

A publication of Keppel Offshore & Marine

March/April 2006

MITA (P277/03/2003)



Teamwork among Keppel yards

Page 10



Keppel O&M makes waves at Asia Pacific Maritime Exhibition

Page 13

### **Keppel at OTC 2006**

Visit Keppel Offshore & Marine (Keppel O&M) at the Offshore Technology Conference (OTC), to be held in Houston from 1-4 May 2006.

Keppel O&M is at booth number *P10617* in the Singapore Pavilion (Pavilion 1).

Drop in also at Keppel FELS Brasil's booth under the Brazilian Pavilion at 4741 and FloaTEC's stand at 1663.

Themed "New Depths, New Horizons", OTC 2006 will be larger with extensions to the exhibition space offered in Reliant Centre, Houston.

### FEATURES

GSF orders ultra-deepwater semi	3
Jacking up to new heights	4
Strengthening ties with Qatar	8
Keppel yards join forces in fast-track upgrading	10
Keppel Nantong gears up for shipbuilding	12
Securing two Prosafe FPSO conversions	13
The next lap for <i>P-52</i>	16
KFELS Super B for the Xtreme drilling market	18
Double happiness for Keppel FELS Brasil	20
Keeping a promise sound	24
Keppel Shipyard delivers FPSO Capixaba for SBM	36

### **Editorial Board**

Editorial Advisor
Choo Chiau Beng

Editor

Lai Ching Chuan

Assistant Editor **Sarah Seah** 

Sub Editor

**Yang Sook Chin** 

Committee members

Michael Chia, Nelson Yeo, Hoe Eng Hock, Yeong Wai Seng, Dr Foo Kok Seng, Jaya Kumar, Quek Mong Song, David Loh, Chin Sze Kiun

Contributors

Andrew Ong, Grace Chia, Lee Yin Chiin, Kristin Nonis

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

# GSF orders ultra-deepwater semi

eppel FELS has secured a contract with GlobalSantaFe Corporation (GSF) to build an ultra-deepwater drilling rig for US\$270 million.

Under the contract agreement, GSF will supply the drilling and sub-sea equipment while Keppel FELS provides the design, engineering and construction of the hull as well as the accommodation quarters for 180 men and marine equipment.

The rig, GSF Development Driller III, is scheduled for delivery in the first quarter of 2009.

GSF has chosen to build the state-of-theart semisubmersible (semi) to the proprietary design, DSS-51, jointly designed and developed by Keppel's Deepwater Technology Group (DTG)

GlobalSantaFe's latest ultra-

deepwater semisubmersible,

DSS-51, is an enhancement

of the succesful DSS-20 rig,

Maersk Explorer, built by

and Marine Structure Consultants (MSC).

Choo Chiau Beng, Chairman & CEO of Keppel Offshore & Marine (Keppel O&M) said, "GSF and Keppel share a longstanding relationship which dates back to 1987. Keppel FELS and GSF have co-operated and completed six new generation jackups that are still performing extremely well in the North Sea, Eastern Canada and South America.

"I am happy that we are now working on our first semi newbuild project together, and I am confident that the highly efficient DSS-51 rig will meet GSF's charter commitment on time and within budget."

Commenting on the demand for deepwater mobile drilling rigs, Choo added, "The fundamentals for deepwater

exploration and production are strong with consensus amongst operators, drillers and service providers that the market for exploration and production of hydrocarbons will be sustained over the next few years."

According to ODS-Petrodata's 12monthly rolling forecast between February 2006 and January 2007, the demand for semis is expected to rise from 141 to 167 units while the marketed supply remains inelastic from 152 to 153. Even as utilisation levels approach full capacity, global demand for the mobile offshore drilling units shows no sign of slowing down.

Said Jon A. Marshall, President & CEO of GSF, "We are looking forward to working again with Keppel FELS on our newbuild semi. Keppel FELS has a track record of well designed and built rigs that have been delivered on schedule.

"In the last few years, GSF has sent a number of rigs to Keppel for repair and upgrading. They have been very responsive and professional. I am certain that the new semi will be a great addition

Keppel FELS and Caspian to our fleet " Shipyard Company The DSS-51 rig is maintenancefriendly with excellent safety features well suited for both exploration and development drilling as well as workover operations. With a dynamically positioned

# Jacking up to new heights

Within the first 12 weeks of 2006, Keppel FELS received orders for the construction of five KFELS B Class jackup rigs. With these contracts, the total number of KFELS B Class rigs being built by Keppel FELS is 20, with one currently under construction at Keppel AmFELS. These orders further entrench the KFELS B Class design as the benchmark for premium rigs in offshore drilling.

### Three rigs for India

eppel FELS made its first entry into India with two consecutive new orders from the **Jindal Group** in India.

The first contract was secured from its associate, **Discovery Hydrocarbons Pvt Ltd**, to build a KFELS B Class jackup valued at US\$171 million. The rig is due for delivery in fourth quarter 2008.

Said Sam Malhotra, Director of Discovery Hydrocarbons Pvt Ltd, "We are glad to work with Keppel FELS for our first newbuild jackup. Keppel FELS has a commendable track record in design, construction and timely delivery of jackups. Their KFELS B Class, a tried and proven design in many offshore environments, has been verified to meet our drilling needs.

"We look forward to developing and strengthening our partnership with Keppel FELS as we serve the Indian and international offshore market."

Tong Chong Heong, MD/COO of Keppel Offshore & Marine (Keppel O&M), said, "The Indian Ocean which has significant oil and gas reserves is one of the world's most sought-after areas. With this new

contract, Keppel O&M is poised to entrench its footprint in the offshore Indian market as well."

"We are glad to partner Discovery Hydrocarbons as it grows their fleet of rigs to provide solutions for the offshore market internationally."

In the same month, a second order for a KFELS B Class jackup rig valued at US\$184 million was signed with **Jindal Pipes Limited**. It includes the design, engineering and construction of the rig as well as costs in getting the rig operationally ready.



The rig is due for delivery in end 2008.

The two Jindal rigs have been customised to meet the owner's operational needs in water depths of up to 350 feet and readily upgradeable to 400 feet. The rigs will have a drilling depth capability of 30,000 feet and can accommodate 112 persons.

They are suited for deployment in environments such as the Indian Ocean, Gulf of Mexico, West Africa and South East Asia.

Mercator Lines Ltd (Mercator) is the second Indian customer to sign up with Keppel FELS for the construction of its first jackup rig for US\$180 million. This includes the design, engineering and construction of the rig as well as costs in getting the rig operationally ready.

To be delivered in first quarter 2009, the new rig will be built to Keppel's proprietary KFELS B Class jackup design. It will be further customised to meet the owner's operational requirements in water depths of up to 350 feet and readily upgradeable to 400 feet. This premium jackup rig will have a drilling depth of 30,000 feet and can accommodate 112 men.

Said Atul J. Agarwal, Joint Managing Director of Mercator, "As we expand our services into offshore rigs, we recognise the importance of working with the right shipyard for our first jackup. We believe that Keppel FELS, with their track record in the design and construction of rigs, is the right choice to help us to offer premium services."

Tong said, "Keppel is glad to partner Mercator in their vision of expanding into the offshore exploration and drilling sector. We are committed to help them meet expectations as a long-term oil and gas player."

This rig is not the first project the Keppel O&M group has undertaken for Mercator, which is the second largest private sector shipping company in India.

Keppel had undertaken the fast-track conversion of a Floating Storage and Offloading (FSO) vessel, FSO Devsi, for Mercator in 2004. The vessel is now gainfully deployed in the Indian Ocean.

### Third jackup for Awilco

Keppel FELS has secured a repeat order for a third KFELS B Class jackup rig from Awilco Offshore (Awilco) at US\$146 million, via the exercise of an option agreement.

The first and second rigs were announced in February and August 2005 respectively.

Customised to Awilco's requirements, the new rig, WilStrike, will be capable of

drilling down to 30,000 feet in water depths of up to 400 feet. Delivery for this new rig is expected in second quarter 2009.

Work on the first two rigs, *WilCraft* and *WilBoss*, is progressing well. Deliveries are expected in fourth quarter 2006 and early 2008 respectively.

#### Seadrill orders fourth rig

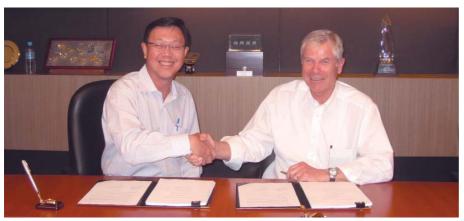
Keppel FELS has secured a US\$132 million contract from a wholly-owned special purpose company of SeaDrill Limited (SeaDrill) for a KFELS B class jackup rig.

Delivery of this new order is expected in the second quarter of 2008.

This order was secured via an option given to Odfjell Partners Ltd (Odfjell) when it ordered its first rig in March 2004. Odfjell placed an order for its second rig in March 2005. In mid 2005, SeaDrill acquired Odfjell Invest Ltd. and was given the right to exercise Odfjell's option with Keppel FELS.

John Fredriksen, Chairman of SeaDrill, commented, "We are delighted to have signed another newbuilding contract with Keppel FELS. A competitive price, a good delivery position and a very capable yard, makes this into a solid financial deal. The ordering of the unit further strengthens SeaDrill/Smedvig ASA's position as a serious and committed owner and operator of modern high end drilling equipment".

SeaDrill is also affiliated to Cyprusregistered Seatankers Management Co. Ltd (Seatankers), which had earlier placed one jackup order with Keppel FELS. Ownership of this rig has been assigned to SeaDrill.



Alexander Krafft (right), Senior Vice President of Awilco Offshore, and Michael Chia, Executive Director of Keppel FELS, inking Awilco's third jackup rig order

Continued on page 6 ▶

### **◄** Continued from page 5

With these developments and including the latest contract, Keppel FELS will, to date, be building four jackup units for SeaDrill.

Like the three jackups, this new rig will be of the KFELS B Class design. It is capable of operating in water depths of up to 400 feet, drilling depth of 30,000 feet and accommodating 112 men.

Said Choo Chiau Beng, Chairman & CEO of Keppel O&M, "We are glad to participate in SeaDrill's vision of building a fleet of premium drilling rigs. We are committed to deliver on time and on budget the four KFELS B class jackup rigs which have a proven track record of highly successful operation in different parts of the world."

Work on SeaDrill's first three rigs is progressing well at Keppel FELS yard. The first rig, *SeaDrill 3*, is scheduled for delivery in May this year. Upon delivery, she will be chartered to TOTAL in Nigeria at a rate of US\$166,000 per day for two years.



