rigamarole

SPRING 09, NO. 27

A PUBLICATION FOR THE PEOPLE, CUSTOMERS, SUPPLIERS AND FRIENDS OF **DIAMOND OFFSHORE DRILLING, INC.**

rigamarole

SPRING 09, NO. 27

rigamarole is published for & about the people & customers of Diamond Offshore. For more information, write us, call or visit us online at www.diamondoffshore.com

Contact
Diamond Offshore Drilling, Inc.
PO Box 4558
Houston, Texas 77210 USA
281 492 5393
rigs@dodi.com

Managing Editor
Les Van Dyke **ABC**

Design & Production
Rigsby Hull Inc.

Printing
Woods Lithographics

Photographers
Drew Donovan, Patrick Lane, Chris Shinn, Nichole Sloan, Jonathan Wilson

A Letter from Larry Dickerson,
President *and* Chief Executive Officer

It is frustrating sometimes to be in our industry. Don't get me wrong. I love Diamond Offshore and the oil patch. What I mean, is we are so used to accomplishing daunting tasks, it is painful to watch the government flounder about when faced with difficult issues or problems.

Case in point: the current economic climate. Ronald Reagan once said, "A recession is when your neighbor loses his job; a depression is when you lose yours." Jobs are key in an economic slowdown. Governments around the world are spending trillions of dollars to create jobs, preserve jobs or prop up failing industries. Here's an idea, at least in the U.S.: Open up offshore drilling! We have high paying jobs that we can provide without any need for subsidies. Money that otherwise would be spent on imported oil instead can flow into employees' pockets, local government coffers and supporting industries payrolls. As it sits, our industry is forced to relocate rigs out of the U.S. and take those jobs to other countries. Not only would increased U.S. drilling be an economic boon, but offshore activity would help support an increased fishing industry as more marine life gathers around the artificial reefs that are our infrastructure.

Got another problem? Don't like the amount of CO2 going into the atmosphere? Well, you aren't going to make any meaningful progress with canvas grocery bags or a few windmills. An almost 50% reduction in CO2 from power sources could be realized by hooking up natural gas to fire the electrical generators now powered by coal. Your U.S. energy industry has already found all the gas we will need to accomplish this in onshore shale plays. If we need some more, I have confidence that new gas fields can be developed offshore Florida and likely on the East Coast as well.

The UK largely replaced their coal-fired electrical plants with North Sea gas in the 1980s, resulting in cleaner air and a smaller environmental footprint from extracting the required energy.

As it is, the U.S. seems intent on driving out this productive industry. More and more Diamond rigs have been heading out to Asia, South America and the Mediterranean Sea. And we love working in, and bringing jobs, to these places. But we would rather add more rigs to serve more places than fill these needs by mobilizing rigs no longer needed in the U.S.

In the meantime, Diamond and the rest of the industry will keep on drilling deeper and drilling safer, constantly making progress and solving problems. Too bad our skills aren't recognized as a resource for wider issues.

Commissioning the OCEAN MONARCH

After a 2-½-year massing of power and might, a newly upgraded Victory-Class semi joins the Diamond Offshore ultra-deepwater fleet.

By Scott Redepenning, *Photography by* Chris Shinn

In 1997 Bruce Willis stood on the helideck of the *Ocean Monarch* driving golf balls at a Greenpeace vessel. At that time, the *Monarch* was an Enserch-owned rig and was serving as a movie set for the film Armageddon. Twelve years, a new owner and $310 million in upgrades later, the *Monarch* joins her sister rig *Ocean Endeavor* as one of the largest conventionally moored floaters in Diamond Offshore's fleet, and one of the most capable ultra-deepwater units operating in the Gulf of Mexico (GOM).

The *Monarch* is the latest in a series of four massive Victory-Class upgrades Diamond Offshore has executed since 2001, which include the *Ocean Baroness, Ocean Rover* and *Ocean Endeavor*. The *Monarch* is capable of drilling wells up to 35,000 feet deep in up to 10,000 feet of water, with all the requisite deck capacities and equipment aboard to accomplish the task with confidence. In mid-March 2009, the rig dropped its array of 15-ton anchors 3,875 feet to the seafloor in the GOM to begin the unit's first job, deepening an existing well for Plains Exploration, which obtained the rig for a 90-day sublet from current contract holder Anadarko. But there was much last-minute work to be done before the drill bit could pierce the seafloor.

Commissioning

Turn back the clock about 20 days. The *Monarch* floats in a staging area, moored on a 250-foot deep shelf in the GOM an hour's chopper ride from the New Orleans International Airport. This conveniently accessible location is where the final stages of rig commissioning took place. Commissioning is the process of proving that everything on the rig performs as it should, from the smallest electrical circuit to the major pieces of equipment to the rig as a whole, with all systems working in unison to simulate a real drilling operation.

This "systems integration test" is a finish line that Project Manager Aubrey Walton was eager to cross. He's been with the *Monarch* since August of 2006, when it arrived at Keppel FELS shipyard in Singapore for the upgrade. He and his team then commenced transforming the rig into its current state—virtually a new-build unit with about 85% virgin structural work and all new state-of-the-art equipment systems.

"We basically built it from scratch," Walton says. "What little we kept was carefully inspected to ensure its soundness." (That "little" was primarily the massive hull, originally overbuilt for the rigors of the North Sea, with the fatigue life of its main columns and pontoons measured at over 100 years. So strong, in fact, is that hull that it can accommodate the large amount of additional flotation capacity necessary to support the weight of the giant new superstructure that was added.) "Everything else," Walton continues, "was created as modular components offsite in about 20 fabrication facilities around Singapore, which were then sent to the shipyard for assembly. We also had major parts of the lower hull built in China and Indonesia. All these pieces were scattered everywhere and then came together at Keppel FELS."

Having so many new components and such a large rig makes commissioning quite the formidable task. "In all, there were about 6,000 items on our list, each needing its own test,

inspection and positive result before moving on," Walton says. "Once the majority of the steel work is done, you test your engines and generators, power distribution systems, emergency control systems, lighting, saltwater pump, drill water pumps, fuel pumps, transfer pumps, purifiers, electrical controls, agitators, shakers, degassers, mixing pumps, charge pumps, mud pumps, blowout preventer system and controls, deck cranes, knuckleboom crane, bridge cranes, iron roughneck, bridge rackers, finger boards, horizontal to vertical pipe handling machines and mouse hole rotary. Just to name a few," he adds.

Only 205 commissioning details of the original 6,000 remained unchecked when the rig was towed to the GOM staging area. This work essentially boils down to four major systems and about two week's effort. These are perhaps the most elemental systems for actually drilling a well—the draw works that lift the drill string, the top drive that turns the string to drill the hole, and the crown-mounted compensator and inline tensioner, which work with instant precision to cancel wave action and protect the drill string and riser from being damaged as the rig heaves in changing seas.

The "last" boat out of Singapore

Normally commissioning takes place at or near the original shipyard. And the majority of the *Monarch's* commissioning was carried out in Singapore. But to make the 13,300-mile journey from Singapore to the GOM with any semblance of time efficiency, the rig would have to be dry-towed on a heavy-lift vessel, and those ships were in tight supply.

"We hadn't finished everything in Singapore, but we already had the *Blue Marlin* booked, and we had a start date for our contract fixed in the GOM. So when the vessel arrived, we elected to complete our commissioning in the Gulf rather than paying demurrage on the only ship available that could meet our schedule," says Walton. "But we'll be fine. Some things we accomplished dockside in Singapore before we left because it's more efficient to get people and equipment to the rig. But there are other things you do at anchorage, like offshore commissioning and final crew familiarization and training. The GOM staging area is a good place to finish those items because it's only a short ride from land by boat or helicopter and only a short tow away from our first job."

The *Monarch* is certainly built and equipped to go deep. And going deep in the GOM makes station-keeping particularly challenging, as the rig has to fight off the Gulf's infamous high-velocity loop current and inevitable seasonal hurricanes. The *Monarch* faces nature down with 12 Stevpris 15-ton anchors: eight standard plus four storm units, which at times will likely be deployed outside of hurricane season for extra assurance.

"Our rig is on Anadarko's budget, so of course we want to perform for them without downtime. Our job is to get the well down fast and get it down safe."

