

Robert L. Long President and CEO

Welcome

Our Asia and Australia Region, geographically the largest and most diverse we have, continues to make a substantial contribution to the success of Transocean. While maintaining one of the best safety records in the company, the region has consistently generated the second-highest margins (Field Operating Profit as a Percentage of Revenue) among the regions. With a Total Recordable Incident Rate of 1.79, the region is one of three that is currently beating the TRIR goal we set for ourselves for 2002.

I had the opportunity to visit the region earlier in the year and spent two weeks calling on many of our offices and rigs. I was impressed by the high standards and capabilities of the people I met. The management team is doing an excellent job of recruiting, training and mentoring the outstanding people available in the many different cultures in which we work. Several of these exceptional people, such as Booncherd Prasong, Driller on the *Trident 15*, are profiled in this publication, and congratulations are due to Prachaya "Mike" Suk-Udom who has recently been promoted to Country Manager in Australia.

I was particularly impressed with some of the safety initiatives that have been undertaken in the region. We have a great operation in Southeast Asia with a lot of dedicated people working together to provide our customers with outstanding service in a safe manner. Our goal in 2003 is to continue to provide outstanding service to our clients while ensuring that all of our people go home safely to their families with no injuries of any kind and no damage to the environment.

Robberg



December 2002

Transocean

Mission Statement: To be the premier offshore drilling company providing worldwide, rig-based well-construction services to our customers through the integration of motivated people, quality equipment and innovative technology, with a particular focus on technically demanding environments.

> Core Values: Financial Discipline Integrity and Honesty Respect for Employees, Customers and Suppliers Safety Technical Leadership

Offshore Frontiers is published twice a year for employees, customers and other key audiences.

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On the Cover:

Rig Manager Hing Ming Wong and OIM Robert Danzin lead crews on the *Trident 9* in Vietnam, demonstrating commitment to excellence in safety, operations and nationalization.

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A new energy era is dawning in the East. Transocean is there with the largest, most experienced and diverse offshore drilling fleet in Asia and Australia.

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Southeast Asia: A New Era



Mention Southeast Asia and China comes immediately to mind as a key consumer and driver of world petroleum demand growth.

Step back to the supply side of the energy value chain, and you also will see petroleum companies utilizing offshore drilling rigs to help meet energy needs like never before. And as it has for more than three decades in Southeast Asia, Transocean is right in the thick of the activity. Today, the company provides the largest, most experienced and diverse offshore drilling fleet in Asia and Australia.

The region's transition to cleanerburning natural gas and crude oil products is accelerating as several multi-billion-dollar energy projects come online. Already the world's largest regional consumer of crude oil, Southeast Asia is interlinked by major pipelines, liquefied natural gas (LNG) plants, refineries and other industrial infrastructure.

More energy projects are in the offing worth \$200 billion by one estimate. China and Pacific Rim countries are forging industrialized economies based increasingly on natural gas and crude oil versus coal — the primary fuel which has emissions problems.

Drilling in the Largest Region

Offshore drilling is vital to accessing much of the 28 billion barrels of proven liquid reserves, which China, Indonesia and Malaysia have combined, plus their almost 155 trillion cubic feet (TCF) of proven natural gas reserves. Australia has only 2.2 billion barrels of liquid reserves, but more than 40 TCF of natural gas.

Long known as the most geographically expansive offshore drilling market, Southeast Asia is also home to some of the most technically challenging offshore well-construction projects for Transocean clients, including BP, TotalFinaElf, Vietsovpetro, Petronas Carigali, Unocal, Talisman and Santos.

Where else in the world are wells drilled regularly in surface BOP mode in two weeks or less? Where else do rigs mobilize so far and so often between jobs, such as this year when the *Sedco 602* semisubmersible went from Indonesia to Russia to Singapore and back to Indonesia? And where else do so many cultures mingle, so similar and yet so different as in Southeast Asia?

These and other factors drive opportunities and challenges.

Transocean: Leadership at Work

While half the world sleeps, Transocean crews are hard at work for clients on 16 rigs in five Southeast Asian countries. The region's most diverse offshore drilling fleet includes the *Sedco 702* and *Sedco 703* semisubmersibles in Australia, the *Trident 15* jackup in Thailand, the W.D. Kent and Charley Graves self-erecting tender rigs in Malaysia and the *Trident 17* jackup and *Hibiscus* heavy swamp barge in Indonesia. These and nine more Transocean rigs are well supported by the company's district offices in Thailand, Vietnam, Malaysia, Indonesia and Australia, the Region Office and Learning Center in Jakarta, Indonesia, and the Singaporebased technical field support group.

Over the years, Transocean's people have delivered solid results. As the region's most experienced offshore driller, Transocean has constructed 45% of the 413 wells drilled in greater than 600 feet (185 meters) of water in Southeast Asia since 1972, according to ODS Petrodata. And since 1983 when ODS Petrodata began tracking wells drilled in less than 600 feet of water, Transocean crews have constructed one of every four wells in these shallower waters that dominate the Pacific Rim's huge continental shelf.

Pioneering Technology

Transocean personnel have also pioneered deepwater surface BOP operations in which the blowout preventer is used in the moonpool of the *Sedco 601* and *Sedco 602* semisubmersibles. Surface BOP operations extend the rigs' water depth capability from 1,500 feet to more than 7,000 feet (460 meters and 2,130 meters) of water. To date, those two rigs alone have drilled the vast majority of all wells constructed in this mode worldwide.

Just as important are Transocean's systems and initiatives for operations, Health, Safety and Environment, workforce nationalization and the Global Reporting System for more than 1,630 company employees in Asia and Australia.

Pathway to Excellence

"Nobody has systems as comprehensive as Transocean's," says Asia and Australia Region (AAR) Manager Steven Newman, who each year logs more than 80,000 airplane miles visiting rigs, offices and clients. He adds that the region is beginning to realize the benefits of employees' tremendous efforts poured into utilizing and improving systems.

"Many of our rigs are achieving excellence by meeting company goals for Total Recordable Incident Rate and downtime, and several others are positioned to do so," Newman notes. "Our employees' commitment to our core values, our systems for operations, Quality, Health, Safety "Where else in the world are wells drilled regularly in surface BOP mode in two weeks or less? Where else do rigs mobilize so far and so often between jobs, such as this year when the *Sedco 602* semisubmersible went from Indonesia to Russia to Singapore and back to Indonesia? And where else do so many cultures mingle, so similar and yet so different as in Southeast Asia?" "With its nationalization efforts, Transocean also is helping local employees progress from Floorhand to Driller and eventually, Offshore Installation Manager (OIM) and Rig Manager with the potential for additional advancement."



and Environment and our nationalization program are vital to our continued ability to secure contracts for our rigs."

Advantage: Nationalization

With its nationalization efforts, Transocean also is helping local employees progress from Floorhand to Driller and eventually Offshore Installation Manager (OIM) and Rig Manager with the potential for additional advancement. Building tomorrow's workforce today is important for any region, but especially in Southeast Asia, where many energy opportunities are emerging.

Even now, bidding on deepwater prospects is heating up in Indonesia — Southeast Asia's only OPEC member — and Australia. Murphy Oil Corporation is following up on Malaysia's first deepwater crude oil discovery in another move by the region to establish itself as a deepwater province. Meanwhile, clients are taking steps to supply huge LNG plants in Indonesia — itself the world's largest LNG supplier as well as new LNG projects for China.

So, keep an eye on Transocean as it works closely with clients to help take Southeast Asia into a new era in its energy history.

Harvey H. Ward, *Malaysia* 6 Offshore Frontiers December 2002



Vietnam

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Malaysia









Indonesia









Thailand







Vietnam Thailand

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Lndonesi



Semisubmersible





Tender Drilling Rig



Heavy Swamp Barge



Australia













Aboard the Trident 9



Opposite page, left to right: Steve Lenz, Operations Manager, Thailand/Vietnam; Tran Quang Khai, Roustabout. This page, top row, left to right: Nguyen Duc Me, Crane Operator; Nattawut Intawong, ART Driller; Louis Bidon, Barge Supervisor. Below, left to right: Nguyen Duc Mang, Floorman; Lai Van Tuyet, Pumpman.



In most areas of the world, drilling into the geologic basement usually means the drill bit missed the target zone. But not offshore Vietnam, where drilling for oil into the basement of granite is the norm and where the *Trident 9* crews have set the standard for drilling on the White Tiger field.

The *Trident* 9 — joined in Vietnam by the *Trident* 16 and the *Trident* 12 — drills wells through the tops of mountains submerged beneath the ocean for millennia. Once into the basement, where crude oil is trapped, the rig's crews pump tons of rice hulls through the drill bit to prevent drilling fluid "losses" from escaping through fractures in the rock.

Fastest Wells by Far

Drilling through hard granite takes more time than the average offshore well-construction project, and after every well, specially hard-banded drill pipe has to be straightened for the next hole. But the *Trident 9* crews have averaged some 70 days to construct a well for Vietsovpetro (the joint venture of Russian company Zarubezhneft and government-controlled PetroVietnam), compared with 120 days or more by other companies.

"We've drilled the fastest wells by far for Vietsovpetro," says Transocean's Vietnam Operations Manager Steve Lenz. "To me, the crew of the *Trident 9* has made all the difference in our Vietnam operation. They are totally dedicated to making the rig number one in safety and operational performance in our Asia and Australia Region."

The *Trident 9* crews' performance also played a major role in Vietsovpetro's decision to extend the rig's contract, to bring in the *Trident 12* for Hoang Long/Hoan Vu and to add the *Trident 16* for JVPC. With all three rigs in Vietnam, the number of Transocean employees, here, totals almost 300 people.



Food for Thought

To support crew morale, Lenz and other members of the company's Vietnam management team meet with rig employees onshore after every crew change, exchanging feedback and ideas for improving performance.



"The Vietnamese people who work for Transocean, like the personnel of the service companies and the government, are educated, hard-working and diligent," Lenz says. "With good communication, safety and operational systems, we have the recipe for continued success."

10-Year Stretch

Transocean rigs have operated in Vietnam since 1993, when the *Trident 16* arrived for an assignment. Since then, the crews of the *Trident 17, Sedco 703, Sedco 600, Jack Bates, Trident 9, Trident 15* and the *Roger W.Mowell* have drilled wells for clients including Fina, Oxy, Petronas Carigali, JVPC and Vietsovpetro.

The Transocean Vietnam office of approximately 20 people is located in the southeastern coastal resort town of Vung Tau, and the staff has done an admirable job of handling the logistical and contractual needs of the rigs, while expanding into two office buildings.

Outlook Vietnam

With a string of crude oil discoveries announced in 2002, the outlook for offshore drilling in Vietnam remains strong. The country is completing its first refinery and will begin using crude oil domestically, while continuing to export most of its production.

For Transocean, the *Trident 16* is secured under contract through June 2004, and steady performances by the *Trident 9* and the *Trident 12* will position them well to compete for additional work.

"The *Trident 16* has just completed a shipyard upgrade, the *Trident 12* has greatly improved on its downtime performance and the *Trident 9* has delivered strong operational and safety performance," Lenz says. "While we can always do better, we're on the right track. And with the way Vietsovpetro has been improving its processes, crude oil production is increasing and rig demand remains strong at this time."

The Vietnamese sky may not exactly be the limit, but the geologic basement is only the beginning.