### **KFELS B Class track record**

No	Yard	Customer	Rig Name	Expected Delivery		
Delivered						
1	Keppel FELS	ENSCO International Incorporated (ex-Chiles Offshore Inc.)	ENSCO 104	Delivered		
2	Keppel AmFELS	ENSCO International Incorporated (ex-Chiles Offshore Inc.)	ENSCO 105	Delivered		
3	Keppel FELS	Atwood Oceanics	Atwood Beacon	Delivered		
4	Keppel AmFELS	Perforadora Central SA de CV	Tonala	Delivered		
5	Keppel FELS	ENSCO International Incorporated	ENSCO 106	Delivered		
6	Keppel FELS	Abu Dhabi's National Drilling Company (NDC)	AL-HAIL	Delivered		
7	Keppel FELS	ENSCO International Incorporated	ENSCO 107	Delivered		
Curr	Currently under construction					
8	Keppel FELS	Sinvest (DDI)	Deep Driller 2	2Q 06		
9	Keppel FELS	SeaDrill Management	SEADRILL 3	2Q 06		
10	Keppel FELS	Gulf Drilling International (GDI)	GULF 4	3Q 06		
11	Keppel FELS	Sinvest (DDI)	Deep Driller 3	4Q 06		
12	Keppel FELS	Awilco (Premium Drilling)	WilCraft	4Q 06		
13	Keppel FELS	ENSCO International Incorporated	ENSCO 108	1Q 07		
14	Keppel FELS	Petrovietnam Drilling & Well Services Company (PV Drilling)	To be named	1Q 07		
15	Keppel FELS	SeaDrill Management	SEADRILL 4	2Q 07		
16	Keppel FELS	SeaDrill Management	SEADRILL 1	3Q 07		
17	Keppel FELS	Sinvest (DDI)	Deep Driller 5	3Q 07		
18	Keppel FELS	Gulf Drilling International (GDI)	GULF 5	4Q 07		
19	Keppel FELS	Awilco (Premium Drilling)	WilBoss	1Q 08		
20	Keppel FELS	Diamond Offshore	Ocean Shield	1Q 08		
21	Keppel AmFELS	Diamond Offshore	Ocean Sceptor	1Q 08		
22	Keppel FELS	Awilco (Premium Drilling)	WilStrike	2Q 08		
23	Keppel FELS	SeaDrill Management	To be named	2Q 08		
24	Keppel FELS	Discovery Hydrocarbon Pvt Ltd	To be named	3Q 08		
25	Keppel FELS	Sinvest (DDI)	Deep Driller 6	3Q 08		
26	Keppel FELS	Discovery Hydrocarbon Pvt Ltd	To be named	4Q 08		
27	Keppel FELS	Sinvest (DDI)	Deep Driller 8	1Q 09		
28	Keppel FELS	Mercator Lines Ltd	To be named	1Q 09		

# Jackup order from Atwood

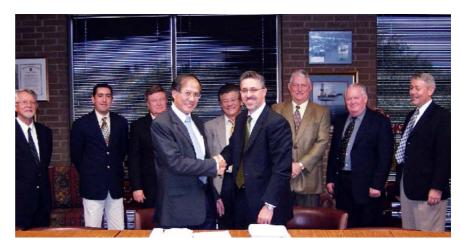
eppel AmFELS Inc. announced on 3 March 2006 that its contract with a wholly-owned subsidiary of Atwood Oceanics Inc. (Atwood) for the construction of a new jackup rig has become effective.

This contract follows the Letter of Intent signed between the two companies announced on 7 February 2006.

The rig, excluding Owner Furnished Equipment, is valued at US\$110 million and is due for delivery in the third quarter of 2008.

Said Ho Cheok Yuen, President and CEO of Keppel AmFELS, "We are glad that Atwood recognises our ability to deliver solutions on time and on budget. I am certain that when delivered, this new rig will be a great addition to Atwood's fleet of rigs."

This new rig will be built to the LeTourneau Super 116E design, with leg lengths of 477 feet (and can be upgraded to 511 feet), and capable of drilling wells up to 30,000 feet deep in water depths of 350 feet.



John Irwin, President of Atwood Oceanics, said "Atwood and its affiliates are pleased to have the opportunity to work with Keppel AmFELS on this jackup project. Keppel AmFELS has a long established reputation as a strong shipyard with extensive experience in the construction of ultra-premium jackup drilling units."

This is Keppel's second jackup for Atwood Oceanics in three years. The last rig, *Atwood Beacon*, was delivered ahead of schedule by Keppel FELS in 2003.

A firm partnership between C. Y. Ho, President/CEO of Keppel AmFELS (left) and Alan Quintero, General Manager (Engineering) of Atwood Oceanics

## Bourbon AHTS delivered



B OURBON Artemis, an Anchor Handling Tug/Supply (AHTS) vessel with 120 tonnes of bollard pull, is the fourth of seven vessels Keppel Singmarine has delivered to the proud owner, BOURBON Offshore (BOURBON).

Godmother Anne-Aymone de Chateauvieux, wife of Henri de Chateauviex, a Director of BOURBON,

BOURBON Artemis displaying her prowess during the sea trial

graced the christening ceremony on 22 February 2006 held at Keppel Singmarine.

A sister vessel to three earlier AHTS vessels, BOURBON Aladin, BOURBON Apsara, and BOURBON Alexandre, this medium-size vessel is designed and fitted with a Class I dynamic positioning (DP) system, firefighting system, with capabilities to be upgraded for standby/service duties and DP Class II.

All the three subsequent vessels for BOURBON are expected to be delivered later this year.

# Strengthening ties with Qatar

In keeping with its "near customer, near market" strategy, Keppel O&M has relentlessly expanded its yard network connection and strengthened its customer base in the Middle East.

With its specialised facilities and expertise in the repair of LNG carriers, Keppel Shipyard is well positioned to support the growing market for natural gas.

Tong Chong Heong, Managing Director and Chief Operating Officer of Keppel O&M, said, "For some time, we have been servicing LNG carriers for Qatar. We are pleased to deepen our relationship and partner with NAKILAT in this significant new venture, which is in line with our "near market, near customer" strategy."

### Joint venture for new shipyard

Through partnering with Qatar Gas Transport, Keppel O&M has taken a first step in making its presence in the fast-growing economy of Qatar.

Keppel O&M has signed a letter of intent with Qatar Gas Transport Company Ltd. (QGTC/NAKILAT) to jointly develop and manage a major new facility in the Port of Ras Laffan, Qatar, for the construction, repair and maintenance of ships and other marine structures.

Conclusion of the joint venture agreement is subject to approval by the Boards of Directors of NAKILAT and Keppel O&M.

Faisal Al-Suwaidi, Vice Chairman of NAKILAT, said, "The new facility will be designed and constructed in accordance with best international practice, and suitable for the repair and maintenance of very large LNG carriers and a wide range of other vessels; the conversion of tankers to Floating Production Storage & Offloading and Floating Storage &



Serving Qatargas fleet since 1999

Offloading systems, and the construction of specialised ships, such as offshore supply vessels."

The yard will also be suitable, with some additional investment, for the fabrication of structures for the offshore oil and gas industry (such as jackup drilling rigs, process modules and decks, jackets, wellhead decks, flare booms, etc.), and the fabrication of components for land-based petrochemical and industrial plant. Additionally, the facility will provide lifecycle support in all the markets it serves.

Planning of the new yard is already well underway, and completion of the first phase of development is scheduled for the fourth quarter of 2009.

### **Drydocking LNG Carriers**

In the same vein, Keppel Shipyard has strengthened its customer base in the Middle East through its latest Alliance Service Agreement for the drydocking of a fleet of Moss Rosenburg (MOSS) type of Liquefied Natural Gas (LNG) carriers chartered by Qatar Liquefied Gas Company Ltd (Qatargas).

The five-year agreement was signed with MO LNG Transport Co., Ltd (MOL), Nippon Yusen Kaisha Ltd (NYK) and Kawasaki Kisen Kaisha Ltd (K-Line).

"There is a growing demand for natural gas worldwide, particularly in Asia and the US. Keppel Shipyard is well-positioned to support the growing LNG carriers market which is expected to treble by 2020," said Nelson Yeo, Executive Director, Keppel Shipyard.

The vessels under the fleet agreement are Al Zubarah, Al Khor, Al Rayyan, Al Wajbah, Broog, Zekreet, Al Wakrah, Doha, Al Bidda, and Al Jasra. Keppel Shipyard has been servicing this fleet of LNG carriers for Qatargas since 1999.

The scope of work involves drydocking for survey, maintenance and repair.

The first two vessels scheduled to call at Keppel Shipyard under this agreement are *Al Wakrah* (72,453 dwt) and *Zekreet* (72,316dwt) in early May this year. It will be the third drydocking in Keppel Shipyard for both vessels.

# Keppel shines fourth semi for Diamond

eppel FELS has secured a contract from Diamond Offshore Drilling, Inc. (Diamond Offshore) for the major upgrading of semisubmersible rig (semi) for US\$102 million.

*Ocean Monarch* will arrive Keppel FELS in mid 2006 for the upgrading and is expected to be operationally ready in fourth quarter 2008.

When completed, *Ocean Monarch* can operate in up to 10,000 ft of water in a moored configuration. It will be among the most modernised and competent of Diamond's fleet of upgraded Victory-class semis.

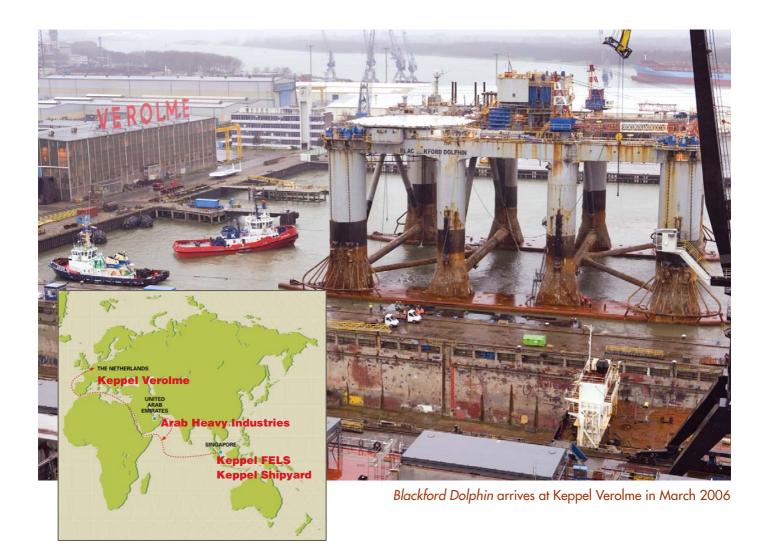
This will be the fourth in a series of fifth generation Victory-class upgrades that Keppel FELS has undertaken for Diamond Offshore. The first three semis are *Ocean Baroness*, *Ocean Rover* and *Ocean Endeavor*. The latter is currently undergoing upgrading works at Keppel FELS and is scheduled for completion in fourth quarter 2006.