— **Chad Williams**, Operations Manager, **Ocean Monarch**

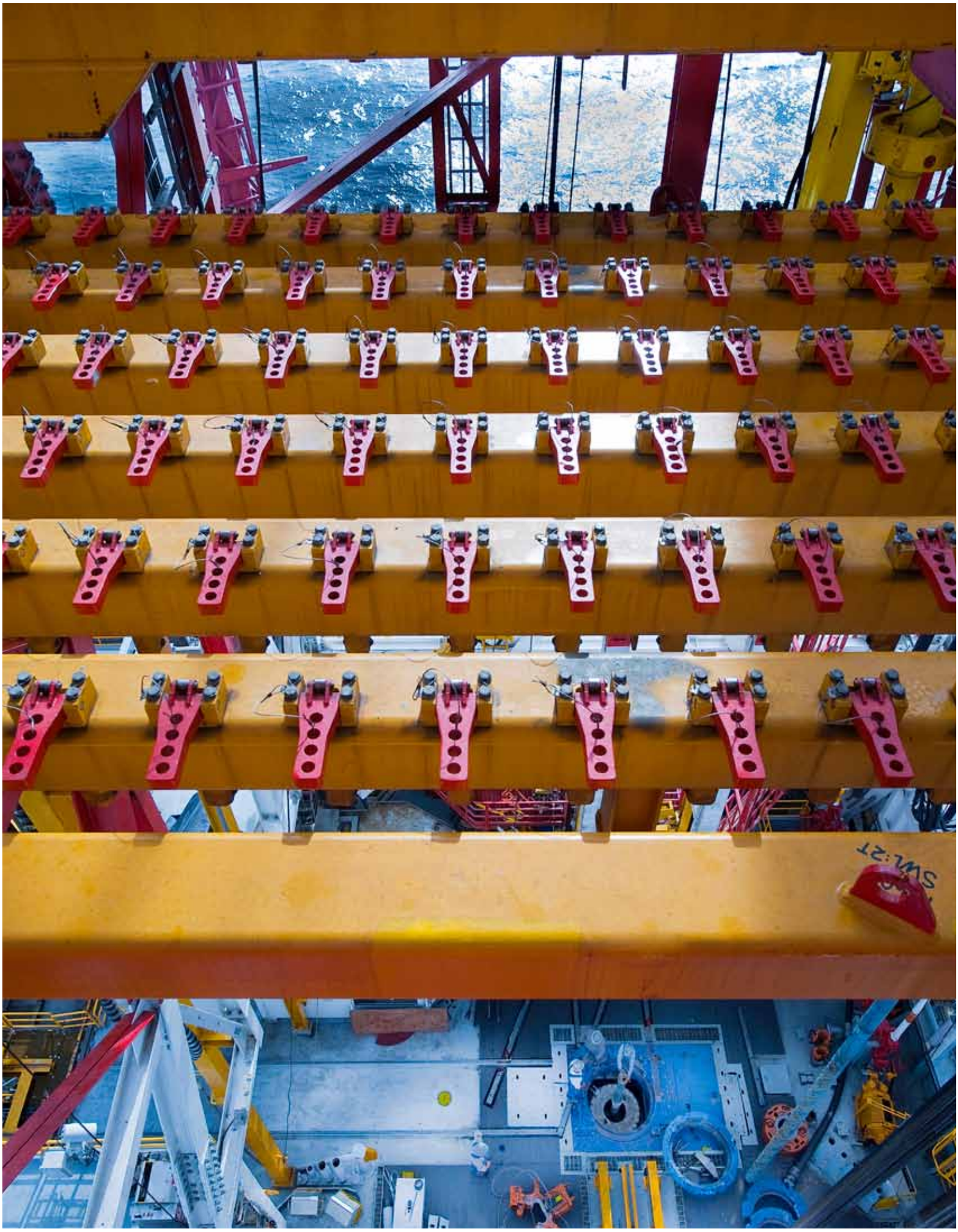
Ultra-deep might

The *Ocean Monarch* started that first job as one in an elite group of gargantuan floaters. The 171.5-foot derrick is hook load rated to 2 million pounds. Riser tension is rated to 3.6 million pounds, rotary loads to 2 million pounds and setback to 1.5 million pounds, which is the pipe weight that can be racked in the derrick. In all, the maximum combined load can reach 6.3 million pounds, with roll or pitch of 2.5 degrees, 6-foot heave and 70-knot winds.

Drilling wells to 35,000 feet in up to 10,000 feet of water necessitates enormous capacities. The *Monarch* has over 50,000 square feet of deck space and can handle 6,000 long tons of variable deck load. The rig has a drill-water capacity of 12,916 barrels, fuel oil of 6,895 barrels, liquid mud of 9,949 barrels, bulk mud storage of 13,300 cubic feet and 11,000 cubic feet of bulk cement storage. At any given time, the *Monarch* can comfortably house and feed a crew of 150 people.

The equipment list is equally impressive. One corner of the deck houses Oceaneering's Millennium Magnum Class ROV (pictured right), a remotely operated vehicle system. Halliburton's HCS-ISO Advantage Combo Cementing Skid claims another corner. Mud can be driven miles beneath the seafloor via four National Oilwell Varco 14P-220 triplex mud pumps rated at 7,500-psi discharge, driven by two GE 1,100-horsepower DC motors.

All of these systems surround a leading-edge NOV drilling package built to perform in high seas, with a crown-mounted



"We have always had a great relationship with Diamond Offshore. I appreciate that the communication is always very open. While the **Monarch** *was being upgraded, my team went to Singapore with the Diamond Offshore team numerous times to collaborate and share knowledge. We believe in this company and rig enough that Anadarko put some of its own capital into the upgrade."*

— **Choney LaSage**, Drilling Superintendent for Deepwater Drilling, **Anadarko**

compensator rated to a 25-foot stroke with a 1-million-pound capacity that doubles to 2 million pounds when closed and locked. The derrick's racking platform has removable fingers that can accommodate 34,000 feet of 6-⅝-inch drill pipe, some of the largest available, and 2,000 feet of bottom hole assembly with drill collars up to 9-½ inches.

On the seafloor thousands of feet beneath the *Monarch*, the wellhead is protected by the rig's state-of-the-art 15,000-psi blowout preventer stack with an H2S-rated lower marine riser package and ROV interface controls.

The *Monarch* is certainly built and equipped to go deep. And going deep in the GOM makes station-keeping particularly challenging, as the rig has to fight off the Gulf's infamous high-velocity loop current and inevitable seasonal hurricanes. The *Monarch* faces nature down with 12 Stevpris 15-ton anchors: eight standard plus four storm units, which at times will likely be deployed outside of hurricane season for extra assurance. Few rigs have a mooring system this robust. The standard chain-to-wire anchors are held by 3-¾-inch wire with a breaking strength of 1.73 million pounds, while the storm anchors employ 3-⅞-inch wire with a breaking strength of 1.825 million pounds. When deployed, the four additional storm anchors add up to 40% more holding capacity than the conventional eight-point mooring system alone.

Monarch Operations Manager Chad Williams calls extra attention to this last feature. "The 2005 hurricane season had several storms that sent a number of rigs adrift. After that we knew there would be new industry standards for mooring in the Gulf of Mexico," he says. "But Diamond Offshore didn't wait for those to be established. We refitted virtually our entire GOM floater fleet with a 12-point mooring system. And we also mandated that any of our new rigs destined for the Gulf be outfitted with storm mooring systems. This protects our property and the interests of our clients while keeping the rig from going adrift."

The measures we took to expand and strengthen the mooring systems on our GOM floaters following hurricanes Rita and Katrina proved very effective, as all of our rigs held station during Ike and Gustav in 2008. In fact, four of our floaters were directly in Ike's path, but weathered the storm without significant incident. And the overall performance of our GOM floaters during the storms earned us a commendation from the Minerals Management Service for the effectiveness of our efforts.

Drilling for Anadarko

The most interested client currently aboard the *Monarch* is Choney LaSage, Anadarko's Drilling Superintendent for Deepwater Drilling. Anadarko's operations in the GOM represent about 25% of the company's revenue, and LaSage is ready to put the *Monarch* to work to bolster that number.

"We're looking to drill sub-salt wells about 30,000 feet down in water about 7,000 feet deep," he says. "We've worked with Diamond Offshore rigs for several years now, primarily the 5,500-foot rated *Ocean Star*, but we've never contracted one that could handle wells quite like this. So we were glad to see the *Monarch* come out, and we hired it for a four-year term."

LaSage adds that the *Monarch's* capabilities were only part of the reason for the contract. "We have always had a great relationship with Diamond Offshore. I appreciate that the communication is always very open. While the *Monarch* was being upgraded, my team went to Singapore with the Diamond Offshore team numerous times to collaborate and share knowledge. We believe in this company and rig enough that Anadarko put some of its own capital into the upgrade."

These client-funded improvements include angling the mud pits for easier cleaning, installing a hydraulic valve instead of a check valve on the BOP, the installation of hard piping to allow more convenient hookups for well test equipment during completions, modifying the derrick to handle bigger drill pipe and specifying a more stalwart wellhead connector.

"There's one other thing about this relationship," LaSage continues. "Anadarko has a very prominent initiative known as IIF, which stands for the Injury Incident Free workplace. Our goals are to protect people and the environment, and Diamond Offshore is completely on board with that in their own initiatives" (see p. 18).

Chad Williams embellishes the point. "Our rig is on Anadarko's budget, so of course we want to perform for them without downtime. Our job is to get the well down fast and get it down safe. Their spread costs are well over a million dollars a day, with our rig being about 40% of that. Anadarko needs a performer—a company that can do it faster, deeper and safer. We work hard to be that company. We set stringent policies and procedures for health, safety and environment, we train our people well, and we hold them accountable to carry our high standards forward."

This commitment is already being proven out by hard statistics. The *Monarch* has not logged a Lost Time Incident (LTI) since coming out of the shipyard in Singapore. This is a significant record given the nature of the commissioning work and the urgent pace that was set to get the rig ready for drilling.

"*We brought a lot of the guys over while the rig was in Singapore, like the drilling teams, electronic technicians, subsea engineers, maintenance techs and mechanics. Our goal was to get them familiar with the systems so they can hit the sea running when the rig's ready to go. We also trained people on our sister rigs, since the equipment systems are a lot like the* **Monarch's**. *There seems to be a lot of pride among the guys about coming to this brand new rig."*

— **Phil Tobey**, Area Manager, Ocean Monarch

Trained to perform

Again, step back a mere two weeks prior to the *Monarch's* first job. No drill pipe has been made up; no mud has been mixed. The BOP stack and ROV haven't seen a drop of seawater yet. For the moment the futuristic driller's chair is all open panels and exposed wires. Yet in a matter of days the rig and crew will be prepared to drill. This readiness is possible because the *Monarch* has sister rigs out there drilling with similar equipment, and much of the crew has been hand-picked from those units.

It was a tough job for Phil Tobey, Area Manager over the *Monarch, Endeavor, Baroness* and *Ambassador.* He had to pull crew from some of his prize vessels and get many of the personnel involved with the *Monarch* well before the rig would ever begin operations.

