Company (CSC) with effect from 26 February 2012.

The former president of CSC, Mr Yan Naing Myint, has returned to Singapore and is appointed the Project Director for Sete Brasil's semisubmersible projects with effect from 7 April 2012.

School of hard knocks

Mr Tong Chong Heong, CEO of Keppel Offshore & Marine (Keppel O&M), started his career in Keppel as a Foreman Engineer in the 1970s before rising through the ranks. In an interview with *Upstream*, he talks about his growth and vision for the company. *OffshoreMarine* highlights extracts from the article.



Mr Tong rose from a foreman engineer in Keppel Shipyard to become the CEO of Keppel O&M

Mr Tong did not receive any formal training as a naval architect but graduated as he calls it, from the 'school of hard knocks', learning the trade with Keppel Shipyard in the 1970s.

He took over the baton as Keppel Offshore & Marine's chief from Mr Choo Chiau Beng, current CEO of Keppel Corporation, in 2009. His first two years at the helm saw the group achieve record high orders and profit margins.

Not one to rest on his laurels, Mr Tong says success is never a given and the challenge is "to stay fit and trim to win more jobs and

execute them well, on time and within budget".

This was in light of the downturn in rig building activity in the 1980s which pushed some US yards into bankruptcy and Keppel Shipyard's rig building subsidiary, then known as Far East Levingston (FELS), was "losing money and losing people", as Mr Tong recalled.

As well as some of their peers, Mr Choo and Mr Tong were then brought in to take control of the situation and turn the tide.

FELS diversified its business and won an order from Consafe to build a semisubmersible accommodation platform. However, the Keppel team was not content to continue only with offshore construction work.

FELS began to develop its own design after acquiring the proprietary rights to the Friede & Goldman Mod V jackup rig design which eventually evolved to become Keppel's KFELS B Class jackup, the industry benchmark design.

Taking control of the rig design process was instrumental in Keppel's rise as a leading rig builder and its continued success 20 years later. The Singapore rig

builder was able to win orders from Norwegian outfits willing to invest in "innovative ways of drilling".

Mr Tong remains optimistic on newbuild orders for jackup rigs. "By the time the next batch of newbuilds are delivered, more than half the rigs [already in operation] will be over 30 years old," he said.

Mr Tong also sees room for expansion in the global mid-water semisubmersible fleet, which, he felt, has not attracted sufficient attention during the latest newbuilding upturn that began in late 2010 through to 2011.

As with its chief executive, Keppel O&M has few qualms about taking on new challenges in what observers once called "a sunset industry."

Mr Tong credits Keppel's success in turning the tables to the "Can-do! spirit" of a dedicated team. He has no regrets spending his career building and establishing Keppel and expanding the yard operator into a leading rig builder.

Mr Tong has three children and four grandchildren.

Safety is our business

Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, drives home the importance of workplace safety in a short video message available on Keppel Group's e-Safety Portal. The following is an excerpt of Mr Choo's message.

"Dear fellow Keppelites, partners and stakeholders, I would like to remind all of you that safety is a Keppel core value and a top priority in all our operations. Over the years, we have embarked on numerous initiatives to make our work places safer and to inculcate a safety culture.

From 2006 to 2010, our Accident Frequency Rate and Accident Severity Rate were significantly lower. However, in 2011, we faced one of our toughest years in our safety journey. We suffered 13 fatalities across the Group.

We are saddened by the loss of these lives. We must not allow these incidents to happen again. We must extract the lessons, learn from them and more importantly, act on them quickly. It is a reminder that we can never take safety for granted.

We must believe that all accidents can be prevented. In order for this to happen, we all have to do our part. We have to look out for ourselves and for those around us.

Remember, 'Safety is Everyone's Business'.

To guide us on the right path, we have embarked on the Keppel Workplace Safety and Health 2018 strategy. Through this, we are putting in place a common set

of safeguards, strengthening accountability and promoting safety ownership. Already, a number of initiatives have been carried out.

Accidents often happen because we think it is somebody else's duty or job. Next time you see a potential hazard, voice it out and correct it on the spot. You are empowered to stop a work process if you think it is not safe.

Remember, Safety is Everyone's Business and it starts with me today. "



The "Plus 5 for Safety" initiative aims to enhance the existing safety toolbox meeting process by extending it to focus on supervisory leadership skills and workers' participation

Towards an incident-free workplace

Through consistent efforts to reinforce workplace safety, Keppel O&M continues to achieve good safety records on its projects.

SHARING OF LESSONS

In its ongoing journey to achieve excellence in safety, Keppel FELS has received strong support from customers such as BP and Enscoco plc (Enscoco).

On 31 March 2012, BP hosted a full day safety workshop at Beaufort Hotel in Sentosa, where the project teams of BP, Enscoco and Keppel FELS gathered to share on the safety aspects of the ENSCO

DS-6 drillship project. The objective of this workshop was to align common project goals of "No Accidents, No Harm to People, and No Damage to the Environment" amongst BP, Enscoco and Keppel FELS.



Keppel FELS, BP and Enscoco plc gathered to share on safety practices at a workshop organised by BP

STELLAR PERFORMANCE

Sterling efforts to upkeep safety at Keppel FELS and Keppel Shipyard have not gone unnoticed.

For achieving 2.5 million safe man-hours on the construction of project B319, the first KFELS B Class jackup rig for Offshore Driller 5, Keppel FELS was awarded a bonus of US\$10,000 on 10 April 2012. Progressing on time and within budget, the first of the seven KFELS B Class jackup rig is scheduled for delivery in 3Q 2012.

Keppel Shipyard was also presented a safety bonus of US\$15,000 by Bumi Armada Berhad (Bumi Armada) for achieving one million safe man-hours on the Floating Production Storage and Offloading (FPSO) vessel, Armada Sterling on 23 April 2012.

Chartered by Oil and Natural Gas Corporation Limited, Armada Sterling will support production activities in India's D1 field. The FPSO is scheduled to leave the yard in 4Q 2012.



GL Noble Denton on behalf of Offshore Driller 5 presented a cheque bonus of US\$10,000 to Keppel FELS, represented by Project Manager Mr Ognian Todorov (right) to Project Manager, Mr Loe Hauw Sheong

Achieving milestones

Keeping a tight rein on project execution, Keppel O&M meets critical project milestones safely and cost-effectively.