Keppel FELS is currently undertaking the construction of one jackup rig for Diamond Offshore. Its sister company, Keppel AmFELS is also building a jackup rig for the same customer. Both rigs are of the proprietary KFELS B Class jackup design from the R&D arm of Keppel.

Diamond Offshore provides contract drilling services to the energy industry around the globe and is a leader in deep water drilling.

Ocean Monarch will be upgraded to a fifth-generation Victory class drilling rig like Ocean Baroness and Ocean Rover





"To meet the tight delivery schedule, Keppel FELS will leverage resources from sister yards to carry out the job simultaneously. In so doing, we are able to satisfy our customers' needs in a faster

and more cost-efficient manner."

Tong Chong Heong Managing Director/Chief Operating Officer Keppel Offshore & Marine

# Keppel yards join forces in fast-track upgrading

eppel FELS has secured a US\$177 million contract for the upgrading of a semisubmersible (semi) drilling rig *Blackford Dolphin* for Blackford Dolphin Pte Ltd, a wholly-owned subsidiary of Fred Olsen Energy ASA.

Blackford Dolphin, the former Ocean Liberator built in 1974, will undergo fast-track refurbishment and have her life span extended for 20 years. When completed, the upgraded drilling unit will have drilling depth capabilities increased from 600ft to 7,000ft water depth,

# ENSCO 56 ready for assignment

enabling her to operate in deepwater environments worldwide.

To meet the quick turnaround delivery by end June 2007, the project will be undertaken jointly by Keppel FELS and Keppel Shipyard in Singapore, Keppel Verolme in The Netherlands and Arab Heavy Industries in the Middle East.

Said Tong Chong Heong, Managing Director/Chief Operating Officer of Keppel Offshore & Marine (Keppel O&M), "This is a fast-track upgrading project and Keppel FELS is glad to partner Fred Olsen in offering innovative field development solutions.

"To meet the tight delivery schedule, Keppel FELS will leverage resources from sister yards to carry out the job simultaneously. In so doing, we are able to satisfy our customers' needs in a faster and more costefficient manner."

Keppel Shipyard, Keppel Verolme and Arab Heavy Industries will be responsible for the fabrication of the lower and upper hull structures and modules. Keppel Verolme will undertake the overall integration of the structure and modules as well as carry out the repairs and maintenance works on the semi.

Commenting on the strategy, Tong said, "By integrating the expertise and experience of our yards, we make the best use of our available resources to provide maximum value to our customers."

Said Helge Haakonsen, Chief Executive Officer of Fred Olsen Energy ASA, "By choosing a yard with a proven track record for delivering major drilling rig conversions on time and within budget, Fred Olsen Energy aims to ensure availability of the upgraded rig to the market during third quarter 2007."



ENSCO 56 departs Keppel FELS' yard as scheduled, ready for its next assignment.

eppel FELS delivers *ENSCO* 56 to long time customer ENSCO on schedule

In October 2005, ENSCO contracted Keppel FELS for a fast-track repair job on *ENSCO 56*. After a four-month stay in the yard, the F&G Mod 2 jackup rig was ready for its next assignment in New Zealand.

The project scope included upgrading of the drill floor and cantilever systems, above its steel repairs, painting works and installation of additional living quarters. Due to its extensive job scope, the Keppel project team was faced with a very tight schedule.

Rising to the challenge, Senior Project Manager, Wilson Goh and his project team began planning for the project before the rig even arrived.

Rig inspections offshore prior to the rig's arrival at the yard allowed the project team to assess the job scope and look into the engineering details. Once the necessary assessments were made, material procurement and prefabrication works were carried out.

Upon its arrival, the project team swiftly launched in to action.

The completion of this repair project marked the first repair project with ENSCO's new Project Manager, Ron Couet.

He said, "Although this was my first repair project with Keppel FELS, we shared an excellent working relationship. The strong relationship has never changed. I remember how strong it was when I was first here in 1996. Through this project, I can understand why ENSCO and Keppel FELS have enjoyed such a long standing relationship. I am looking forward to our future projects together."

# Keppel Nantong gears up for shipbuilding

ith the number of contracts secured by Keppel O&M increasing steadily, sister yards in Keppel's global network are gearing up to share the workload.

At Keppel Nantong Shipyard, renovation and refurbishment works have already been completed and the yard has commenced construction works for the offshore support vessels (OSVs) under contracts clinched by Keppel Singmarine.

New facilities and equipment such as cranes and steel-plate cutting machines have been added. The yard first struck steel for the vessels in March 2006.

Keppel Nantong Shipyard is currently building four Anchor Handling Tug/ Supply (AHTS) vessels for owner Hadi Offshore Pte Ltd., a newly established Singapore subsidiary of Saudi Arabian company, Hadi H. Al-Hammam

Establishment, and two AHTS vessels for Gulfmark Offshore, Inc.

The vessels are expected to be delivered progressively from third quarter 2007 till the third quarter of 2008.

On 20 February 2006, the yard welcomed representatives from Gulfmark Offshore Inc., Keppel Singmarine's long-time customer, who were pleased with the environment and capabilities of the yard.



Geared up for newbuildings of OSVs at Keppel Nantong Shipyard



Management share the capabilities and facilities with guests First strike steel from Gulfmark Offshore



## Securing two Prosafe **FPSO** conversions

eppel Shipyard has been awarded two contracts valued at approximately S\$130 million for the conversion of two Floating Production Storage and Offloading (FPSO) facilities for Prosafe Production (Prosafe).

A leading owner and operator of FPSO and FSO facilities, Prosafe has in the last nine years entrusted Keppel Shipyard exclusively to carry out the conversion of all their FPSO and FSO systems.

With the two latest FPSO/FSO conversions projects, the number of such projects carried out by Keppel Shipyard for Prosafe will add up to eight since 1997.

Said Nelson Yeo, Executive Director of Keppel Shipyard, "We are delighted with the trust and confidence that Prosafe has in Keppel Shipyard. We will continue to focus on fast track conversions to further strengthen our market position."

Added Hugh Parry, Managing Director of Prosafe, "We have entrusted Keppel Shipyard with the conversion of a number of sophisticated FPSO projects due to their strong track record. We have confidence in their reliable and quality service."

The first award is for the conversion of the 25-year old tanker, M.T. Apollo, into an FPSO capable of handling a daily oil production of 90,000 barrels of oil per day (bopd), daily fluid capacity up to 150,000 barrel of fluid per day (bfpd) and having a storage capacity of 1.78 million barrels of oil.

The workscope for the 257,865 dwt tanker will include the fabrication and



Keppel Shipyard has completed six FPSO/FSO conversions, including ABO FPSO, for Prosafe since 1997

installation of the internal turret, flare tower and helideck; integration of production skids, boilers and turbo alternators and renewal of bottom plates, as well as internal tank blasting and painting.

Upon delivery in end 2006, the facility will be deployed in Polvo Field off Brazil for Devon Energy.

The second award is for the conversion of a Suezmax tanker, a 25-year old tanker, M.T. Ionikos, into an FPSO capable of handling a daily production of 50,000 bopd, daily fluid capacity up to 120,000 bfpd and having a storage capacity of 770.000 barrels of oil.

Work on the vessel will include the fabrication and installation of the internal turret, flare tower and helideck; integration of production skids, boilers

and turbo alternators; renewal of bottom plates, and internal tank blasting and painting.

Due for completion in first quarter 2007, the FPSO facility will be deployed at the Tui Field located in the Taranaki Basin, offshore New Zealand for New Zealand Overseas Petroleum Ltd

Keppel Shipyard is the world leader in FPSO/FSO conversions, having completed 59 FPSO/FSO conversions and upgrading projects since 1981. It is also the leading yard in shiprepair and other vessel conversions as well as LNG repairs.

An innovative supplier of products and services in niche areas in the global offshore oil and gas industry, Prosafe is a leading owner and operator of FPSO/FSO vessels outside the North Sea.

# LNG carriers drydock at Keppel Shipyard





Hoegh Gandria and S.T Ekaputra

eppel Shipyard (Benoi) was bustling with action with the first two LNG vessels, *Hoegh Gandria* and *S.T Ekaputra*, at the yard for the year.

Hoegh Gandria, the 1977-built vessel with a gross tonnage and deadweight tonnage of 96,011 and 66,999 respectively, entered the yard on 25 February 2006.

Extensive cable renewal of more than 16,000 m in length, main turbine overhauling and insulation works were carried out. Completed in record time of one month, Keppel earned praises from the vessel's owner, Hoegh Fleet Services A S (Oslo, Norway) as well as its overseas specialists who had worked on the vessel during her time in the yard.

Joining her, *S.T Ekaputra* arrived at Benoi Yard on 10 March 2006 for her fifth dry-docking in Keppel since the 1990s. This Moss-type vessel with a gross tonnage of 109,258 and total tank capacity 138,369 m<sup>3</sup> was built in 1990 by Mitsubishi Heavy Industries Ltd for its owners, Cometco Shipping Inc (Monrovia, Liberia).

Managed by Humolco Trans Inc (Jakarta, Indonesia), *Ekaputra* was drydocked for 10 days during which she underwent repair works, including the installation of 418 bottles of carbon dioxide fire extinguishing system, re-varnishing and overhaul of cargo pumps, low and high duty compressor overhaul, LP main turbine overhaul and installation of optical system (ESDS).

S.T Ekaputra left the yard for her scheduled trading from Bontang (Indonesia) to Tung An (Taiwan) in early April while Hoegh Gandria set sail for her loading port in Arun (Indonesia) end March 2006.

A regional leader in the repair of LNG carriers, Keppel Shipyard has recently been entrusted with the job to carry out the conversion of a floating liquified natural gas storage and regasification unit. This conversion project for Golar LNG Limited is the first of its kind in the world.