"We brought a lot of the guys over while the rig was in Singapore, like the drilling teams, electronic technicians, subsea engineers, maintenance techs and mechanics. Our goal was to get them familiar with the systems so they can hit the sea running when the rig's ready to go," he says. "We also trained people on our sister rigs, since the equipment systems are a lot like the *Monarch's*. There seems to be a lot of pride among the guys about coming to this brand new rig."

Confidence, and a healthy dose of anxiety is apparent in the demeanor of Driller David Punchard, who is over-seeing the finishing touches in his driller's shack and will soon put down the *Monarch's* first string of pipe. "I've run a driller's chair similar to this on the 10,000-foot-rated *Ocean Confidence*, but there are some new bells and whistles on this one," he says. "I'm a little nervous about it, to be honest, but I know it's going to be great. We have a good team and every-one's always more than happy to help. And, you know, there comes a time when you get used to what you've been doing, and you want to step out a bit and learn something new."

SCOTT REDEPENNING IS AN INTERNATIONALLY EXPERIENCED FREELANCE WRITER, AN ENTHUSIASTIC SOCCER COACH TO 5-YEAR-OLDS AND A HIGHLY QUALIFIED BEACH BUM.


FIREMAN

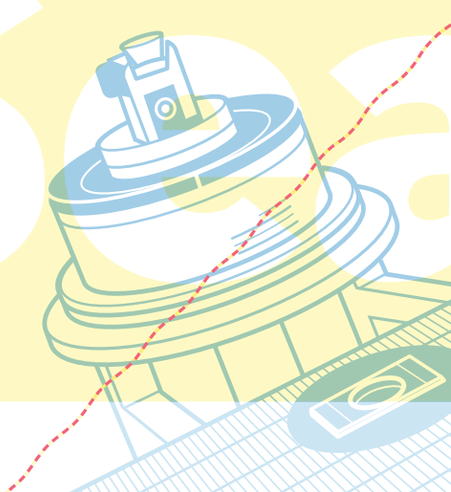
10,000 FEET UNDER THE SEA

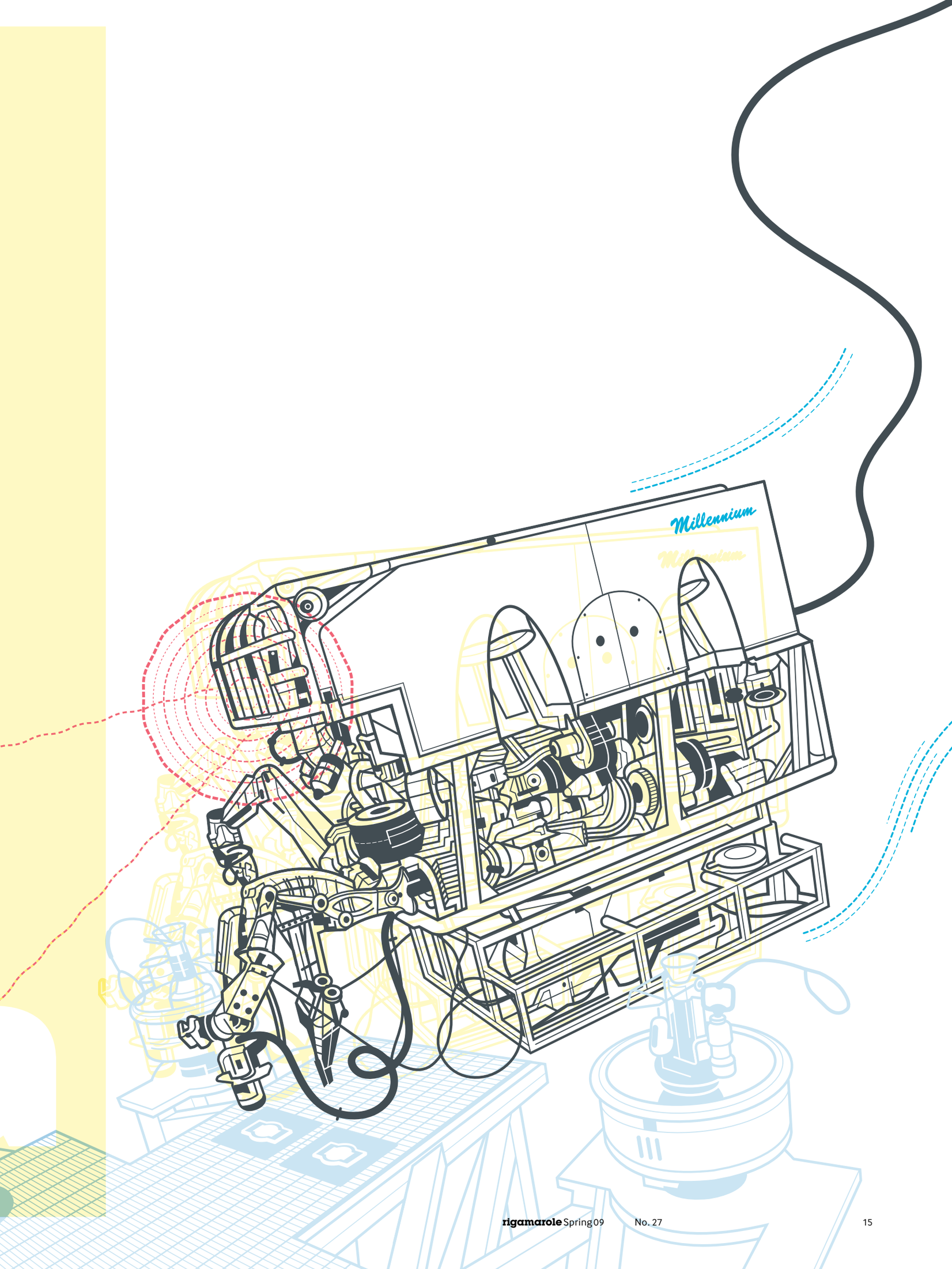
ULTRA-DEEPWATER RIGS GET A POWERFUL SET OF EYES, ARMS AND HANDS FAR BELOW THE WAVES WITH REMOTELY OPERATED VEHICLES.

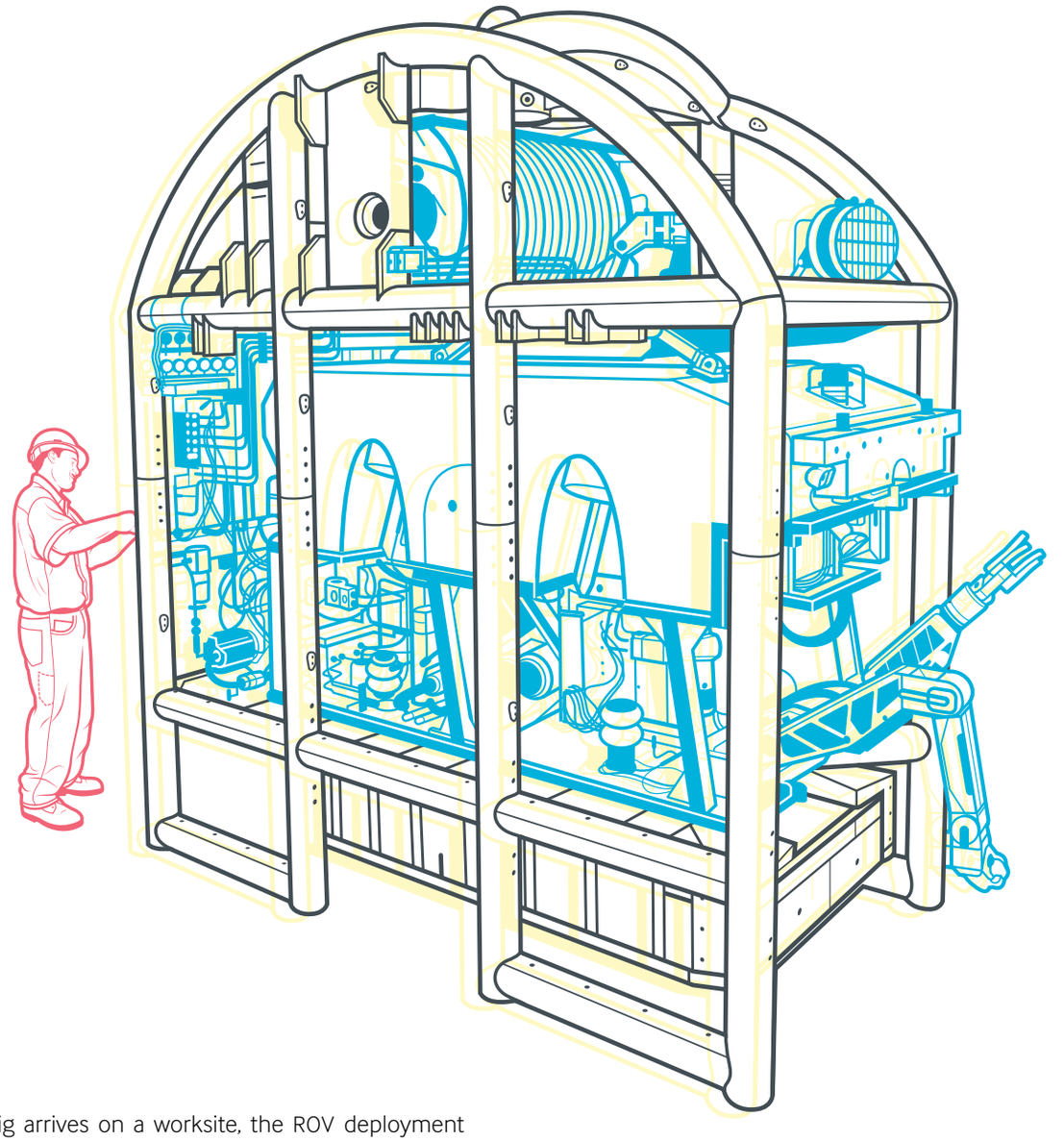
By Scott Redepenning, *Illustrations by* Jameson Simpson

The deeper the water, the farther the rig is from the wellhead. This is a simple relationship that gives rise to some complicated issues. Imagine trying to flip a switch, turn a valve or do a closeup inspection on equipment that's nearly two miles away, underwater, with 5,000 psi of pressure bearing down. Diamond Offshore ultra-deepwater rigs perform these kinds of tasks routinely by deploying onboard ROVs.