TRANSOCEAN IN VIETNAM Number of rigs: Three Type of rigs: All jackups Year started: 1993 Firsts: First well constructed in Vietnam in more than 2,500 feet of water — Jack Bates in 1996 Fastest geologic basement wells constructed — approximately 70 days Customers: Vietsovpetro, JVPC,

Hoang Long/Hoan Vu District Office: Vung Tau

COUNTRY FACTS

Oil & Gas Scene: Liquid proven oil reserves of 1.2 billion barrels. Proven natural gas reserves of almost 3 trillion cubic feet. One refinery under construction.



Transocean's District Office in Vung Tau.

Coastline: 10,500 miles (3,200 kilometers) Borders: 3,770 miles (1,150 kilometers) with China and 5,410 miles (1,650 kilometers) with Laos Terrain: Two main cultivated areas — Red River Delta in the north and the Mekong Delta in the south. Mountains and hills comprise three-quarters of the country. Population: 80 million made up of Vietnamese (84%) and Chinese (2%). The remainder are Khmers, Chams and

and Chinese (2%). The remainder are Khmers, Chams and members of 51 other ethnic groups.

Capital City: Hanoi (population 3 million) Currency: Dong

Exchange rate: 15358/USD

Official Language: Vietnamese. Business is usually conducted in Vietnamese or English, although many executives speak French and Russian, and a few speak Chinese.

Religion: Officially an atheist nation, many Vietnamese profess to be Buddhists. Five million are Christians, mostly Catholics. Other people of faith include Caodaists, Hoa Hao Buddhists, Muslims and Hindus.

Climate: Hot and humid with almost always a chance of rain. Located in the tropical monsoon zone, January-April is the rainy season for the north, and May-October is the rainy season for the south.

Government: Socialist Republic











d the Code

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Aboard the Sedco 601



Opposite page, left to right: Brett Harrison, Toolpusher, Rusdi M. Sinaga, ART, Marine; Bambang Rudjijarso, Ballast Control Operator; Mark Mathews, Chief Mechanic; Rolly Rondina, Ballast Control Operator: This page, left to right: Robinson Sinaga, Roustabout; Suyoko, Head Roustabout; Yohansah, Roustabout.



"Bang, bang, bang!"

That's how Toolpusher Brett Harrison describes the way the *Sedco 601* semisubmersible churns out wells offshore Balikpapan, Indonesia, often in just days.

Known along with the *Sedco 602* for pioneering surface blowout preventer (BOP) operations, the *Sedco 601* during September was constructing Indonesia's first well with two strings of expandable casing in the Makassar Straits off Borneo for Unocal.

Surface BOP technology enables the rig to far exceed its original water-depth rating of 1,500 feet (460 meters), and the *Sedco 601* has drilled in more than 6,700 feet (2,040 meters) of water with the process that involves using the BOP in the moonpool *(see related stories, pages 38, 40)*. Expandable casing also extends the rig's capabilities, enabling it on the Unocal well to add two more strings of casing and to access previously unreachable reservoirs.

"It's critical that expandable casing work on this well," Harrison says, as eight-foot swells jostle by on a mid-September day. "After we finish this first well with Unocal and Enventure, the expandable casing joint venture of Shell and Halliburton, we can use this technology on other wells, further pushing the rig's boundaries."

Driving the technological envelope is not new for the crews of the *Sedco 601*. Even before the rig was outfitted to drill wells in the surface BOP mode in 1998, the *Sedco 601* crews were constructing wells in record time in the early 1990s in the Gulf of Thailand. Completing a well in just over nine days then got the client's attention.

"The thing that distinguishes this rig is the consistency of the work performed by the crews," Harrison says. "They know how to get the job done."

Job Number One

Despite some initial difficulties, the rig today is running two additional sections of expandable casing liners on the Unocal well. A "pig" device next is pulled through the casing assisted by only 2,000 pounds per square inch of pressure. As the pig moves, it expands the casing by 1.06 inches, creating a single-diameter casing back to the last liner lap, versus traditional strings of casing joints that begin at 36 inches and end at seven inches.

Without expandable casing, the conventional casing design would run out of strings short of the necessary depth. Now that the rig is helping pioneer this new technology, it can help clients bring more wells on line more quickly.

Safety, Indonesian-Style

But technological achievement does not guarantee the rig's next contract. Safer and smoother operations are always pursued to help ensure that this goal is achieved.

The crews are working to reduce the rig's rolling Total Recordable Incident Rate of 2.42 incidents per 200,000 hours worked. They are eager to discuss how safety and security issues are addressed.

When the rig worked in late 2001 off the coast of the Aceh province, crews coordinated with the Indonesian government to ensure that the separatist rebels onshore did not disrupt drilling operations. Extra lights went up in the moonpool area, the equivalent of U.S. Navy Seals stayed onboard and an Indonesian navy boat patrolled nearby. More important, the crews worked safely, despite some nervous tension.

Feeding Time

Crews also take care to ensure that operations go smoothly and in harmony with the environment, which in mid-September included 15 cigarette-thin fishing boats bobbing nearby. As with most offshore drilling units, the rigs attract small fish, which bring by larger fish.

"Sometimes, there are large schools of tuna that feed in the area. It's quite a feeding frenzy," says Chief Mechanic Mark Matthews, an up-and-coming dirt track racecar driver during his off-tour time in Australia.

Soon, the tuna move on, and so will the *Sedco* 601 to take on yet another offshore drilling challenge.

"Where we go from here is not always up to us, but to the extent that we can, we will control our destiny with steady performance," Harrison says.

And as it turned out, the rig successfully completed the expandable casing liner job in October. Both expandable casing strings were successfully run and set, positioning the little BIG rig for exciting possibilities. Steady-on, *Sedco 601*.





Opposite page, left to right: Vincent Berthou, Rig Manager; Eric Weiderhold, Toolpusher; Wanto, Painter. Second row: Saipul Anwar, Painter; Darmansyab, Floorman.

Amid the sweeping Mahakam River on Kalimantan's mid-East coast, the *Hibiscus* continues laying claim to the title of Indonesia's most experienced inland drilling barge.

Completing development wells for TotalFinaElf on the Tunu field, the French petroleum company's largest natural gas field, the *Hibiscus* is one of the most powerful swamp barges in Indonesia. It can also drill two wells in succession without a rig move. The savings can be 24 hours or more between wells simply by using a special skidding system to move the heavy swamp barge's derrick over the next well location.

And if all goes according to plan, TotalFinaElf soon will have a new template, enabling *Hibiscus* crews to construct four wells without moving the rig. That process will save even more days of non-productive time and will reduce already minimal environmental impact with fewer rig locations required.

While time savings and environmental performance are important, what distinguishes the *Hibiscus* is its powerful, steady drilling. And, here on the huge Tunu field, where natural gas was discovered in 1977, TotalFinaElf is seeking to drill dozens of wells with several inland barges.

"Well construction on the *Hibiscus* is not so much about speed as it is about overall performance," says Rig Manager Vincent Berthou. "Our goal is to make sure that TotalFinaElf gets good, solid development drilling."

To better achieve that goal, the barge rig recently underwent an upgrade, boosting capacity for its three mud pumps to 7,500 psi from 5,000 psi. Next, *Hibiscus* crews began preparing to operate in the middle of a major river, starting with locating the rig. Four tug vessels, sonar equipment and divers helped position the 240-foot-long (73-meter) *Hibiscus* in a secure location, so that sweeping tides that resemble shore break currents on the Mahakam, would not undermine the mud bed beneath the rig.

In addition, divers placed sandbags near the bottom of the barge to prevent soil erosion, constantly aware of the local alligator population. With that job safely completed, challenges above water included operations over high-pressure production platforms.

Hibiscus crews accurately drill to vertical and horizontal depths that exceed 18,000 feet (5,500 meters) and almost 12,000 feet (3,500 meters), respectively, using Transocean's HS&E and operational processes.

Just as important is managing cultural and logistical challenges, especially ensuring that rig parts arrive in time while keeping warehouse inventory within budget.

While the weather is hot in September, cool breezes over open water in the middle of the river in





the Mahakam Delta are a welcome respite to the rig's crews who are more used to inland locations with nearimpenetrable swamp vegetation and mosquito hoards.

Meanwhile, the occasional visits from ill or injured residents of a nearby fishing village *(see photo, page 15)* give the rig's medics a chance to extend a neighborly, helping hand.

Likewise, environmental-protection efforts also support relations with local residents, who not only fish for a living but also grow prawns in wooden cage-like set-ups that dot the water for miles around the *Hibiscus*. As in the United States and other locations, cuttings are placed in a container barge for third-party, off-site disposal.

Partly due to its long history of working in Indonesia since 1986* and because of the company's nationalization efforts, the *Hibiscus* has the advantage of a large local workforce. Approximately 90% of the 103 crewmembers are Indonesian nationals, whose positions range from floorhands to chief electricians, chief mechanics, assistant drillers and drillers.

"Our mix of local and expatriate personnel is a powerful combination," says Berthou, a French national. "This strengthens our team and benefits our client, our company and our local operations."

In recent years, rig, district and regional leaders including those in Training, QHSE and Human Resources — have worked hard to improve communications among crewmembers who speak many languages and dialects. The Bahasa language spoken in Indonesia, for example, is different from Bahasa used in Malaysia.

"Supervisors conversant in English and Bahasa Indonesia are most effective," says Travis Fitts, outgoing Human Resources Manager, AAR. "The ability to engage in two-way communications and confirm the expectations of the supervisor and the company provides for a safe and effective operation. The learning curve for newly hired employees is flattened with the improved communications as well."

The *Hibiscus*, she's not just heavy, she's experienced and striving for improvement.

*The rig worked under the name Raisis from 1986 until 1993. After a major upgrade in Singapore during 1993, it became the Hibiscus.

Fast facts

TRANSOCEAN IN INDONESIA Number of rigs: Five Type of rigs: Three semisubmersibles, one jackup and one inland drilling barge Year started: 1968 Firsts: First significant Indonesian offshore discovery — E.W. Thornton for Sinclair in 1968 First deepwater wildcat in the Far East — Deepwater Navigator (formerly Sedco 445) in 1,155 feet of water, in the South Java Sea in 1972 First well in more than 2,000 feet of water — Deepwater Navigator, North Aceh Jau #1 in 1986 First well in more than 4,000 feet of water -Jack Bates, Java Sea - Bayu Laut Dalam #1 in 1994 First Indonesian well in more than 5,000 feet of water — Sedco 602, E Kalimantan - Nakula #2, in Surface BOP mode in 1999 First well in more than 6,000 feet of water — Sedco 601, E Kalimantan/Ganal Blk/Gada #2 in 2000 Southeast Asia water depth drilling record: 6,722 feet of water by Sedco 601 for Unocal in 2000 Customers: Unocal, Santos, Rims, BP, TotalFinaElf, ConocoPhillips Region Office: Jakarta District Office: Balikpapan

COUNTRY FACTS

the east.

Oil & Gas Scene: Liquid proven reserves are approximately 5.9 billion barrels. Proven natural gas reserves of 70 trillion cubic feet. Nine refineries. World's largest LNG exporter. **Archipelago:** 17,508 islands; the largest in the world, extending 3,200 miles (5,150 kilometers) from Sumatra in the west to Irian Jaya, the western half of New Guinea, in

Terrain: World's second-largest area of primary rainforest after Brazil. Part of the Pacific Rim's "ring of fire" with hundreds of volcanoes, 70 of them still active. Estimated 500 species of mammals, 1,500 species of known birds.

Population: 218 million; Malay (95%) with 300 minorities, including Melanesian, Proto-Austranesian, Polynesian, Micronesian, Islamic and ethnic Chinese.