STRIKING START

On 3 April 2012, Keppel FELS celebrated the strike steel ceremony for projects B339 and B340, the last two KFELS B class jackup rigs for Standard Drilling. This marked the start of physical construction of these projects for delivery in 4Q 2013 and 2Q 2014 respectively.



Celebrating the strike steel milestone of projects B339 and B340 are the management of Standard Drilling and Keppel FELS

LAYING STRONG FOUNDATIONS

PT Pelayaran Straits Perdana's second Coal Transshipment Barge, H378, with Keppel Singmarine laid its keel on 2 April 2012.

Designed by Keppel Singmarine's Marine Technology Development, the vessel is capable of loading 35,000 tonnes of coal per day, and can operate in open sea and difficult transshipment conditions. The vessel is scheduled for delivery in 4Q 2012.



The management of PT Pelayaran Straits Perdana and Keppel Singmarine celebrated the keel laying ceremony of H378 on 2 April 2012

EARLY COMPLETION

West Berani, a Semisubmersible Drilling Tender (SSDT), built to Keppel's proprietary SSDT™ 3600 design called at Keppel Shipyard for refurbishment and repair services.

Works commenced in February 2012 and concluded early, a month later. West Berani is the fifth SSDT that Keppel has built for Seadrill Asia.



Keppel Shipyard completed the repair job for West Berani, a Semisubmersible Drilling Tender, a month early

Choice ship repair yard

Keppel Shipyard received a strong vote of confidence at Seatrade Asia Awards 2012, where it was conferred the Repair Yard Award, edging out other competitors in the region.

The award was presented to Keppel Shipyard for the high quality of its repair work, strong delivery track record and commitment towards safety.

Mr Nelson Yeo, MD (Marine) of Keppel O&M and MD of Keppel Shipyard, said, "It is through the feedback and support of our customers and business partners that we have been able to enhance our range of services over the years and we will continue to strive for better performances."

Each year, Keppel Shipyard repairs and refurbishes an average of 400 vessels, spanning tankers, container ships, dry cargo vessels,

gas carriers and offshore support vessels.

The yard is also the preferred partner for the conversion and upgrading of Floating Production Storage and Offloading units, Floating Storage and Offloading vessels and Floating Storage and Regasification Units.

In addition, Keppel O&M sponsored the Wet/ Dry Bulk Operator Award for Seatrade Asia Awards 2012. Held on 23 April 2012, the ceremony was well-attended by over 500 business leaders and industry executives.



Mr Nelson Yeo (centre), MD (Marine) of Keppel O&M and MD of Keppel Shipyard, received the Repair Yard Award on behalf of Keppel Shipyard at Seatrade Asia Awards 2012



The trusted name for repair and refurbishment of a diverse range of vessels, Keppel Shipyard handles an average of 400 such projects in a year

Expert in rig repairs



Keppel's track record in repairs include undertaking rigs of competing designs. From top left clockwise – West Cressida, West Triton, Doo Sung and Jack Bates

Whether in the construction of new rigs or repairing of old ones, Keppel FELS' expertise in execution has earned the trust of repeat customers.

Even as it ensures the smooth construction of the new rigs on order, Keppel FELS has the

capability to maintain a healthy workload of repair projects which includes rigs of competing designs built at other yards.

It will be undertaking the upgrade and modification of Hakuryu 10, a jackup rig based on the Baker Marine Class (BMC) 375 design for repeat customer, Japan Drilling Company. Built in 2008, Hakuryu 10 is estimated to arrive in May 2012 from Spain.

Keppel FELS' excellent track record has been demonstrated on other repair projects such as GSF rig 140, an F&G Enhanced Pacesetter 9500 semisubmersible; Jack Bates, an F&G Trendsetter L-1020 semisubmersible; Doo Sung, an F&G Enhanced Pacesetter L-907; a leg chord on West Cressida, a BMC 375 jackup; Essar Wildcat, an Aker H-3 semisubmersible; and West Triton, a BMC 375 rig.

Expanding capacity with innovative solutions



A significant addition to Keppel FELS' drydock space, the *Can-Do!* barge increases the efficiency and versatility of the yard

Bustling with activity from its record order book, Keppel O&M's yards have developed innovative solutions to enhance capability and capacity to meet the needs of its customers. Floating barges at Keppel FELS and BrasFELS have enabled the shipyards to be more versatile and take on more jobs.

CAN-DO! BARGE

Enhancing Keppel FELS capabilities and facilities is a purpose-built 138 metres (m) by 78m barge.

Named the FELS Can-Do! barge, it has a lifting capacity of 30,000 tonnes and is a significant addition to Keppel FELS' drydock space. This barge is suited to undertake special periodic surveys, repairs and upgrading works for a variety of vessels, and is able to submerge to depths of 17m. It will

be further upgraded to enable it to take in vessels with up to 8.5m draft in the future.

The first project to be completed on the barge is the repair of ENSCO 85, a LeTourneau 116-C jackup rig, which was delivered at the end of April 2012. The scope of work included hull steel renewal, piping and electrical work as well as the refurbishment and upgrading of mechanical and drilling equipment.

A DOCK AHEAD IN BRAZIL

At BrasFELS, Keppel's Brazilian shipyard in Angra Dos Reis, a mating barge was converted into a floating dock to extend the capabilities of the shipyard beyond its existing drydock facility.

Named FS-1, the floating dock has

proven its worth, with several key projects successfully completed on it. FS-1's maiden project was the docking of the drillship Noble Leo Segerius which had its stern section extended in an upgrading programme.

Following that, FS-1 was again put to good use for the docking of its first semi, ENSCO 6000 in October 2011. The 22,000-tonne docking capacity of the FS-1 was able to easily accommodate ENSCO 6000 which had a total displacement of 11,114 tonnes during the docking operation as well as a pontoon measuring 75m by 50.4m.

Other projects docked on the FS-1 included the drillship Noble Roger Eason which underwent emergency thruster repairs at the end of 2011 and more recently, the Noble Phoenix drillship, which was docked from 4 January to 12 April for a change of thruster blocks.