The ROV aboard the newly upgraded *Ocean Monarch* is an Oceaneering* Hydra Millennium Plus system, fully equipped to operate at the rig's 10,000-foot water depth rating. From the 8 x 20-foot. control van perched on the *Monarch's* main deck, a three-man crew puts the ROV through its paces, assisting with virtually every underwater rig function, from site inspection to subsea equipment deployment to drilling. According to Oceaneering ROV Project Manager Egan Gyldenege, there's rarely an idle moment.




Millennium



"As soon as a rig arrives on a worksite, the ROV deployment cage is usually the first thing into the water," he says. "The unit goes down to help set the rig's anchors, or the transponders in the case of a dynamically positioned rig. We then take a seabed survey to make sure there are no obstructions or environmental issues to deal with before commencing work. We take video and sonar the entire time the ROV and deployment cage are at depth to have a recording of everything we see and do. We also repeat this survey when the rig is about to move to another location to verify that we are leaving the site in proper condition—not leaving anything behind that shouldn't be there." These pre- and post-drilling surveys are a Minerals Management Service requirement.

After anchorage and site survey, the ROV goes about the various tasks of helping to spud the well—setting the lower marine riser package (LMRP), blowout preventer (BOP) stack and riser. "You'll have an ROV deployed at depth around the clock for days and even weeks while doing the initial spud in," Gyldenege says. "We are 99% of the observation that goes on. We are looking for the right kinds of visual verification that things are going as they should. We can also see and address any issues that may come up. But we're not just watching; we're also doing. We can use the brute strength of the ROV to help land the surface casing strings, BOP and LMRP by grabbing the structures with the unit's manipulator arms and guiding them into place."

Once the well is spudded and the drill string begins its journey, the ROV is still ever present, assisting the drilling and subsea crews with both observational and manipulative tasks. The unit's "eyes" consist of five cameras that record digital video and stills in color and black & white or high definition. One is a low-light camera for situations where the work area isn't sufficiently illuminated by the ROV's eight 250-watt light pods. Two hydraulically powered robotic manipulator arms provide seven-way movement that replicates and augments the full functioning of the human shoulders, elbows, wrists and hands, giving the ROV pilot both formidable strength and precise small-detail coordination simultaneously.

Oceaneering Vice President of Sales and Marketing Charles Royce says the greatest role of an ROV is to speed things up—all things. "We can take care of tasks in minutes that would take days if the rig crew had to pull the equipment out of the water. Say you're changing a gasket thousands of feet down. You'd spend three days pulling the stack, another day or so working on the equipment and three more days putting it back down. The ROV lets you quickly make the change in situ, giving you back about a week in drilling time."

Weighty capabilities

The entire ROV system accounts for 150,000 pounds of the *Monarch's* total deckload. The ROV and deployment cage weigh 20,000 pounds and the control and work vans 48,000 pounds. The remaining 82,000 pounds is tied up in the deck-mounted hoisting system and the 12,000 feet of steel-armored umbilical cable on which the ROV and cage are lowered to working depth. The umbilical itself is the single most expensive component of the system, costing Oceaneering between $250,000 and $350,000 per cable. It is also the most critical component, says Royce.

"All of the ROV's power, telemetry and communication fiber optics run through that cable. Without those, it doesn't matter how sophisticated the vehicle is. It becomes just a hunk of metal in the water." Royce then takes his analogy to another level. "If you lose the ROV, you can't see, you can't work, and you can't drill. Then the whole rig is just sitting there doing nothing. We can't have that. That's why we have over 12,000 feet of umbilical on a rig that plans to drill in up to 10,000 feet of water. As a preventive measure, we periodically slip, cut and reconnect the cable at its highest stress point, where it terminates on the deployment cage."

When the cage reaches working depth, the 8,800-pound ROV—now neutrally buoyant—is "flown out" via eight vertical and horizontal thrusters to perform its various planned tasks. The vehicle is connected by a 1,000-foot tether that carries power and fiber optics from the deployment cage to the ROV. The cage itself is also equipped with lights, cameras and thrusters, allowing the "garage" to be flown with almost the same deft precision as the vehicle.

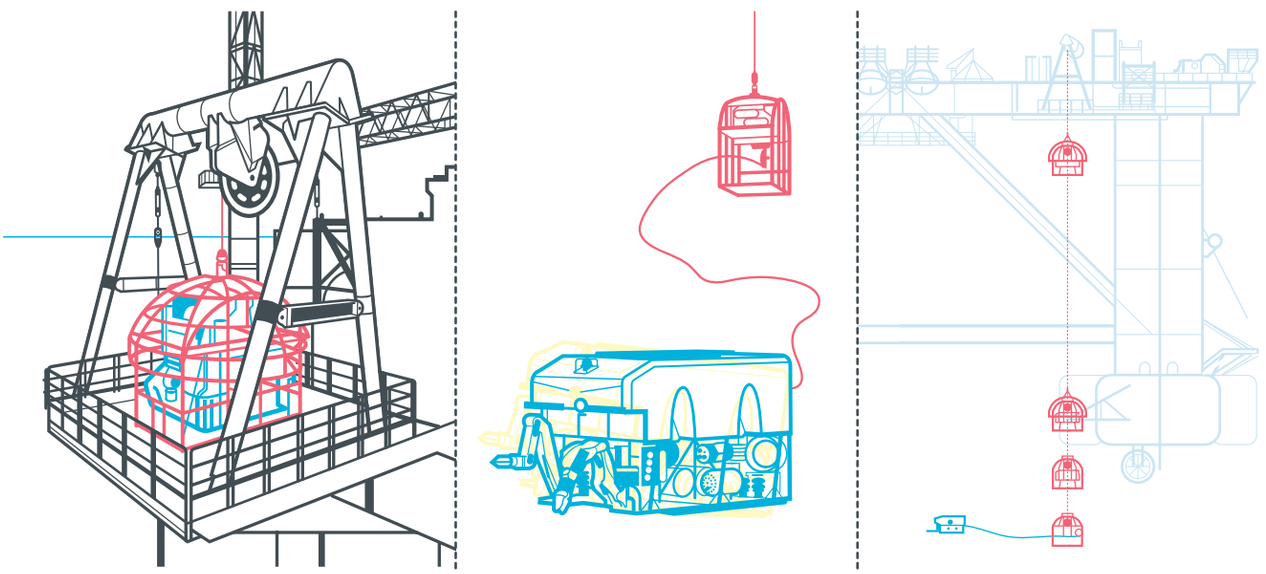
"People mostly focus on the ROV itself, but the cage is a pretty amazing piece of equipment," says Royce. "It pays out and retracts the tether. It can see, it can navigate, and it carries the hundreds of pounds of tools that the ROV typically needs at the worksite."

Gyldenege adds, "When we deploy the ROV, we're planning to do multiple tasks that could take days or weeks. If we're working at 10,000 feet, it takes about eight hours to pull the ROV out onto the deck, re-outfit the system and send it back down. That's time taken away from drilling, so we try to be overprepared and send the ROV down with every tool it could possibly need. Sometimes we'll even launch a day or so ahead of time if rougher seas are in the forecast. We're equipped to launch in high seas, but if we can avoid it, we'll just park the unit at depth and wait for the rig to be ready for the tasks to commence. Obviously, full preparation is key."

Tooling packages typically sent down include wire and fiber rope cutters, ring-gasket replacement tool, trash pump for vacuuming or blowing debris from a work surface, rotary grinder/cutter/buffer, hot stabs for actuating various components on the subsea equipment and an assortment of wrenches and other rotary tools.

The manipulator arms that wield these tools run on a 200-horsepower hydraulic pump system, which also powers the thrusters. Two electric motors aboard the ROV drive the hydraulics at 480 volts AC, which must be stepped up in three phases to nearly 3,000 volts on deck before the electricity is sent down the umbilical, ensuring that the required power gets to the ROV at depth to perform all functions.

"When we deploy the ROV, we're planning to do multiple tasks that could take days or weeks. If we're working at 10,000 feet, it takes about eight hours to pull the ROV out onto the deck, re-outfit the system and send it back down. That's time taken away from drilling, so we try to be overprepared and send the ROV down with every tool it could possibly need."



In the pilot's seat

On the *Ocean Monarch*, ROV personnel are vital players in the rig's functioning. Although direct Oceaneering employees, they in effect become members of the *Monarch's* drilling, subsea and station-keeping teams. They are integral to task planning and are in constant communication with key rig personnel during operations. A live video feed from the ROV is also sent to monitors throughout the *Monarch*, so all crewembers can see what's going on in real time. "I think the best part of the job is that no matter what needs to be done down there, the whole rig crew is looking to the ROV people to be the eyes of the operation," says Royce. "It can't happen without you."