Capital City: Jakarta (population 17 million) Currency: Rupiah

Exchange rate: 9210/USD

Official Language: Bahasa Indonesia. English is spoken in government and business circles and by the younger generation. More than 580 languages/dialects are spoken. **Religion:** Islam (87%), Christianity (10%), Hinduism (mainly in Bali, 2%) and Buddhism (1%).

Climate: Indonesia straddles the equator, days are all the same length and rain is frequent. Dry season: May-September. Wet season: October-April.

Government: Democratic republic

Performance through Core Values

In seeking to define excellence, employees in the company's Asia and Australia Region (AAR) daily face operational, safety, environmental, cultural and other challenges. The following AAR employees and crews have been recognized with company and regional awards for successfully addressing these issues. All share a constant commitment to the company's core values.

Altogether, the rig award recipients represent more than half the company's AAR rig fleet. "Our goal," Region Manager Steven Newman adds, "is nothing short of an incident-free workplace, day-in and day-out. All these recipients are helping us move toward that objective."

FIRST Excellence Awards Colin Nelson, Marine Technician, Singapore office - Colin recently received a Transocean FIRST Excellence Award for his dedication to living the company's core values through myriad marine operational challenges faced by Transocean and its clients — not only in AAR but in other regions around the world.

J.P. Gimet, SubSea Supervisor, Singapore Technical Field Support Group - J.P. was recognized with a 2001 FIRST Excellence Award, which came from a career of more than 30 years of being an example of Transocean's core values.

Harvey H. Ward - For continuousimprovement efforts, including consistent incident reporting and in-house promotion programs, the crews of the *Harvey H. Ward* earned a 2000 FIRST Excellence Award.

2002 AAR Quarterly QHSE Recognition

To qualify for the AAR Quarterly QHSE Awards, rig crews completed a full self-audit and improved their Total Recordable Incident Rate. Recipients received a congratulatory letter from Steven Newman with \$2,500 US to apply toward improving the quality of life onboard their rigs.

Sedco 600 - A repeat winner of the 2002 AAR Quarterly QHSE Recognition Award, the *Sedco 600* completed her Conoco work and moved over to a project with Santos and RIMS. The rig underwent a Region HS&E audit and achieved 80% compliance. **Trident 16** - The *Trident 16* completed her multi-operator contract in Malaysia, mobilized to Thailand for a one-well project with PTTEP, underwent an SPS survey and contract-related enhancements in Singapore and has begun work for JVPC in Vietnam. Through it all, the crews consistently demonstrated a positive attitude and a focus on safety management.

Trident 17 - During the second quarter, the *Trident 17* finished her program with Kodeco, completed a UWILD in Merak, Indonesia, and then commenced a term contract with BP. An aggressive target was set to complete the UWILD in 10 days or less. Due to the fine planning and preparation of the rig crews and project team, the UWILD took just over eight days.

Sedco 702 - The *Sedco 702* is the first of the company's two Australian rigs to qualify for the quarterly award. With a focus on QHSE and operational excellence, and a work program that includes Agip, Apache, Santos, and others, the rig continues to enhance Transocean's reputation in the land of Oz.

Sedco 601 - After a short stint in conventional subsea mode late last year, the rig returned to surface stack mode with Unocal in Indonesia in January. With an enhanced mooring system, the crews have continued their record-setting performance. **Ron Tappmeyer** - A repeat winner of the 2002 AAR Quarterly QHSE Recognition Award, the crews of the *Ron Tappmeyer* concluded her Unocal work and moved over to a short 60-day program with CNOOC.

Trident 9 - Also a repeat winner of the 2002 AAR Quarterly QHSE Recognition Award, the *Trident 9* crews are continuing her successful campaign in Vietnam with Vietsovpetro. During the second quarter of 2002, the rig also underwent a Region HS&E audit, demonstrating an impressive 89% compliance.

Hibiscus - The *Hibiscus*, on a longterm contract with TotalFinaElf in Balikpapan, recently completed her upgrade to 7,500 psi mud system. As with the *Trident 17* and her UWILD, an aggressive target was set for the *Hibiscus* upgrade and the rig crews and project team delivered on those expectations.

W.D. Kent - With consistently low downtime and a focus on QHSE, the crews have delivered steady performance for Petronas Carigali in Malaysia. A shipyard project in mid-2001 and rig moves since then have been completed — incidentfree. Like the *Tappmeyer* crews, the *Kent's* personnel have readily embraced the Transocean system and are leading the way in development and implementation.

Note: at press time, the *Sedco 703* received a third-quarter AAR QHSE Award, as did the *Trident 9*, *Trident 17*, *Sedco 600*, *Sedco 601* and the *Hibiscus*.

Transocean:



A World of Experience



Transocean's diversity of people and markets is matched only by its diversity of assets. From inland barges in 10 feet of water to drillships in 10,000 feet of water, we're never out of our depth. ®

Left to right, this page: First Row: Sedco Energy, Sedco 710, Paul B. Loyd Jr. Second Row: Shelf Explorer, Discoverer Enterprise Third Row: Deepwater Pathfinder, Peregrine 1 Fourth Row: Discoverer Seven Seas, George H. Galloway, Jack Bates Fifth Row: Transocean Driller, Transocean Legend, Transocean Winner



TRANSOCEAN FLEET

	YR. ENTERED	WATER DEPTH	DRILLING DEPTH			
TYPE AND NAME SER	VICE/UPGRADED	(IN FEET)	(IN FEET)	LOCATION	DESIGN	BOP RATING
High-Specification Floaters	12 drillching 10 comi	submorsibles				
		10 000	05.000	115 0014	D: E	10.0/4: 15.000 :
Discoverer Deep Seas (DP Ship)	2001	10,000	35,000		Discoverer Enterprise	18 3/4 in., 15,000 psi
Discoverer Spirit (DP Ship)	2000	10,000	35,000	US GOM	Discoverer Enterprise	18.3/4 in 15.000 psi
Deepwater Pathfinder (DP Ship)	1998	10,000	30,000	US GOM	Conoco/Reading & Bates	18 3/4 in., 15,000 psi
Deepwater Millennium (DP Ship)	1999	10,000	30,000	US GOM	Conoco/Reading & Bates	18 3/4 in., 15,000 psi
Deepwater Discovery (DP Ship)	2000	10,000	30,000	Benin	RBF/Samsung	18 3/4 in., 15,000 psi
Deepwater Expedition (DP Ship)	1999	10,000	30,000	Brazil	Rauma Repola Arctic	18 3/4 in., 10,000 psi
Deepwater Frontier (DP Ship)	1999	10,000	30,000	Brazil	Conoco/Reading & Bates	18 3/4 in., 15,000 psi
Deepwater Navigator (DP Ship)	2000	7,200	25,000	Brazil	Earl & Wright Sedco 400	18 3/4 in., 15,000 psi
Discoverer Seven Seas (DP Ship)	1976/1997	7,000	25,000	Brazil	Sonat Discoverer	18.3/4 in 15.000 psi
Peregrine I (DP Ship)	1982/1996	5,200	25,000	Brazil	Gusto Pelican	16 3/4 in., 10,000 psi
Deepwater Horizon (DP Semi)	2001	10,000	30,000	US GOM	RBS-8D	18 3/4 in., 15,000 psi
Cajun Express (DP Semi)	2001	8,500	35,000	US GOM	SFXpress 2000	18 3/4 in., 15,000 psi
Deepwater Nautilus (DP Semi)	2000	8,000	30,000	US GOM	RBS-8M	18 3/4 in., 15,000 psi
Sedco Express (DP Semi)	2001	7,500	35,000	Brazil	SFXpress 2000	18 3/4 in., 10,000 psi
Transocean Marianas (Semi)	1998	7,300	25,000	LIS GOM	Sedco 700	18 3/4 in 15 000 psi
Sedco ZOZ (DP Semi)	1976/1997	6.500	25,000	Brazil	Sedco 700	18 3/4 in., 15,000 psi
Jack Bates (Semi)	1986/1997	5,400	30,000	UK N. Sea	F&G L1020 Trendsetter	18 3/4 in., 15,000 psi
Sedco 709 (DP Semi)	1977/1999	5,000	25,000	Nigeria	Sedco 700	18 3/4 in., 15,000 psi
Transocean Richardson (Semi)	1988	5,000	25,000	US GOM	GVA 4500	18 3/4 in., 15,000 psi
M.G. Hulme, Jr. (Semi)	1983/1996	5,000	25,000	Nigeria	F&G 9500 E. Pacesetter	18 3/4 in., 15,000 psi
Jim Cunningham (Semi)	1982/1995	4,600	25,000	Egypt	F&G 9500 E. Pacesetter	18 3/4 in., 15,000 psi
Transocean Kather (Semi)	1988	4,500	25,000			18 3/4 in., 15,000 psi
Sovereign Explorer (Semi)	198/	4,500	25,000	Equatorial Guinea	GVA 4000	18 3/4 in 15 000 psi
Henry B. Goodrich (Semi)	1985	2,000	30.000	Canada	Songt/Mitsui SES-5000	18 3/4 in., 15,000 psi
Paul B. Loyd, Jr. (DP Semi)	1987	2,000	25,000	UK N. Sea	Aker H-4.2	18 3/4 in., 15,000 psi
Polar Pioneer (Semi)	1985	1,640	21,000	Nor. N. Sea	Sonat/Hitachi	18 3/4 in., 15,000 psi
Transocean Arctic (Semi)	1986	1,640	25,000	Nor. N. Sea	Marosso 56	18 3/4 in., 15,000 psi
Other Flogtors - 2 Drillshing	27 Somiculturorsibles					
omer noarers - z Drinsnips	- 27 Semisubiliersibles	07.000	00.000			N1/4
Joides Resolution (Research Ship)	19/8	27,000	30,000	Costa Rica	Earl & Wright Sedco 400	N/A
Sodeo 710 (DP Somi)	1970	4,200	25,000	Brazil	Sodeo 700	10 3/4 in., $10,000$ psi 18 3/4 in. 10,000 psi
Sedco Z00 (Semi)	1973/1997	3 600	25,000	Equatorial G	Sedco 700	18.3/4 in 10.000 psi
Transocean Legend (Semi)	1983	3,500	25,000	Brazil	Trosvik Bingo 3000	18 3/4 in., 10,000 psi
Transocean Amirante (Semi)	1978/1997	3,500	25,000	US GOM	Aker H-3	18 3/4 in., 10,000 psi
C. Kirk Rhein, Jr. (Semi)	1976/1997	3,300	25,000	US GOM	Aker H-3	18 3/4 in., 10,000 psi
Transocean Driller (Semi)	1991	3,000	25,000	Brazil	F&G L-1033 E. Pacesetter	18 3/4 in., 15,000 psi
Falcon 100 (Semi)	1974/1999	2,450	25,000	US GOM	F&G L 900 Pacesetter	18 3/4 in., 15,000 psi
Sedeo 703 (Semi)	1973/1993	2,200	25,000	Australia	Sedco 700	18 3/4 in., 10,000 psi 18 3/4 in., 15,000 psi
Transocean John Shaw (Semi)	1982	1,800	25,000	UK N Seg	F&G 9500 F Pacesetter	18.3/4 in 10.000 psi
Sedco 712 (Semi)	1983	1,600	25,000	UK N. Sea	Sedco 711	18 3/4 in., 15,000 psi
Sedco 714 (Semi)	1983/1997	1,600	25,000	UK N. Sea	Sedco 711	18 3/4 in., 15,000 psi
Actinia (Semi)	1982	1,500	25,000	Egypt	F&G L-1033 E. Pacesetter	18 3/4 in., 10,000 psi
Sedco 600 (Semi)	1983	1,500	25,000	Indonesia	Sedco 600	18 3/4 in., 10,000 psi
Sedco 607(Semi)	1983	1,500	25,000	Indonesia Indonesia	Sedco 600	18 3/4 in., 10,000 psi
Sedneth ZO1 (Semi)	1903	1,500	25,000	Angola	Sedco 700	18 3/4 in., 10,000 psi
Sedco 702 (Semi)	1973/1992	1,500	25,000	Australia	Sedco 700	18.3/4 in., 10,000 psi
Sedco 708 (Semi)	1976	1,500	25,000	Congo	Sedco 700	18 3/4 in., 10,000 psi
Transocean Winner (Semi)	1983	1,500	25,000	Nor. N. Sea	GVA 4000	18 3/4 in., 15,000 psi
Transocean Searcher (Semi)	1983/1988	1,500	25,000	Nor. N. Sea	Trosvik Bingo 3000	18 3/4 in., 15,000 psi
Transocean Prospect (Semi)	1983/1992	1,500	25,000	UK N. Sea	Trosvik Bingo 3000	18 3/4 in., 15,000 psi
Transocean Wildcat (Semi)	1977/1985	1,300	20,000	UK N. Sea	Aker H-3	18 3/4 in., 10,000 psi
I W. McLean (Semi)	1970	1,250	25,000	UK N. Sea	Zapata SS-3000	18 3/4 in 10 000 psi
Sedco 704 (Semi)	1974/1993	1,000	25.000	UK N. Sea	Sedco 700	18 3/4 in., 15,000 psi
Sedco 706 (Semi)	1976/1994	1,000	25,000	UK N. Sea	Sedco 700	18 3/4 in., 10,000 psi
Indune New UC 00						
- Juckops - Non-05 - 20						
Irident 9 Trident 17	1982	400	20,000	Vietnam	Modec 400-C-35	13 5/8 in., 10,000 psi
Trident 20	2000	350	25,000	Indonesia Caspian Sea	Kennel Fels CS Mod V	18 3/4 in 15 000 psi
D R Stewart	1980	300	25,000	Italy	Marathon IT 116-C	13 5/8 in 15 000 psi
George H. Galloway	1984	300	25,000	Italy	F&G L780 Mod II	13 5/8 in., 10,000 psi
Harvey H. Ward	1981	300	25,000	Malaysia	F&G L780 Model II	13 5/8 in., 10,000 psi
J.T. Angel	1982	300	25,000	India	F&G L780 Model II	13 5/8 in., 10,000 psi
Randolph Yost	1979	300	25,000	Equatorial G.	Marathon LT 116-C	13 5/8 in., 10,000 psi
Roger W. Mowell	1982	300	25,000	Singapore	F&G L780 Model II	13 5/8 in., 10,000 psi
kon lappmeyer Shelf Explorer	19/8	300	∠5,000 25,000	Malaysia	CEEM T2005 C	13 5/8 in., 10,000 psi
Interocean III	1902	300	20,000	Oman	Songt Orion-Cantilever	13 5/8 in 10 000 psi
Transocean Nordic	1984	300	25,000	India	CFEM T2600-1	13 5/8 in., 15,000 psi
Trident 2	1977/1985	300	25,000	India	Marathon LT 116-C	13 5/8 in., 10,000 psi
Trident 4	1980/1999	300	25,000	Congo	Marathon LT 116-C	13 5/8 in., 10,000 psi
Trident 8	1982	300	21,000	Nigeria	Modec 300-C-35	13 5/8 in., 10,000 psi
Trident 12	1982/1992	300	21,000	Vietnam	BMC 300-1C	13 5/8 in., 15,000 psi
Irident 14 Trident 15	1982/1994	300	25,000	Angola Thailand	BMC JUU-C	13 5/8 in., 10,000 psi
Trident 16	1982	300	25,000	Vietnam	Modec 300-C-38	13.5/8 in 10.000 psi
C.E. Thornton	1974	300	25,000	India	Marathon LT 53-C	13 5/8 in., 10,000 psi
F.G. McClintock	1975	300	25,000	India	Marathon LT 53-C	13 5/8 in., 10,000 psi
Transocean Comet	1980	250	20,000	Egypt	Sonat Cantilever	13 5/8 in., 10,000 psi
Transocean Mercury	1969/1998	250	20,000	Egypt	Sonat Cantilever	13 5/8 in., 10,000 psi
Irident 6	1981	220	21,000	Nigeria Tria i da d	Modec 300-C-35	13 5/8 in., 10,000 psi
KBF 208 PRF 140	1980	160	20,000	Irinidad Octar	BMC 150 C	13 5/8 in., 10,000 psi
RRF 110	1900	100	20,000	Vatar Trinidad	Bethlehem III-100 MC	13 5/8 in 10 000 psi
	1752	105	20,000	miliada	Domeneni Jo-100-MC	10 0/ 0 m., 10,000 psi

