

MICA (P) 153/04/2008

Offshore

Proprietary designs win market confidence

Making waves at OTC

Marine

Keppel Shipyard wins Seatrade Asia Award

> Safety Starts With Me Safety Excellence 2010



LEWEK ARUNOTH

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OffshoreMarine is a bi-monthly publication of Keppel Offshore & Marine Ltd 50 Gul Road, Singapore 629351 Tel: (65) 6863 7200 Fax: (65) 6261 7719/6265 1927

Company registration no. 199900642R

ENSCO places two more semi orders

eppel FELS has won new contracts to build two ultra-deepwater semisubmersible (semi) drilling rigs worth a combined US\$1.04 billion. The orders came from a subsidiary of repeat customer ENSCO International Incorporated (ENSCO).

Secured within a month of each other, the ENSCO 8504 and ENSCO 8505 are due for separate deliveries in 2011 and 2012.

Daniel W. Rabun, Chairman, President & CEO of ENSCO said, "We are pleased that Keppel FELS is constructing all six of our new 8500 Series® semis. We are benefiting from synergies associated with building all these rigs at one yard with a partner with whom we have a strong working relationship, and who is familiar with our needs."

The ENSCO 8500 Series® semis can drill in up to 8,500 feet of water. Its features include a two-million-pound quad derrick, offline pipe handling capability, 35,000-feet drilling capacity, and station-keeping capabilities that meet dynamic positioning 2 (DP-2) requirements, making the rigs ideal for deepwater development drilling.

"Deepwater has become a very important part of our business. We estimate that our deepwater fleet, including the 8500 Series® semis, will contribute approximately 30% of our total revenue when in operation," said Daniel Rabun

Choo Chiau Beng (CB Choo), Chairman & CEO of Keppel Offshore & Marine (Keppel O&M) said, "We are pleased that ENSCO has yet again entrusted us with the construction of their two latest deepwater rigs. We will continue to give full support to our valued customer and partner, and contribute to the growth of their high quality deepwater fleet."



Magnificent six - Keppel FELS is constructing the entire fleet of six 8500 series® semi drilling rigs for ENSCO

Headquartered in Dallas, Texas, ENSCO owns and operates a modern fleet of offshore drilling rigs, serving the global petroleum industry.

To date, Keppel FELS has delivered nine brand new jackup rigs to ENSCO. The first of six semis it is building based on ENSCO's proprietary design has been inaugurated (see story on page 14). The semi has been contracted to Houstonbased Anadarko Petroleum Corporation and major Italian oil and natural gas player Eni for works in the Gulf of Mexico.

Fleet Status: ENSCO 8500 Series® with Keppel FELS

No.	Semisubmersibles	Projected Delivery	Contract Status
1.	ENSCO 8500	3Q 2008	Contracted in Gulf of Mexico to Anadarko and Eni
2.	ENSCO 8501	1Q 2009	Contracted in Gulf of Mexico to Nexen and Noble Energy
3.	ENSCO 8502	4Q 2009	Contracted in Gulf of Mexico to Nexen
4.	ENSCO 8503	3Q 2010	Contracted in Gulf of Mexico to Cobalt
5.	ENSCO 8504	2H 2011	_
6.	ENSCO 8505	1H 2012	_

Keppel's proprietary designs win market confidence

eppel O&M's proprietary solutions are gaining hard-won respect in the global marine and offshore industry.

Its offshore arm Keppel FELS made headlines in June with four repeat rig orders amounting to some US\$1 billion from Queiroz Galvão Óleo e Gás (QGOG) and the Seadrill group of companies.

The orders are for two newbuild KFELS B Class jackups, a DSS 38 semisubmersible (semi), and an SSDT 3600E drilling tender.

"Having our own suite of innovative designs and solutions give us the flexibility to address technological changes in terms of drilling processes and drilling equipment, among others," said CB Choo, Chairman & CEO of Keppel O&M.

But the rig-builder's winning formula goes beyond technological creativity. It also believes in listening closely to its customers and working with their needs.

Being the only shipyard group with its own suite of deepwater solutions, Keppel O&M sees great opportunities going forward as oil production and exploration move deeper under the sea.

QGOG acquires another DSS 38 semisubmersible

Brazilian drilling contractor group Queiroz Galvão Óleo e Gás (QGOG) has returned to Keppel FELS for its second DSS 38 semisubmersible drilling rig.

"The repeat semisubmersible order speaks volumes of QGOG's deepening confidence in us, and the growing acceptance of our DSS 38 design. Keppel O&M is in good stead to add value to Brazil's offshore sector," said CH Tong, MD & COO of Keppel O&M.

To be named *Alpha Star*, the rig may be deployed in offshore West Africa or South America when due for delivery in the second half of 2011. QGOG will supply the rig's drilling and subsea equipment.

Keppel FELS won the contract for QGOG's first semisubmersible, *Gold Star*, in August 2006. *Gold Star* has been placed under charter and service contracts with

DSS 38: A new generation deepwater rig

Innovative and cost efficient, the DSS 38 semisubmersible drilling rig is designed to meet operational needs in the "Golden Triangle" of deepwater, namely Africa, the Gulf of Mexico, and Brazil.

The DSS 38 is rated to drill to depths of 30,000 feet below mud line in just over 9,000 feet water depth. It contains both vertical and horizontal riser storage, and is kept in position by eight 3000kW Azimuthing thrusters.

Able to house up to 130 men, the rig measures 103.5 metres in overall length with a main deck size of 69.5 square metres, giving it an operational displacement of some 38,000 tonnes.





KFELS B Class: The industry's power horse

Economical and readily upgradeable for higher performance, the KFELS B Class jackup incorporates Keppel's fully-automated, advanced high capacity rack and pinion elevating technology.

With a Self-Positioning Fixation System, the rig can accommodate 112 men, operate in water depths of up to 400 feet, and drill down to 30,000 feet.

Brazil's Petrobras, and is slated for delivery in the second half of 2009.

Other than the two DSS 38 semis for QGOG, Keppel FELS is also building three DSS 21 rigs for Maersk Contractors, and one DSS 51 rig for Transocean.

The DSS series of semisubmersible rigs are jointly designed by Keppel O&M's Deepwater Technology Group and Marine Structures Consultants of Netherlands.

Seadrill Group places three drilling rig orders

Keppel FELS has secured a contract worth US\$420 million to build two KFELS B Class jackup drilling rigs for Oslo Stock Exchange-listed Seadrill Limited.

The rigs are due for delivery in the second and fourth quarters of 2010.

Seadrill Limited CEO Alf C. Thorkildsen said, "We had an excellent experience working with Keppel FELS, and are impressed with performance of the four KFELS B Class jackup rigs now operating at full capacity. We are pleased to partner Keppel FELS again to construct our latest two newbuild jackups."

Including Seadrill's two latest orders, Keppel FELS has secured 33 orders for the popular proprietary KFELS B Class jackups since its launch in 2000.

Meanwhile, Seadrill Asia, a subsidiary of Seadrill Limited, has placed a repeat order for a semisubmersible drilling tender.

CH Tong said, "The Seadrill group of companies is an esteemed customer for Keppel. We value their steady flow of projects, which attest to their irreplaceable trust and confidence in us."

Designed by the Deepwater Technology Group, the KFELS SSDT 3600E drilling tender is expected to be delivered in the first quarter of 2011.

When completed, it will join Seadrill Asia's fleet of six other KFELS SSDT rigs built by companies under the Keppel O&M group. Keppel FELS is now constructing West Berani II, number six in the fleet, which is due for delivery in end 2009.

SSDT: Leading edge motion technology



Drilling tenders used to be deployable only next to fixed platforms. But the KFELS SSDT series changed that, allowing drilling contractors and operators of deepwaters to work alongside Spars and Tension Leg Platforms.