Adding to its capacity, BrasFELS' floating dock FS-1 can take in a variety of vessels. Its latest is the drillship Noble Phoenix

Excelling in innovation

To compete and sustain business growth in a globalised marketplace, Keppel O&M creates value by increasing its capacity for innovation through Innovation and Quality Circles (iQC) programmes.



Keppel FELS achieved excellent results at the National Innovation & Quality Circles Convention with record results of four Star and eight Gold awards



Mr Tong Chong Heong (sixth from left), CEO of Keppel O&M, Mr Chow Yew Yuen (second from right), COO of Keppel O&M, and Mr Wong Kok Seng (fourth from left), MD of Keppel FELS, presenting the National iQC Star Award certificate to Keppel FELS iQC team, MINDS from Engineering CAD Department

The eighth iQC movement at Keppel FELS ended on 13 February 2012 with the best results ever achieved in the company's history – four Star and eight Gold awards. All 12 teams which participated in the National iQC (NiQC) Convention were winners.

The outstanding teams were identified from the pool of 55 iQC and Safety Innovation Teams (SIT) comprising employees from various departments who had participated in the annual Keppel FELS Innovation Month.

With ideas ranging from improving the efficiency of the 3D review log process to re-designing the manufacturing steps of the jackup legs fabrication process, iQC has proved to be an effective platform for the sharing of best ideas.

Congratulating the teams, Mr Tong Chong Heong, CEO of Keppel O&M, said, "It is important that we encourage our people to come up with innovative ideas and processes, and translate these into lower costs and faster turnaround for the company and our customers. iQC is not just about the competition, it should drive productivity by enhancing cost and manpower efficiencies."

Mr Richard Tay, Chairman of Keppel FELS iQC Secretariat and Shipyard Manager of Keppel FELS,

The awards of the 12 winning teams of NiQC

AWARD	TEAM NAME (DEPARTMENT)	PROJECT TOPIC
STAR	The Deftly (Quality Assurance)	To improve on the standardisation of KFELS B Class Jackup
STAR	CANBOX (Engineering Hull & Production Hull)	Reusable cantilever box beam
STAR	TOICA (Production Mechanical)	Safe and effective way of transporting materials at height
STAR	MINDS (Engineering CAD)	To redesign 3D review log process globally with live database, server side automation and excellent client side tools
GOLD	The Preservationist (Production Electrical and Instrumentation)	To reduce the time taken to sort out preservation record
GOLD	Hull Star Team (Production Hull)	To eliminate the overturning of star bracing during fabrication
GOLD	PIPE (Piping Innovative Processes for Efficiency)	To revolutionise pipe fit up process
GOLD	GS8 (Planning and Control)	To enhance planning process for Pioneer Yard dry dock
GOLD	UFO (Logistics)	Use cross-dock practice to reduce the average storage time of materials
GOLD	Beyond (Production Mechanical)	Multiple holes on master jig for different jackcase machining
GOLD	D-Y-N-A-Mech (Production Mechanical)	Effective manhole barrication
GOLD	George 2 (Security)	Effective method to ease vehicle congestion in the operation area

added, "This achievement demonstrates our commitment to live out our core values of innovation and continuous learning, as we strive towards delivering value-added solutions for our customers."

iQC helps to promote innovation and teamwork, two of Keppel O&M's core values. Through iQC, teams get together to identify improvement opportunities through problem-solving techniques, contributing towards achieving the group's vision of becoming the provider of choice in the offshore and marine industry.

Project iView by MINDS Team – Star Award

Business units across Keppel O&M can now communicate, collaborate and track project status of the 3D review log using iView. This latest technology platform was invented by Team MINDS from Keppel FELS Engineering CAD (Computer Aided Design). iView helps to reduce the time taken to prepare the 3D review log, a weekly compiled design problem report issued by CAD engineering team to identify potential reworks on site.

With a built-in snapshot tool, images can be captured directly from any 3D modeling software with no editing or cropping required, and this reduces the time needed to generate the review log. Besides providing centralised database for easy information retrieval and real time updates, iView allows auto-generation of reports, automatic tracking, email notification and data upload to be sent to other business units.

Celebrating 10 years of Excellence



From top left clockwise: (from left) Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, Antonio Augusto de Queiroz Galvão, President of Queiroz Galvão Óleo e Gás (QGOG), Jonathan Fairbanks, Board Member of Floate International and Managing Partner of Global Energy Capital, Gustavo de Queiroz Galvão, Assistant Director of QGOG; (from left) Solomon Ortiz, former U.S. Representative for Texas' 27th congressional district, Tong Chong Heong, CEO of Keppel O&M, Solomon Ortiz Jr., President of OCS Group; (from left) Wong Kok Seng, MD of Keppel FELS and Peter Noble, Chief Naval Architect & Chief Arctic Technologist of ConocoPhillips; (from left) Gregers Kudsk, VP and Senior Technical Advisor at Maersk Drilling, and YY Chow, COO of Keppel O&M; (from left) Tong Chong Heong and Steven L. Newman, President and CEO of Transocean; (from left) Tony Quinn, Operations Director at SBM Offshore, and Nelson Yeo, MD (Marine) of Keppel O&M and MD of Keppel Shipyard; (from left) Choo Chiau Beng and Larry Dickerson, President of Diamond Offshore Drilling; (from left) Tan Geok Seng, President of Keppel O&M (USA) and President and CEO of Keppel AmFELS and Jimmy Lim, Manager, Pressure Control Equipment, NOV; (from left) Nils Van Nood, VP at GustoMSC, and Michael Chia, MD (Offshore) of Keppel O&M

Formed exactly 10 years ago, Keppel O&M celebrated its 10th anniversary on 1 May 2012, at its annual cocktail party held during the Offshore Technology Conference (OTC) in Houston.

The highly anticipated party saw over 1,000 customers, business

associates, partners and friends turn up to mark the occasion with the Board of Directors and senior management from Keppel.

At the party, Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M spoke of the partnerships that were integral

to the company's success. He said, "In the last 10 years, with the trust and support of all of you, our customers and industry partners, Keppel O&M has achieved good growth. We have built up a robust track record of deliveries and partnered customers to expand our suite of proprietary solutions.

"Over the last decade, we have also forged ahead with our *Near Market, Near Customer* strategy to better serve our customers wherever they are. Since our integration 10 years ago, Keppel O&M has been focused on harnessing the synergies and collective strengths of its

members to maximise value for its stakeholders. Looking ahead, we will continue to work hard to ensure that we deliver on our promises to complete projects safely, on time, and within budget."