Three Oceaneering crewmembers are constantly in charge of the ROV—an electronic technician, mechanical technician and supervisor. Although each has specialized skills and duties, all three are trained to do every job, including piloting the ROV. The pilot flies the vehicle from a multifariously complex control chair that puts a button-bedecked joystick in each hand. Several other toggles, minor joysticks, foot pedals and a touch screen add more functions. The pilot simultaneously controls tether payout and retraction, thruster up, down, forward and back, and port and starboard lateral travel and hard turns. All manipulator arm functions are controlled—shoulder, elbow, forearm, yaw, wrist rotation and claw open and close. Camera controls such as tilt, pan and zoom are also at the pilot's fingertips, and everything the ROV sees, as well as key operational data, is displayed on several monitors arrayed before the pilot.

Controlling these some two dozen variables at once becomes second nature to pilots, and difficult tasks are made to look simple. Yet this skill level does not come easy. Oceaneering spends $10 million a year on simulator and on-the-job training for ROV personnel. Gyldenege points out the high level of sophistication of Oceaneering's simulators. "These are extremely realistic, much like a flight simulator," he says. "They replicate all of the forces at work in the ocean, including current and the heaving of the rig in the waves. A new recruit spends about 10 hours on a simulator before ever touching a real ROV. Then we begin to give them live experience on an ROV doing real work. However, they will not be involved with critical portions of tasks until they've flown the ROV a minimum of 200 hours."

Gyldenege says that simulators are also used by seasoned pilots to practice unfamiliar tasks before attempting them in the real world. "We use our simulators to 'do the job' before we do the job. We can replicate the tasks and conditions our pilot will face and end up saving everyone lots of time. Tasks that were taking days and days in the simulator we've been able to knock down to hours by doing them again and again and getting really good at it."

Royce puts it into financial perspective. "Simulation is a must. With rigs already costing operators up to a million dollars a day, we just don't have the luxury of on-the-job training," he says. "Our ROV systems typically cost operators between $9,000 to $12,000 a day. We have to be the best we can be the minute we begin work. When we perform a task, our clients want us to be as good on the first time as on the 10th time. Getting it right, right away, saves a lot of money."

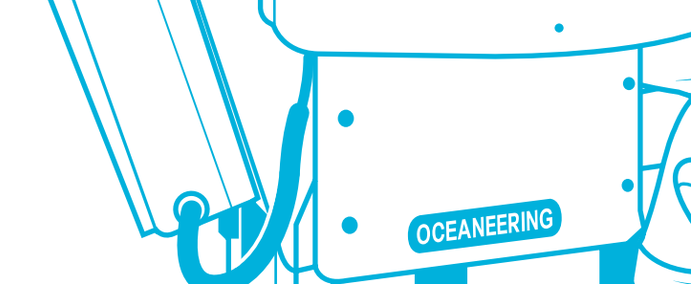
Crewing up

Looking at the ROV control chair, one imagines that the best pilots would be arcade dwellers who grew up mastering video games. Gyldenege says this is a common misperception. "We don't look for joystick jockeys. We seek out people who have strong electronic or mechanical backgrounds. We get some ex-Navy people who are used to working offshore. But we also get the guy who turned a wrench on his car every weekend, or someone from a farm who is really good with equipment, or an electrician who worked on residences, or a commercial diver who wants to stay dry now. We just look for bright people and then we train them for what we want them to do."

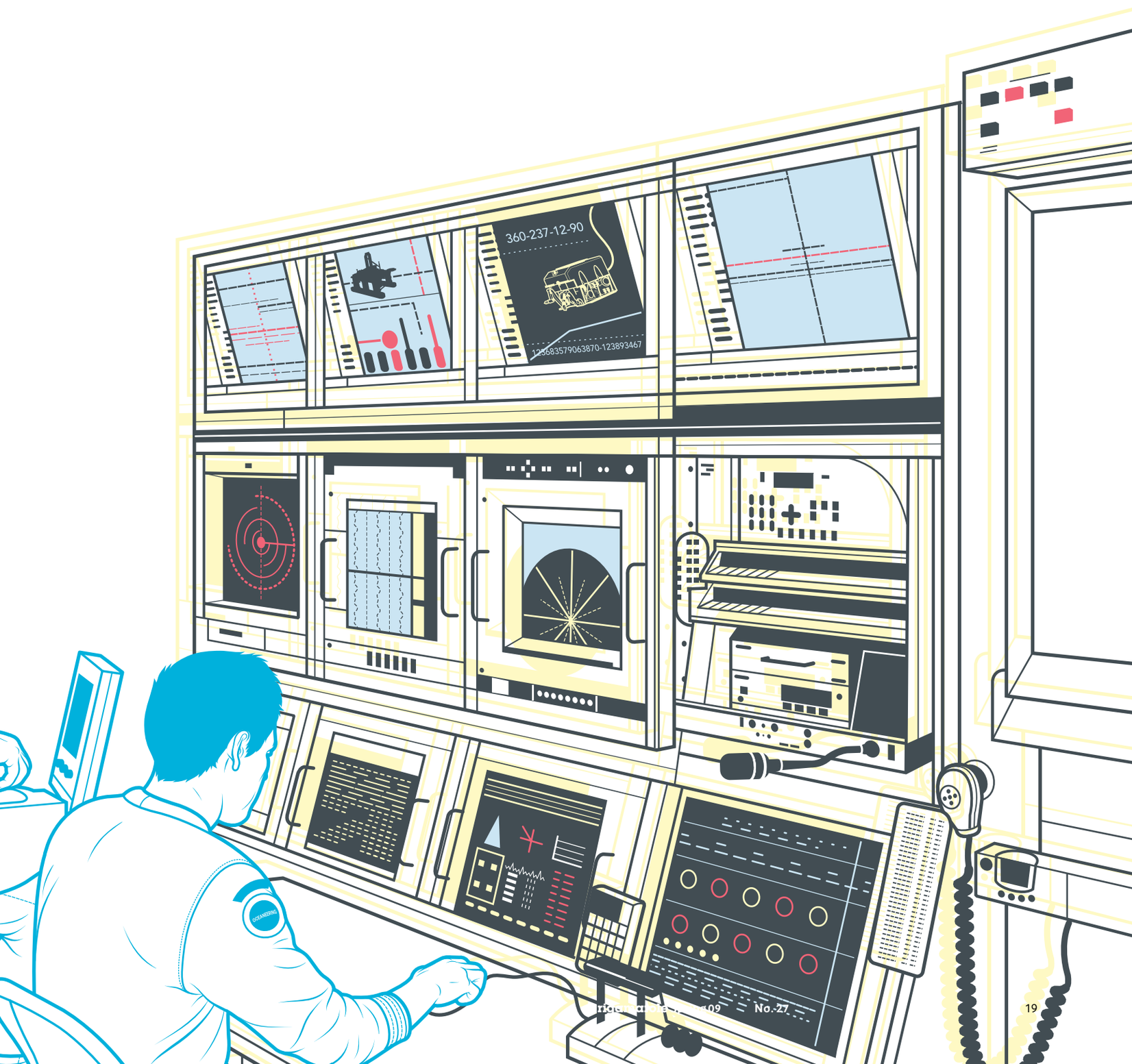
Although the *Monarch* is only now working its maiden assignment since being upgraded in Singapore, the ROV crew has built considerable longevity with the rig. "We got involved with Diamond Offshore way ahead of time on the *Monarch*," says Royce. "We went out to Singapore and had the actual crew who works the ROV on the *Monarch* install the system. That way they would know it inside and out and be ready to work the ROV immediately."

Gyldenege says that upcoming tasks for the *Monarch's* ROV system could be virtually anything that Diamond Offshore and its clients want to do. "I really believe that ROVs are an outgrowth of necessity. Their only limitation is the imagination. When a client says, 'Hey, it would be great if...' we are great at coming through on those 'ifs.'"

SCOTT REDEPENNING IS AN INTERNATIONALLY EXPERIENCED FREELANCE WRITER, AN ENTHUSIASTIC SOCCER COACH TO 5-YEAR-OLDS AND A HIGHLY QUALIFIED BEACH BUM.



Looking at the ROV control chair, one imagines that the best pilots would be arcade dwellers who grew up mastering video games. This is a common misperception. “We don’t look for joystick jockeys. We seek out people who have strong electronic or mechanical backgrounds.”




THINK
SAFETY

Safety: One day at a time

By Denise Allen Zwicker, *Photography by* Drew Donovan & Chris Shinn

THEY SAY, "ETERNAL VIGILANCE IS THE PRICE OF LIBERTY." IT IS ALSO THE PRICE OF HUMAN SAFETY.

Until a company achieves zero safety incidents, there is always room for improvement. With that in mind, Diamond Offshore launched and enhanced several safety programs in 2008. Two more safety programs have been introduced in 2009: ZIO and DODI.

"With Zero Incident Operations (ZIO), we will focus on all incidents, not just the total recordable rate. This will move us toward our goal of zero safety incidents," says Scott Vaughn, director of health, safety, environmental and claims. "We also are replacing the STOP program, which came from a third party. Instead, we are designing our own behavior-based element: Diligent Observation, Decisive Intervention (DODI). We plan to release DODI, which also matches our corporate name, Diamond Offshore Drilling, Inc., in mid-2009."

The new ZIO program grew from a corporate belief that all safety incidents can be prevented. "It may seem like a lofty goal to have zero incidents in a hazardous business like ours. But by planning our work, we can prevent all incidents," says Vaughn. The DODI program will direct crew members to note—on special cards—any factors that could lead to a safety incident, then correct them. The cards address the entire rig environment: not just the tools and equipment, but also housekeeping and human behavior.

Both ZIO and DODI, along with the 2008 programs, have set the stage for improved rig safety in 2009.

"Safety is No. 1," says Moe Plaisance, vice president of International Operations, Eastern Hemisphere. "For us, there's no difference between safety and operations. Or safety and financial results. Or safety and any other business metric. We don't gain when people get hurt. We only lose."