A typical SSDT carries high capacity cranes of up to 200 tonnes to deploy a Drilling Equipment Set (DES) onto neighbouring platforms within 12 hours. Not only will the latest tender rig for Seadrill Asia feature a crane capacity of 250 tonnes, it will also have four mud pumps, and enhanced mooring capabilities tailored for tough drilling needs in offshore South East Asia. The tender can provide accommodation for 160 people.

An Ariel delivery

eppel FELS has completed its fourth KFELS B class jackup rig for Seadrill Limited (Seadrill) within budget and three days ahead of schedule.

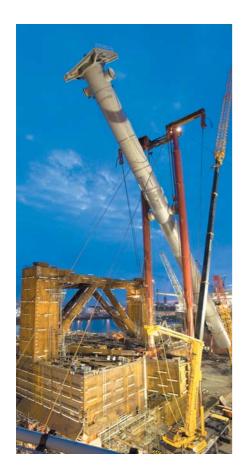
On the early delivery, MD & COO of Keppel O&M, CH Tong, said, "Finishing before the deadline demonstrates our commitment to on-time, on-budget deliveries to customers. Looking ahead, with the tight supply market, we are exploring more innovative ways to create value for our customers."

Christened *West Ariel* in keeping with the tradition of naming Seadrill's drilling units after a celestial body, the rig is Keppel O&M's sixth jackup rig delivery this year — with five from Keppel FELS and one from Keppel AmFELS.



Keppel FELS delivers the West Ariel, on budget and ahead of schedule

Keppel outfits SBM's MOPUstor



eppel Verolme has won its first contract from Single Buoy Moorings Inc. (SBM) to outfit a Mobile Offshore Production Unit with storage (MOPUstor).

The MOPUstor is a dual-function predrilling and oil production and storage facility equipped with a regular cantilever jackup rig.

Keppel Verolme's yard workers have begun work on the bare bones of the MOPUstor. Besides piping, structural, electrical and instrumentation works, the unit's key feature – a substructure, will be installed.

The substructure consists of a 1,240-tonne caisson or sealed underwater

structure, columns and braces supporting the MOPUstor's legs, and a steel subsea storage tank.

The 3,300,000 bbl storage tank minimises offshore production and storage costs by spewing out sea water as oil fills the tank.

Such outfitting jobs deal with many intricate equipment parts. So beyond mechanical expertise, Keppel Verolme also brings to the table a timely, refined procurement process that keeps costs down for customers.

When operational in 2009, SBM's MOPUstor will be deployed to Calgary-based Talisman Energy for redevelopment of Norway's Yme field.

The MOPUstor settles into Keppel Verolme yard

In a class of its own

he proprietary KFELS B Class design has proven popular since its launch in 2000. Since then, Keppel FELS has built and delivered 19 such rigs for customers including ENSCO Offshore Company, Aban Singapore, and Diamond Offshore.

The company delivered its 20th KFELS B Class drilling rig, the *Ocean Shield*, to Diamond Offshore at the end of April.

Among the world's deepest drilling rigs in its class, the *Ocean Shield* can operate in water depths of up to 350 feet.

The rig is now being tested and

prepared for its first assignment. It is the first of two KFELS B Class rigs commissioned by Diamond Offshore in 2005. The second is being built by Keppel FELS' sister company, Keppel AmFELS in Brownsville, Texas, USA.

Another Diamond Offshore project, the Victory-class semisubmersible *Ocean Monarch*, is due for completion later this year. At Keppel FELS, the semisubmersible is being upgraded to an ultra-deepwater drilling unit capable of drilling in water depths of up to 10,000 feet.

The KFELS B Class design



Joining forces for a job well done

eppel Batangas Shipyard completed the pontoons for drilling semisubmersible, DSS 38 Goldstar, for Brazilian drilling contractor Queiroz Galvão Óleo e Gás (QGOG).

Roger Gagnon of QGOG (right) presents a bonus cheque to Kok Boon Heng, President of Keppel Batangas



In a show of appreciation for the yard's timely delivery and good safety record, QGOG presented a US\$10,000 bonus to Keppel Batangas on 8 May 2008.

When handing out the cheque, Roger Gagnon, QGOG Marine & BFE Manager said, "We have been looking forward to this day. There were many challenges during the past twelve months but your perseverance has been invaluable in overcoming these obstacles."

Since 2006, Keppel FELS has subcontracted offshore construction projects out to Keppel Batangas in order to fulfill its growing orderbook for newbuild structures. The tie-up has maximised resources within Keppel O&M's network of yards, ensuring timely deliveries to the valued customers

The DSS 38 Goldstar project exemplifies the close collaboration between Keppel's Philippine yards.

Subic Shipyard started fabricating the pontoons' mid sections in April 2007. Two months later, Keppel Batangas began production work on the pontoons end modules. It later completed each pontoon by integrating the mid sections delivered by Subic Shipyard in January 2008 and its own modules.

That was when the port and starboard pontoons were ready to be assembled with other oil rig modules in Singapore.

Keppel Batangas is now working on four other offshore fabrication projects for Keppel FELS.

Resolute commitment to Scorpion

eppel AmFELS delivered the third of five LeTourneau Super 116 jackup rigs to Scorpion Offshore Ltd (Scorpion) on 28 July 2008 within budget and two months ahead of schedule.

The feat, achieved amid tight labour supply and rising raw material costs, earned the US-based wholly-owned subsidiary of Keppel O&M an early delivery bonus of US\$1.2 million.

Lady Sponsor Mrs Susan Padilla christened the jackup rig *Offshore Resolute* two days prior to its setting sail for offshore Vietnam to begin operations in July this year.

At the naming ceremony, President & CEO of Keppel AmFELS, GS Tan, said, "The *Offshore Resolute* was completed ahead of schedule, on budget, and achieved 1.3 million manhours without lost time incidents. Such consistency and successful completion reinforces Keppel AmFELS' reliability and reputation."

Bermuda-based Scorpion commissioned Keppel AmFELS to build five LeTourneau Super 116 jackup rigs in 2005. The first two, Offshore Courageous and Offshore Defender, were delivered on time in 2007.

Each rig features a 70-feet cantilever with a drilling depth of some 30,000 feet, allowing for the maximum reach now available for all but a few harsh environment units. Such rigs can operate under 350 feet of water as outfitted or in water of depths up to 400 feet by adding leg sections.

With the *Offshore Resolute* well on its way to drill for clients, Keppel AmFELS is devoting its attention to finishing Scorpion's two remaining LeTourneau Super 116s by their slated delivery dates in 2008 and 2009.

Keppel AmFELS' clients for jackup rigs include Diamond Offshore, Atwood Oceanics, Perforadora Central, and Rowan Companies.



Offshore Resolute, the third jackup for Scorpion Offshore, has been delivered safely, on budget, and ahead of schedule

Making headway in Nantong

■ he Nantong Municipal People's Government has lauded Keppel Nantong Shipyard for emerging among its top five revenue earners in the marine industry for 2007. The accomplishment comes less than three years after Keppel set up business in the thriving maritime city.

In a letter to the company, the Nantong Economic and Trade Commission noted, "In 2007, we saw significant developments in the Nantong's marine industry. We hope that these companies could continue to tap the opportunities available and explore new technology innovations, so as to contribute more to the development of Nantong's marine industry."

Keppel Nantong Shipyard is currently constructing 22 vessels for a global clientele. It has also undertaken offshore construction projects, such as jackup

hulls and semisubmersible drilling tender pontoons, for sister yard Keppel FELS in



Since its inception, Keppel Nantong has been an active contributor to the growth of the local marine industry

Verolme yard lauded at Deloitte Awards

eppel Verolme has made it to the Netherlands' 50 Best Managed Companies at the 2008 Deloitte Gala



Keppel Verolme offers excellent infrastructure and versatility when meeting customers' needs

Under the guidance of Thijs Wöltgens, President of the Chamber of Commerce in the Netherlands, an independent and expert jury for the awards selected the country's top 50 ventures based on the organisations' turnover, company strategy, and policies implementation. They lauded Keppel Verolme's excellent financial management, talent management, and technology innovations.