## Keppel now owns 81% of KPMI



To cater to growing demand for rigs, the facilities of Keppel Batangas Shipyard have been upgraded to undertake offshore work

eppel O&M through its wholly-owned subsidiary, KS Investments, has on 6 April 2006 acquired an additional 51.08% interest in Keppel Philippines Marine, Inc. (KPMI).

This was pursuant to KS Investments' tender offer made on 1 March 2006, and resulted in KS Investments' interest in KPMI increasing from 29.47% to 80.55%.

This general offer is part of the Keppel Group's plan to consolidate its regional investments in the marine industry under KS Investments.

KPMI operates three shipyards in the Philippines: Keppel Batangas Shipyard (Keppel Batangas), Keppel Cebu Shipyard (Keppel Cebu) and Subic Shipyard and Engineering (Subic Shipyard). Keppel

Batangas and Keppel Cebu are wholly owned by KPMI. Subic Shipyard is an associate.

#### KPMI posts record profit

Keppel Philippines Marine (KPMI) registered consolidated sales revenue of Php 1.452 billion for the year 2005. This represented a 6% improvement over that of the previous year.

The increase was attributed to the good performance of its shipyards. Keppel Batangas Shipyard contributed Php 885 million, of which 69% came from its shiprepair activities and the rest from its shipbuilding contracts, recognised based on percentage of completion.

Keppel Cebu Shipyard accounted for Php 566 million, from shiprepair.

KPMI's consolidated operating profit increased by 56% to Php 232 million as a result of improved margins and reduced cost.

Contributions from associates, especially Subic Shipyard and Engineering, increased 121% from Php 25.7 million to Php 56.8 million in 2005.

Pre-tax profit at Php 313 million and after-tax profit at Php 252 million were 68% and 84% higher respectively compared with their corresponding results in 2004.

# The next lap for P-52

The race to complete one of the world's largest semisubmersible Floating Production Unit (FPU) the mission of delivering the lower hull of P-52 to Brazil.



P-52 bids farewell to Singapore



The lower hull of *P-52* rests on Blue Marlim – a dry-tow vessel – as it sets sail for Brazil

### Goodbye, Singapore

aving successfully completed the Singapore lap, the lower hull of *P-52* left Keppel FELS for Keppel FELS Brasil in Angra, Brazil, where it will begin its next lap.

Dry-towed, *P-52* left on 22 February 2006 and embarked on an arduous journey before arriving in Brazil 35 days later.

Upon arrival, the lower hull will undergo topside integration to form one of the world's largest floating production units (FPU).

The *P-52* FPU is being constructed using cutting-edge construction and engineering techniques. After two years of sheer hard work and solid partnership between the Keppel-led consortium and Petrobras, *P-52* is well on its way to completion.

When deployed in the deepwater Roncador field in the Campos basin in 2007, the FPU will be able to produce 180,000 barrels of oil a day.

Yeong Wai Seng, Senior Project Manager of Keppel FELS, who took the project through the Singapore leg shared, "We are glad and relieved. Glad that it is a job well done on our part, achieving great engineering feats like the mating of the two sections of the lower hull.

"And we are relieved, knowing that we are passing the baton to our colleagues in Keppel FELS Brasil who are able to ensure that Keppel's stamp of quality will be evident anywhere in the world."

# An exceptional job

Dear Michael,

On behalf of Petrobras, I would like to say that we are very pleased with the exceptional job done by Keppel FELS. We have built up a very strong partnership and that has certainly helped us to achieve what I call SUCCESS.

I would like to express my gratitude to those who have been working closely with the Petrobras team: Iqbal Rahuman and his engineering team. Yew Ming Yeong; S Y Tan and their production team; Leow and his commissioning team; Nonis; Marcus and the QA team; W B Lim; Tan Ven Fu; Richard Tay; Chor How Jat; B H Woo; Yeong Wai Seng and many others.

Unfortunately, I can't name all of them as the list would be very long. My sincere apologies for that.

Last but not least, a very special thank you to Mr CB Choo and Mr CH Tong.

Once again, thank you very much to all of you. I'm looking forward to work with Keppel FELS again.

Best Regards,

Flávio Siqueira Júnior P-52 Lower Hull Construction Manager

### continues as Keppel FELS successfully accomplishes

### **Ahoy! Brazil**

The lower hull of the semisubmersible floating production unit (FPU), *P-52*, arrived majestically in Brazil on 29 March 2006.

The joy and jubilation were overwhelming at BrasFELS yard for the historical moment of the passing of baton for the *P-52* project from Keppel FELS in Singapore to the team on its homeground.

The next lap of the race is now taken over by Keppel FELS Brasil for the completion of the deckbox, the complete topsides and the living quarters, and Technip for the process engineering and marine mating.

The arrival of the *P-52* lower hull at Keppel FELS Brasil's BrasFELS yard in Angra dos Reis, Rio de Janeiro, marks a major milestone towards the completion of *P-52*.

It also coincides with the successful dredging of the Jacuecanga Channel in front of BrasFELS shipyard to allow access and movement of the *P-52*.

Dredging began in early January 2006 to increase the depth of the access channel to the wharf of BrasFELS yard to a depth of 11 metres, one km long and 200 metres wide.

Work on the Jacuecanga Channel started only after BrasFELS had received an environmental license from the Rio's State Foundation of Engineering and Environment (FEEMA) following a thorough evaluation of the environmental impacts.



*P-52* arrives at Keppel FELS Brasil's BrasFELS yard in Angra dos Reis, Rio de Janeiro

It took the yard two years of studies, evaluations and community activities to educate local stakeholders of the nature and implication of the work.

Five environmental programmes were developed to minimise possible impacts on fishing and tourism activities in the area.

A dredge solemnity-carrier was selected to carry out the dredging by suction to ensure minimal impact. The dumping ground is 35 miles off the coast and was chosen to ensure that the temporary dispersions of the materials during dumping do not alter the transparency of the water at the beaches and tourist spots.

The dredging work and its completion is highly significant to Angra dos Reis. It has secured continual livelihood for 5,000 residents from the town, who depend on the consistent stream of work in BrasFELS shipyard.

For Keppel FELS Brasil, it enables BrasFELS yard to carry out future mega projects requiring deep draft, besides the immediate movement of the *P-52* and its twin project the *P-51* to and from the yard.

The construction of the *P-52* FPU was first clinched by 75:25 consortium of Keppel and Technip in December 2003. Innovative solutions and fulfilment of the requirements for local contents put forth by the Brazilian government were key to securing the US\$775 million contract.

When completed, the *P-52* FPU will stand 34-storey high and 10 Olympic swimming pools wide. The platform will be anchored in a depth of 1,795 metres in the Campos Basin, and will have the capacity to produce 180,000 barrels of oil per day and 9.3 million m³/day of gas.

See pages 20 & 21 for more stories on P-51 and P-52.

# KFELS Super B for the

ne of the world's most capable drilling jackup rigs was christened on 8 April 2006. Named *Deep Driller* 2, the rig is the first of a fleet of five jackup rigs that Keppel FELS is building for Sinvest ASA (Sinvest).

This milestone marks the successful on-time completion of *Deep Driller 2*.

Built to the KFELS Super B design, *Deep Driller 2* is an enhancement of the highly acclaimed KFELS B Class design. The rig is developed to the owner's specifications and marks another achievement in Keppel's design and engineering capability.

When delivered, the state-of-the-art Super B will be deepest drilling rig in water depths of 350 feet. It is capable of drilling down to 35,000 feet. It is also developed to withstand high pressure and high temperature conditions during operations.

Said Bjarne Skeie, Chairman of Sinvest and Deep Drilling Invest (DDI), "With the capabilities of drilling deep wells, long horizontal wells and deep down to 35,000 feet, this jackup is the only jackup in the world which has all these capabilities in one unit. It is prepared for the extreme drilling market."

A job is already waiting for the rig. Upon its delivery, *Deep Driller 2* will go to Brunei Shell Petroleum Company for deployment offshore Brunei Darussalam.

### **Necessity creates brilliance**

This solution for the extreme drilling market was formed out of necessity.

Bjarne saw a need to offer a product with a creative feature in anticipation of an upturn in the drilling services market which was then in the troughs in early





2003. With a brilliant concept in hand, he came to Singapore and approached Keppel FELS to develop the Super B model.

"Singapore is the build centre for drilling rigs and Keppel FELS is the number one and most experienced shipyard in the world," complimented Bjarne during the naming of the rig by his daughter, Lena Skeie.

#### Reliability begets renown

Being the number one rigbuilder does not come easy. Keppel FELS' reputation stems from its commitment to being reliable and delivering value-added products and services. Its dependable, quality products are predictably delivered on time and within budget always.

As Choo Chiau Beng, Chairman/CEO of Keppel O&M, the parent company of Keppel FELS pointed out, "At Keppel, we recognise that on time deliveries are critical to rig owners especially during such an active offshore drilling market."

It is this hallmark which has propelled Keppel FELS to global status and attracted many customers worldwide. Amongst them are the Norwegians who have given Keppel some \$\$3 billion worth of work.

"As I look across the Keppel Offshore & Marine organization, I recognise that they have a system for building and delivering

## Xtreme drilling market



jackups that allows them to have a refined and controlled product, delivered on time to the specification that they are able to agree long in advance," affirmed Bill Rose, President and CEO of Premium Drilling, the joint venture operating and marketing arm of Sinvest.

### Teamwork delivers success

The successful partnership between Keppel and Norway is a result of the business friendly policies of the Singapore Government, said Choo.

He shared, "The foreign workers policies in Singapore have helped ensure sufficient labour to meet the growing number of projects in our yards. Business friendly practices have also helped Keppel in many of our commercial dealings with countries like Norway."

Guest-of-Honour, Minister Lim Swee Say, Minister, Prime Minister's Office, talked about management-union relations. He

told the 150 guests present at the event, "Over the years, Singapore, corporations, workers and unions have worked very hard to establish ourselves to be a leading business hub in this part of the world."

He noted that this is a reciprocal relationship and that the tripartite of corporation, union and workers gives local corporations the competitive edge for success.

Citing Keppel as a company which looks after the interest of the workers, he said, "Keppel is a shining example of this excellent labour management relation. At Keppel, the management is always on the lookout for measures and initiatives that further the interest of the workers. It is precisely because of this kind of management commitment that the unions and the workers are doing their very best as a team, to deliver their commitment to the customer, at the highest quality, at the lowest cost and most importantly, always on time".