Held from 30 April to 3 May

2012, OTC is the largest annual oil and gas event in the world bringing together industry experts and top executives from some 40 countries and over 2,500 companies. The Keppel party is one of the key highlights at OTC for its networking opportunities.

Robust operations



A thunderous blast at Keppel Shipyard Gul (KSG) on 2 March 2012 startled workers in the yard.

The mock explosion was part of a joint security exercise by Keppel O&M's Security Department and members of the Shipyard Security Watch Group, and the Home Team comprising the Land Police, Police Task Force from Special Operations Command, Police Coast Guard and Singapore Civil Defence Force.



The exercise, code-named Ex Gunyard, is in line with regulatory requirements of the International Ships and Port Facilities Security Code. Initial scenarios started with tabletop exercises playing-out across all Keppel O&M yards, and culminated with a high-level simulated terrorist attack at KSG.

The exercise tested the robustness of Keppel O&M's Business Continuity Management framework, which underpins its ability to perform daily operations and deliver critical services to customers with minimal disruptions during emergencies.



Anthony Toh, Group Security Manager of Keppel O&M, said, "Our ability to recover quickly from an unexpected disruption depends on the quality of our preparations. The exercise provides an opportunity for all stakeholders to work together through a disaster, and test our preparedness and emergency planning at the organisational level."

To ensure that the organisation is equipped to respond to crisis in a concerted and collective way, Keppel O&M carried out a joint security exercise at its yards together with the Home Team

Thumbs up for BrasFELS



New Petrobras President and CEO Ms Maria das Graças Silva Foster (third from left) visited BrasFELS in March 2012 and was impressed with the shipyard

“This is a real shipyard”.

Petrobras’ new President and CEO, Ms Maria das Graças Silva Foster made this comment during her visit to Keppel’s Brazilian shipyard, BrasFELS in March 2012.

Hosted by CEO of Keppel FELS Brasil, Mr Kwok Kai Choong, the visit enable Ms Graças Foster to learn first-hand about the yard’s track record. Ms Graças Foster was impressed by Keppel’s belief in Brazil since 2000 when it first took over the former Verolme yard.

BrasFELS has since become the most comprehensive shipyard in Latin America. Other than interacting with some of the apprentice trainees, Ms Graças Foster also had a chance to see the projects in progress at the yard, including the integration of the Floating Production storage and Offloading vessel (FPSO) Cidade de Sao Paulo, the fabrication of the module blocks for FPSO Cidade de Paraty as well as the P-61 lower hull construction.



Distinction for progress

In recognition of its outstanding contributions to Singapore’s economic growth and its commitment to promote the country’s social and community interests, Keppel O&M was conferred the Distinguished Partner in Progress (DPIP) award by the Singapore Economic Development Board (EDB).

Mr Tong Chong Heong, CEO of Keppel O&M received the award from Deputy Prime Minister and Coordinating Minister for National Security and Minister for Home Affairs, Mr Teo Chee Hean in a ceremony on 28 March 2012.

Mr Tong said, “This award attests to our relentless efforts to strengthen the industry

in Singapore, improve our operational excellence, maintain technology foresight and nurture people to sustain our growth.

“We are thankful for the strong support from EDB which has

helped us become a global leader in the offshore and marine industries. A rising tide lifts all boats, and through public-private collaborations, we can enhance Singapore as well as our own competitive edge worldwide.”



Keppel O&M was conferred DPIP award by EDB on 28 March 2012. From the left: Mr Leo Yip, Chairman of EDB, Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, Ms Deborah Henretta, Group President of P&G Asia, Mr Tong Chong Heong, CEO of Keppel O&M, and Mr Teo Chee Hean, Deputy Prime Minister and Coordinating Minister for National Security and Minister for Home Affairs

Global interactions

The past two months saw Keppel O&M play host to eminent visitors from Malaysia, Norway and Denmark.



Mr Wong Fook Seng (fourth from right), Senior GM (Operations) of Keppel FELS, hosted a delegation led by Malaysia External Trade Development Corporation on their visit to Keppel O&M's facilities



A group of Norwegian Parliamentarians from the Finance & Economic Affairs Standing Committees visited Keppel FELS and Keppel Shipyard as part of their educational trip in Singapore

MALAYSIAN TIES

Keppel FELS and Keppel Shipyard welcomed a delegation of government and industry personnel led by the Malaysia External Trade Development Corporation on 15 March 2012.

Mr Wong Fook Seng, Senior GM (Operations) of Keppel FELS hosted

the delegates and shared insights into Keppel O&M's businesses and operations through a corporate presentation and discussions.

The visit concluded with a tour of Keppel O&M's facilities, where the delegation witnessed first-hand its range of projects and activities.

Members of the Sarawak and Sabah Shipowners Association (SSSA) also called at Keppel Shipyard on 15 March 2012.

The delegates were provided with an overview of the company's operations. While touring the yard, the delegates learned about Keppel Shipyard's repair and conversion services as well as its commitment to safe and high quality deliveries.

NORWAY RELATIONS

A group of 19 Norwegian Parliamentarians from the Finance & Economic Affairs Standing Committees were also warmly welcomed at Keppel FELS on 21 March 2012. The delegation was hosted by Mr Nelson Yeo, MD (Marine) and Mr Aziz Merchant, ED (Engineering) of Keppel FELS, along with other senior management.

Besides discussing on Keppel O&M's businesses and its global operations, the delegates also exchanged views on topics such as environmental concerns, employee strength and welfare, as well as Keppel's competitive edge.

Seafox 5, the KFELS multi-purpose self-elevating platform offshore wind turbine installation vessel, which is under construction now in Keppel FELS was showcased as an example of Keppel O&M's green rig designs.

DANISH CONNECTION

On 19 April 2012, the Danish Shipowners' Association brought a group of Danish journalists for a visit to Keppel FELS. This was part of the media education programme by A.P. Møller-Maersk. The delegation was led by Mr Steen Reeslev, Senior Vice President, Head of Group Relations at A.P. Møller-Maersk and Chairman of the Communication Committee of the association. The purpose of the visit was to highlight Danish shipping activities in Singapore, and to give the Danish

media a better understanding of Singapore's status as a global maritime hub.