Harold Linssen, President of Keppel Verolme, said, "We are proud to be recognised as one of the best performing companies. It affirms the enormous commitment, devotion, and the professionalism of our people at Keppel Verolme."

The companies were honoured at a gala dinner on 4 June 2008. Deloitte organised the inaugural event in cooperation with the Nijenrode university, the Netherlands Chamber of Commerce, and the VNO/NCW (The Confederation of Netherlands Industry and Employers).

Keppel Shipyard wins Seatrade Asia



Keppel Shipyard's Nelson Yeo (centre) receives the Shipyard Award from Tateo Kaji, Executive Vice President, ClassNK

he development, capacity investment, and cost efficiency of Keppel Shipyard have been recognised at the annual Seatrade Asia Awards, which made its debut on 13 May 2008 this year at the Shangri-La hotel in Singapore.

An independent judging panel of industry leaders selected the winners, celebrating their excellence and innovation in the region's maritime sector.

Commenting on the win, ED of Keppel Shipyard, Nelson Yeo said, "The Shipyard Award is a recognition of our hard work and efforts in enhancing yard productivity and efficiency. We want to share this award with our customers, partners, and subcontractors, who have worked closely and tirelessly with us to achieve a positive and safe workplace for all."

Asian shipping voice gets a boost

An impressive line up of maritime industry thought-leaders are being scheduled to speak at Sea Asia 2009. This was revealed at the conference's official launch at the Reflections at Keppel Bay show gallery.

Although only into its second instalment, the biennial conference to be held from 21 to 23 April 2009 is already establishing itself as a premier event for global shipping professionals.

More than 10,000 delegates, ship owners, and business leaders from over 45 countries are expected to convene to address pressing issues related to the future of Asian shipping.

Asian countries now account for 45 percent of the world's shipping fleet and half of the ship orders globally. Therefore, many players in the region, including Keppel, see value in



Wang Look Fung (right) and CB Choo (third from right) get active in Sea Asia 2009 to enlist top speakers and canvass for Asian shipping interests

award

Motorised shelter workshops, enclosed blasting chambers, and new gantry cranes are just some examples of new facilities set up at Keppel Shipyard over the last three years to boost capacity and productivity. The company has also adopted the e-transactions portal *ShipServe* in 2007 to streamline procurement processes.

The Seatrade Asia Awards is a regional take on its global counterpart Seatrade Awards. The awards recognise achievements based on six basic principles, including contribution and commitment to developing the maritime sector, operational or commercial innovation, and social and environmental responsibilies.

In all, Singapore-based organisations took home an impressive 10 out of the 19 awards presented this year.

consolidating and developing Asia's clout on the world shipping deck.

For starters, Keppel FELS ED, Michael Chia and Keppel Group Corporate Communications GM, Wang Look Fung, will advise on the conference programme, as they are on the Sea Asia Steering Committee.

In addition, CB Choo, Chairman & CEO of Keppel O&M, is among the list of prominent speakers on a distinguished international advisory panel created to provide advice and counsel to the planning of the event.

Building on the success and 'Asian Voice' theme of the inaugural 2007 conference, next year's debate is entitled, *The Asian Voice in World Shipping - Clearer and Stronger.*

Keppel O&M is also proud host of the Sea Asia 2009 official reception.

United we stand



Minister Lim Swee Say, who is also General-Secretary of NTUC, presents the NTUC May Day award to 'Sister Attyah'

ttyah Hassan was one of only five female workers when she joined Keppel FELS at the age of 16. Even then, she knew she could make a difference.

Attyah said, "Many co-workers faced problems back then but did not know where to go and whom they can talk to. I felt I could be their spokesperson."

So she joined the company's union three years later in 1982, rising through the ranks to become a full-time unionist in 1998. Today, she is 'Sister Attyah' to Keppel FELS's 3,500 union members and she works hard to ensure they are treated fairly at work.

Attyah's commitment and contributions did not go unnoticed. The General Secretary of the Keppel

FELS Employees Union (KFEU) was commended at the National Trades Union Congress (NTUC) May Day dinner on 29 July 2008.

"I am extremely happy to receive this award but it is not mine alone. It also belongs to my committee and the management, for without their support I would not be able to do so much for my peers," Attyah said.

At the NTUC's May Day celebrations on 10 May 2008, Keppel FELS Hull Supervisor Sanusi Marsudi won the May Day Model Worker Award.

The award recognises workers with excellent work performance and attitude, who pursue re-training and skills upgrading, or who overcame major obstacles to return to work. 208 workers from various local industries received the commendation this year.



First DSS 21 semi named

Reppel FELS and Maersk Contractors inaugurated the new DSS 21 proprietary design semisubmersible (semi) — the most technically advanced deepwater drilling rig to be designed and built by Singapore to date.

The remarkable semi was named *Maersk Developer* by Mrs. Kari Reinertsen, wife of Øivind Reinertsen, President of StatoilHydro (North America Operations), on 21 June 2008 in Keppel FELS yard.

The ceremony's Guest-of-Honour, Mr Lim Boon Heng, Minister, Prime Minister's Office, said, "About 30% of jackup rigs and 16% of semisubmersibles currently under construction in the world are designed by Singapore companies. In the semisubmersible category, all the Singapore-designed rigs come from Keppel O&M as the result of its investment in R&D since the 1980s."

"Keppel has been a good example of how Singapore companies can position themselves higher up the value chain by using technology innovation to build enduring businesses."

The DSS 21 design is jointly developed by the Company's Deepwater Technology Group, Marine Structure Consultants of the Netherlands and Maersk Contractors. Claus V. Hemmingsen, CEO of Maersk Contractors, said, "The successful construction of the new DSS 21 rig is built on the firm foundation of an excellent partnership between Maersk and Keppel. The rig will be a new cost efficient solution for deepwater exploration and development, which will serve our customers well"

CB Choo, Chairman & CEO of Keppel O&M, said, "We listen closely to customers when developing our proprietary designs because any technology innovation must ultimately create value for them."

The Maersk Developer is the first in a series of three sixth-generation DSS 21





1, 2 & 3: Named in the presence of Minister Lim Boon Heng by Lady Sponsor Mrs Kari Reinertsen, the DSS 21 Maersk Developer is the most advanced deepwater rig designed and built in Singapore

newbuild deepwater semi rigs Keppel FELS is building for Maersk. The other two under construction now are scheduled for delivery in the second quarters of 2009 and 2010 respectively.

"We are pleased to work with trendsetting partners like Maersk Contractors. Over the years, they have given us the necessary platforms to develop and launch our proprietary solutions. We would like to thank Maersk Contractors for choosing Keppel as the preferred partner for their fleet expansion plans," said CB Choo.

Designed for maximum uptime with reduced emissions and discharges, the DSS 21 series semi rigs are a unique environmentally friendly solution for the offshore industry.

The semi units each feature a dynamic positioning system that can be attached to a prelaid mooring system. Capable of operating at water depths of 3,000 metres and drilling down to 10,000 metres, they are well suited for operations in offshore Brazil, West Africa, Gulf of Mexico and South East Asia.

To date. Maersk Contractors has invested over S\$3 billion worth of projects with Keppel Offshore & Marine. The projects include the construction, repair, and conversion of rigs and floating production storage and offloading facilities.

In addition to the deepwater semis, Keppel FELS has also been tasked with building four jackup rigs for Maersk. The first, Maersk Resilient, was delivered in January 2008.





First of the series of six rigs, ENSCO 8500

Brian Higgins and Yeo Yue Ngiap celebrate the triumph and partnership of the project

Keppel and ENSCO inaugurate first 8500 Series® rig

eppel FELS, together with ENSCO International Incorporated (ENSCO), have named the first rig in the fleet of six new ENSCO 8500 Series® semisubmersibles (semi).

A strong safety record of 5.5 million incident-free man-hours was achieved by the yard in the construction of this premier rig.