	YR. ENTERED	WATER DEPTH CAPACITY	DRILLING DEPTH CAPACITY			
TYPE AND NAME	SERVICE/UPGRADED	(IN FEET)	(IN FEET)	LOCATION	DESIGN	BOP RATING
Jackups - US Gulf of	Mexico - 26					
RBF 250	1974	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 251	1978	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 252	1978	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 254	1976	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 255	1976	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 256	1976	250	25,000	US GOM	Bethlehem JU-250-MS	13 5/8 in., 10,000 psi
RBF 192	1981	250	25,000	US GOM	BMC 250-MS	13 5/8 in., 10,000 psi
RBF 200	1978	200	20,000	US GOM	BMC 200-MS Bethlehem IU-200-MC	13 5/8 in 10,000 psi
RBF 201	1982	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi
RBF 202	1981	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi
RBF 203	1982	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi
RBF 204 RBF 205	1981	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi 13 5/8 in., 10,000 psi
RBF 206	1980	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi
RBF 207	1981	200	25,000	US GOM	Bethlehem JU-200-MC	13 5/8 in., 10,000 psi
RBF 191	1978	184	20,000	US GOM	BMC 200-MS	13 5/8 in., 10,000 psi
RBF 150	1979	150	20,000	US GOM	Marathon LI 150-44-C	13 5/8 in., 10,000 psi
RBF 1.52	1980	150	20,000	US GOM	Brite 150-11 Bethlehem IU-150-MC	13 5/8 in 10 000 psi
RBF 153	1980	150	25,000	US GOM	Bethlehem JU-150-MC	13 5/8 in., 10,000 psi
RBF 154	1979	150	16,000	US GOM	Marathon LT 150-44-C	13 5/8 in., 10,000 psi
RBF 155	1980	150	20,000	US GOM	L-011C	13 5/8 in., 10,000 psi
RBF 156	1982	150	20,000	US GOM	BMC 150-IC	13 5/8 in., 10,000 psi
KDI 10J	1902	120	23,000	03 00/	DMITSO	13 3/8 III., 10,000 psi
Submersibles - U.S. (Gulf of Mexico - 3					
RBF 75	1983	82.5	30,000	US GOM	PM 85-MS C	13 5/8 in., 10,000 psi
RBF 77	1982	85	30,000	US GOM	CBI 85-MS C	13 5/8 in., 10,000 psi
KBF / 8	1983	85	30,000	US GOM	CBI 82-M2 C	13 5/8 in., 10,000 psi
Inland Drilling Barge	es - Non-U.S 4					
Hibiscus	1979/1993	25	25,000	Indonesia	Heavy Swamp Barge	13 5/8 in., 10,000 psi
Searex 12	1982/1992	25	20,000	Nigeria	Swamp Barge	13 5/8 in., 10,000 psi
Searex 6	1981/1991	25	25,000	Nigeria	Swamp Barge	13 5/8 in., 10,000 psi
Searex 4	1981/1989	21	16,000	Nigeria	Swamp Barge	13 5/8 in., 5,000 psi
Inland Drilling Barge	es, U.S. Gulf of Mexico -	31				
Rig 1	1979	13	20,000	US GOM	Inland 190 x 50	11 in., 10,000 psi
Rig II Pia 15	1997	13	30,000	US GOM	Inland 200 x 54	13 5/8 in., 10,000 psi 13 5/8 in., 10,000 psi
Rig 19 Rig 19	1996	13	15.000	US GOM	Inland 165×54	11 in 5.000 psi
Rig 20	1998	12	15,000	US GOM	Inland 175 x 54	11 in., 5,000 psi
Rig 21	1982	11	15,000	US GOM	Inland 200 x 50	11 in., 10,000 psi
Rig 23	1995	11	15,000	US GOM	Inland 160 x 48	11 in., 5,000 psi
Rig 28 Rig 29	1979	13	25,000	US GOM	Inland 220 x 50	13 5/8 in., 10,000 psi 13 5/8 in., 10,000 psi
Rig 30	1981	13	30,000	US GOM	Inland 220 x 50	13 5/8 in., 10,000 psi
Rig 31	1981	13	30,000	US GOM	Inland 220 x 50	13 5/8 in., 10,000 psi
Rig 32	1982	13	30,000	US GOM	Inland 220 x 50	13 5/8 in., 10,000 psi
Rig 7 Bia 0	1978	15	20,000		Posted 200 x 54	13 5/8 in., 10,000 psi
Rig 9 Rig 10	1981	17	20,000	US GOM	Posted 210 x 54	13 5/8 in 10 000 psi
Rig 17	1981	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 27	1978	21	30,000	US GOM	Posted 230 x 60	13 5/8 in., 10,000 psi
Rig 41	1982	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 46 Pia 47	1981	20	30,000	US GOM	Posted 198 x 54 Posted 210 x 55	13 5/8 in., 10,000 psi 13 5/8 in., 10,000 psi
Ria 48	1982	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 49	1980	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 52	1981	20	25,000	US GOM	Posted 212 x 70	13 5/8 in., 10,000 psi
Rig 55	1981	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 50 Ria 57	1973	20	25,000	US GOM	Posted 200 x 70	13 5/8 in., 10,000 psi 13 5/8 in., 10,000 psi
Rig 57 Rig 61	1978	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 62	1978	20	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 64	1978	17	30,000	US GOM	Posted 210 x 54	13 5/8 in., 10,000 psi
Rig 74 Bia 75	1981	17	30,000		Posted 210 x 54	13 5/8 in., 10,000 psi
kig 75	1901	17	30,000	US GOM	Posted 210 x 34	13 5/8 In., 10,000 psi
Self-Erecting Tenders	- 4					
Charley Graves	1975	500	20,000	Malaysia	Self-Erecting Tender	13 5/8 in., 10,000 psi
Searex 10	1983/1994	450	21,000	Congo	Self-Erecting Tender	13 5/8 in., 10,000 psi
зеаrex У W.D. Kent	1981 1977	400	20,000 20.000	Cote d'Ivoire	Self-Erecting Tender	10 3/4 in., 5,000 psi 13 5/8 in 10 000 psi
	17//	400	20,000	muluysiu	Jen-Lieching lender	10 07 0 m., 10,000 psi
Platform Rigs – 2						
Cliffs #1	1988/1998		18,000	China		
Cliffs #3	1993/1998		25,000	Trinidad		
Other - 1						
Sedco 135D	1966/2001	600	Dewatering	Brazil	Earl & Wright Sedco 135	
			•		-	

As of December 1, 2002, for most units, whether wholly, or partially owned, managed, chartered or under joint venture.