The six Danish journalists were from some of the leading news dailies and shipping and maritime trade media in Denmark. During an overview of the operations of Maersk Drilling and Keppel FELS, the journalists showed keen interest in the future growth of the two companies, as well as the role of the Singapore Government in supporting the development of the maritime cluster in Singapore.

The visit ended with a tour of Keppel FELS' Pioneer yard. The journalists went away with an appreciation of Keppel FELS' position as a global leader in the offshore sector, and how the company supports Maersk Drilling in building its fleet of high quality rigs.

Solid record



ENSCO 91 is one of four jackups from Ensco that will undergo upgrading, repair and modification works at N-KOM

Nakilat-Keppel Offshore & Marine (N-KOM) continues to build on its strong track record for quality deliveries as well as expand on its range of capabilities with the award of its first jackup project, ENSCO 91, from international drilling rig owner and operator, Ensco plc (Ensco). It has also been awarded repair and maintenance contracts for three other Ensco jackups, which will call at N-KOM in the coming months.

On 25 March 2012, N-KOM completed general repairs on Rowan California for Rowan Companies. This was the second

time the jackup was at N-KOM following its smooth repair session in July 2011.

As a specialist in liquefied natural gas (LNG) vessel repairs, N-KOM has undertaken a steady stream of LNG vessel projects. In April 2012, N-KOM delivered Mozah – the largest LNG carrier in the world – and Al Jassasiya to STASCo (Shell) and Maran Gas Maritime respectively. Turning in an exceptional performance on the latter project, N-KOM received an early delivery bonus from the vessel's manager, Maran Gas Maritime.

Riding on technological waves

Mr Aziz Merchant, ED of Keppel FELS (Engineering), Keppel's Deepwater Technology Group and KOMtech (Deepwater technology) recently shared on the growing demand for more technologically advanced rigs with *Upstream* and *AsianOil Week*.



Mr Aziz Merchant, ED of Keppel FELS (engineering), Keppel's Deepwater Technology Group, KOMtech (Deepwater technology) shared expert views on technology innovations that support safe and efficient deepwater exploration



DSS™ 38E design is well suited to meet the requirements of the deepwater "Golden Triangle" region, comprising Brazil, Africa and the Gulf of Mexico

The global drive to find new deepwater deposits has opened up opportunities for rig builders as operators and owners scuttle to replace aging vessels with more technologically advanced models.

Keppel O&M is strongly positioned to ride the next wave of demand for high specification rigs, tailored not only to meet the higher technological requirements posed in the wake of the "Deepwater Horizon" incident but also harsh environment.

Mr Merchant shared that the industry is looking to increase systems redundancy and automation, hence rigs have to

be re-engineered for greater efficiency to carry more and larger equipments on board.

He said, "Designing and building new exploration and production rigs come with its own challenges. Authorities managing exploration in the harsh-environment hydrocarbon basins, as well as the rig owners, are calling for state-of-the-art technologies, though not many of us know the surprises from drilling ultra deepwater wells."

Keppel FELS is now working with rig owners and operators to develop a raft of solutions to counter any new environmental surprises.

The company has also developed three updated semisubmersible rig designs – DSS™ 38E, DSS™ 51HE and DSS™ 60HE in response to recent inquiries for new drilling demand off Brazil and in the North Sea. These rigs would be able to accommodate a minimum six-ram blowout preventer (BOP), which Mr Merchant flagged as a new industry standard.

Most of the semisubmersibles active in the North Sea are third and fourth-generation rigs equipped with four-ram BOPs. There is an emerging need to renew the semisubmersible fleet in the North Sea partly because these rigs cannot be upgraded to six-ram BOPs.



Keppel has developed DSS™ 51HE and DSS™ 60HE in response to inquiries for new drilling demand in the North Sea

DSS™ 51HE has an operational displacement of 52,000 metric tonnes and a high variable deck of 6,000 metric tonnes, while DSS™ 60HE has an operational displacement of around 61,000 metric tonnes and a higher variable deck of 7,500 metric tonnes. The two new rigs have

superior motion characteristics and are designed with drilling equipment suitable for well work-over intervention, exploration drilling and development drilling.

They are capable of operating in water depth of up to 7,500 feet and can drill up to 30,000 feet

from the rotary table, for year-round operations. The rigs are also provided with self contained mooring of up to 500 metres water depth for the North Sea.

In addition, oil and gas companies are looking to increase drilling efficiency in the region, as some of these rigs operate at only 50% uptime during winter seasons.

Mr Merchant added, "Moving forward, we envision the new-generation semisubmersible and drillship designs to operate in even deeper depths and at higher temperature and pressure levels. Also, we need to apply market knowledge and technology expertise innovatively to a variety of offshore applications."

Several new design demands:

- Better escape and protection from drill floor, so as to protect crew from exposure to hazards in the event of an emergency
- The use of more accurate kick detection devices
- Rig engine air intake location to be avoided from potential gas flow direction
- Increase in mud pit tank capacity and design density
- Accuracy of flow meters accurate to within 3-5%
- Finescale pressure gauges to improve driller's ability to see small pressure changes in manifolds
- Centralise the drill by means other than the annular preventer prior to activating the blind shear ram
- BOP Shear pipe ram to consider shearing the pipe under the effect of flowing well and centralising the pipe
- Independent acoustic control of the BOP functions
- Remote real time capturing of BOP function data and event logger

Cycling for a good cause

With the aim of supporting a good cause, Michael Holcomb, President/Director of Keppel Marine Agencies, Texas, USA participated in the annual Houston-to-Austin BP MS 150 charity bike ride with riders from Transocean on 21 to 22 April 2012.

The 180-mile ride is the largest event of its kind in North America to help combat multiple sclerosis (MS), a chronic and unpredictable disease of the central nervous system. Mike shared, "It took me 14 hours to finish the journey. I would not say it was the hardest

challenge but it was one of the most rewarding experience to share the road with 13,000 participants to support MS. It also provided a platform for me to bond with our customers from Transocean. I hope it would be the start of an exciting new tradition. "



Michael Holcomb, President/Director of Keppel Marine Agencies Texas, USA (fourth from left) participated in the annual Houston-to-Austin BP MS 150 charity bike ride with customer Transocean to support charity

Bowling among friends

Keppel FELS' customers, employees and partners came together in a friendly bowling competition organised by Keppel FELS on 24 February 2012, as part of a regular Sundowner programme to relax and foster closer relationships.