Minister of State for Trade and Industry, Mr Lee Yi Shyan, was present when the *ENSCO 8500* was named by Mrs Carol Garon Durkee, whose husband Todd Durkee is GM, Gulf of Mexico and International Deepwater of Anadarko Petroleum Corporation. This new deepwater rig has been contracted in the Gulf of Mexico to Anadarko and Eni.

Daniel Rabun, Chairman, President & CEO of ENSCO, said, "We are pleased with the excellent job by Keppel FELS on our first ENSCO 8500 Series® semisubmersible. As she takes on her maiden assignment in the

Gulf of Mexico, the *ENSCO 8500* will be a showpiece of the quality and capabilities of our new deepwater fleet under construction at Keppel FELS."

Keppel FELS is ENSCO's preferred offshore solutions provider. In the last decade, Keppel has worked closely with ENSCO to build up and renew its rig fleet, which includes the delivery of nine new jackup rigs.

CB Choo, Chairman & CEO of Keppel O&M, said, "The win-win partnership we have forged has played an important role in helping ENSCO to build its position among the world's foremost drilling contractors, and in establishing Keppel FELS's reputation as the world's leading rig designer and builder."

CB Choo added, "As ENSCO pursues a prominent position in deepwater drilling, we want to be there to support our valued partner. The rich collective experience and insights we have gained on the ENSCO 8500 semi will certainly enhance

the engineering and construction efficiency of the next five units to come."

The ENSCO 8500 Series® of deepwater semisubmersibles is an enhanced version of the *ENSCO 7500*, and is based upon an ENSCO proprietary design.

The ENSCO 8500 Series® rigs will be capable of drilling in up to 8,500 feet of water, and can readily be upgraded to 10,000 feet water-depth capability if required. Enhanced features include a two million pound quad derrick, offline pipe handling capability, increased drilling capacity, greater variable deck load and improved automatic station keeping ability.

With these features, the ENSCO 8500 Series® rigs will be especially well-suited for deepwater development drilling.

ENSCO, headquartered in Dallas, Texas, owns and operates a modern fleet of offshore drilling rigs servicing the petroleum industry on a global basis.







- 1. Like the dancing lion, the ENSCO 8500 is a distincitve showpiece of versatility and quality in deepwater drilling
- 2. Graced by Guest-of-Honour, Minister Lee Yi Shyan (second from left), the ENSCO 8500 was named by Mrs Carol Durkee (third from right)
- 3. Three cheers for ENSCO 8500 project team!

Keppel Shipyard expands its repertoire

amed on 21 June at Keppel Shipyard, the 725,000 bbls storage *Lewek Arunothai* has become the first Floating Production, Storage and Offloading (FPSO) unit that Keppel Shipyard has converted for EOC Limited (EOC).

ED of Keppel Shipyard, Nelson Yeo said, "With the combined efforts of EOC, Keppel and our contractor partners, our

yards have achieved a total of 1.4 million manhours to date with no lost time incidents. I wish to thank everyone for helping Keppel achieve the ultimate goal of an incident-free environment yardwide."

Workers at Keppel's Subic Shipyard in the Philippines performed the first part of the vessel's refurbishment and life extension, while the engineering, procurement, and topside fabrication took place in Singapore simultaneously. When the vessel arrived at Keppel Shipyard, the remaining topside works were carried out and integrated. The vessel can process 175 million standard cubic feet of natural gas a day.

The yard carried out life extension and upgrades of a Floating, Storage and Offloading (FSO) vessel for the Erawan field in Thailand back in 1997. It also converted a tanker into an FSO for the Platong field in Thailand in 2004.

Altogether, Keppel Shipyard has completed 76 FPSO and FSO projects. It is now working on another six.

Meanwhile, sister yard Keppel Singmarine is building a 30,000 bhp Multi-Functional Support Vessel for Ezra Holdings.

EOC Limited (EOC) is an associated company of Singapore-listed Ezra Holdings Limited, an integrated offshore service provider with a broad range of offshore support vessels for charter.











Striking first steel are the Directors of Greatship Offshore

Defining professionalism

he Keppel yards continue to go beyond delivering quality to its valued customers. In April, Keppel FELS performed work in double quick time on two distressed rigs, the ENSCO 53 and Deep Driller 5, allowing for their return to regular drilling programmes with minimal down-time.

Flying Squad called to action

A distress call from ENSCO International Incorporated (ENSCO) set Keppel FELS's offshore repair team, the Flying Squad, into action. A team of engineers was quickly primed to assess the situation while materials and equipment required for the repair were prepared.

The Flying Squad, led by Pungavanam Sithiasagaran, Team Leader and Quality Assurance Supervisor, then went onboard *ENSCO 53* to commence repair works. The squad completed the contracted work almost a week ahead of schedule with requested additional welding also completed in time.

Impressed with the pace and quality of work, *ENSCO* 53 Rig Manager Gary Martin said, "They did an excellent job completing the repairs in a very short time frame. Keppel FELS has a great team and I thank them for their support."

Meanwhile, Deep Driller 5 Rig Manager Ashish Sethi was in no panic when an Anchor Handling Tug Supply (AHTS) vessel grazed the hull of his rig en route to Vietnam on 13 April. The incident had left a trail of external damages requiring urgent repairs.

"Although it was a Sunday, a call to Keppel FELS set the wheels in motion for surveys to be organised and a berthing space in the shipyard to receive the rig. This promptness and sense of urgency demonstrated by the Keppel team continued through the course of the project until the rig was repaired and delivered," Ashish wrote in a letter to the company.

To top it off, the repair works led by Keppel FELS Project Superintendent Firdaus Rahim were completed three days ahead of schedule on 3 May 2008.

Ashish added, "Most notably, the focus on safety by everyone was truly commendable and this ensured the project was completed ahead of schedule without any lost time incidents."

Solid progress at the yards

Amidst the buzz, Keppel FELS and Keppel Singmarine continue to celebrate their achievements of project milestones.

The keel of *Maersk Semi No. 3* was laid at Keppel FELS on 30 April. The proprietary deepwater semisubmersible (semi) is the

third in a series of three built to the DSS 21 design.

Maersk Jackup No. 4 had its keel laid soon after on 2 May. The rig is the final of four MSC CJ50 jackup rigs that Keppel FELS is constructing for Maersk Contractors.

Trident 15, a Modec 300 C-38 jackup drilling rig set sail to owner Transocean on 15 April. The rig came to Keppel FELS for a periodic special survey, extensive repairs, and upgrading works.

The first steel for the second of three KFELS N Class jackup rigs Keppel FELS is building for Skeie Drilling and Production was struck on 31 May. KFELS N Class rigs will be the largest jackups ever to be constructed in Singapore. They can also run drilling and production activities concurrently.

At Keppel Singmarine, *H335* Anchor Handling Tug (AHT) had its keel laid on 8 April. The 100-tonne bollard pull tugboat is a repeat order from Seaways International, to whom Keppel delivered the first order, *Seaways 12*, in November last year.

Projects *H341* and *H342*, both 93-metre platform supply vessels (PSVs) for Greatship Offshore, struck their first steel on 1 April. The 4,600 dwt PSVs will be fitted with diesel electric propulsion and dynamic positioning systems.

Keppel gets personal with safety

On 22 May 2008, Keppel Group along with subsidiary Keppel Shipyard, launched two important campaigns "Safety Starts with Me" and "Safety Excellence 2010," reaffirming their staunch commitment to protecting every worker's welfare.

Safeguarding personal and group welfare

S ome 400 guests made up of Keppel Group management, staff, business partners, and suppliers bore witness to the company's steadfast pursuit of safety during the two campaign launches held at Keppel Shipyard.

For Keppel Corporation Executive Chairman, Lim Chee Onn, the message is simple.

"We in Keppel believe that safety is a never-ending journey that requires a lifelong commitment from each and everyone of us," he said.