- 1. Lady Sponsor, Lena Skeie (left) christens Deep Driller 2. (From left) Choo Chiau Beng, Tong Chong Heong, MD/COO, Keppel O&M, Minister Lim Swee Say, Lim Chee Onn and Michael Chia, Executive Director, Keppel FELS
- 2. Management of Keppel and Sinvest receive Minister Lim
- 3. Michael Chia presents the rig's name plate to Rig Manager, Guy McNabb
- 4. Lena celebrates the joyous occasion with daughter, Liv Kinsella
- 5. An eventful day for Minister Lim as he gets an insight into the rig's operations
- 6. Minister Lim meets Keppel's men of steel
- 7. Minister Lim tries the drilling operator's seat on Deep Driller 2
- 8. A warm partnership between Bjarne Skeie (left) and Tong (right)

Assuring Sinvest that Keppel O&M would live up to its reputation as the number one shipyard with on time deliveries, Choo told Bjarne in the presence of Minister Lim and Keppel Corporation's Executive Chairman Lim Chee Onn that, "You will also be very happy to know that the other four Sinvest rigs under construction here at Keppel O&M are progressing well according to schedule."

# Double happiness for Keppel FELS Brasil

Keppel FELS Brasil receives accolades for its consistent effort to pursue the highest standards for project management and its commitment to Health, Safety and Environment.

### Achieving double certification

eppel FELS Brasil, together with its subsidiary, BrasFELS yard and its facility in Niterói, have been awarded the Safety and Occupational Health Administration OHSAS 18001 and ISO 14001 System of Environmental Administration certification by Bureau Veritas Quality International (BVQI) in February 2006.

With this, Keppel FELS Brasil achieves the rare distinction of being the first company in Brazil's marine industry to obtain both qualifications.

Said Milton Areas, Corporate Manager of Health, Safety and Environment (HSE), "Keppel FELS Brasil is committed to uphold the highest standards of safety and environment at our workplace to ensure we provide products and services of the highest quality to the marine sector in Brazil."

"This marks an important achievement in aligning the systems and processes of our Brazilian operations with that of Keppel O&M to comply with the international environmental and safety standards

"It is the collective achievement of the employees of Keppel FELS Brasil, especially the HSE teams from BrasFELS and Niterói," beamed President & CEO of Keppel FELS Brasil, Tay Kim Hock.

### **Honoured by Petrobras**

Keppel FELS Brasil through its Niterói yard received from Petrobrás the Quality, Safety, Environment and Health (QSMS) award for 2005 on 16 March 2006.

Keppel FELS Brasil emerged the winner under the project "Implementation of Enterprise for Roncador" (IERO) where seven shipyards involved in the *P-52* project were closely evaluated for one year for their Quality, Safety, Environment and Health practices.

The manager of the Niterói yard, Edmundo Santos, was also honoured with his team. At the award ceremony held at Keppel FELS Brasil's Niteroi unit, the Roncador Field Project Manager, Antônio Carlos Justi, congratulated Keppel FELS Brasil on this achievement. He said: "The competence of the company in the execution of the project led to the winning of the award. This is the fruit of labour of the teamwork in Keppel FELS Brasil."

Tong Chong Heong, MD/COO of Keppel O&M said, "It is indeed a great honour to receive this recognisation from our valued client. This is undoubtedly a great motivation for the whole team of Keppel FELS Brasil.



The team at Niteroi Yard beaming with pride

"I would like to congratulate and thank the team at Keppel FELS Brasil and I am sure we will work harder to reach a greater level of excellence in all our projects."

The Niterói yard of Keppel FELS Brasil is presently constructing four modules for *P-52*. All four of them are near completion and will

be moved to BrasFELS yard where they will be installed on the deck box of *P-52*.

The construction of the modules took about 1.8 million manhours work without accidents.

The Niterói yard is currently also fabricating four modules for the *P-51* floating production unit.



(From left to right): Edmundo Santos,
Manager of the Niterói yard, Eduardo
Nuñez, Project Manager of the P-52
Project, Tay Kim Hock, the President &
CEO of Keppel FELS Brasil, Tong Chong
Heong, Managing Director (MD) and
Chief Operating Officer (COO) of Keppel
O&M, Jorge Luiz Zelada General
Engineering Manager for Petrobras,
Antônio Carlos Justi, Roncador Field
Manager, Sergio Azeredo, Representative
of Petrobras at Niterói

# Keppel imparts values to newbies

ur Core Values are important anchors of our organisation...",

- Chairman & CEO Choo Chiau Beng.

Addressing new Keppelites at the inauguration of the Keppel O&M Corporate Orientation on 3 March 2006, Choo Chiau Beng, Chairman & CEO of Keppel O&M, reiterated the importance of core values in shaping behaviours and actions.

To be conducted on a monthly basis, the Keppel O&M Corporate Orientation provides an overview of the organisation's Vision, Mission, Core Values, businesses, strategic directions, Group policies and career progression. The orientation program aims to strengthen communication with new Keppelites by giving them an appreciation of the various facets of Keppel O&M.

Many of the participants expressed their appreciation in providing them a platform to interact with the Management.



At the end of the orientation, they were asked to pen down the work targets they hope to achieve in the next six months in a "Dear Me" postcard. At the end of the six months, the self-addressed postcard will be posted back to them for reflection and to take stock of their set targets and achievements.

S. Jayakumar, Keppel FELS' General Manager of Marketing, shares his experiences

# Friendship at work

Celebrating friendship
(from left):
Choo Chiau Beng,
Fritz Muller,
Tong Chong Heong,
Bozidar Petrovic,
Helmut Ponath,
Herbert Prinzen,
Dr Hans Vieregge and
Nelson Yeo



eppel Shipyard and Niederelbe Schiffahrtsgesellschaft GmbH & Co. KG (NSB), with bonds of friendship spanning 20 years, gathered to celebrate the docking and repair of NSB's150th vessel, CMA CGM Voltaire, at Keppel Shipyard on 23 February 2006.

Keppel Shipyard's close and long-standing relationship with Helmut Ponath, President & CEO of NSB, started in 1984 when Mr Ponath first worked with Nelson Yeo for the drydocking of a vessel from his old company.

Kelvin Goh, the Project Manager for 150th vessel flanked by Nelson Yeo and Bozidar Petrovic, Vice President of NSB



In 1988, the repair of NSB's first vessel, *Proud Eagle*, was carried out at the old Keppel Shipyard at Telok Blangah. Since then, the partnership has strengthened over time.

The mutual trust and bond have blossomed into family-like ties at the two companies.

This is clearly evident in the strong turnout of the past and present Keppel Shipyard team members who had worked with NSB over the years.

Choo Chiau Beng, Chairman & CEO of Keppel O&M, and Tong Chong Heong, MD & COO of Keppel O&M and Managing Director of Keppel Shipyard, were also present to extend Keppel Shipyard's appreciation for NSB's continued support.

Nelson Yeo, Executive Director of Keppel Shipyard said: "I am proud to have project managers like Kelvin Goh and Jeffrey Chua who are committed to dedicated service and strong partnership to NSB, our friend and valued customer.

"I am confident that our partnership will grow from strength to strength. We look forward to



A gathering of the present and ex-Keppelites including Lawrence Mah (left) and Loh Wing Siew (fourth from left)

the docking and repair of the 200th NSB vessel in our yard in the near future."

Kelvin Goh has recently been appointed as Project Manager for NSB vessels docking at Keppel Shipyard. He was previously Assistant Project Manager.

He said, "The 150th vessel CMA CGM Voltaire

is my fourth NSB baby. It is an honour to be entrusted as the Project Manager for the 150th NSB vessel docking in Keppel.

"I enjoy working with the NSB team because we share the same passion and enthusiasm. My experiences on the first NSB vessel "BUXCROWN" with Mr Ponath has trained me well to deliver the best for NSB."

# Showcasing Keppel at APM

eppel Offshore & Marine (Keppel O&M) showcased its wide range of offshore and marine capabilities at the bi-annual Asia Pacific Maritime (APM) exhibition.

Held on 22 to 24 March at Singapore Expo, APM 2006 is into its ninth run. The exhibition attracted 600 companies from 45 countries.

Mrs Lim Hwee Hwa, Minister of State for Finance and Transport, graced the event.

On behalf of the Singapore Pavilion, Michael Chia, President of the Association of Singapore Marine Industries (ASMI) and Executive Director of Keppel FELS, gave the guest-of-honour a good overview of the industry players present at the show.



Michael Chia and Minister of State Lim Hwee Hwa share a moment at the model of Maersk Explorer, a drilling semi built for Maersk Contractors

# Keeping a promise sound

In an environment where safety and security are paramount and adverse distractions a liability, the security team led by Anthony Toh, Keppel O&M Group Security Manager shoulders the important responsibility of ensuring the security and safety of the yards.

ach time a terrorist activity takes place, it reminds us of the uncertain times today. Targets are indiscriminate, making almost anything anywhere a potential. Shipyards are no exception.

That is why nothing is taken for granted in the premises of Keppel O&M. Anthony Toh, Keppel O&M Group Security Manager and his team of Senior Officers lead a 114-strong Group Security Team to ensure that customers and stakeholders are fully assured of the security and safety of the yards.

Realistic simulation exercises are carried out by the Keppel O&M security team to finetune the co-operation and coordination with external agencies like the Singapore Police Force

### **Security is Paramount**

The team adopts a two-pronged approach to the security of the yards. The first is to ensure that the daily proceedings of the yards are in order and the second, strategic long-term investments and implementation of systems to keep antagonists at bay.

Senior Guard Commander, Mahinder Singh is one of the outriders that the security team deploys to patrol the yard daily. During his patrols, he ensures that everyone adheres to the yard rules, looks out for any irregularities and trespassers from land or sea.

Mahinder shares, "For the past 17 years, I patrol the yard and take enforcement actions against any offenders. As a result, I may have offended some people or caused them to be wary of me. However, I take pride in carrying out my duties fearlessly."

Hawk-eye Senior Guard Commander, Mahinder Singh asserts that *Big Brother* is always watching







Safe and secure – flanking Anthony (front centre) and part of the Keppel O&M security team is the Outrider Squad

"I also ensure that vehicles do not obstruct the flow of traffic or cause any obstructions in order to facilitate all the work in the yard," he added.

Anthony and his second-in-command, Desmond Oliveiro, who between them have a total of 70 years of experience with the Singapore Police Force, train and educate their officers.

Providing an account on how he taught his officers to do surveillance when they spotted a suspicious bag (filled with copper trimmings) lying around in the yard, Anthony said, "I told them to be in their civilian clothing to be inconspicuous. Then to keep a lookout on the bag at a distance. Finally, the culprit came back to collect the bag and was nabbed by us!"