Left to right, this page: First Row: Charley Graves, Deepwater Millennium Second Row: Falcon 100, Sedco 707, M.G. Hulme, Jr. Third Row: Trident 15, Discoverer 534, Deepwater Horizon Fourth Row: Transocean Nordic, Rig 30, Deepwater Nautilus Fifth Row: Transocean John Shaw, Transocean Amirante, C. Kirk Rhein



Aboard the Harvey H. Ward

Opposite page, left to right: Jerry Brian,OIM; Jan Jager, Mechanic; Greg Henrey, Toolpusher; Brian Fogarty, Barge Master; Greg Trinidade, Driller.

For more than 35 years, Transocean crews have constructed wells offshore Malaysia and Brunei, often taking a specialized approach to achieve optimal results.

The jackups *Harvey H. Ward, Roger W. Mowell* and *Ron Tappmeyer* are joined in Malaysia by the tenderassisted drilling rigs *W.D. Kent* and *Charley Graves*. The largest such fleet in the country, the rigs meet clients' diverse drilling needs in unique ways.

For example, crews on the *Ward* and *Mowell* use Swiss-cheese drilling on some of the 50 wells they are constructing on Talisman's PM-3 full-field development in the commercial arrangement area between Malaysia and Vietnam in the Gulf of Thailand.

"Swiss-cheese drilling is much safer for clients and it allows them to drill in areas where they couldn't before," says Bob Gardiner, Operations Manager, Malaysia. "Wherever the problem area is, you just drill through it."

The concept includes drilling 30 to 40 holes at each proposed spud can footprint location through hard layers of formation that cannot take the weight of the rig plus pre-load. Swiss-cheese drilling allows the three spud cans, which support the rig's legs, to achieve the predetermined and final penetrations in a controlled and safe manner.

Shipyard to Shipshape

Further supporting operations, the *Ward* and *Mowell* underwent enhancements at Singapore shipyards in recent years, as did the jackups *Trident 9, Trident 12, Trident 15, Trident 16* and the tender rig *Kent*. The Singapore Technical Field Support team played an important role in these and many other projects.

The investment in the rigs — as well as crewmembers' adherence to Transocean operations, HS&E and training systems — has paid off.

During 2001, Talisman and its partners Petronas Carigali and Petrovietnam used the *Ward* to complete a production-enhancement program that increased production rates 30% on the Kekwa field. Next, after drilling two development wells and working over four existing wells on the Kekwa field, the *Ward* drilled the East Bunga Raya #1 well, encountering seven new oil zones for Talisman in its block PM-3.

Murphy Oil Corporation used the *Trident 16* to discover West Patricia, located offshore Sarawak, in late October of 2000. Delineation of the West Patricia discovery, completed by the *Trident 16* in late 2001, confirmed more than 30 million barrels of oil. Development is currently under way in the area using the *Ron Tappmeyer*. The



jackup not only will construct wells but also has installed a small platform onto the seabed for housing them.

"Just as busy, and at times busier than the jackups, are our self-erecting tender-assisted rigs, which conduct development-drilling operations," notes Simon Rushton, District Manager, Malaysia. Though



tender-assisted drilling

requires more planning and people than jackups, operating rates are less, mainly because tender rigs are less capitalintensive. Flexible in working over platforms of various dimensions, tender rigs are attractive to clients such as Shell, which may need to drill two dozen wells on a large platform when tapping a huge natural gas reservoir.

After the *Kent* and *Graves* arrive at locations, these floating barges are secured with eight-point anchor systems. Each rig's heavy-lift crane then hoists the entire drilling substructure, derrick and BOP onto a nearby platform to be secured. Hydraulic hoses and an electric power cable are run between the tender and the platform, along with a walkway for drilling crews.

How flexible are tender-assisted drilling rigs? Consider one example. In July 2002, the *Kent* added another record in Malaysia for Petronas Carigali for the highest well horizontal/total vertical depth (TVD) ratio and the longest 13-3/8-inch casing string in a well greater than 80 degrees vertical deviation. Cost-savings benefits for the client resulted from drilling the well from a platform 15,564 feet away from the well and with a TVD of 4,697 feet (1,432 meters) — versus installing a satellite platform or subsea wellhead system.

"These achievements are a big credit to the rig crew. The results on this well prove the success of a team effort with a correct attitude," says Neville McCay, Rig Manager. "The high level of commitment shown by the crew has resulted in minimal downtime while maintaining a Total Recordable Incident Rate of 0."

How busy Malaysian clients will be in the 21st Century is not fully known. But if it's anything like the last three-plus decades, Transocean crews will be focused on safely and efficiently working on fields of all sizes with everything from jackups and Swiss-cheese drilling to flexible assisted tender operations and semisubmersibles in subsea or surface stack mode.

Fastfacts

TRANSOCEAN IN MALAYSIA

Number of rigs: Five Type of rigs: Three jackups, two self-erecting tenders Year started: 1966

Firsts: First Malaysian well constructed by a semisubmersible — *Sedco 135-A* in 1966

First semisubmersible to operate in Surface BOP mode — Sedco 135-A in late-1960s for Shell Borneo

First jacket installation with a jackup in West Malaysia — Harvey H. Ward in January 1991 for Talisman

Greatest well horizontal/TVD ratio, longest 13-3/8-inch casing string in well greater than 80 degrees vertical deviation — *W.D. Kent* in 2002

Customers: Murphy, Talisman, Carigali and Shell **District Office:** Kuala Lumpur

COUNTRY FACTS

Oil & Gas Scene: Liquid proven reserves of 2.5 billion barrels. Proven natural gas reserves of 44 trillion cubic feet. Six refineries. The energy sector is being boosted by the expansion of the liquefied natural gas (LNG) complex in Bintulu, Sarawak, which will be one of the world's largest when a third plant is completed at the end of 2002.

Malaysia comprises: 13 states in the Malay Peninsula situated south of Thailand, including Sabah and Sarawak states on the north coast of the island of Borneo, which is separated from the Peninsula by the South China Sea.

Terrain: Nearly half of the country, which consists of coastal plains that rise to hills and mountains,

is covered by rainforests. **Population:** 23 million; Malay (50%), Chinese (27%), Indian (9%) and other (14%). **Capital City:** Kuala Lumpur (population 2.56 million) **Currency:** Ringgit **Exchange rate:** 3.8/USD **Official Language:** Bahasa Malaysia

Religion: Islam (55%), Buddhism, Taoism, Confucianism, Ancestor Worship, Hinduism, Christianity and Sikhism.

Climate: Hot and humid. November-February is the rainy season for the east coast of Peninsular Malaysia, the northeastern part of Sabah and western part of Sarawak.



Transocean's office in KL is near the Petronas Towers. The towers' structure is awesome, and the park behind the building is a popular gathering place.

Government: Constitutional elective monarchy



According to Shell's 1978 book, The Miri Story, Malaysia's petroleum story begins with the first entries in Mr. Claude Champion de Crespingny's diary (then Resident of Baram) dated July 31, 1882, referring to oil dug by hand by local inhabitants. Mixed with resin, "Earth oil" was used for caulking boats. Later, oil was officially discovered in 1910 at Miri, Sarawak.



Discoverer II

ming

Malaysia's oil industry "advanced" to wooden derricks in swamps and on hills during the 1940-1945 Japanese Occupation and moved offshore in the 1960s. That decade marked the first arrivals of two of the company's semisubmersible rigs, the Sedco Alpha (Sedco 135-A) in 1965 and Sedco Echo (Sedco 135-E) in 1968, for the Royal Dutch Shell Group, followed by the Discoverer Il for Esso (ExxonMobil) in 1969.

The Sedco Alpha drilled the first well by a semisubmersible in Malaysia in mid-1966 and struck oil offshore in the West Lutong field.

As they say, the rest is history. The company's more than 35 years of experience in Malaysia and Brunei has seen several Transocean rigs. They include Trident 2, Trident 15, Trident 16, Trident 17, D.R. Stewart, Jim Cunningham, Jack Bates, Sedco 600, Sedco 601, Sedco 602 and Actina. Others include Searex 3, Searex 5, Searex 11, J.W. Nickle, I.J. Pierce and the North Star. Most recently, the Harvey

H. Ward has worked in Malaysia

since 1999, primarily for Petronas Carigali, and in Southeast Asia since 1982, starting with Brunei Shell. The *Roger W. Mowell* has operated in Malaysia for more than two years for Petronas Carigali and previously worked in Indonesia, Italy, Greece, Tunisia and Spain for clients including Shell, Marathon and Agip.

The Ron Tappmeyer has spent most of its working years in Australia for eight operators. However, it has also drilled in Indonesia, Thailand, Bangladesh, Italy and Holland.

For the past 10 years, the W.D. Kent has conducted operations solely in Indonesia and Malaysia, working on an impressive number of wells in that time: 308 at last count.

The Charley Graves has operated in Malaysia, Egypt, Gulf of Suez, Ivory Coast, Equatorial Guinea and Congo and is now once again back in Malaysia.

These are the rigs that are helping write yet another chapter in Malaysia's petroleum story, positioning Transocean for another 35-plus years of service to clients. Perhaps nowhere else in the world where Transocean operates is filled with such cultural diversity. Each country presents an artist's palette rich in history, folklore, religious beliefs and breathtaking natural beauty.

Transocean has offices in seven Southeast Asian cities, with the Asia and Australia Region office in Jakarta, Indonesia. District offices are located in Balikpapan, Indonesia; Bangkok, Thailand; Kuala Lumpur, Malaysia; Vung Tau, Vietnam; and Perth, Australia. Also, a Technical Field Support team works out of Singapore.

While impossible to paint full portraits of all Transocean Southeast Asia hubs, *Offshore Frontiers* captured the culture in Vung Tau, Vietnam, and Balikpapan, Indonesia, between assignments on the rigs featured in this issue.

Southeast Asia









Vung Tau: Vietnamese Riviera

Vung Tau is a beach resort town about 78 miles (125 kilometers) from Ho Chi Minh City (formerly Saigon). Known to some as the Vietnamese Riviera, the town's four major beaches are popular weekend destinations from the big city via 75-minute hydrofoil boat rides down the Sài Gòn River. Travel by car takes over two hours.

Eleven Vietnamese nationals and seven expatriates staff the Transocean district office. Also on staff are six drivers, very much a necessity in urban Vung Tau where the preferred mode of transportation is motorbike and the traffic is best described as organized chaos.

Truong Phung Y Nhi, Personnel Coordinator for the *Trident 12*, says several staff members live only a fiveminute motorbike drive from the office — a pleasant building inspired At left: Ho Chi Minb City; Vung Tau, the Vietnamese Riviera; Vung Tau is known for its good, inexpensive seafood. At right: Balancing chores and exercise.

by French architecture. Nhi is from Hue, the old Royal Capital of Vietnam, located in the central part of the country. She has worked as personnel coordinator for Transocean on and off since 1995.

As a resort town focused on fishing and the oil industry, Nhi says visitors may get a little bored in Vung Tau. "There are not many modern entertainment spots here, like bowling, and not much of shopping, too." But if you enjoy relaxing ocean settings, mountain hikes and an almost endless menu of seafood, then Vung Tau is your kind of place.

Seascape for the Elite

The name Vung Tau was inspired by the geography of the area. Its natural bay served as a haven for many merchant ships and came to be known as *Vung* (puddle) *Tau* (ships). Two famous mountains stand where the southern tip of town meets the ocean — *Nui Lon (Truong Ky)* and *Nui Nbo (Tao Phung)* or Large Mountain and Small Mountain.

Vung Tau is the first seaside resort for the elite in Vietnam. The first hotel, the Arduzer, was built in the 1870s and was a spa for the era's French leadership. Today, many bungalows, vacation homes and modern hotels dot the beaches.