- The Keppel O&M team looks on as Charles Foo, Managing Director (Special Projects), shares Keppel's safety strategy with Acting Minister Gan Kim Yong
- 2. Shipyard's Safety Excellence 2010 programme was launched with the endorsement of its key partners in the presence of Minister Gan
- Safety Excellence 2010 roll-out spurs Keppel Shipyard staff to take safety to heart and look out for one another





The "Safety Starts with Me" campaign follows from Keppel Group's first Annual Safety Convention last October, where Keppel Corporation and all its business units unanimously adopted "Five Key Safety Principles" underpinning the Group's approach to managing safety issues.

"A safe and healthy work environment has always formed an important part of Keppel's care and concern for our staff welfare. Indeed our safety work plan is always an integral part of our continued efforts to improve our operational efficiency," said Mr Lim.

Riding on the same theme as the national safety campaign 2008, Keppel Group aims to give its messages maximum impact. At the same time, it strives to support Workplace Safety and Health (WSH) Council's WSH 2015 vision to become an international centre of excellence for safety by fostering a safe and healthy work environment for everyone and for Singapore.

The Guest-of-Honour, Acting Minister for Manpower, Gan Kim Yong, said, "I am encouraged by Keppel's initiatives because

for Singapore to achieve higher workplace safety standards, the industry must take the lead to promote safety."

Indeed, Keppel's business units are taking a proactive approach to embed safety practices and messages into their work processes. They are also learning earnestly from one another and from external agencies.

Keppel Shipyard leads the way forward

Paving the way for the Group's safety journey and success is Keppel Shipyard with its large workforce. The yard's *Safety Excellence 2010* programme aims to reach out to all employees as well as subcontractors through a series of initiatives and schemes over the next two years.

Major stakeholders including ExxonMobil Development Company (ExxonMobil), Shell International Exploration and Production, Single Buoy Moorings (SBM), and Prosafe Production have joined hands with Keppel Shipyard on this significant initiative.

For starters, they have pledged over a total of \$2 million to jumpstart various safety schemes under the programme. The bulk of their sponsorships will support safety training for subcontractors who make up more than two-thirds of the 14,000 workers at Keppel Shipyard everyday.

"Keppel Shipyard firmly believes in joining hands with our clients and contractors to provide safe, high quality services with a fast turnaround time," said Nelson Yeo, Executive Director of Keppel Shipyard.

He added, "As such, we want all our contractors to continue to join in the various training and development schemes under our *Safety Excellence 2010* programme. This will bring the yard closer to its vision of an incident-free workplace."

On top of the stakeholders' pledge, Keppel O&M group has set aside \$13 million in its 2008 safety budget to promote and realise workplace safety in its Singapore yards.

Keppel's safety efforts did not go unnoticed.

Continued on page 20 ▶





Nelson Yeo and Abu Bakar share the yard's initiatives to equip every employee and worker with the knowledge and skills to contribute to the yard's safety



Abu Bakar (2nd from left), Senior GM (Operations) of Keppel Shipyard engages the yard's partners on the safety initiatives presented

◄ Continued from page 19

"We've been working with Keppel in Singapore, Brazil, and Europe. Keppel's safety commitment can be seen in these sites and we greatly appreciated that," said Francis Blanchelande, Chief Operating Officer of SBM.

Long time partners also see that Keppel Shipyard has come a long way.

Yarami Pena, Construction Advisor of ExxonMobil, said, "I was here at the start six years ago during the first cold eye review and again here this year. Six years ago, Keppel Shipyard had the desire but was not sure what to do. Now it is a company still with the same desire but with a vision and the knowledge to do it."

Keppel Shipyard gets the ball rolling

More than 700 staffers, project and section managers, foremen, engineers, and contractor associate heads took to heart the key messages and goals expressed over two days during Keppel Shipyard's safety campaigns roll-out.

Keppel Shipyard's team efforts have produced impressive results so far. Its Accident Frequency Rate (AFR) fell from 3.48 in 2002 to 0.24 in 2007, well surpassing the industry average.

Senior Machinery Fitter, Mohamed B Lamin has worked with Keppel Shipyard for more than 20 years.

Noticing the changes, he said, "In the last few years, the workers have really become more aware of safety, making it part of their work processes. Checking the equipment expiry dates, ensuring that the machines are working properly, and wearing the right safety gear have become routine. The mindset is there. We also look out for each other because everybody realises the importance of safety."

However, the company's commitment does not stop there. By the end of the two-year period under the *Safety Excellence 2010* programme, the yard has set its sight on training and

empowering every employee and subcontract worker to care for his own as well as his co-workers' well-being.

Keppel FELS takes a Hands-on Approach

"Hand injuries, Stop it, Everybody's Responsibility" – that was Keppel FELS message to its employees, subcontractors and customers at this year's Health, Safety and Environment (HSE) Excellence Promotion Campaign.

At the campaign launch on 15 April 2008, CB Choo, Chairman & CEO of Keppel Offshore & Marine urged everyone to stay vigilant on safety issues.

"We are all committed to complete and

deliver projects to clients on time and within budget but this should not be a reason for us to overlook safety," he said.

He added, "We must continually strive towards achieving Zero Accidents, Zero Loss because every incident or every life lost is one too many."

The annual HSE Excellence Promotion Campaign aims to raise HSE awareness in the shipyard. This year's two-month campaign ended on 14 June focused on hand safety again because of how essential they are for work and in life.

"We need our hands and fingers to work and play but more importantly, we need them to hold our loved ones. If we neglect their safety, we do not suffer alone but along with our family and loved ones as well," said Chairman of this year's HSE Excellence Promotion Campaign, Tan Kheng Kee, Assistant Manager (Facility) of Keppel FELS.

Although looking after workers' hands was hands down the main message at the campaign launch, organisers made time to showcase novel safety ideas.

During the launch, Safety Innovation Team (SIT), *Fusion*, from the Piping department wowed audiences with a safer, more efficient flatbar fitting process for leg jetting pipes fabrication.

The idea won *Fusion* a Silver Award at the Association for Singapore Marine Industries' 10th Workplace Safety and Health Innovation Teams Convention for marine industry last year.

Continued on page 22 ▶



(From left) CB Choo, Tan Kheng Kee and Wong Kok Seng, Executive Director (Operations) of Keppel FELS, enjoy fresh safety ideas and messages created by Fusion and other Kepplites

◄ Continued from page 21

A Safety Champion



HSE officer Isaac Yeo briefs Keppel FELS yard workers on a routine workday, urging them to make health and safety concerns a way of life

Watching his colleagues go home safe and sound after each work day is reward enough for Keppel FELS Health, Safety and Environment (HSE) Officer Isaac Yeo, who has a tall task at hand.

Isaac and his peers aspire to create a safety culture in Keppel FELS where everyone takes ownership for their own safety, as well as for those around them.

But the 27-year-old Keppelite knew what he was getting into, even as an undergraduate student when he decided on his life vocation. Back then, an industrial attachment with an environmental consultancy firm inspired him to pursue a career in health and safety.

So Isaac indicated right from the start that he eventually want to join the Health Safety and Environment (HSE) team when he applied to be a management trainee with Keppel FELS.

A year and a half on, Isaac holds a Specialist Diploma in Workplace Safety and Health under the Professionals Workforce Skills Qualifications (WSQ) programme, a joint collaboration between the Singapore Workforce Development Agency (WDA) and the Workplace Safety and Health (WSH) Council.

Isaac was the only Keppelite and the youngest among the first batch of 52 trainees who had benefited from the revamped WSQ framework, which aims to develop WSH professionals who will champion safety improvements within their own companies and industries.

However, Isaac is still at least six months shy of turning legitimate because it is no walk in the park to become a Registered Workplace Safety and Health Officer (WSHO).

Besides successfully completing the WSQ course, trainees have to pull in at least two years of relevant job experience before he/she can apply for the official accreditation.

Despite the demanding task of balancing work and training, Isaac finds solace in exploring safety issues from a strategic level.

"As a HSE officer, I am able to have an overview of all the different operations involved in building an oil rig, as opposed to focusing on any aspect," he said.