#### 100% Operational Readiness

The bigger challenge is in the event of a crisis where the systems set up are tested. These have been purposefully and

painstakingly developed over time to effectively respond to the crisis.

One initiative is the Shipyard Security Watch Group (SSWG), which comprises Keppel O&M, Singapore Technologies Marine (ST Marine) and Jurong Shipyard. Together with the Singapore Police Force and other Home Affairs agencies in the Jurong Industrial Estate, the SSWG serves to tighten the overall security within the immediate vicinity through joint patrols.

Combined training and exercises that include crisis simulations such as chemical threats, bomb hoaxes and hostage situations are also carried out to strengthen inter-yard relations. These simulations are carried out in compliance with the International Ships & Ports Security (ISPS) regulatory requirements for world-class maritime facilities.

#### **Accolades**

On 13 January 2006, the SSWG held its inaugural seminar to share their ongoing

partnership activities with the Singapore Police Force, Singapore Civil Defence Force, Police Coast Guard and the Maritime & Port Authority of Singapore (MPA) on security exercises and drills to meet the ISPS requirements.

For all its efforts, the Watch Group was presented with a Silver award by the South West Community Development Council and a Gold award by the National Community Safety & Security Program (CSSP).

"We invest a lot of resources, time, money, manpower to ensure safety in the yard because we never know what will happen. Accidents do happen and risks are ever present, but through these investments, the detrimental effects of these adversities can be significantly reduced," said Anthony.

Daunting, the task may be, it is all in a day's work for Anthony and his team, as they contribute to delivering the promise of 'On Time, On Budget' to customers.

### Zero downtime on P-53

P-53 commemorated its first major safety milestones for one million manhours without lost-time incidents.

More than 40 Petrobras, Charter Development LLC and Keppel Shipyard project team members attended the event. They were joined by Mr Eduardo Bordieri, Asset Manager for the Marlim Leste Field.

Previously known as *VLCC Settebello*, *P-53* is undergoing a hull conversion, which includes the installation of a marine system as well as the fabrication and integration of the internal turret on the 322,446 dwt tanker.

With 75 risers, the turret on *P-53* will be the largest ever fabricated and installed in the world. Due for the Marlim Leste field in the Campos Basin, the production unit is scheduled for completion in end 2006.

Works are underway for fabrication of the turret, accommodation and office blocks, refurbishment of the engine room and pump room, as well as painting and installing of new structures and piping in the tanks and deck.

Upcoming project milestone will be the lifting of the N01 block in May 2006 and second drydocking in June 2006.

"This safety achievement has been made possible through the joint effort of both client and shipyard site teams," said Terry Wong, Project Manager for *P-53*.



Safety first: celebrating P-53's one million manhour lost time incident-free milestone

### One million manhour lost time incident-free

Dear Terry Wong,

On behalf of PETROBRAS/CDC, I would like to congratulate Keppel Shipyard for this remarkable achievement.

This is the real proof of the commitment of the Keppel family with the most important value we all (workers, managers, human beings) have: LIFE.

I expect to join you to commemorate very soon the next target: 2 million manhour incident-free.

Thank you and congratulations,

Sincerely,

#### **Edmilson Medeiros**

P-53 Construction, Assembly and Integration Manager

# Safety award for Keppel FELS

onstruction of WilCraft, the maiden KFELS B Class jackup for Awilco Offshore (Awilco) began in April last year. Work on the rig has progressed well, culminating in the project team achieving one million manhours without a lost time incident in February this year.

Awilco recognised this achievement by presenting Keppel FELS with a Safety Excellence Award and a Safety Bonus of US\$10,000. This commendation is testament to Keppel O&M's commitment to excellence in safety, in which every employee is inculcated with the value to make safety a part of life.

Awilco shares this value. In its commendation letter, Project Manager

Pete England wrote, "...(safety) is something that we have come to expect as second nature to Keppel FELS.

"What impresses us further is that on WilCraft, this has so far been achieved without any let up on the drive to meet schedule and quality targets, despite the current unprecedented workload in your yard."

Pete added, "Safety is one of the foremost concerns for Awilco in our fleet expansion programme, and it is for this reason that all our jackup rigs are equipped with a significantly increased degree of mechanisation within the pipehandling process areas.

"The challenge for Keppel FELS will be



to safely and successfully install, test and commission this considerably increased scope of equipment for delivery in the fourth quarter of this year.

"We would like to take this opportunity to encourage you to continue in the same exceptional drive and spirit that you have displayed so far, and by doing so, we are confident that you will successfully surmount these impending challenges safely."

# Building an incident-free culture

he project teams for Keppel FELS and Transocean came together for a teambuilding exercise, ahead of their new projects.

A two-day session entitled "Working Together to Expand Our Safety Culture",



the programme approached the issue of safety enhancement by analyzing both companies' safety culture, combining their best traits for application to the upcoming projects.

Said Michael Chia, Executive Director of Keppel FELS, "Safety is a continuous journey without a stop. We must constantly improve, enhance and ensure that our safety measures are in place to reduce or eliminate risks."

Sharing the same fervent commitment to safety, Keppel FELS and Transocean

Safety through team effort between Keppel FELS and Transocean aim to continuously improve safety performance through various initiatives. The teambuilding programme is one of them.

Said Transocean Project Manager, Byron Halbleib, "This investment in our work force will provide strong dividends towards our common goal of successfully completing these projects incident free, on time and on budget."

He added, "Full and active participation in this teambuilding programme by the Keppel FELS project team leaders typifies Keppel FELS' proactive approach to safety management and demonstrates why Keppel is a recognised world-class leader in their field."

## Delivering global solutions



(Second from left) CB Choo meets His Royal Highness Prince Philip Duke of Edinburgh, at the World Maritime Conference 2006

o succeed, a shipyard must have strong capabilities, understand the needs of its customers and be able to provide solutions.

Choo Chiau Beng, Chairman & CEO of Keppel O&M shared this formula, which mirrors that of Keppel, at the World Maritime Technology Conference (WMTC) 2006 from 6-10 March in London.

Illustrating from the oil and gas value chain, Mr Choo discussed the role of a shipyard in the upstream and midstream sector.

In upstream, with its design, construction and conversion capabilities, Keppel is able to provide seismic, drilling, support and maintenance vessels in this area.

While in midstream, Keppel's expertise lies in providing repair and upgrading services to a suite of tankers and transporters including Liquefied Natural Gas (LNG)/Liquefied Petroleum Gas (LPG) and crude oil carriers.

Mr Choo also spoke about striking a winwin relationship between the shipyard and its customers. Citing Keppel O&M as an example, he discussed how the group partners its customers to provide maximum value that can meet their needs and business objectives.

Aptly themed *Maritime Innovation* – *Delivering Global Solutions*, WMTC 2006 aimed to promote integrated solutions to industry-wide issues while assessing its impact on global economies now and in the future.

# Knowledge sharing

nowledge sharing is essential for best practices. Mistakes are learnt and avoided.

Choo Chiau Beng, Chairman & CEO of Keppel O&M shared this at the launch of the Directory of Experts on 15 February 2006

As its name suggests, the Directory of Experts is a valuable reference list of specialists in fields such as engineering, 3-D modelling right up till rig construction and FPSO conversion.

Easily accessible via the Enterprise Information Portal (EIP), this latest initiative under the auspices of the Knowledge Management (KM) programme provides a platform for Keppelites to approach the experts for guidance.

Charles Foo, MD (Special Projects) of Keppel O&M and the champion for KM, commented, "Knowledge Management is one of the drivers of innovation.

"However, for the quantum leap, innovation should be driven by technology foresight which means engaging in R&D, interpreting market trends and having the industry expertise."



Directory of Experts at a click

# Investing in human capital

eppel O&M hosted delegates from the Ministry of Manpower (MOM) – Foreign Workforce Department and the Economic Development Board (EDB) on 8 February 2006. The aim of the dialogue session and yard visit was to understand the operations of the yard.

Said Tong Chong Heong, MD/COO of Keppel O&M, "The industry has a compelling need for a constant stream of tradesmen and for their skills to be upgraded."

Keppel O&M focuses on multi-pronged human capital development initiatives to recruit, train, nurture and retain talents in higher value-added positions, such as engineers, management and supervisors.

These initiatives include scholarships, further education sponsorships for employees, participation in career fairs, rehiring of retired but physically fit employees and supporting various institutions in nation-wide recruitment drives, such as the Super V programme, Republic of Singapore Navy – career transition programme and the Yellow Ribbon programme.

Urging for more mutually beneficial initiatives, Tong said, "We look forward to more such dialogues with MOM and EDB to meet the country's manpower challenges together."

Michael Chia, Executive Director of Keppel FELS (front) walks the ground with the MOM and EDB delegates



# A Norwegian visit



Onboard Deep Driller 2, the first Super B Class jackup built for Sinvest

elegates from valued customer, Sinvest ASA (Sinvest) of Norway visited Keppel FELS on 9 March 2006.

A dialogue session was held to further strengthen relationship between the two companies. The delegates, led by Bjarne Skeie, Chairman of Sinvest, toured the yard and saw the progress of various Sinvest projects.

Keppel FELS is building five Super B Class jackup rigs for Sinvest. The projects are in various stages of completion. The first rig, to be named *Deep Driller* 2, was christened on 8 April 2006.

Involved primarily in investments relating to the offshore industry, Sinvest ASA is a public company quoted on the Oslo stock exchange.

# Glowing new ideas



Top three winners of the new S<sup>3</sup> programme (from L to R), Ng Hoong Fei, Yvonne Chang and Betty Mok

eppel FELS' inaugural Staff Suggestion Scheme (S³) was a hit with an overwhelming number of suggestions submitted.

Re-launched in September 2005, the scheme aims to encourage employees to put on their thinking caps and contribute suggestions to improve work efficiency and effectiveness.

Headed by the  $S^3$  Secretariat, a quarterly topic is raised for employees to submit their suggestions.

Kicking off the first quarter was 'Saving Energy & Resources". Keppelites were encouraged to put forward brilliant ideas on how to save resources around the premises of Keppel FELS.

First-prize winners of a \$150 voucher each, Ng Hoong Fei, Purchasing Manager, and Betty Mok, Administration Officer, submitted their energy saving suggestions.

Their proposals were to reduce the number of light bulbs in areas that do not require much lighting in the main building.

In addition, novel ideas such as installing motion sensors in toilets to activate lights

when in use and time-controlled switch to turn off canteen lights when not in use, were also mooted.