A Beach for Everyone

Bai Sau (Back Beach) is located on the southeast side of town. The most popular beach in Vung Tau, it is packed during the summer with tourists who enjoy swimming, jet skiing, parachuting and inflatable "bananas" pulled by boats. Or you can climb up Small Mountain to see the Jesus Statue.

The inside is illuminated by light coming from six windows shaped like the Chinese character *Tho* (longevity). "You can climb up the stairs inside the statue and see the whole Vung Tau. It takes about 30 minutes to climb up and some local people climb everyday as exercise," Nhi says, noting there is also a lighthouse to explore on the other side of Small Mountain.

Bai Truoc (Front Beach) is located between the two mountains and is also known as *Tam Duong*, or "searching for the sun." Many coconut trees line the crescent moon-shaped beach. Not considered a clean beach for swimming, it has many kiosks, open-air restaurants and bars, and it is the beach closest to urban Vung Tau. Not far from this beach is another statue of interest, Nhi says — the Mother Maria Statue. "You can climb up there to look down to the sea. It's very beautiful. I myself go on weekends."

Other sites of interest are the pagodas and temples that lean against the mountains and face the ocean.

Historically known for its wild pineapple trees and black rocks, *Bai Dua* (Pineapple Beach) is located at the foot of Small Mountain. It is the smallest of the four major beaches in Vung Tau but very popular for its calm waters and majestic sunsets.

Bai Dau is situated northwest of town. It is a small, rocky beach, but its water is calm, shallow and very clear. Visitors find it a good place to



Below, left: Vung Tau rush bour; street vendors catch up on the latest gossip; rice field workers find that chairs make bandy storage shelves. Top right: Balikpapan life and industry; fruit stand.

relax and eat at Cay Bang, widely recognized as the best seafood restaurant in Vung Tau.

Mam Ruoc, Anyone?

Vung Tau is famous for good, inexpensive seafood. "We normally have our office dinner at Bamboo Restaurant on the beach side or *Lan Rung*, which means Orchid, in town. Both are very good."

The seafood in most demand is shellfish dishes — the finest escargot, clams, blue crabs and scallops. Popular desserts are fruits such as grapefruit, and a soft tofu dish in light brown sugar syrup cooked with ginger roots and pineapple leaves.



Vung Tau is also famous in culinary circles for its Mam Ruoc fermented shrimp paste. Ironically, if you knew the process by which it was made, you may not be tempted to sample the tasty sauce popular on meat dishes. No matter where you go in Vietnam, Nhi says don't forget to sip the heavenly *café sua da*, or iced coffee.

Hidden Treasure

The Vung Tau office staff uses these words to describe what it's like to work in Vietnam — adventure, fun, challenging.

"Vietnam is like a conspicuously hidden treasure difficult to hit upon, but once you understand the softer nuances of the local culture, savoring it can be a true delight. If there is one reason that makes Vietnam so special and a unique place to work, it's the people," says Sam Modica, Financial Controller, who used to work in Ho Chi Minh City, and is currently based in Transocean's Perth, Australia, Office.

Indonesia: Island Contrasts

From the rainforests and Orangutan Survival Foundation of Balikpapan to the Golden Triangle high-rise business district in Jakarta, and to the five-star resorts on Bali, Indonesia is a country of contrasts.

Balikpapan: Orchids, Orangutans, Oil

Balikpapan, where Transocean has a district office, is a port city in East Kalimantan Province on the eastern coast of Borneo. Indonesia shares the vast island of Borneo with two other countries — Brunei and Malaysia's Sarawak. The province lies on both sides of the equator and is home to the island's original inhabitants, the *Orang Gunung* or Mountain People. East Kalimantan is the second largest of the 27 provinces in Indonesia, and the richest because of its enormous





supplies of oil and timber.

Transocean's Balikpapan Office, located in town has 16 employees, including 11 nationals and five expatriates. The growth of the oil industry here has helped Balikpapan develop a true city center complete with banks, travel agencies, shops, restaurants and a market. But it's outside the city where tourists can experience the incredible beauty that this part of the world has to offer.

Flora and Fauna Fun

Along the rural coast, visitors can enjoy scuba diving, fishing, swimming and other water sports. Departing the village of Tanjung Redep for a threehour longboat ride to the island of Derawan gives tourists the chance to see turtles, manatees and other rare creatures. Other sights include rare species of marine plants, coral reefs, iguanas, sea birds, crab and a plum location for pearl diving.

Traveling inland, the extensive Mahakam river system has carved its way through the jungles and flatland. Riverboats slide through the heavily silt-laden waters where plants and animals feed and drink along the shore, and wild orchids drip off trees. Bekantans (Proboscis monkeys), orangutans, crocodiles, clouded leopards, crab-eating macaques, giant butterflies and the legendary hornbill all live here. Below, left: Going to market in Balikpapan; taking the market with you; hanging with friends outside Transocean's Balikpapan office. Below, right: Onions that make you want to smile; colorful puppets are just some of the traditional Indonesian crafts found at numerous shopping centers in Jakarta; the pulse of Indonesia at night.

More orchids can be found on the 5,000-acre Orchid Reservation near the village of Kersil Luwai, where 27 different species are cultivated, including the very rare *Cologenia Pandurata* or black orchid.

Jakarta: The Pulse of Indonesia

Jakarta on the island of Java is home to Transocean's Asia and Australia Region Office and Learning Center. A melting pot from the 17,000-plus island archipelago of Indonesia, Jakarta is a good place to seek fame and fortune, says Elda Sianturi, Senior Secretary/Office Administrator.

"Jakarta is our main economic,







political and cultural center. It's the place to do deals and meet government officials," says the Indonesian native. Elda joined Transocean in 2000 and assists Region Manager Steven Newman with office operations.

About 70 Transocean employees, including expatriate, nationals and labor contractors, work on the 18th floor of a high-rise located in the "Golden Triangle" of Jakarta's central business district. The Region Learning Center is located on the 16th floor. Considered the showpiece of the prosperous new Jakarta, the Golden Triangle is formed by three major thoroughfares surrounded by skyscrapers, shopping malls, apartments, hotels and flyovers, or overpasses.

Tributes to History

Tourists can experience Jakarta's history by visiting "Kota," the heart of the 17th-century Dutch town of Batavia, centered around the cobbled square of Taman Fatahillah. From the fine, old Dutch architecture of Kota, you can wander north to another time at the schooner dock of Sunda Kelapa. "It's the most impressive reminder of the age of sailing ships to be found anywhere in the world," Elda says.

Taman Mini Indonesia Indab (Indonesia Miniature Park) is one of Jakarta's most popular attractions. The theme park provides an interesting look at the diversity of the country's 27 provinces with miniature architectural structures. The park also features an orchid garden, a bird park with a walk-in aviary, a fauna museum and recreational grounds with a swimming pool and restaurants.

If you only had a short visit to Jakarta, Elda says she would get right to the heart of the matter and take visitors shopping. "I would recommend the shopping centers which show and sell Indonesian traditional artworks. Either Pasaraya Shopping Center located south of Jakarta, or Sarinah in Jakarta's central business district. These shops sell uniquely Indonesian handicraft such as native swords, Batik clothing and Hindu statues."

And as for food breaks, whatever your preference, Jakarta has it, from roadside stalls serving delicious steamed crabs to elegant European restaurants. Elda says restaurants allow you to sample regional dishes from all the Indonesian provinces.

"Jakarta is a big, cosmopolitan city that offers a promising life for all its residents," Elda says. "It is the predominant trendsetter among other Indonesian provinces. In terms of tourist destinations, Bali is matchless."

Matchless beauty. Trend-setting cities. Rich bistory. Southeast Asia's cultural canvas offers a world of experiences.





NATIONALIZATION: Leadership in Progress



Above, left to right: Booncherd Prasong, Driller, Trident 15; Thawat Pradubchananurat, Rig Safety Training Coordinator, Trident 15; Richard Jimmy, Assistant I, ART Electrical, Hibiscus.

When Booncherd Prasong was promoted to Driller on the *Trident 15* last August, he became Transocean's first full-time Thai national in that role. This latest move in Booncherd's career — dating to 1990 when he became a *Sedco 601* room-boy — is just one of Transocean's many nationalization efforts.

ationalization is a hot topic in Southeast Asia. Host country governments, petroleum company clients and service companies are seeking to further develop local workforces for the benefit of everyone involved.

And as much as any company, if not more, Transocean is utilizing multiple tools so that local employees can grow in their careers and step further into leadership positions.

Booncherd, 43, is a case in point. Over the years,

he has worked his way through the ranks on the *Sedco 601, Trident 16, Trident 12*

and the *Trident 15*, which he joined as an Assistant Driller in August 2001.

His hard work and studies — including the company's On-the-Job Training (OJT) program — are supplemented by his positive attitude and mentoring by leaders such as *Trident 15* Offshore Installation Manager Mike Hoagland.

"Booncherd's experience and training have prepared him well to be a Driller," says Hoagland, a former Driller who has monitored Booncherd's progress in recent years from Roughneck to Derrickman to Assistant Driller. "We're proud of him, and he is handling his new responsibilities well."

Trident 15 leadership also helped Indonesian Pribadi Dwijaya to become Driller, when he transferred in March 2002 to return to his home country on the *Trident 17*. Similarly, Thawat Pradubchananurat returned to Thailand and the *Trident 15* in January to complete the final stages of his development as Barge Supervisor.

Meanwhile Booncherd might not enjoy the exclusivity of his new standing for long, as he is being



Trident 17 Deckpusher Johnny Jambe (r) advances his offshore drilling education at the Jakarta Learning Center, assisted by Well Control Instructor Glenn Potter.

closely followed up the ladder to Driller by two compatriots: Assistant Driller Somchai Kan and ART (Accelerated Rig Training) Floorman Jerayut Karaket.

"The careers of Booncherd, Pribadi and Thawat are indicative of Transocean's commitment to training and developing personnel in all countries where we operate," says Travis Fitts, outgoing Human Resources Manager, Asia and Australia. "We congratulate them and look forward to many more career-development successes in Thailand, on the *Trident 15* and across the region."

Local Leadership

One way to foster leadership in local employees is through the ART program. Under the guidance of Hary Susanto in Jakarta, Indonesia, the program recruits, trains and develops technical school graduates with heavy industry experience.

This year, 80 new ART recruits are working through the 2.5-year process toward becoming first-level supervisors in positions including Subsea Supervisor and Assistant Driller.

Richard Jimmy, a 25-year-old Indonesian, says he left an electrical job at an auto engine plant, for the ART program on the *Hibiscus*, attracted by Transocean's global presence and long-term commitment.

"Transocean is a worldwide company with more than 150 offshore drilling rigs and supporting units," he says during a break from his Electrical I duties on the *Hibiscus* on Indonesia's East Coast. "This is the right time for me to build my future. I hope to become Rig Manager."

That is music to the ears of Fitts.

"We want people who will make the long-term commitment to their success and to the company's," he says. "Our retention goal for ART recruits is 80% over a



Left to right: Steven Newman, Region Manager, Asia and Australia; Elda Sianturi, Senior Secretary/Office Coordinator, Jakarta; Travis Fitts, outgoing Human Resources Manager, Asia and Australia; Hary Susanto, Accelerated Rig Training Coordinator; Vivi Rika Susanty, AAR Operations Secretary, Jakarta; and Bernard Berjeaud, District Manager, Indonesia.

10-year period — which is most of a rigbased supervisor's career development. We dedicate approximately six months of each year to ART recruitment and selection. Each recruitment period is followed by aptitude testing, a rig visit and a three-day induction to make sure the fit is right for both the company and the employee."