With participants from America, Middle East and Asia, the event reflected the international scale of Keppel FELS' customers and partners, and reinforced the strong ties that Keppel FELS has built with them.



Keppel FELS' customers, employees and partners enjoy a night of fun, laughter and camaraderie

Model employees



The inaugural Outstanding Keppelite Awards were presented at the Carlton Hotel on 23 March 2012

Nine Keppel O&M employees have been conferred with the inaugural Outstanding Keppelite Awards.

On 23 March 2012, the award ceremony was held at Carlton Hotel in conjunction with the 9th "Grow Beyond" talk, a series organised by Keppel College to engage talents and promote knowledge sharing. 22 Keppelites across the Group have received this award.

Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M explained the rationale for the conception of the Awards. He said, "The Outstanding Keppelite Awards recognise Keppelites who exemplify our core values. In addition to consistent outstanding work performance, the winners and nominees are inspirational role models for all of us."

One of the award recipients, Loh Kee Huat, GM and Assistant Yard Manager of Prime Steelkit and Keppel Singmarine, appreciates that Keppel has enduring core

values. He now advocates the same values to the younger engineers that he works with and shared, "Technical competence is easy to learn once you've acquired the right values".

During the event, best-selling author and motivational trainer, Adam Khoo shared insights in a lively presentation to over 300 Keppelites on how to "Master Your Mind for Peak Performance".

Recipients of Outstanding Keppelite Awards 2012

Keppel Data Centres Investment Management
Yeo Shengyan, Lionel
AVP

Keppel Digihub
Toh Ban Lee, Thomas
Assistant Manager

Keppel FELS
Mohd Sahlan Bin Salleh
AGM

Goh Han Bin, Max
Assistant Shipyard
Manager

Teo Sin Leong, Ivan
Assistant Project
Engineering
Manager

Siek Weiying, Wayne
Senior Project
Superintendent

Keppel FMO
Sim Poh Heng
AGM

Keppel Land
Goh Han Kee
DGM (Projects)

Wee Boon Leong
AGM (Investments)

Koh Hui Hwa, Doreen
Senior Manager

Toh Kah Fai, Collin
Manager

Goh Choon Kim
Assistant Manager

Yang Bo
Assistant Director,
Keppel Land China

Keppel Logistics
Wu Di, Nelson
Senior Manager

Yee Cheng Foong
Manager

Keppel Seghers
Cheang Whye Theng
Senior Plant Manager

Balasubramanian
Rajendran
Project Manager

Keppel Shipyard
Poh Leong Kok
SVP

Lim Shaw Chuan, Ivan
AGM

Leong Kok Weng
Senior Project Manager

Keppel Singmarine
Cong Yu Jie
Senior Manager

Loh Kee Huat
Assistant Yard
Manager and
GM of Prime Steelkit

40 years of dedication

After four decades of dedication to Keppel, Mr Sit Peng Sang has retired from his appointment as ED of Keppel O&M with effect from 1 March 2012.

In recognition of his long service and significant contributions to the group, his colleagues from Keppel O&M Human Resources organised an appreciation dinner for him on 17 February 2012.

Mr Sit, 66, shared, "I have worked in Keppel for many years and it has been enriching for me to witness how Keppel O&M has transformed from a simple local shipyard to a global leader with 20 yards and offices today. I have benefitted from the collective wisdom of all my colleagues and I sincerely thank them for enriching my working life. "



On behalf of Keppel O&M board members, Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M presented a gift to Mr Sit Peng Sang (right)

The true blue Keppelite commenced his career in 1972 as an Administrative Officer at Keppel Singmarine, formerly known as Singapore Slipway. Thereafter, he was posted to work in Keppel Shipyard,

Keppel Philippines Shipyard, Keppel Engineering and Keppel FELS. When Keppel O&M was formed in 2002, Mr Sit was appointed as CFO, and subsequently as ED of Keppel O&M in January 2011.

Fostering ties



Mr Choo Chiau Beng (second from right), Chairman of Keppel O&M and Honorary Fellow of the Institute of Marine Engineering, Science & Technology (IMarEST) engaging leaders in the field of marine engineering at the 109th IMarEST Annual Dinner on 9 March 2012 in London, seen here in the company of (from left) Mr Keith Read, former Chief Executive of IMarEST; Mr Philip Greenish, Chief Executive, Royal Academy of Engineering; and Professor Choo Yoo Sang, the 106th (2008) IMarEST President

Developing global talents



Agnes Barbara L. Lorenzo (extreme left), VP (Administration & Finance) of Keppel Philippines Marine, Inc., (left) celebrated the graduation of Keppel Batangas Shipyard and Keppel Subic Shipyard's scholars

Through scholarships and bursaries, Keppel O&M makes positive contributions locally and abroad to global talent development that drives growth for communities and industries as well as for its businesses.

INDUSTRY DEVELOPMENT

At the Singapore Industry Scholarship (SgIS) Fair and Information Session held at the Singapore Management University on 18 March 2012, Keppel Corporation's Group Human Resources department and Keppel O&M training team reached out to interested students, providing them with a deeper understanding of the developmental opportunities at Keppel. Keppel Scholar, Wayne Siek, also shared with students and parents his

experiences during his four years with Keppel O&M.

GRADUATING HONOURS

Over in the Philippines, Keppel Batangas Shipyard and Keppel Subic Shipyard congratulated four outstanding students from the NAMEI Polytechnic Institute, Myra Mendoza, Alvin Kenneth Ilagan, Edgardo Flores, Jr. and Jonathan Baligad, who graduated with honours in Naval Architecture and Marine Engineering under scholarships by the Keppel companies.

Mr Mok Khim Whang, President of Keppel Philippines Marine, Inc. and Keppel Subic Shipyard, said, "Through our scholarships in the Philippines, we are nurturing

young talents who would otherwise not be able to attend college due to financial reasons. We hope that by providing them with opportunities for further education, they will be better able to carve a bright future for themselves and contribute to the offshore and marine industry."