"That's why our operations meetings always begin with a safety report," says Senior Vice President, Worldwide Operations, Lyndol Dew. "Safety is first and foremost in all we do."

But not everyone fully embraced that mantra last year. The result was that Diamond Offshore did not meet all of its 2008 safety goals.

"In 2004, our industry ramped up to near full rig utilization. That diluted our experience at almost every level," says Dew. "Plus, we moved many rigs from U.S. waters to international waters. When we move rigs, people move into new jobs. Or they change rigs, which is like moving to new jobs. But the constant in all this is GEMS. GEMS is the way we help ease the ups and downs of change."

GEMS is Diamond Offshore's Global Excellence Management System. This set of procedures fully addresses health, safety, environmental protection and regulatory compliance worldwide.

New safety measures in 2008

In its continuing effort to improve safety on Diamond Offshore rigs, the Company enhanced and added several new safety programs in 2008. These include better access to GEMS on the rig floor, a safety-intervention card, "60 Days of Safety," a hand-safety campaign, a more formal incident review process and area-specific safety plans.

"Everyone at Diamond Offshore has always had access to GEMS: it's our foundation," says Dew. "But in 2008 we made GEMS even handier. We put computers in weather-tight enclosures on the drill floor and where our roustabouts work. Now our crews can find GEMS guidance right where they're working."

Each rig employee also received a safety-intervention card printed in his or her native language. "Our surveys showed that some crew members didn't truly believe that they had the power to stop a job they saw as unsafe or unclear," says Vaughn. "This card gives them that power. And it's signed by our CEO, Larry Dickerson."

Dickerson also led a management video that kicked off "60 Days of Safety" last winter—a time when incidents often increase. Crew members were eligible for a drawing each day that their rigs worked safely.

A hand-safety campaign, new in 2008, addresses the nearly 60% of safety incidents that involve employees' hands, arms and fingers. Further, the Company established a formal roundtable to discuss the root cause of every incident. Another change was area-specific health, safety and environmental (HSE) plans.

"Most of our rigs did a good job in safety last year," says Plaisance. "But we had some troubling shortfalls."

"On the other hand, quite a few rigs moved from one country to another and re-crewed without a major incident, which is a huge feat," says Ronnie James, vice president of International Operations, Western Hemisphere.

"Take the *Ocean Heritage*, for instance," says Plaisance. "This rig has moved all over the world… Indonesia, India, Ecuador. Yet it has a great safety record—nine years since its last Lost Time Incident.

"You might think crews in the developed world would work the safest," he muses. "But the *Heritage* has what I call a 'United Nations' crew: Egyptians, Indians and Indonesians. As a rule, they follow our GEMS guidelines. Maybe that's because their jobs are so important to them. Compared to the average person in their native countries, they're paid very, very well. They want to keep their jobs. And they want to be safe."

Tools in the toolbox

Managers agree that the Company has a wealth of safety tools—the best in the business, they say. The problem lies in persuading every employee to use those tools every day, for every job, no matter how routine.

"Our best tool is the long-standing Job Safety Analysis (JSA)," says Dew. "If everyone buys into the JSA, chances are the work will proceed safely. The JSA, which is performed before a task begins, helps us plan our jobs, step by step. We look for the hazards and figure out how to avoid or prevent them."

The JSA is just the first step: As mentioned before, every crew member can stop any job at any time. "When that happens, we all take a half-step back and rethink the job," says Steve Nelson, vice president, U.S. Gulf of Mexico Operations. "If something is unsafe, we correct it. If someone doesn't know exactly how to do the job, we make sure he or she does.

"We know that people—above all, newer, entry-level people—worry that they'll get into trouble if they stop a job," Nelson adds. "So we address that with several tools. One is the card signed by Larry Dickerson. Another is to ask each crew member to practice stopping a job until he feels comfortable doing so."

The Company's "lesson-learned" program is another robust safety tool. When an incident occurs, managers quickly nail down the root cause and alert all 45 rigs of the lesson learned. "To keep these lessons fresh, we then include them in the JSA for that job," notes Nelson.

“For us, there’s no difference between safety and operations. Or safety and financial results. Or safety and any other business metric. We don’t gain when people get hurt. We only lose.”

— **Moe Plaisance,** Vice President of International Operations, **Eastern Hemisphere**

"Our best tool is the long-standing Job Safety Analysis (JSA). If everyone buys into the JSA, chances are the work will proceed safely. The JSA, which is performed before a task begins, helps us plan our jobs, step by step. We look for the hazards and figure out how to avoid or prevent them."

— **Lyndol Dew,** Senior Vice President, **Worldwide Operations**

Our biggest foe? Human nature

"Our work is hazardous. But when it comes to safety, human nature is our biggest foe," says James.

Plaisance agrees: "We tell our people that taking shortcuts may give you the false notion that you're saving time and money. But if you have an accident, all the time you saved goes right out the spout. It will take time to fix what you've done wrong. Plus, you've lost the skill of the person who's hurt. And, finally, we work under laws that just don't allow that kind of behavior."

The key is safety leadership, says Nelson. "Our supervisors must lead by example, so we evaluate them for that. Our crane operators and drillers have to be 'on board' with safety. Their crews are working in the most hazardous jobs on our rigs."

To spur crew members to follow its safety standards, the Company dangles a variety of carrots, such as cash bonuses and award programs. Rigs also receive safety kudos from both the U.S. Minerals Management Service (MMS) and customers.

In 2008, the *Ocean Endeavor* received the MMS Houma District SAFE Award. The Company is now eligible to win the national SAFE award this spring. Likewise, the *Ocean Tower* won Chevron's Outstanding Contractor Award for its work in post-hurricane platform restoration.

Customer involvement

"Almost all of our customers have robust safety programs that measure our performance," says Dew. "They review GEMS, and we review their safety systems to make sure we're working in tandem. We tell customers, 'This is how we work safely. If you have ideas, we'll be glad to hear them.' One thing we do very well in our industry is share safety ideas."

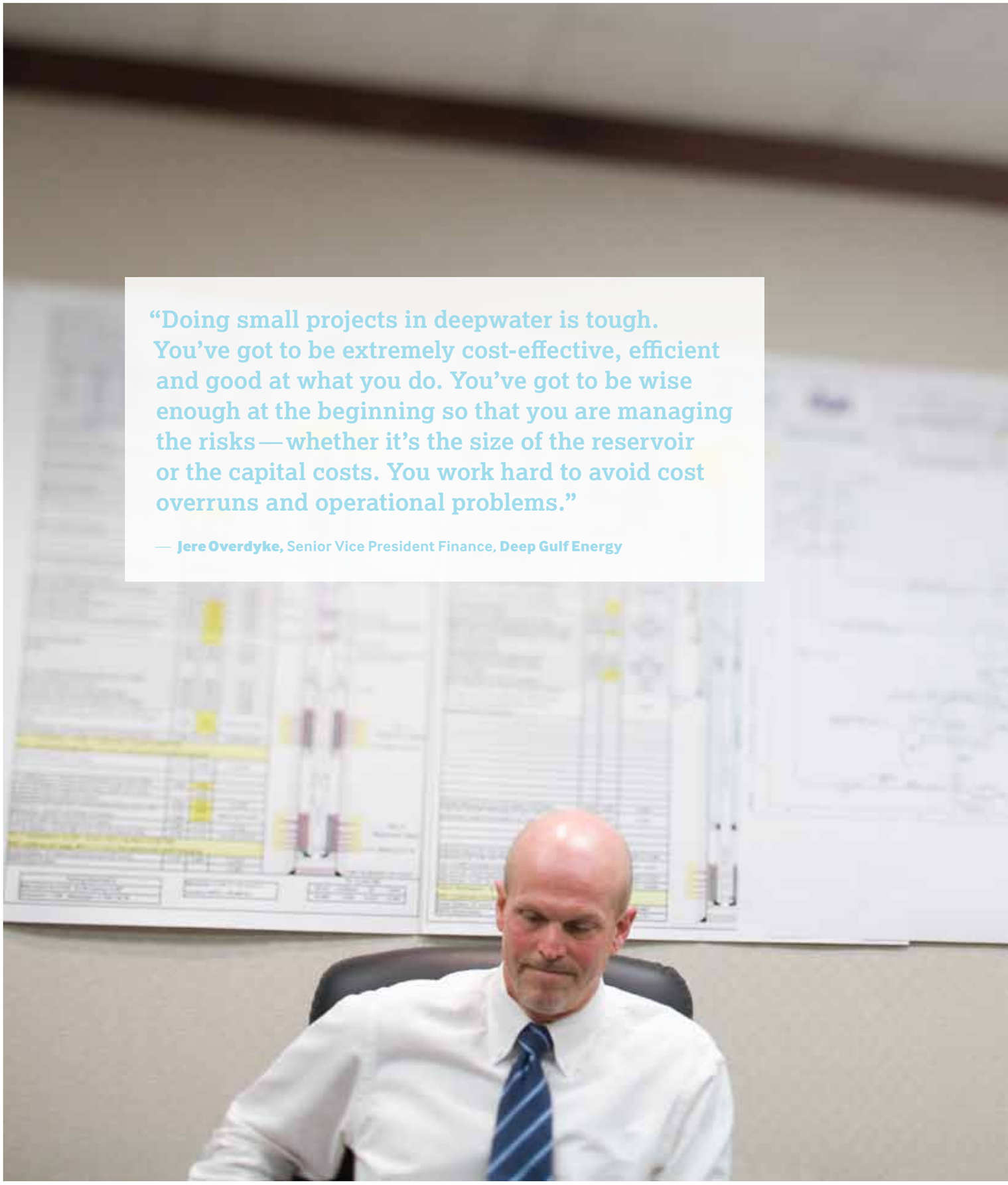
Diamond Offshore also depends on customers to help set the tone for safety. "The operator's company man is the top dog on the rig. He sets the tone. And if he doesn't talk about safety at all, he sends a completely different message," says Nelson.