Yvonne Chang, Assistant HR executive, won the third prize of a \$50 voucher for contributing her paper-saving suggestion that combines three forms into one. Presently, new employees have to fill in three separate forms with several similar fields when applying for an internet account. A single form facilitates a shorter work process and saves paper.

S<sup>3</sup> Secretariat Chairman and HR Manager of Keppel FELS, Stanley Yong, strongly urged employees to contribute more suggestions using a S<sup>3</sup> form available from their respective departments' S<sup>3</sup> representatives," he said, "Keep up the enthusiasm and keep the suggestions coming."

# Keppelites support SingHealth

pearheaded by Keppel O&M, members of the Keppelite Recreation Club (KRC) were out in force along Orchard Road on 18 February 2006 to help sell coupons at the launch of SingHealth Foundation's "Save Money, Save Lives" Project 2006.

Proceeds from this fund-raising project will go to supporting SingHealth's medical research in the fields of cancer, heart disease, diabetes, childhood hereditary disorders and neurosciences.

Despite having busy work schedules and having to sacrifice a Saturday, the volunteers from Keppel were glad that they could be part of a good cause.

Winson Lim, Assistant Purchasing Officer at Keppel Shipyard shared, "I want to lend a helping hand to those who are less fortunate and in poor health. I am happy to be able to do this through the KRC."

Guest of Honour, Dr Vivian Balakrishnan, Minister for Community Development, Youth and Sports, and Second



Winson Lim struts the street for a good cause

Minister for Trade and Industry, presented Keppel O&M with a token of appreciation, which was received by Chee Jin Kiong, Executive Director of Human Resources.

# Subic connection for Clippers



Sending-off in Filipino style. The Subic Shipyard & Engineering team turned up in full force to cheer on The Uniquely Singapore Clipper crew

n route from Singapore to Qingdao in China, the 10-strong Clipper fleet was diverted to stopover at Subic Bay, Philippines, on 5 February 2006 due to keel problems.

A survey identified an issue with the connection between the outer skin of the hull and the keel.

Coming quickly with aid where possible, Subic Shipyard & Engineering (Subic Shipyard) assisted in the supply of brand new keel bolts for the entire fleet of Clippers.

"As a Race Partner of Singapore's entry to the Clipper Race – Uniquely Singapore, Keppel have shown tremendous support to the Clipper 05-06 Race, playing host along with other Race Partners when the fleet visited Singapore in January 2006.

"This time, they have generously stepped in with logistical help, supplying crew with accommodation for their stay in the Philippines and now with the engineering and supply of 220 keel bolts for the Clipper fleet," said Race Director Tim Hedges of Clipper Ventures.

Each boat is fitted with 21 bolts, weighing 2.5kg each and every bolt is custom-made using the latest Computer Aided Design technology. With a team of around 90 people working on the fleet (amounting to around 1,000 daily manhours), the rectification work was completed in four weeks.

While the repairs were underway, the remaining Singaporean crew put up at the corporate accommodation of Subic Shipyard.

"Keppel is proud to be of assistance to the Clipper Race and to be associated with the spirited adventure seekers who will stop at nothing to overcome the odds. Whether Clipper and their crew are in Singapore, the Philippines or anywhere else in the world, we will always be delighted to find solutions in any way we can," said Wang Look Fung, General Manager of Group Corporate Communications, Keppel Corporation.

Located in the Philippine Economic Zone Authority area of Zambales, Subic Shipyard is a member of Keppel O&M. The company is noted for its repair and conversion works on supertankers and Floating Production Storage and Offloading (FPSO) vessels.

Said Charles Yap, President and General Manager of Subic Shipyard, "Extending the Singaporean hospitality to our friends in need in a foreign land is our pleasure indeed."

The Clipper 05-06 Race set sail again on 25 March from Subic Bay in the Philippines, after completing a series of sea trials. The second half of Leg Four (Race 6) was re-commenced.

As a "Bon Voyage" gift, Subic Shipyard gave away packs of the Philippines' very own unique dried mango to sweeten the journey for the Clipper crew.



# Around our yards

OffshoreMarine tracks works carried out at various Keppel yards.

### Singapore

### **Keppel Shipyard Tuas**

Name : *Margrethe Maersk* Owner : A P Moller Maersk

Country: Denmark Type : Container Ship

DWT : 60,639 GRT : 52,191

Date : 21 March 2006 – Present Scope : General repair and renewal Name : Kaminesan

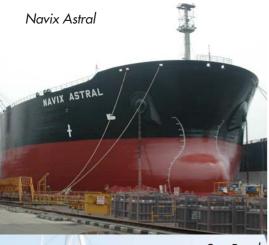
Owner: MOL Tankship Management

Ltd (Ex-International Energy

Transport Co Ltd)

Country: Japan
Type : Tanker
DWT : 303,896
GRT : 159,813

Date : 25 March 2006 – Present Scope : General repair and renewal





Name: Federal I

Owner: Federal International

(2003) Ltd

Country: Singapore

: Floating Storage and

Offloading (FSO)

DWT : 149,235 : 88,122 **GRT** 

Date. : 24 February 2006 -

Present

Scope : General repair and

renewal

Name: Fortuna Ayu

Owner: P T Panji Adi Samudera

(PAS Maritime)

Country: Indonesia

: Chemical Tanker Type

DWT : 37,224 GRT : 19.707

: 25 March 2006 -Date

Present

Scope : General survey and repair

Name: MSC Stella

Owner: Mediterranean Shipping

Company

Country: Italy

: Container Ship

DWT : 85,820 GRT : 73,819

: 26 – 29 March 2006 Date Scope : Drydocked for aft seal

bonding, stern tube cooling

pipe to repair

Name: Sun Road

Owner: Sunford Shipping Ltd.

Country: Japan

: Container Ship Type

DWT : 57,904 GRT : 53,359

: 29 March – 6 April 2006 Date Scope : Drydocked for general repair

and renewal works such as

tailshaft withdrawal. propeller polishing & dye checking, main engine turbocharger overhauling and ballast pipes repair

### **Keppel Shipyard Benoi**

Name: Durgandini

Owner : P T Arpeni Pratama Ocean

Line

Country: Indonesia Type : Oil Tanker DWT : 36.406 GRT : 21,810

Date : 7 January 2006 – Present : Double hull conversion

Name: Navix Astral

Owner: MOL Shipmanagement Asia

Country: Singapore : Oil Tanker Type DWT : 275,644 GRT : 144,127

: 21 March 2006 - Present Date Scope : General survey and repair

### **Philippines**

### **Subic Shipyard**

Name : Alexander Carl

Owner: Keoyang Shipping Co. Ltd

Country: Korea

Type : Ore / Coal Carrier

: 208,394 DWT GRT : 110.627

Date : 01 – 19 March 2006 Scope : Drydocked for general

repair as well as renewal

works such as hull

preservation, overhauling of sea valves, main engine air cooler renewal and

overhauling of

accommodation ladders

#### **Keppel Batangas Shipyard**

Name: SUPERFERRY 9

Owner: Aboitiz Jebsens

Shipmanagement

Country: Philippines

Type : Passenger / Roro

DWT : N.A. GRT : 8.839

Date : 18 March – 4 April 2006 Scope : Emergency drydocking for

rudder repair

Name: Solid Gold

Owner: Solid Shipping Company

Country: Philippines : Cargo Carrier Type

DWT : N.A. GRT : 3,956

Date : 22 February –

15 March 2006

Scope: 68.5 tonnes of steelwork,

piping works, rudder and

propeller works

### Keppel Group Newsbytes



Regional interest in property funds and trusts present opportunities for Keppel Land to further expand its business

**Keppel Land**'s wholly-owned real estate fund management arm, Alpha Investment Partners Ltd (Alpha), has announced the final closing of its Alpha Core Plus Real Estate Fund.

The Fund has raised a total of S\$720 million which exceeded its original target of S\$412 million. With gearing, the Fund will eventually reach a total asset size of S\$1.8 billion when it is fully invested.

The total investor commitments raised by Alpha have now reached S\$1.6 billion. When they are fully invested on a general basis, Alpha will have a total asset under management of S\$4.4 billon.

Keppel Land has set a new milestone on 20 March 2006 for the listing of K-REIT Asia, a new real estate investment trust aimed at investors who want access to an increasingly broad range of property investment opportunities in Asia. The listing document was despatched with a circular in respect of the distribution in specie of units of K-REIT Asia.



SPC and partners have begun drilling of the Jeruk-3 well

Singapore Petroleum Company (SPC) and its partners have begun drilling the Jeruk-3 well to further appraise the Jeruk oil discovery. Located offshore East Java, about 42 km east of Surabaya, the Jeruk field is currently being appraised to determine its potential.

**Keppel Seghers**, the environmental technology division of Keppel Integrated Engineering (KIE), has secured a S\$13 million contract to provide technologies and services for the first waste-to-energy plant to be built in the city of Jiangyin, Jiangsu province, China.

Keppel Seghers will provide its proprietary equipment design and technical services for the furnace, boiler and flue gas cleaning components of the plant.

When completed in end 2007, the waste-to-energy plant will be able to treat 800 tonnes of municipal waste a day.

At the inaugural Singapore Corporate Awards (SCA) presentation ceremony held at the Raffles City Convention Centre on 7 March 2006, **Keppel Land** and **Keppel Corporation** emerged the Gold winner of the Best Annual Report Award (ARA), and the Silver winner of the Best Investor Relations Award (IRA) respectively, in the category of listed firms with a market capitalisation of \$500 million or more.