Magna cum laude graduate, Myra Mendoza is now a Management Trainee with Keppel Batangas Shipyard. Expressing her appreciation, she said, "Keppel has been very generous and supportive throughout my five-year course. My family and I are very grateful to Keppel for giving me the opportunity to pursue tertiary education."

Impressive kicks

45 soccer enthusiasts from Keppelite Recreation Club (KRC) gathered at the sports field of Ngee Ann Polytechnic for the 17th ASMI 7-A Side Soccer Tournament organised by Association of Singapore Marine Industries (ASMI) on 22 April 2012.

This event provides the platform for companies from the marine industry in Singapore to interact and pit their sporting skills against one another. Five teams from Keppel FELS, Keppel Shipyard (Tuas), Keppel Shipyard (Benoi), Keppel Shipyard (Gul) and Keppel Singmarine demonstrated their *Can-Do!* spirits as they

contested with 15 other teams at the tournament.

The spectators were kept entertained by the teams' display of strategy, skills and team spirit.

Keppel Singmarine eventually edged out the Keppel FELS with a score of 3-2 in a penalty kick and emerged as the champion team for the 17th ASMI 7-A-Side Soccer Tournament.



Keppel Singmarine demonstrated their *Can-Do!* spirit and emerged as the winning team of 17th ASMI 7-A Side Soccer Tournament

Keeping Keppelites in the pink



100 Keppel Shipyard's employees attended the Stress & Health Talk conducted by AcuMed

To promote personal wellness and workplace harmony amongst its employees, Keppel Shipyard rolled out an array of initiatives in April 2012.

Its Workplace Health Committee collaborated with AcuMed, a global leader of innovative orthopaedic and medical solutions, to organise a Stress & Health Talk on 12 April 2012. 100 participants attended the Stress & Health Talk where they learnt how to recognise and respond to stress symptoms. Low Kwan Lin, Human Resources Executive of Keppel Shipyard, shared, "It was a very

informative and enriching talk. I am better informed of the symptoms of stress and ways to manage it."

Keppel Shipyard also had a Milk Day on 17 April 2012. Apart from receiving the bone check by Anlene, each employee received a nutritious packet of milk as a reminder to increase one's calcium intake.

On 13 April 2012, the Company also held a lunch party to celebrate new year for the Tamil employees where everyone gathered to enjoy a meal of Indian cuisines.

From ground up



Ivan Lim (first from left), AGM (Operations) of N-KOM, at the Qatari shipyard

In October 2010, Ivan Lim was called upon to lead a major effort to get a new greenfield shipyard in Qatar up and running.

Ivan, who has worked for Keppel O&M for more than 10 years recounted the experience, "The first batch of personnel went through tough times building up a world-class shipyard that started off from an empty piece of land in Ras Laffan. With the ground laid, the team is now working to ramp up operations."

Today, Nakilat-Keppel Offshore & Marine (N-KOM) – a joint venture between Qatar Gas Transport Company Ltd (Nakilat) and Keppel O&M meets the growing demand for offshore and marine services in the Middle East region by providing quality services that span rig and ship repair, modification and upgrading.

As AGM (Operations) at N-KOM,

Ivan manages the shipyard trades and oversees the engineering, quality systems and assurance, and project control and management departments. He is also the management representative for the company's integrated management system and certification programme, looking into operations requirements and regulatory compliance.

He opined, "It is important to have the right mindset and embrace new environments. The biggest challenge that I faced was adapting to the local style of working. There were many trying moments, but I have learnt to be patient and diplomatic in managing such situations."

Ivan is not new to challenges, having worked hard from the ground up. Upon returning from his master's degree under a Keppel scholarship in 2005, Ivan worked at Keppel Shipyard as a Project

Engineer and was promoted through the ranks to Yard Manager in 2010 before his current posting.

He added, "Being brought up in a multi-racial society has helped me to assimilate to the new environment. Qataris are generally friendly and fun-loving people, and I can appreciate their perspective to life and work.

"I see more similarities than differences in the way people in Qatar and Singapore behave and live their lives. "

Ivan's indomitable optimism and willingness to adapt to a new environment is exemplary of Keppel's *Can-Do!* spirit, a common thread binding Keppelites the world over.

Amazing race

Over 800 participants, including 80 Keppelites from Keppel O&M took part in an island-wide Amazing Maritime Challenge on 22 April 2012.



Mr Michael Chia (right), MD (Offshore) of Keppel O&M, kick-starting the Amazing Maritime Challenge which drew over 800 participants

The race, of which Keppel Corporation was a sponsor, was part of a slew of activities organised in conjunction with the Singapore Maritime Week from 22 to 27 April 2012.

Teams pitted their skills and knowledge in a series of maritime-themed games and quizzes. Held in and around the Maritime Experiential Museum & Aquarium, teams strategised and competed for the top cash prize of \$1,500.

Out of the 20 Keppel O&M teams which participated, Team Buoy led by Yvonne Ng, Commercial Executive at Keppel FELS, clinched first runner-up spot in the open category. The team completed all

the nine stations in less than three hours and won themselves medals and \$900 cash prize.

Yvonne shared, "It was a great experience for us! We had so much fun exploring Singapore while learning about the vibrant maritime industry which is commonly known to be a complex subject. Winning the race made it extra meaningful for us."

The Amazing Maritime Challenge was jointly organised by the Maritime and Port Authority of Singapore, the Association of Singapore Marine Industries, the Singapore Maritime Foundation and the Singapore Shipping Association.

Stepping up for charity

Over 300 Keppelites turned up at West Coast Park for a Group-wide charity walkathon on 25 March 2012, which was organised in support of Keppel-Gawad Kalinga (GK) Eco Village in Bauan, the Philippines.

Proceeds raised will go towards the Eco Village's final phase of development, which includes the construction of 20 homes, a community centre, a pre-school as well as a rain harvesting and reed bed system.

Flagged off by Guest-of-Honour Mr Choo Chiau Beng, CEO of

Keppel Corporation and Chairman of Keppel O&M, the walkathon saw Keppelites enjoying the 3-km

fun-filled walk in the company of friends, colleagues, families and pets.



Keppelites trot for a worthy cause in support of the Keppel-Gawad Kalinga (GK) Eco Village in the municipal of Bauan, in the province of Batangas, in the Philippines

Beyond Earth Hour

Keppel O&M's yards in Singapore and the Philippines gave their support for the global climate change movement by participating in Earth Hour 2012.