ART Basics

ART development begins with the entry-level position of Roustabout and progresses through the ranks to first-level supervisory positions in the ART's discipline of choice: Drilling, Electrical, Mechanical, Marine, Subsea or Materials.

The development process has a special, early focus on understanding rigs and the company. Subjects covered include Transocean's core values and the colors personality-understanding process, how rigs are organized and how maintenance systems function.

Employee development also includes knowing clients and how to meet their needs.

"Of course, without the support of our client, Unocal, none of the *Trident 15* successes so far, including nationalization, could have been achieved," notes Keelan Adamson, former Rig Manager of the jackup and now Marketing Manager, Nigeria.

Mentoring is a key aspect of the program, one that Richard Jimmy's mentor on the *Hibiscus*, Ungkap Simatupang, also an Indonesian, finds to be simple most of the time.

"I let Richard do his job and I check, monitor and give feedback," he says. "For me, it's easy." How far an employee can progress — whether through ART, its predecessor, the Supervisor Development Program, or the more traditional career path — largely depends on the individual.

"Personnel can progress into leadership roles from virtually any side of the operation," Fitts says. "Steve Lenz began his career with the company in the maintenance discipline and is now Operations Manager of Thailand-Vietnam. The right person with the correct mix of knowledge, motivation and ambition will have the opportunity to progress into senior management of the company."

Also, nationalization does not always have to take place in someone's home country.

After a visit with Thailand's Department of Mineral Resources, recalls Fitts, officials who had been seeking to reduce the number of expatriate employees working in Thailand, instead agreed to increase them.

Why?

"We presented our nationalization plan to the DMR which included the fact that we had Thai national ART employees being developed in Vietnam - due to limited development positions on our rig in Thailand," Fitts says."A review of personnel development on an Asian scale highlighted the value in allowing Asian nationals to work in development positions outside their home countries. Eventually, those employees will come home to Thailand ready for leadership positions, which is what the Thailand DMR officials want to ultimately achieve. There is a tremendous win-win opportunity with the ART development process."

Any employees seeking to further their career development should ask for help, Fitts notes, adding that career advancement is open both in operations, as well as through support functions.

Motivation

"We hope the ART program motivates other employees to take advantage of the OJT system available to them, and if they would like some additional help, we will seek to find a suitable mentor to assist them in their career development."

Hary Susanto agrees, noting that Transocean's nationalization plan also is attracting attention from clients, as well as governments such as Thailand and Vietnam, which have had dialogue on it with the company.

"We are the only company in Southeast Asia that has this kind of program offshore," says Susanto. "Transocean really wants to develop people, and I believe that increasingly governments will want to institute this kind of effort in other industries to develop tomorrow's leaders."

Asia and Australia Region Manager Steven Newman points out that the success stories of Booncherd, Pribadi and Thawat are encouraging.

"These are just the latest examples of how our region-wide nationalization efforts are paying immense dividends," he says. "We want all our employees to develop to their fullest potential. It may take seven or more years for someone to become a polished Chief Electrician, but if an employee has the will and the skill, we'll help make the way."

Relay for Life

Australia Employees Raise Funds for Cancer Research



In 2002, communities all over the world took to local tracks for a worthwhile cause. They were there to honor cancer survivors, remember loved ones lost to cancer and to raise funds for more cancer research. Transocean employees in Perth, Australia, joined the event called "Relay for Life" at Perry Lakes Stadium. In April 2002, for 24 hours, crews of

the Sedco 702 and Sedco 703 and district

office staff took turns rounding the quartermile (400-meter) track determined to make good on the pledge donations they had gathered. The 15-member team completed 333 laps. Ralf "Pedro" Petersen, one of only four male solo competitors, put in a mammoth effort of 301 laps — almost 75 miles (120 kilometers).

Pedro, who works for Transocean's catering company, provided a little entertainment as he walked and ran the course by changing into several costumes. The most popular among the crowd was the cart-wheeling chef, complete with glue-on mustache. After 21 hours, his feet were badly blistered

but his determination and a pair of crutches helped him complete the relay.

The costumes represented the indiscrimination of cancer on all job titles. Pedro truly showed GUTS — Genuine Urge To Succeed — and it was not a surprise that he was selected to read the closing oath at the end of the 24-hour event.

Off-tour crews cheered on the

Transocean relay team members cheer on one-man relay team Pedro Petersen to the finish line.



The Transocean team included, left to right, Paul Viljakainem, Nationwide Catering; Rhiannon Tomerini; Laurie Tomerini, RSTC, Sedco 703; David "Yogi" Sarolea, HS&E Coordinator, Perth; Tracey Marsh, new HR Manager, Jakarta; and Tanya Petersen, Pedro's daughter.

Transocean team and all enjoyed the barbecue alongside the accommodation tents of the supporters. Special thanks goes to the office management support team in Perth for supplying all the food and refreshments during the weekend event.

"The Transocean team assisted the Cancer Foundation by raising money to help with research. Every donation allows the Cancer Foundation to expand its knowledge of cancer, which is diagnosed in one of every three men and one in four women during their lifetime. Cancer is still responsible for 27% of all

> deaths in Australia," reports David Sarolea, alias "Yogi," HS&E Coordinator.

Yogi says the idea of raising money to support charities fighting cancer began offshore a couple of years ago with a Christmas Raffle."Transocean and service companies were asked to provide gifts to be raffled off. We sold tickets for the prizes and visits by 'surprise Santas' (Santa-shaped bodies were a prerequisite). The money raised by the raffle was given to 'Kids with Cancer,' another charity supported by Transocean," he says. "The whole idea is to get involved with the Christmas cheer."

The group's most recent fund-raising effort for Kids with Cancer was

October 25 — National Bandanna Day. "A box of bandannas was sent to each of the rigs — the *Sedco 702* and *703*. The crews purchased the bandannas and the money I received was way more than the cost of the \$2 box of bandannas," he says.

"The generosity of the crews offshore always surprises me."

Connecting with Customers

Sedco 702

Gentlemen, attached are the offshore BIP numbers and graphics for year 2002 including the Mutineer 2 well. The bottom line is a total savings of Aus \$24.9 million and Aus \$9.9 million net to Santos on a like for like \$/foot basis 2002 versus 2001. Exeter 2 is on track and running ahead of schedule. Ole Moller, his drilling crew and the other cross-functional team members are outperforming all our Australian competition. Everyone in WBU involved in this effort should be congratulated for a world-class work performance. Regards,

Frank Jones General Manager Drilling Santos Ltd.

P.S. Ole, please pass this along with my sincerest appreciation to John, Henry and everyone onboard the 702. This is truly world class stuff! I am not easily impressed and I am IMPRESSED!

Sedco 714

On behalf of BP we would like to congratulate the entire crew of the *Sedco* 714 on the outstanding operational performance achieved during the drilling phase of the Mirren Drilling and Completion Campaign. This was not achieved without incident but the greatest identified risk of the operation, the safe handling of the skip and ship drill cuttings, was safely managed and achieved.

The Sedco 714 Team achieved a drilling performance of 24 days per 10,000 feet drilled (24days/10K) which eclipses the industry Best in Class performance threshold of 28 days per 10,000 feet drilled (28 days/10K) by a handy margin. It takes everyone pulling together to achieve this type of result including the onshore planning team, our service contractors, the catering staff and the rig crews who do the ultimate implementation.

Okay, achieving 24 days/10K sounds good but what does it really mean? Well to put it into perspective, the Mirren/*Sedco 714* Team is the only drilling team to achieve this drilling performance level within CNS in the past five years, and within BP's entire UKCS Operations only three other subsea wells have achieved this performance level in the past three years! Furthermore, within the industry this is recognized as "Best in Class" drilling performance.

BP wishes to congratulate all crew members on a job well done and looks forward to continued success in the completion phase of the Mirren West well.

Regards,

Will Van Gestalt Drilling Superintendent Mirren - Sedco 714

Sedco 706

The Transocean *Sedco* 706 is demobilising after eight years acting as drilling support for Dunbar development drilling operations...

I would like to convey to you the appreciation of TotalFinaElf for the quality of the services provided by the *Sedco 706*, both in terms of operational efficiency and safety performance. We particularly note the awards gained by the drilling teams over the years and, in particular, the Safety award for two years LTI-free operations in 2000...

Please pass to your personnel our congratulations for a job well done over the past eight years and our wishes for a successful future. *Yours faithfully*,

Michel Contie, Managing Director TotalFinaElf Exploration UK

Sedco 712

Diogenes Angelidis and Howard

Meredith, many thanks for an excellent visit yesterday. I was very pleased at the high level of discussion on, and commitment to, safety with yourselves, the safety reps and the few crew that I met.

I was also extremely impressed with our commitment to business improvement at all levels of detail. The excellent track record of the 712 in drilling performance shows that such commitment and application delivers real success. I would also like to applaud the excellent work of the shore-based team in this.

Hugh Scott, thanks for organizing and well done to you and your team for the leadership and teamwork.

Keep up the excellent work and stay safe! Best Regards Roger Patey Business Improvement Director Shell U.K. Exploration & Production

Paul B. Loyd, Jr.

I wanted to pass on a few comments to you following my weekend visit. I was very impressed by the level of HS&E commitment on board. Of particular note was the degree of waste segregation — the best I've seen. It was clear that this was a genuine effort being made by all the crew and not just by management (six Environmental START cards submitted over the previous month — far higher than the FPSO's).

My personal thanks go to Tony Lumsden, OIM; Len Ethell, RSTC; Ian McGibbon, Maintenance Superintendent; Derek Robertson, Safety Toolpusher; Mark Martin, Warehouseman; Alex Park, Camp Boss; Barry Greig, Company Man; and Scott McAllan, Materials Coordinator, for their time and assistance which was so freely



The Deepwater Horizon semisubmersible of Transocean was featured by Offshore Magazine, which focused on the world's most advanced offshore drilling units.

given during my visit to the rig. They were invaluable in helping me complete my Audit, two environmental awareness presentations, for allowing me to sit in and participate in their Green team meeting and for answering all my questions. *Thanks*,

Sean Young

Deepwater Environmental Advisor Northern Business Unit, BP

Sedneth 701

The *Sedneth* 701 has successfully finished the VAALCO Gabon (Etame), Inc. re-entry and completion program on wells ET-3 and ET-4H, and ET-1V. These wells presented a range of challenges, which were met and overcome by successful collaboration between VAALCO, Transocean and service company operational and managerial personnel, both onshore and offshore...

The pride your whole team takes in their work is made evident by the overall condition of the rig and is confirmed by the minimal downtime experienced during this campaign. Their dedication and commitment to safety is excellent. Their proactive approach and planning assures that they use the safety programs to assist in planning their work. This results not only in a safe operation but a smoother one, due to the pre-planning. VAALCO Gabon (Etame), Inc. is pleased with the overall performance of the *Sednetb* 701 and her team and will certainly consider using her or another Transocean rig when the opportunity presents. *Sincerely, W.T. Price Project Manager - VAALCO Gabon*

Interocean III

On behalf of Atlantis Holding Norway AS, I would like to express our satisfaction with the performance of the *Interocean III* rig and crew during our 1-1/2-year contract period. The wells being worked on are not the average Gulf wells. They are deep, with challenging formations and pressures and there has been a good learning curve over the project.

We were very pleased to have been able to award the crews a performance bonus on Sharjah-2 sidetrack for a job done well and safely. It was disappointing from our side not to be able to award a full bonus on the UAQ-3 sidetrack due to the problems experienced setting Weatherford/Nodeco liner hangers, as the rest of the well went according to plan. I would like to ask you to pass on the thanks from Atlantis senior management to the full Transocean crew and management team.