Still, the HSE officer and his colleagues find unique safety management challenges in the offshore and marine industry.

The sheer task of managing an average of some 500 workers on each rig means that Isaac and his peer supervisors have to pick up people management skills on the fly and in double quick time. Throw a kaleidoscope of countries and cultural backgrounds into the mix, and Isaac's safety messages risk getting lost in translation.

Nonetheless, the passionate health and safety champion remains unfazed. Living and breathing safety issues everyday, Isaac say he cannot help but see good and bad safety procedures wherever he goes, even when he is not working.

Helping hand for China and Myanmar

eppel O&M has raised over \$\$165,000, doing its part to support victims of the Sichuan earthquake in China and Cyclone Nargis in Myanmar.

The management has also provided aid to Myanmese employees whose immediate family or properties have been affected.

Meanwhile, joining worldwide relief efforts, the Keppel Group has pulled together money and other resources to help rebuild lives and support rehabilitation efforts in the disaster-hit communities.

Keppelites across the Group in Singapore and overseas are also giving to the cause, organising ongoing initiatives at the same time to raise funds even among customers.

Also contributing to the relief effort, Keppel Nantong Shipyard has collected from local staff and subcontractors donations amounting to RMB 20,000 for the Red Cross Society in Nantong.

The following companies from the Keppel Group donated a combined sum of about US\$1 million or RMB 7 million to the Sichuan Quake relief:

Group aid to relief effortsKeppel Corporation Limited

Keppel Land Limited
Shanghai Merryfield Land Co Ltd*
Shanghai Pasir Panjang Land Co Ltd*
Shanghai Ming Hong Property Co Ltd*
Beijing Kingsley Property Development
Co Ltd*
Tianjin Merryfield Land Co Ltd*
Chengdu Hillwest Development Co Ltd*
Cityone Development (Wuxi) Co Ltd*
Spring City Golf & Lake Resort*
Singapore consortium of the Sino-Singapore
Tianjin Eco-City
Evergro Properties Limited
Keppel Offshore & Marine Ltd

Keppel Telecommunications & Transportation Ltd Singapore Petroleum Company Ltd

Keppel Nantong Shipyard Ltd Keppel Integrated Engineering Ltd

Offshore visitors

eppel Offshore & Marine's (Keppel O&M) welcomed over 30 analysts and fund managers based in the region at its yard in June this year. Proud of its pristine safety track record and state-of-the-art facilities, the company regularly opens its doors to visitors.

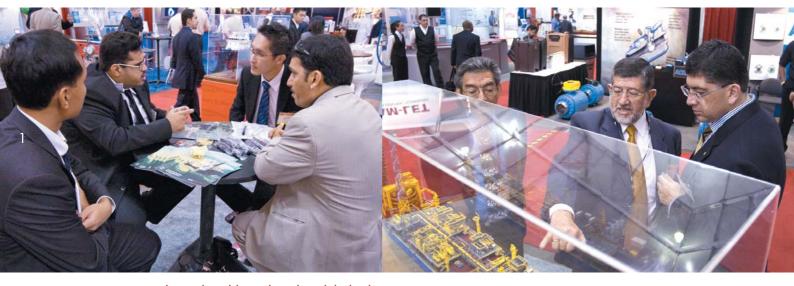
CB Choo, Chairman & CEO of Keppel O&M, Sit Peng Sang, CFO of Keppel O&M, and Jaya Kumar, GM (Marketing) of Keppel FELS, were among the senior management who shared about the company's management and operational best practices.

The many topics discussed throughout the tour included strategies for tackling rising material and labour costs, hedging steel and foreign exchange risks, as well as putting safety first when it comes to yard operations.



Local and overseas visitors being treated to an interactive tour of Keppel O&M's rigbuilding production and operation

^{*} Keppel Land's subsidiaries and joint venture companies in China



Drawing customers who seek viable and quality global solutions

Singapore's best makes waves at OTC

ome 75,000 energy professionals and delegates from 110 countries gathered in Houston, Texas for this year's annual Offshore Technology Conference (OTC).

Themed "Waves of Change," the four-day conference starting from 5 May reflected on the profound evolution of the oil and gas industry and its corporate players through the years.

Traditionally dominated by American and European industry players, OTC has seen a growing presence of Asian companies in recent years, including those from China, India, Vietnam, and Singapore.

Led by industry veteran Keppel O&M, homegrown enterprises exhibited their products and services with flair at the Singapore Pavilion for the fourth consecutive year.

Prior to the Singapore Pavilion's debut in 2005, Keppel O&M already had its fingers on the OTC pulse for some 18 years through the annual Keppel cocktail reception.

What began as a simple networking function became the most anticipated reception at OTC. Today, Keppel's reception continues to draw industry bigwigs, partners, customers and suppliers by the hundreds.

Meanwhile, Keppel O&M's overseas business units such as Keppel Verolme and Keppel FELS Brasil staked their claims as long-time OTC exhibitors in their respective country pavilions. Even

newer associate companies, namely Floatec LLC, have been creating a buzz with a sizeable presence at the conference.

This year's OTC attracted 2,500 international companies. Combined, they occupied over 1.5 million square feet of exhibition space, an area equivalent to the size of 13 football fields.

Founded in 1969, OTC is the world's foremost event showcasing development of offshore resources in oil and gas drilling, exploration, production, and environmental protection. The topics discussed continue to shed light on technological innovations and forums on economic, social, and political aspects of resource development.







Industry magnates worldwide renew ties and forge new partnerships at the 2008 Offshore Technology Conference and Keppel cocktail reception

Super V sizing skills and careers



Mr Lim Swee Say, Minister, Prime Minister's Office and Secretary-General, NTUC and Michael Chia, President of ASMI & ED of Keppel FELS congratulate Keppel's Super V graduates

Keppelites graduated under the ASMI *Super V* scheme, a job recreation and training programme on 22 May 2008. The scheme is tailored for locals with no relevant marine skills, but who are keen to pursue supervisory careers in the industry.

Jointly created by the Association of Singapore Marine Industries (ASMI), the National Trades Union Congress (NTUC) and Singapore Workforce Development Agency (WDA), the initiative also aims to provide structured training for Singaporeans with secondary education in order to qualify them under the National ITE Certificate (NITEC).

Among the 17 proud graduates, eight have been promoted to full-fledge Trainee Supervisors. To do so, the workers must complete a progressive two-year training course that gears them up for one of five key marine core training tracks – Marine Electrical Technology, Marine Steel Fitting, Marine Pipe Fitting, Marine Mechanics and Marine General Welding.

Keppel O&M has been actively recruiting for the *Super V* programme since its launch in November 2005. It is also involved in the newly-launched *Super V2* scheme that targets ITE graduates in non-marine or Higher NITEC tracks.

Success stories

Besides receiving a nationally-recognised certificate, graduates of the *Super V* programme become more employable with the relevant marine trade skills. Here are two success stories adapted from ASMI articles:

GROWING WINGS WITH SUPER V

With a father who used to work in the marine industry, Shaun Foo Yong Chiang was no stranger to the trade. He responded to an advertisement calling for trainee supervisors under the ASMI *Super V* scheme in February 2006.

Coming from a background in service, the switch to an industrial sector has brought Shaun his fair share of challenges. Now Trainee Supervisor at Keppel Shipyard's hull department, the *Super V* graduate said he has learned to enjoy rolling with the punches.

"I have learnt a great deal though the *Super V* programme and am proud to have completed the NITEC training in Marine Steel Fabrication Technology (Hull & Structure) Course. I am



Super V training gave Hafiz trade skills certification and lifelong skills in marine electrical drafting, electrical power distribution, automation and instrumentation



glad for the opportunity to improve my knowledge and skills and to raise my competency at work," said Shaun, who is also a Safety Leader.

STEPPING UP TO ABOARD A MARINE CAREER

A fascination with ships led Muhammed Hafiz Bin Ahmad to sign up for a course to become a trainee supervisor under the ASMI *SUPER V* scheme.