"Operators that embrace safety make it much easier for us to succeed," Nelson adds. "That wasn't always true 15 years ago. But today most operators have good, strong safety cultures."

Total commitment

"Safety is by far the toughest problem we face," says Dew. "And safety hinges on human actions: To work safely demands discipline and total commitment to our safety guidelines. We have to find ways to inspire everyone to do the job right all the time. Safety is not a destination; it's always a journey. He concludes, "Every day, we start again. What happened yesterday is over. And tomorrow is still ahead. We can only focus on being safe *today*."

DENISE ALLEN ZWICKER HAS BEEN A FREELANCE WRITER SINCE 1977, COVERING VIRTUALLY EVERY ASPECT OF THE ENERGY INDUSTRY.



"Doing small projects in deepwater is tough. You've got to be extremely cost-effective, efficient and good at what you do. You've got to be wise enough at the beginning so that you are managing the risks—whether it's the size of the reservoir or the capital costs. You work hard to avoid cost overruns and operational problems."

— **Jere Overdyke,** Senior Vice President Finance, **Deep Gulf Energy**

Deep Gulf Energy Skin in the Game

By Molly Glentzer, *Photography by* Patrick Lane

Signs of frugality greet visitors immediately at Deep Gulf Energy's headquarters in a nondescript west Houston building. Or rather, don't greet visitors: DGE conducts business without a receptionist. To venture further inside, one picks up a phone and dials an extension from a list—any extension, including that of President Richard Clark. ¶ Project diagrams, not artsy paintings, hang on the walls beyond. The coffeepot, while spiffy, brews one cup at a time, self-serve. ¶ Lest you get the wrong impression, however, know that all this economizing springs from choice rather than necessity. ¶ Founded in April of 2005 by a handful of offshore veterans, Deep Gulf Energy runs on an extremely disciplined business model. "We're a niche player," says Clark. "We look for low-risk exploitation or exploration projects. Most will be small, and we develop those with subsea systems. It's all deepwater—that's all we do—and we tie into someone else's existing platform." ¶ When his DGE co-founders—Jere Overdyke, senior vice president, finance, and David Huber, senior vice president, operations—join Clark at a conference table to chat, they echo that philosophy like fraternity brothers.

"We're a niche player. We look for low-risk exploitation or exploration projects. Most will be small, and we develop those with subsea systems. It's all deepwater—that's all we do—and we tie into someone else's existing platform."

— **Richard Clark,** President, **Deep Gulf Energy**

"We don't try to drill wells all over the world; we don't try to drill wells anywhere onshore. It's just one spot, and do the very best you can do," says Overdyke.

Since the inception of the company, DGE has participated in 16 deepwater wells in 11 projects, of which 15 wells and 10 projects have been successful. DGE currently has interests in nine projects, four of which are producing about 8,600 net BOE/D. Another net 10,000 BOE/D, from the other five projects including the Sargent well completed by Diamond Offshore's semi *Ocean Saratoga*, should come onstream in the next year.

Doing small projects in deepwater is tough, Overdyke says. "You've got to be extremely cost-effective, efficient and good at what you do. You've got to be wise enough at the beginning so that you are managing the risks—whether it's the size of the reservoir or the capital costs. You work hard to avoid cost overruns and operational problems."

DGE is backed primarily by First Reserve Corporation, the world's largest private equity firm focused exclusively on the energy industry, and by Quintana Capital Group, an energy-focused private equity firm run by Corby Robertson Jr. and Don Evans.

They've been extremely supportive, Overdyke says. "These are investors that we want involved in everything we do." At the same time, he adds, "They do a lot of due diligence and have very tight corporate governance. We run Deep Gulf like a public company."

With one major exception: DGE's executives take on big risk, too. "When you're with a private equity group, you have to invest some of your own money in your deals," Clark explains. "It puts a whole new light on it. You treat it like your own money because a portion of it is."

Skin in the game in deepwater is rare, says Huber. "And scary. You get a dry hole or you overspend something, it comes out of your own pocket."

DGE employs a close-knit staff of 16 people, most of whom have worked together more than a decade. They have the intellectual capital of a large company, but without a big technical staff, Huber says. "You need to form relationships with excellent companies. You get their best as a result. Because we've been good to do business with for a long time, our contractors go out of their way to help."

That respect enables mutual benefits, he adds. "Unlike bigger companies that often go through a lot of red tape to get contractors on board, we generally do it very quickly and very efficiently."

For example, while DGE's projects don't lend themselves to long-term rig commitments, its principals have worked with Diamond Offshore for a long time. "We depend on playing windows when someone else may have a slot available," Clark says.

The *Saratoga's* crew did a good job, he says, and the *Ocean Victory* began drilling in about 4,500 feet of water at their Cannonball site (Green Canyon 593) in April.

Although Clark says he'd still like to see service costs better reflect today's lower commodity prices, DGE views the current environment as positive for its business model. DGE can economically drill and develop smaller plays that do not meet the economic criteria of larger companies. And their flexible transaction structuring allows deals to be made to benefit all parties.

"On the flip side of that," Clark adds, "your cash flow is down because commodity prices are down, so you've got to be very selective."

Of course, this team has ridden industry cycles before. "Some of us have worked together 25 years. And for the last 15, we've been primarily pursuing this strategy of doing low-risk things in deepwater, so we've had a lot of reps," says Clark.

And their perspective doesn't just spring from work experience. Huber and Clark have climbed some of the world's highest mountains together—about as extreme as team-building gets.

About nine years ago, Clark explains, a group of oilfield pals decided to try climbing Africa's Mount Kilimanjaro. That proved to be fun, so they kept at it. They've also tackled the highest mountain in the Americas, Argentina's 22,800-foot Aconcagua peak. Last December, Clark climbed Ecuador's highest summit, the Chimborazo volcano.

"You get to know people pretty well when you're in a small tent and you're freezing and you're not feeling so well," says Huber, who claims he usually has to be dragged to the top. "It draws people together when you take on that big of a physical challenge."

"We work hard; we're busy," Clark says of life at DGE. "But you go on one of these trips, and you kind of wipe the slate clean. I feel much more productive and eager when I get back."

The founders also lead busy family lives. Clark and his wife, Stacy, have two teenage daughters, Hannah and Christine. In summer, they like to water ski near their lake house in Seguin, Texas.

Overdyke concentrates on tennis and golf, keeping up his game for DGE's spring and fall "deepwater golf" tournaments at Whispering Pines, which is owned by one of the principals at Quintana. "I'm much better than any of the Diamond guys," he jests.

He and his wife, Carol, raised a couple of hardcore DGE cheerleaders: their sons Trey, a Wyoming energy lawyer with the Denver-based law firm of Holland & Hart, and Scott, now at Columbia Business School after several years in the jungles of Panama with the Peace Corps. "On all of their

- **Richard Clark** (left)
  President
  Deep Gulf Energy
- **Jere Overdyke** (below, left)
  Senior Vice President
  Finance
- **David Huber** (below, right)
  Senior Vice President
  Operations

wilderness trips, they have pictures taken showing them wearing DGE hats," Overdyke says.

Huber's heart lies in Colorado, where his wife, Cynthia, holds down their ranch near Colorado Springs. They have horses and steers, he says, and luckily they inherited a ranch foreman with the property. "I'm usually a burden when I go up; I'm a city guy," he says.

They may run a tight office, but at DGE nobody skimps on fun. And mountaineers or not, all the employees focus on being the very best at their profession.

"You do everything you can to avoid the risks", Clark says, "but you're still going to have problems. And the measure of your team is how they react."

Overdyke chimes in. "What gets all of us excited is to make a pretty big bet and see it from inception through the cycle, drilled and completed," he says.

They're also excited about DGE's future. "We have no debt. Right now we have cash in the bank, excess cash that we didn't invest because we couldn't find specific projects that met our hurdles," says Overdyke.

"It helps to have investment partners who understand the business," Clark says. "They're niche players, too. First Reserve has in excess of $18 billion under management and is currently investing its 12th fund. They're great people, and they've been doing it for 25 years. Our other outside investor, Quintana Capital, and its predecessor entities have been operating and investing in the oil and gas business since the 1930s so they also have a real understanding of our business."

FREELANCE WRITER **MOLLY GLENTZER** IS BASED IN HOUSTON, TEXAS.

Exploring at the Edge of the World

By Molly Glentzer

Total isolation, constant 50-knot winds, Argentina's first offshore drilling program in decades with the whole country watching—all this is just another day at the office for the *Ocean Scepter*, the only rig drilling off the coast of Argentina.

The San Jorge Gulf offshore Argentina had not seen any drilling activity for decades until the new-build premium jack-up *Ocean Scepter* spudded its first well for the consortium of Enarsa, YPF and Enap last October. So important was the occasion that Argentine President Cristina Fernandez de Kirchner visited the rig to mark the occasion, heralding it as "a great day for Argentina."

The *Scepter,* contracted through July 2009, is performing exploratory work for two programs financed largely by private investors in partnership with the Argentine government—a first.

The privately held YPF financed and operates the $100 million Aurora project, with drilling targeted to about 7,500 feet. YPF also partners with the Argentine government's Enarsa and the Chilean government's Enap Sipetrol (serving as operator) in the $50 million Hélix E2 project, with drilling to about 4,800 feet in the South Atlantic's Austral basin.