Should you wish a reference for future contracts, we would be happy to provide one and hope you will be in contact nearer the time that our 2003 work program gets firmed up. *Best Regards, Colin Shepherd Operations Manager Atlantis Holding Norway AS*

Sedco Energy

We have had a week with very hard work with influx and losses. We all go to well control schools, but very often we see that the situation is not exactly the way it should be according to the books, with pressures and signals we do not understand.

We want to express our appreciation for the professional way you handled the problems and challenges this last week. I also would like you to know that Statoil-Nigeria has received mail from upper management in our HQ that expressed gratitude for the handling of the situation and outcome of the well section. Thanks and regards, Helge G. Håland **Drilling Manager** Roy Hofsøy Drilling Superintendent Statoil-Nigeria

Deepwater Discovery

Please pass my congratulations to the OIM and crew of the *Deepwater Discovery* on achieving the outstanding milestone of one year without a Lost Time Incident.

I believe that this has been achieved by the dedication and professionalism of the rig personnel and its management. Going to nine countries, with the start-up of new local crews each time is a challenge on its own. The start-up of our own operations was no different. To do this without any serious injury makes the effort worthwhile. Thank you.

Woodside believes passionately that no one should get hurt performing work for Woodside. What is noted is the fact that this record has been achieved working for nine other operators in West Africa in addition to Woodside. We are pleased that the record is achieved whilst working for us.

To all of you on the Deepwater Discovery please continue to think about the hazards you face each day and we want you to take the time to avoid letting the hazards turn into an accident.

I wish you a safe day, safe hitch and another safe year. Congratulations, David F. Bond Team Leader International Drilling Woodside Energy Ltd.

Corporate Report

Surface BOP: In Perspective

Adapted from an article by Earl Shanks, Transocean Director, Technology Development, in the September 2002 edition of Drilling Magazine.

Using a surface blowout preventer (BOP) has enabled the *Sedco 601* and *Sedco 602* to work in the benign and ever-deeper waters of the Far East, pioneering one of the more cost-effective and innovative deepwater drilling technologies.

Now that operators are considering surface BOP drilling operations for moderate environments, a look back at how Transocean helped develop this technology provides a unique perspective on its future.

The surface BOP was first used on a floating drilling vessel in the 1960s, when Shell Borneo hired the semisubmersible *Sedco 135-A*. For many years, the *135-A* worked in this mode in water depths as great as 250 feet (76.25 meters), compared with today's world record of 6,722 feet (2,050 meters) held by the *Sedco 601*.

About six years ago, Unocal and Transocean personnel from Montrouge, France, and Indonesia, partnered on an application for offshore drilling in Indonesia. The result was an efficient and reliable surface BOP system that has generated significant savings for Unocal and other operators (see Figure A). Unocal used this Saturation Exploration (SX) approach in a benign environment with water depths between 100 and 500 feet (30.5 and 152.5 meters) proving that several days of time can be saved compared to conventional subsea operations.

Since then, approximately 145 wells have been drilled using surface BOPs through October 2002 by three specially outfitted semisubmersibles. In this mode, the *Actinia* drilled five wells in Thailand, and the *Sedco 602* completed 68 wells.



Figure A



Figure B

The *Sedco 601* has drilled 71 wells and continues to use this technology.

Pre-Set Mooring

Transocean and Unocal have used another enabling technology, pre-set mooring, combined with Surface BOP operations, to drill in deepwater and ultra-deepwater. Preset mooring utilizes high-holding-capacity, verticallift anchors in the seafloor and either synthetic mooring rope or a wire insert between an anchor and the anchor chain to the semisubmersible.

Since Transocean and Unocal initiated this technology, 104 wells have been drilled in water depths greater than 1,000 feet (305 meters); with 75 wells in water depths greater than 2,000 feet (610 meters); and 58 wells in water depths greater than 3,000 feet (915 meters). In greater than 5,000 feet of water (1,525 meters), 19 wells have been drilled. And in greater than 6,000 feet of water (1,830 meters), five wells have been drilled. The wells' maximum total depth to date in Surface BOP mode is 16,182 feet (4,936 meters).

What's Next?

Surface BOP operations ideally are suited to areas where relatively benign environmental conditions prevail. However, moderate environmental conditions and seasonal operating windows also will permit its application, when adequate safeguards are put into place.

In many moderate environment areas studied to date, during certain times of the year, maximum heave and offset could occur. For these areas, Transocean has designed a shutoff and disconnect system at the seafloor that is built into the riser system to prevent the possible loss of the high-pressure riser.

Controlled from the surface, this seafloor isolation system (*SIS; see Figure B*) consists of a single shear ram with an upper and lower hydraulic connector. Transocean plans to use the device for the first time early next year.

A dedicated SIS design team in the Houston engineering offices designed this system, based on the experience and knowledge obtained from the company's successful Indonesian operations. A year and a half of engineering and designing by Transocean has reduced the lead time for constructing the system to meet a client's needs.

"The SIS results from the hard work of many people, including Scott McGrath, Project Manager; *continued on page 40*

Measuring Our Success

Transocean Stock Price Performance

January 2, 2002 to September 30, 2002

The price of Transocean common stock closed at \$20.80 on September 30, 2002, compared with \$32.49 on January 2, 2002. The company's stock trades under the symbol RIG on the New York Stock Exchange.

Source: New York Stock Exchange (NYSE). Data reflects daily closing stock prices for Transocean stock.



Transocean 2002 Fleet Utilization by Quarter						
By Rig Type	Utilization					
	1st Quarter	2nd Quarter	3rd Quarter			
High-Specification Floaters	82%	85%	85%			
Other Floaters	82%	73%	76%			
Jackups Non-U.S.	90%	82%	84%			
Other	57%	60%	51%			
U.S. Shallow Water Division	22%	29%	34%			
U.S. Inland Water Division	41%	24%	47%			
Total MODUs	61%	57%	63 %			

Transocean Fleet Utilization and Safety Performance YTD 2002

By Region	Utilization*	TRIR**	
Africa	77%	1.80	
Asia & Australia	79%	1.79	
Middle East, Caspian & India	83%	2.75	
U.S. Shallow Water Division	27%	2.16	
U.S. Inland Water Division	37%	3.18	
North America	81%	2.28	
Norway	77%	2.59	
Brazil	83%	2.22	
U.K. North Sea	79%	1.43	
Total	63 %	2.03	

Press Box

Media Mentions

<u>Deepwater Nautilus sets</u> another world record in

the GoM

Success after success of a new polyester mooring system is changing the face of deepwater mooring. The latest evidence of the system's capability is the deepwater mooring record set by Transocean's semisubmersible Deepwater Nautilus in 8,009-ft water depth. The Nautilus set this record on March 6 on Shell's Great White prospect in the Alaminos Canyon section of the Gulf of Mexico.

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* Utilization year to date, September 2002.

** Total Recordable Incident Rate per 200,000 bours worked year to date, November 2002.

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Surface BOP: installed and operating in the Sedco 601 *moonpool.*

Paul Holley, former Surface Stack Manager for the AAR Office; and Pierre Morvan, Engineering Manager," says John Rouse, Vice President of Engineering and Construction. "Also instrumental were Bill Ambrose, Sr. Design Engineer; Dean Williams, Sr. Subsea Engineer; Bryan Sanchez, Design Engineer; and Chuck Miller, Principle Engineer for Stress Engineering.

"In addition, Tony Flynn, then-Drilling Services Manager and now Rig Manager of the *Discoverer 534*, helped support the well construction and operations efforts for the new system."

Greater Depths

With the closure device at the seafloor, an additional environmental protection barrier is introduced in the unlikely event of losing pressure integrity of the high-pressure riser. While surface BOP technology has been applied in water depths beyond 6,700 feet (2,044 meters), plans are in the works to use this application beyond 8,000 feet (2,440 meters) of water in the Far East. While not intended for all deepwater applications, this technology does have application for many deepwater provinces in benign and moderate weather areas. And so, several operators are looking at surface BOP

operations for West Africa, the Mediterranean and the Gulf of Mexico, all in ultra-deepwater.

Operators' interest was evident with 300 attendees at IADC's November 6 Surface BOP Workshop in Houston. Transocean was well represented throughout the program. Employees can read the agenda and presentations on the Technical Services Intranet site.Visit Technology Development's link at http://hqs.eng.tsfnetlink.com/tech_ development and see the IADC Workshop in Group News.

Transocean People: Surface BOP

Surface BOP activities have been supported by a variety of personnel in the Asia and Australia Region (AAR). When the Surface BOP application was developed with Unocal, Mike Unsworth was District Manager and later Region Manager. He was instrumental in developing the commercial relationship and concept development with Unocal. Mike, who today is Vice President, Marketing, credits the devoted Surface BOP Team for being responsible for the many successes over the years. Steven Newman, AAR Region Manager, says the dedication and effort by the Surface BOP Team today is as strong as ever.

Bernard Berjeaud, District Manager, Indonesia, is involved with the commercial relationship with Unocal.

Cody Folsom, Rig Manager, Sedco 601, is directly involved in the day to day Surface BOP operations and decisions.

Jeff Breal, Operations Engineer - Australia, supported the operations before being transferred. As the area Mooring Specialist, he developed and coordinated mooring arrangements and procedures for the operations.

Steve Myers, District Manager - West Africa North, worked in Special Projects when the project began. He was responsible for the first integrated and consolidated operational and technical review, risk analysis and business plan.

Rod Travis, ABS Consulting/ EQE, helped facilitate countless hazard identification and operability studies for Transocean as well as our operator clients.

Paul Holley, Rig Manager during the early years of Surface BOP operations, is the former Surface BOP Project Engineer. He was heavily involved in the original technical development, engineering and operational procedures.

Phil Fife, retired, was Operations Manager for the development of the Surface BOP system.

In Brief: Surface BOP

Surface BOP operation is the practice of utilizing a floating drilling unit fitted with a BOP suspended by conventional riser tensioners above the waterline in the moonpool area. The BOP, usually a land/jackup-type BOP, is connected to a high-pressure riser serving as a conduit to the sea floor.

Typically, the high-pressure riser has been 13 3/8-inch or 13 5/8-inch casing deployed in one continuous length from the casing shoe about 2,500 feet (763 meters) below the mudline to the surface wellhead (*Figure A*). The equipment configuration is similar to a jackup utilizing added top tension, except that the vessel is floating and the water can be thousands of feet deep.

The beauty of the system is its simplicity. Significant cost savings are achieved because of the days reduced to begin drilling out the surface casing compared with conventional subsea BOP systems.

The surface BOP system used in the Far East has a "doubler sheave" on the BOP to obtain twice the effective riser tension. However, this also reduces the effective tensioner stroke by half. The advantage of this concept greatly reduces the upgrade costs of the drilling vessel by getting double riser tension for almost no cost.

Make the Right Nove

Offshore drilling requires a strategy, especially in today's environment where the wrong move can be more costly than ever. That's why the first move should be to look for a company with worldwide capability and experience. And that's Transocean.

In fact, we have more experience drilling deepwater and harsh environment wells than anyone. We also have the largest and most diverse fleet in the world, so we can deliver exactly the rig our customers need when and where they need it. And we operate in every major oil and gas area, so we can save on mobilization and demobilization costs worldwide.

Put them all together and you can see why more and more customers have learned that the right move is frequently the easiest move. That's why they call Transocean.

Transocean: We're never out of our depth.®



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