Two years after making it to his desired Marine Electrical Technology track, Hafiz has become Keppel Shipyard's full-fledge Trainee Supervisor responsible for repairing and overhauling ship motors.

Not one to consider himself a hands-on person, Hafiz said, "However, thanks to practical training in the workshops and constant hands-on training on the job, I've managed to overcome this obstacle."

To get to where he is today, the fresh supervisor had to pass the Skills Evaluation Test (SET) Levels 1 and 2, as well as attain the NITEC in Marine Electrical Engineering.

Model Trainee award winner Shaun (second from right) points out field solutions with more confidence upon advancing his skills

Broadening horizons



eppel Scholar Gerard Lim realised a life-long dream to work while studying overseas as part of his undergraduate studies at the National University of Singapore (NUS) Overseas Colleges (NOC) programme. He recounted the year leading up to July 2007, where he lived in the United States, thanks to Keppel O&M's sponsorship.

He said, "Going overseas expanded my horizons and exposed me to different ideas and greater challenges. I gained so much more enriching 'real-life' lessons than if I had just spent half a year studying abroad, which is the norm for NUS students."

The entrepreneurship-focused NOC programme immerses students in the world of business by hooking them up with start-up companies in various established industry communities worldwide.

Gerard said, "I was lucky to be sent to Philadelphia, which is home to a hotbed of industries such as biomedical and information technologies. I had the privilege of working alongside some very dynamic individuals in an IT consulting firm."

Although living abroad poses some unique challenges, Gerard took them in his stride. He said, "Working in a foreign environment with no Asians around me was a challenge. But I took the initiative to interact with my co-workers. Looking

The sky is the limit for Gerard

back now, I believe I made many good friends."

Indeed, the Keppel Scholar mixed business with pleasure, establishing the Singapore Philadelphia Innovators Network (SPIN) with his peers. He said SPIN served as an excellent springboard to get to know many entrepreneurs and businessmen.

Looking ahead, the young entrepreneur is determined to make even more out of his knowledge gained.

"I am looking forward to familiarising myself with business operations in the shipyard and be an asset to the company. Although many of the business concepts are more applicable to start-up firms, some can be made relevant to larger companies like Keppel," Gerard said.

All of that, he added, is with the aim of keeping Keppel O&M's lead in the offshore and marine industry.



Gerard (left) with his peers at IT start-up, e-brilliance, in Philadelphia

Transforming youths one tackle at a time

eppelites from FSTP Brasil have been facing off with underprivileged youths on their home turf every quarter since April 2006. They pit their skills in football – a prized talent and national obsession for many Brazilians.

But the stakes are getting higher as FSTP Brasil, the 75/25 consortium owned by Keppel Offshore & Marine and the French company, Technip, aims to do more.

The group wants to raise further awareness and funding for the youth football players, who train under the Centro Social Montreal Esportivo do Rio project. The project diverts the youths, many of whom are involved in criminal activities, from favelas* or shanty towns in Rio de Janeiro.

So far, FSTP Brasil has raised enough funds to buy over the school premises at the favela, Duque Furquim.

The team also has managed to rope in colleagues from partner agencies such as Keppel FELS, BrasFELS, and Technip, as well as friends from business counterparts, El Paso, Chevron, Datamar, and Smith International, to join their volunteering.

However, it is not all play and no work for the football fans. The FSTP team expanded their activities in 2007, bringing their expertise as facilitators and speakers to educate the youths in an eightweek life skills programme.

The friendly competitors also get together to indulge in family traditions. They celebrated last Christmas together with the usual festivities spiced up with a twist. Instead of stuffed stockings, each youth received a backpack filled with school books and goodies.

What started out as a simple fundraising volunteer activity for FSTP Brasil staff and family members to socialise outside the workplace, has turned into a gift of friendship and vision - to dare to dream bigger dreams for the Brazilian youths.

Playing for life

Local clergyman Pastor Justino Ribeiro Gomes founded the Centro Social Montreal Esportivo do Rio football project to engage youths from the favela, Cidade de Deus.

He wanted to give them another outlet for self-expression by developing their football skills.

Legend has it that a young boy even surrendered his gun for an opportunity to turn over a new leaf and train with Pastor Justino's football team.

A force to be reckoned with, the pastor himself played for one of Rio's best football clubs, Flamengo, in his youth. He was responsible for training many of the young men now playing for some of the best football clubs in the country.

*Favelas are the Brazilian equivalent of shanty towns or slums. Notorious for their extreme poverty, high drugrelated crime rates and rival gang warfare, these shanty towns are often considered a disgrace to the general population in the country.



Youth selected for the eight-week life skills programme



Younger boys getting their fair share of the soccer action

Keeping emergency preparedness in check

eppel Group places a strong emphasis on continually reviewing and refining its Business Continuity Management (BCM) systems – a set of best practices to lessen negative social, economic, and political impact in times of crises.

That is why Keppel FELS in April simulated an explosion, while Keppel Batangas Shipyard simulated an Avian flu pandemic to test and fine-tune their crisis response systems.

"Fire!" in the pump room

A mock explosion at Keppel FELS' pump room got every staff member pulling out all stops during a BCM exercise – the sixth in the last four years.

They tried to get quicker response from their counterparts at sister yards and security staff were provided with metal detectors and undercarriage mirrors to prevent further disruptions.

Yard Manager of Keppel FELS, Richard Tay said, "The exercise helps the yard to test all around the effectiveness of our Health, Safety and Environment procedures, making sure we are well prepared during emergencies."

Already, Keppel FELS prepares for emergencies by recalling staff during the weekends and at late hours on a regular basis.

However, it wanted to test the yard's readiness and coordination with external agencies such as the Singapore Civil Defence Force (SCDF) and the Police who support Keppel's efforts during emergencies.

Coordinating officer Staff Sergeant Phua said, "Coordination between the firefighters and the control centre was very good. The exercise improved the teamwork between Keppel and SCDF. But more importantly, it trained our team to handle crises in a shipyard, which is not something we see everyday."





Good communication and coordination between the Keppel and SCDF teams ensure swift responses to any 'crisis'





Beefing up defenses are the Keppel FELS and Keppel Batangas teams

Meeting bird flu at a safe distance

Over in the Philippines on 15 April, an Avian flu pandemic was enacted at Keppel Batangas yard. Everybody, including subcontractors and visitors, had their temperatures taken by the monitoring and response team.

"The exercise lets us see and understand how well and timely everybody reacts to a similar situation. This helps to protect all our safety and well-being," said Kok Boon Heng, President of Keppel Batangas.

All participants overcame their initial apprehension after the objective and significance of the exercise have been explained.

Local subcontractor Severo Angulo commented, "It is reassuring to know that the shipyard has a feasible contingency plan in case of an actual pandemic like the bird flu. We feel that our health is well looked after even at the workplace."

"The exercises are not just about physical preparation but also coordination and planning. The simulation is meant to be as real as possible so everyone can be mentally prepared, and all the details can be ironed out during execution."

Anthony Toh, Keppel O&M's Group Senior Manager of Security

Around our yards

OffshoreMarine tracks works at various Keppel yards.



Singapore

Keppel Shipyard

Name : Sunny Joy

Owner : Yuyo Steamship Co. Ltd

Country: Japan Type : VLGC : 45,965 **GRT**

Date : 21 April to 5 May 2008 : External hull blasting and Scope

painting carried out. The

main engine, aux. generator and cargo pumps

underwent an overhaul. Minor steelwork repair also conducted in the topside

tanks

Name. : Bandaisan Owner : MOL Tankship

Management Co. Ltd

Country: Japan : VLCC Type **GRT** : 149,282

: 14 to 29 April 2008 Date : The bow was reinforced: Scope

> the boiler cleaned and repaired. A general overhaul was conducted on the main



engine, various motors, bow thruster, as well as the sea, ballast, cargo, IG and steam valves. Inspection and repairs were conducted on the cargo and ballast piping system. The hull was cleaned, and underwent blasting and painting.