### Global Reach

Keppel Offshore & Marine Ltd (Head Office) 50 Gul Road Singapore 629351 Tel: 55 6863 7200 Fax: 65 6261 7719 www.keppelom.com

#### **SINGAPORE Keppel FELS Limited**

(**Pioneer Yard 1 – Head Office**) 50 Gul Road Singapore 629351

(Pioneer Yard 2) 55 Gul Road Singapore 629353

(Shipyard Road) 31 Shipyard Road Singapore 628130

Tel: 65 6863 7200 1et: 05 0803 / 200 Fax: 65 6261 7719 Email: marketing@keppelfels.com www.keppelfels.com Contact Persons: Michael Chia, Executive Director

S Jaya Kumar, General Manager (Marketing)

Keppel Shipyard Limited (Tuas Yard – Head office) 51 Pioneer Sector 1 Singapore 628437 Tel: 65 6861 4141 Fax: 65 6861 7767

(Benoi Yard) 15 Benoi Road Singapore 629888

Tel: 65 6861 6622 Fax: 65 6861 4393

(Gul Yard)

55 Gul Road Singapore 629353 Tel: 65 6861 3007 Fax: 65 6862 3645/7

Email: ks@keppelshipyard.com www.keppelshipyard.com Contact Person: Nelson Yeo, Executive Director

Keppel Singmarine Pte Limited 15 Benoi Road Singapore 629888 Tel: 65 6861 6622 Fax: 65 6862 1792

Email: singmarine@keppelsingmarine.com www.keppelsingmarine.com Contact Person: Hoe Eng Hock, Executive Director

Offshore Technology Development Pte Ltd 55 Gul Road Singapore 629353 Tel: 65 6863 7409 Fax: 65 6862 3465

Email: felsotd@pacific.net.sg Contact Person: Dr Foo Kok Seng, General Manager

**Deepwater Technology Group Pte Ltd** 50 Gul Road Singapore 629351 Tel: 65 6863 7163

Fax: 65 6863 1739 Email: aziz.merchant@keppelom.com Contact Person: Aziz Merchant, General Manager

#### Asian Lift Pte Ltd

23 Gul Road Singapore 629356 Tel: 65 6668 4222

Fax: 65 6668 4333 Email: asianlift@asianlift.com.sg Contact Person: John Chua, General Manager

Keppel Smit Towage Pte Ltd

23 Gul Road Singapore 629356 Tel: 65 6668 4222 Fax: 65 6897 8056

Email: kst@keppelsmit.com.sg Contact Person: Ben Chew, General Manager

#### **AUSTRALIA**

AUSTRALIA
Keppel Prince Engineering Pty Ltd
Level 7, 3 Bowen Crescent
Melbourne, Victoria 3004, Australia
Tel: 61 3 9820 9033
Fax: 61 3 9866 6110 Email: cchiam@ozemail.com.au Contact Person: Charles Chiam, Director

#### **AZERBAIJAN**

Caspian Shipyard Company Ltd South Bay, KMNF Basin Baku AZ1023, Azerbaijan Tel: 994 12 449 9930 Fax: 994 12 449 9931

Email: csc@csc.az Contact Person: Bill Kee, President

Keppel FELS Brasil S/A
Rua da Assembeia, 10 – 2002
20011-000 Rio de Janeiro, RJ, Brazil
Tel: 55 21 2102 9400 Fax: 55 21 2224 2248 Email: kimhock.tay@keppelfels.com www.kfelsbrasil.com.br Contact Person: Tay Kim Hock, President & CEO

#### **BULGARIA**

Suicaria

September 1

September 1

September 2

Septembe

CHINA/HONG KONG
Keppel Nantong Shipyard
No. 9 Yan Jiang Road, Nantong City, Jiangsu Province
P.R.China 226005
Tel: 86 513 560 3070
Fax: 86 513 5601936 Email: taikwee.lee@keppelsingmarine.com Contact Person: Lee Tai Kwee, President

### Keppel Seghers Engineering & Construction (China) Co., Ltd.

Shenzhen Branch Office, 6th Floor Chiwan Petroleum Building, Chiwan Road No. 3 P.R. China 518068 Tel: 86 755 26851902, 86 755 26851959,

65 68637215 (Singapore Contact) Fax: 86 755 26851670

Email (China): hojh@keccsz.com Email (Singapore): jongheng.ho@keppelfels.com Contact Person: Ho Jong Heng, General Manager

### Keppel FELS Offshore and Engineering Services Mumbai Pvt Ltd

Mumbai FVI Ltd Unit Number 3, 8th Floor, Prism Tower-A Mindspace, Link Road, Goregaon (West) Mumbai 400 062, India Tel: 91 22 4001 8888 Fax: 91 22 4001 8898

E-mail: anant.shukla@kfelsmumbai.com

Contact Person: Anant Shukla, Assistant General Manager

### **KAZAKHSTAN**

Keppel Kazakhstan LLP SEZ "Seaport Aktau", Aktau 130000, Mangistau Oblast Republic of Kazakhstan Republic of Razakristan Tel: +7 3292 571 100 HP: +7 300 528 4885 Fax: +7 3292 571 110 Email: pw.yick@kkl.kz Contact Person: Yick Ping Wong, General Director

#### **NETHERLANDS**

Keppel Verolme BV
Prof. Gerbrandyweg 25, 3199 KK Rotterdam-Botlek
Harbour no. 4550, P O Box 1001, 3180 AA Rozenburg
The Netherlands
Tel. 31191 324200

The Netherlands
Tel: 31 181 234300
Fax: 31 181 234346
Email: mail@keppelverolme.nl
www.keppelverolme.nl
Contact Person: Harold W.M. Linssen, Managing Director

#### **NORWAY**

### Offshore & Marine A/S

Orisnore & Marine A/5 Strandgaten 147, P O Box 425 4304 Sandnes, Norway Tel: +47 5160 2500 Fax: +47 5160 2510 Email: Inge.Oliversen@o-m.no Contact Person: Inge Oliversen, President

Keppel Philippines Marine Inc Unit 3-B Country Space 1 Building Sen. Gil Puyat Avenue, Salcedo Village 1200 Makati City, Philippines Tel: 63 2 892 1816 Fax: 63 2 815 2581, 63 2 892 4604 Email: mhq@keppelpm.com commercial@keppelpm.com

www.keppelphilippinesmarine.com Contact Person: Toh Ko Lin, President

Keppel Batangas Shipyard Barrio San Miguel, 4201 Bauan, Batangas Philippines Tel: 63 43 7271532 to 36 Fax: 63 43 7271453 Email: kbs@keppelpm.com Contact Person: Yu Cheng Hee, Executive Vice-President

#### Keppel Cebu Shipyard Inc

Dad Cleland Avenue, 6015 Lapu-Lapu City, Cebu Philippines Tel: 63 32 340 0081 to 89 Fax: 63 32 340 0068, 63 32 340 0096 Email: marketing@keppelcebu.com.ph www.keppelcebu.com.ph Contact Person: Fok Swee Yin, President

#### Subic Shipyard and Engineering, Inc.

Cabangaan Point, Cawag 2209 Subic, Zambales, Philippines Tel: 63 47 232 2380 Fax: 63 47 232 3350, 63 47 232 3883 to 84 Email: all@subicship.com Contact Person: Charles Yap, President

#### **UNITED ARAB EMIRATES**

Arab Heavy Industries
P O Box 529, Ajman, UAE
Tel: 971 6 526 3232
Fax: 971 6 526 3233
Email: ahiaeme@emirates.net.ae www.ahi-uae.com Contact Person: Y K Leong, Managing Director

#### USA **Keppel AmFELS**

PO Box 3107, 20000 South Highway 48 Brownsville, TX 78523, USA Tel: 1 956 831 8220

Fax: 1 956 831 6220

Email: cheokyuen.ho@keppelamfels.com Contact Person: Ho Cheok Yuen, President & CEO

### **Keppel Offshore & Marine USA**

5177 Richmond Ave, Suite 1065 Houston, Tx 77056, USA Tel: 1 713 840 8811 Fax: 1 713 840 1198 Email: yewyuen.chow@keppelOM-usa.com Contact Person: Chow Yew Yuen, President

FloatEc, LIC
14701 St. Mary's Lane
Suite 250, Houston, TX 77079
Main Tel: +1 281 870 5200
Main Fax: +1 281 870 5210
Email: businessdevelopment@floatec.com
Website: www.FloaTEC.com
Contact Person: Eric H. Namtvedt, President
Direct Tel: +1 281 870 5556
Mobile: +1 281 381 2781
Email: ehnamtvedt@floatec.com

### Keppel Marine Agencies, Inc

#### (Texas Office)

5177 Richmond Ave, Suite 1065 Houston, Tx 77056, USA Tel: 1 713 840 1188 Fax: 1 713 840 1960 Email: mike.holcomb@kmaihouston.com / john.bajor@kmaihouston.com Contact Person: Michael Holcomb, President/ Director John C Bajor, Marketing Manager

(New Jersey Office) 15 Huddy Avenue, PO Box 417 Highlands, New Jersey, USA Tel: 1 732 872 8800 Fax: 1 732 872 8801 Email: keppelnj@comcast.net Contact Person: John J. Bajor, Director

VIETNAM
Keppel FELS Limited
Petrovietnam Tower, Suite 150M
9 Hoang Dieu Street, Ward 1, Vung Tau City
S.R. Vietnam
Tel: 84 64 850098 Fax: 84 64 850089 Email: henrysng@hn.vnn.vn Contact Person: Henry Sng, Country Manager

# Keppel Shipyard delivers FPSO Capixaba for SBM



PSO Capixaba, a conversion contract worth S\$90m, was delivered in end February 2006.

The 13-month fast-track project is the sixth Floating Production Storage Offloading (FPSO) conversion project for Keppel Shipyard since 2000 from Single Buoy Moorings (SBM), member of the SBM Offshore N.V. Group.

The workscope on the former *Stena Congress* includes installation and integration of topside modules; the fabrication and installation of the internal turret, flare tower, piperack and helideck; and installation of a hose reel at the stern for offloading to export vessels.

FPSO Capixaba will now be capable of producing 100,000 barrels of oil per day (bopd) with a storage capacity of two million barrels. The vessel will be moored

in 1,350 metres of water. First oil is anticipated in the second quarter of 2006.

To be leased by SBM to Petrobras SA, Brazil's national oil company, FPSO Capixaba will be the first FPSO to be deployed in the Golfinho light oilfield in the Espirito Santos Basin offshore Brazil.

Three other FPSO facilities owned by SBM and converted by Keppel Shipyard are also on lease to Petrobras. They are FPSO Espadarte, FPSO Brasil and FPSO Marlim Sul. When the FPSO Capixaba joins their rank later in the year, their total production output for Petrobras will be 390,000 barrels of oil per day.

Didier Keller, Managing Director and Chief Executive Officer of SBM Offshore N.V., said, "We have entrusted Keppel Shipyard with the conversion of a number of sophisticated FPSO projects due to their strong track record. Once again, Keppel has delivered an excellent FPSO project on time and proven itself to be very reliable."

Choo Chiau Beng, Chairman & CEO of Keppel Offshore & Marine, shared, "We are pleased to deliver yet another quality FPSO conversion project to our valued customer SBM. We look forward to our continued partnership in the years ahead."

Keppel Shipyard has a strong track record for 59 FPSO and FSO conversion and repair projects.

Currently, Keppel Shipyard is carrying out several FPSO and FSO conversion and upgrading projects at its yards. One of these projects involves the major conversion of *P-53* project for Petrobras.