About 40 employees from Keppel O&M signed up as the World Wide Fund for Nature's (WWF) Earth Hour ambassadors and took part in the first-ever Earth Hour human formation in Singapore. The formation in the shape of '60+ SINGAPORE' was at the heart of Orchard Road, and Keppelites across the Group formed the digit '6' in the formation. '60' stands for 60 minutes while the '+' emphasises the importance of going beyond the single initiative

of switching off lights for just an hour.

Among Keppel's Earth Hour ambassadors is Michael Yeo, Principal Draftsman at Keppel FELS, who took pride in being a part of the formation. On his participation, Michael enthused, "An event of such prominence helps to raise awareness of climate change. Each and every one of us plays an important role in conserving earth's resources. In participating in Earth Hour, I am signaling that I am committed to do my part to save the earth."

In addition, non-critical lights were switched off at Keppel O&M's yards and open-air car

parks. Eco-friendly tips were also disseminated to employees.

Keppel O&M's dormitories for its foreign workers, Acacia and Juniper lodges also participated in Earth Hour 2012 by forming the Earth Hour 60+ logo using candles. Other activities also include the screening of a film on the environment, quizzes with prizes and having the lights out during the special hour.

Earth Hour started in 2007 in Sydney, Australia when 2.2 million homes and businesses turned their lights off for one hour in united front for climate change and since, the initiative has become a global sustainability movement.



Keppel O&M's dormitories for its foreign workers participated in Earth Hour 2012 by forming the Earth Hour 60+ logo using candles

Building lives



After many months of hard work, an abandoned mango farm littered with garbage and overgrown bushes has been transformed into a vibrant living environment for needy families



Friendships and ties grow and blossom in the midst of the Keppel-GK Eco Village

The Keppel-GK Eco Village in the municipal of Bauan, in the Batangas province, in the Philippines warmly welcomed new residents at the Turnover Ceremony on 8 March 2012. The second batch of 20 needy families each received a newly-completed home.

“There is a strong sense of neighbourliness amongst the families. My husband and I are thankful for the opportunity to raise our family and own a house in this good environment,” shared Lilia Malaluan, one of the new homeowners.

Keppel Philippines Marine pledged an initial sum of PhP 9 million towards the Eco Village, and volunteers from Keppel Batangas Shipyard contributed to the construction by participating in the building activities after work, over weekends and during public holidays.

Mr Nelson Yeo, MD (Marine) of Keppel O&M and MD of Keppel Shipyard, elaborated, “About one and half years ago, I visited this site with Mayor Dolor and Luis. We found this plot of land suitable for sheltering needy families, because it is within a residential district. Residents who live here will be able to build ties with the wider community, and more importantly, find jobs. Having a stable job is key to a better standard of living for poor families.

“Many parties contributed to the good progress of this project. The local government of Bauan, led by Mayor Dolor, kick-started this initiative by contributing this plot of land, and it continues to provide guidance and support. The charity organisation Gawad Kalinga provided the framework for development.”

The Eco Village will comprise 60 housing units when completed, and is being developed in three phases. The first batch of 20 homes were completed and handed over to needy families in end-2011.

The Mayor of Bauan, Ryanh M. Dolor, said, “We wish to express our gratitude to Keppel. They have provided invaluable support to this municipality. In particular, they have improved the lives of our citizens by providing employment as well as by building homes for the needy.”

Jose Luis Oquiñena, ED of GK, said, “This Eco Village is a testament to how big businesses can play a major role in transforming the lives of ordinary citizens.”

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Five more DSS™ 38E units for Sete Brasil



(L-R) Mr Pedro Barusco, COO of Sete Brasil, signing of the Letter of Intent for the five additional semis based on the DSS™ 38E design with Mr Tong Chong Heong, CEO of Keppel O&M, Mr Kwok Kai Choong, President and CEO of Keppel FELS Brasil and Mr Tommy Sam, Vice President of Keppel FELS Brasil

Keppel O&M through its subsidiaries, Keppel FELS Brasil S.A. and Estaleiro BrasFELS Ltda, has signed a Letter of Intent (LOI) with Sete Brasil Participações S.A. (Sete Brasil), to design and construct five semisubmersible drilling rigs based on Keppel's proprietary DSS™ 38E design.

The LOI facilitates Keppel O&M's preparation work on these potential projects, pending the signing of the final construction contracts. Earlier in December 2011, Keppel O&M had secured a contract to build one DSS™ 38E semisubmersible for Sete Brasil. The additional five rigs will support Brazil's exploration of its vast proven offshore oil and gas resources.

Mr Tong Chong Heong, CEO, Keppel O&M, said, "We are pleased that Sete Brasil is moving ahead with the decision to order the five additional semisubmersibles on top of the first DSS™ 38E unit ordered

late last year. With our proven track record of our Angra yard in Brazil, we are in a good position to continue to contribute effectively to the growth of Brazil's oil and gas industry."

Sete Brasil's CEO, Mr Joao Carlos Ferraz, said, "We have entered into this LOI for five additional semisubmersibles from Keppel, as we are confident of Keppel's strong track record in the design and construction of deepwater rigs, as well as their established yard in Brazil. It is full steam ahead for us in growing our fleet of rigs and vessels to support the exploration and production activities in offshore Brazil, and we need to partner shipyards like Keppel which can deliver the quality rigs in a timely manner."

The DSS™ 38E design is an enhancement of Keppel's proven fifth generation deepwater solution, the DSS™ 38. With

improved capability and operability, the DSS™ 38E is well suited to meet the stringent requirements of the deepwater "Golden Triangle" region, comprising Brazil, Africa and the Gulf of Mexico.

Jointly developed and owned by Keppel's Deepwater Technology Group and Marine Structure Consultants, the DSS™ 38E design is an innovative and cost-effective design. It is rated to drill to depths of 10,000 metres below the rotary table in 3,000 metres water depth. Its operational displacement is approximately 45,000 tonnes.

Each rig will have accommodation facilities to house a crew of up to 160 men. The vessel is designed to stay in position via eight Azimuthing thrusters and the configurations comply with the American Bureau of Shipping Dynamic Positioned System (DPS-3) requirements.