Name : IA Sunshine : MOL Tankship Owner

Management (Asia) Pte Ltd

Country: Singapore Туре : LPG Carrier **GRT** : 42,551

Date

: 10 April to 4 May 2008 : Significant steel work was Scope

carried out in the Forepeak tank, all top side tanks and double bottom tanks. This was followed by extensive tank coating work in the #2, #3 & #4 (P&S) double bottom tanks and renewal of various piping systems. CCTV installed in the

Engine Room.

The Philippines

Keppel Batangas Shipyard

: MOL UNIVERSE Name

: Alpha Ship GmbH & Co.

KG. Zenit

Country: Germany Туре : Cargo GRT : 21,199

: 29 March to 14 April 2008 Date

Scope : The hull was cleaned,

blasted and painted. The water ballast tank was cleaned and sea valves were overhauled. The vessels' zinc anodes were also renewed and crane load tested before its departure.

: LORCON VISAYAS Name

: Magsaysay Ship Owner

Management

Country: Philippines

: Cargo Туре DWT : 7,233 GRT : 5,954

: 12 March to 16 May 2008 Date

Scope : Work scope included hull

> cleaning, grit blasting and painting. The job involved 160 tonnes of steelwork and piping renewal.

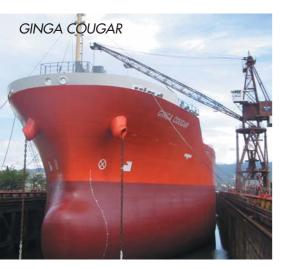
Keppel Cebu Shipyard

Name : GINGA COUGAR : Unix Line Pte Ltd. Owner

Country: Singapore Туре : Chemical tanker

DWT : 25,435 GRT : 16,232

: 4 to 17 April 2008 Date.









Scope : Hull blasting and painting,

overhauled high velocity venting valve and vacuum valve, load testing of provision cranes

Name : FRIESLAND
Owner : Jaczon B.V
Country : Netherlands

Type : Fishing vessel (Purseiner)

DWT : 2,580 GRT : 2,450

Date : 23 April 2008 – current Scope : Tank cleaning works,

external hull blasting and painting, sea chest and sea valves servicing renewal of smoke stacks, upgrading of accommodation, kitchen and routine drydocking and

repairs works.

Subic Shipyard & Engineering

Name : MV "KORYU"

Owner : Hachiuma Steamship

Co., Ltd.

Country: Japan

Type : Bulk Carrier DWT : 172,549 GRT : 87,473

Date : 22 March – 8 April 2008

Scope : During its drydocking, a

series of works onboard the vessel included overhauling of main lube oil pump, main engine turbocharger and diesel generator

governor, boiler cleaning, hull preservation,

upgrading of cargo holds, renewal of hatch coaming and engine survey works.

Name : MV "GALAXY ACE"

Owner : New Asian Shipping

Company, Limited

Country: Hong Kong

Type : Vehicle Carrier

DWT : 13,418 GRT : 33,733 Date : 5 to 26 April 2008

Scope : The vessel had its external

hull preserved, and other refurbishment works included anchor chain renewal, bow thruster inspection, painting, soot collecting tank fabrication including piping. Steel in car decks, tank top and the internal areas were renewed. Several engine

parts were also overhauled.

Name : MV "NORD TRAMP" Owner : Dampskibsselskabet

Norden AS

Country : Denmark
Type : Bulk Carrier
DWT : 171,199
GRT : 85,379

Date : 9 April to 10 May 2008 Scope : Hull preservation works

and upgrading of cargo

holds.

The Netherlands

Keppel Verolme

Name : *GSF Labrador*Owner : Transocean Inc.
Country : Scotland
Type : Jackup rig
GRT : 7,179

Date : Arrived on 23 April Scope : The rig's spud can was

inspected and underwent a maintenance programme.

Name : Ensco 92

Owner : Ensco International Country : USA (Bahamas flag)

Type : Jackup rig GRT : 6,541

Date : 28 February to 26 March

2008

Scope : The rig was berthed

alongside and repair works

took place.

Keppel Group Newsbytes

Keppel Corporation produced moderate earnings results in 1Q2008 amid a challenging economic backdrop. The Group's attributable profit amounted to \$262 million with an Earnings Per Share of 16.5 cents. The Economic Value Added of \$177 million was \$17 million higher compared to 1Q2007, while the Annualised Return On Equity was 19.9%.

The Offshore and Marine division also secured new orders of \$664 million of in 1Q2008. Net orderbook stood at \$11.8 billion with deliveries into 2011.

In industry news, **Keppel Group** and its related companies clinched top spots in *The Business Times Corporate Transparency Index*, which reflects the investing community's perception of a company's investor relations approach and commitment to financial disclosures.

Of the 463 companies assessed, MobileOne Limited, Keppel Land and Keppel Corporation ranked second, third and fifth overall.

Keppel Land's wholly-owned subsidiary, Keppel China Marina Holdings Pte Ltd, entered into a joint venture with Sunsea Yacht Club (HK) Company Limited to develop its first residential development incorporating a marina lifestyle in Zhongsan, Guangdong Province in China.

When finished, the development will have a total gross floor area of 408,000 sqm complete with some 300 high-end luxury villas with private berths and 2,500 condominium and serviced apartment units. Located on MoDao Island in Shenwan Town of Zhongsan City, the development will offer the first premium waterfront homes near the heart of the economically vibrant Pearl River Delta region.

Keppel Land's Ocean Financial Centre and Marina Bay Financial Centre bagged top green honours awarded by the Building and Construction Authority. The company's commitment to sustainable growth also saw the Marina at Keppel Bay winning the Clean Marina Award from the Marina Industries Association of Australia.

Keppel Integrated Engineering's subsidiary Keppel Prince Engineering (Keppel Prince) recently expanded its fabrication capacity by acquiring a general engineering and fabrication workshop in Portland, Australia. Keppel Prince is adding a new production line to the existing workshop, increasing its output from two to three wind towers a week.



Highest Platinum Green Mark Award for Ocean Financial Centre affirms Keppel Land's commitment to build world-class, sustainable developments

Global Reach

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Keppel clinches specialised shipbuilding contracts

eppel Singmarine has secured two contracts, a derrick pipelay vessel and a Multi-Functional Support Vessel (MFSV), from valued customers, Global Offshore International Ltd (Global Offshore) and Lewek Shipping Pte Ltd (Lewek Shipping).

Hoe Eng Hock, ED of Keppel Singmarine, said, "Demand for offshore support vessels remains strong, with customers now making enquiries for larger and more powerful ships. We are pleased that our customers continue to entrust us with construction of the sophisticated vessels."

Due for delivery in the second quarter of 2011, the derrick pipelay vessel is a multi-purpose construction vessel that can accommodate up to 264 persons. It will be equipped with two propulsion thrusters, six positioning thrusters, four power generators, a Dynamic Positioning System 2 and an integration pipelay equipment.

The second contract for a 100-metre Rolls-Royce designed UT 788 CDL ultra-deepwater MFSV is scheduled for completion in the fourth quarter of 2010.

Driven by a hybrid diesel and electric propulsion system, the MFSV with Dynamic Positioning System 3 capabilities will have a bollard pull in excess of 300 tonnes. Besides being able to carry highly hazardous liquids, the vessel can perform deepwater anchor



Keppel Singmarine is building the second derrick pipelay vessel for Global Offshore



An artist's impression of the ultra-deepwater MFSV

handling, towing and supply services, and wellinstallation and -intervention services.

Global Offshore is a wholly-owned subsidiary of USlisted Global Industries Ltd. With a premium fleet of vessels, the company is a leading provider of oil and gas offshore construction, engineering and support services

Lewek Shipping is a 100% owned subsidiary of Singapore-listed Ezra Holdings Ltd, an integrated oil and gas offshore support solutions provider. Ezra's global operations span the Southeast Asia, West Africa, Australia, the Middle East and India.