Numerous diplomats and VIPs visited the *Scepter* with President Kirchner. In her remarks, Kirchner praised

THIS PAGE—PHOTOGRAPHY BY JONATHAN WILSON

The San Jorge Gulf offshore Argentina had not seen any drilling activity for decades until the new-build premium jack-up *Ocean Scepter* spudded its first well for the consortium of Enarsa, YPF and Enap last October. So important was the occasion that Argentine President **Cristina Fernandez de Kirchner** visited the rig to mark the occasion, heralding it as "a great day for Argentina."

YPF majority stakeholders Enrique Ezkenazi and Sebastian Ezkenazi for their patriotism. "Finding Argentine entrepreneurs who bet on their country is not easy," she said.

As of mid-April, the *Scepter's* crew has spudded four wells and the rig is performing—especially considering that the unit is a new-build and this is its first job, says Operations Manager Jonathan Wilson. "We've been within all of our budget, safety and downtime parameters." To date, the crew had logged only two safety incidents with no serious injuries.

Built at the Keppel AmFELS shipyard in Brownsville, Texas, the *Scepter* is one of two ultra-premium new-build jack-up rigs recently completed and delivered by Diamond Offshore. Combining brute strength with technological intelligence, it can handle 2 million pounds of hook load and nearly 7.3 million pounds of variable deck load, with a derrick and drill floor that can cantilever 70 feet out from the hull and run the pumping system to 7,500 psi. The rig is capable of drilling up to 35,000 feet deep in up to 350 feet of water. Wilson compared it to a luxury automobile that's equipped with just the right amount of technology but not overloaded. "The more complicated a system is, the more prone it is to failure. There are not a lot of fancy things that aren't value-added," he said.

Wilson has been with the *Scepter* since January of 2007, "when it was plates and pipes sitting in the dirt." He attributed the rig's early success to the crew's expertise and positive culture. "They are passionate about the rig. They've taken ownership of it, anticipating problems and finding quick solutions."

But good performance doesn't mean that there are no challenges. The Aurora project sits approximately 45 miles offshore Comodoro Rivadavia in the state of Chubut, while the Hélix E2 project lies off the coast of Santa Cruz and the Strait of Magellan. And the nearby region of Patagonia is pretty remote in itself. "You can drive five or six hours on the steppes and see nothing," Wilson said.

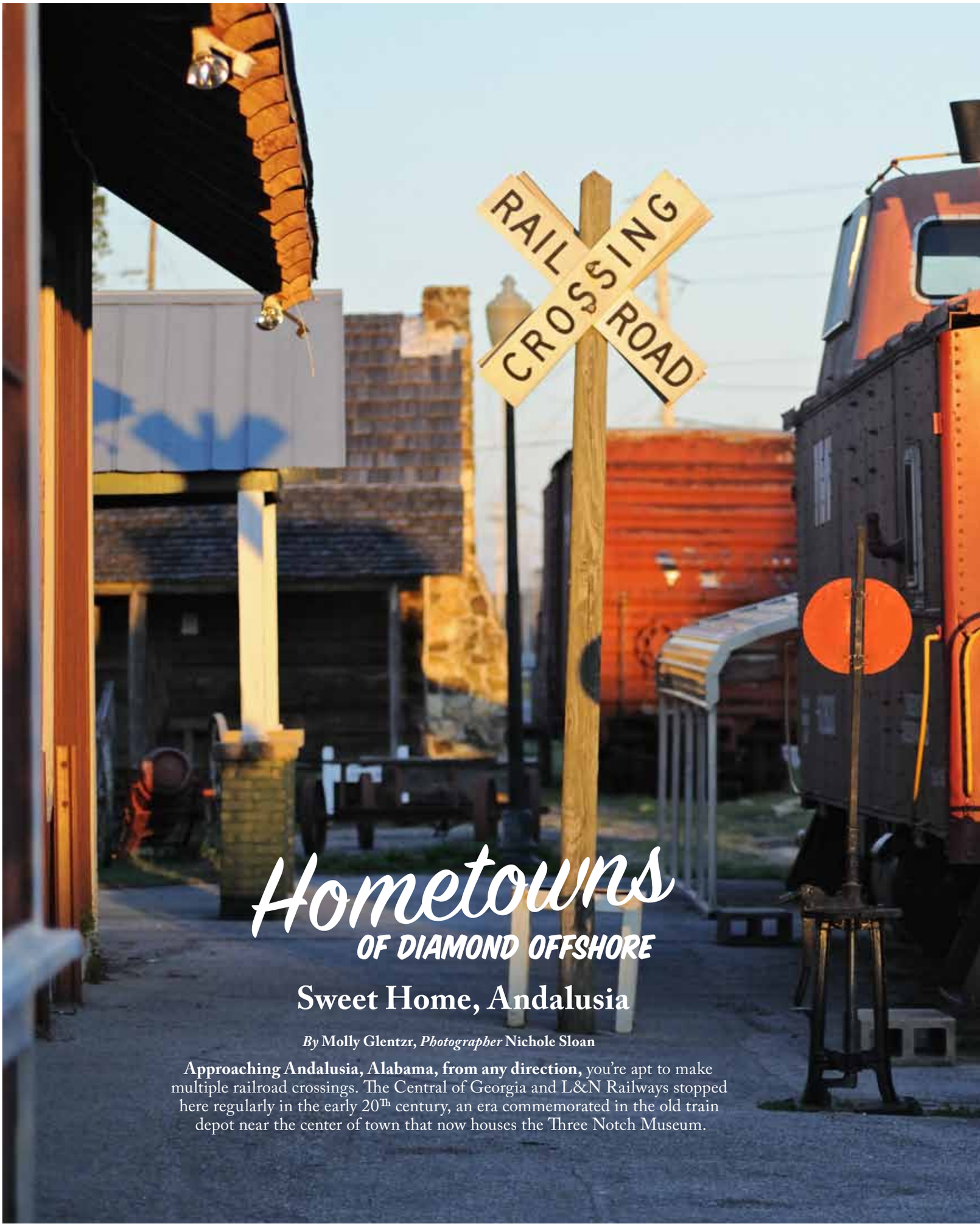
"Because we are the only offshore rig in Argentina, the onshore infrastructure to support a rig is not here, so we constantly have to improvise to meet those challenges." His office, he noted, is 900 miles away in Buenos Aires.

Argentina's customs and visa laws present other issues. "Every piece of equipment has to be imported to Argentina, then exported to the rig. We have to anticipate problems and have parts on the rig long before we need them," Wilson said.

The extreme environment impacts operations, too. "On a normal day, the wind blows 40-50 knots, so you have to be very careful with the cranes," Wilson explained. "The ocean is about 38 degrees Fahrenheit, cold enough that a man in normal work clothes will die in five minutes if he falls in. Even getting on location is a challenge because we have an 11-meter tidal change every 12 hours. And once you are on location, there is no data regarding soil conditions on the seafloor."

The contract for the *Scepter* ends in late July, and the operators plan to take a break, evaluate results and decide whether or not to move ahead with another drilling program.

FREELANCE WRITER **MOLLY GLENTZER** IS BASED IN HOUSTON, TEXAS.



Hometowns
OF DIAMOND OFFSHORE

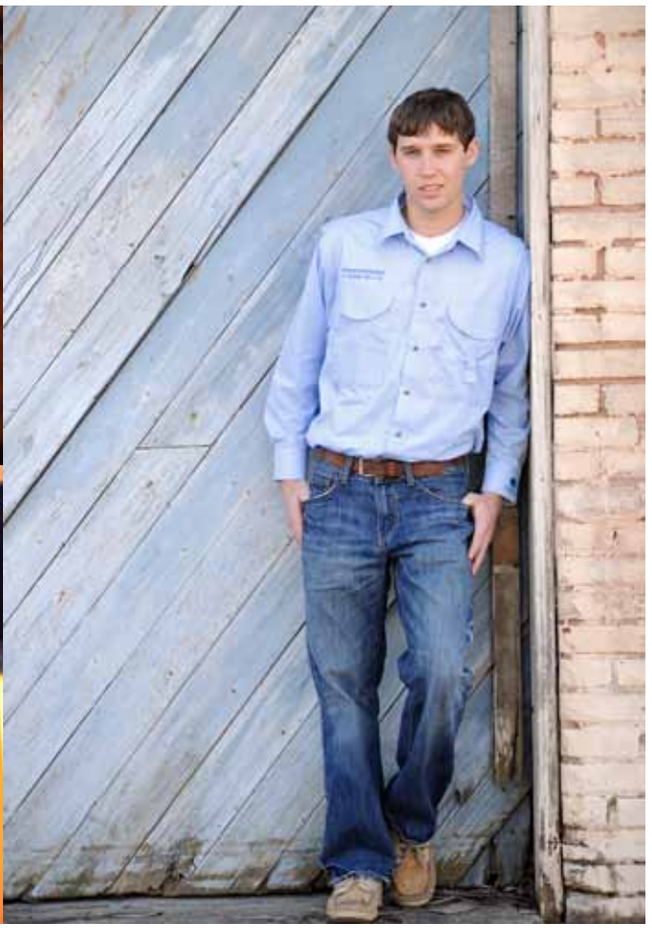
Sweet Home, Andalusia

By **Molly Glentzr,** *Photographer* **Nichole Sloan**

Approaching Andalusia, Alabama, from any direction, you're apt to make multiple railroad crossings. The Central of Georgia and L&N Railways stopped here regularly in the early 20Th century, an era commemorated in the old train depot near the center of town that now houses the Three Notch Museum.


ABOARD

• **Zachary L. Bass**
ROUSTABOUT
Ocean Confidence



The museum and several of Andalusia's streets acquired their names from a legend about how Andrew Jackson, passing through en route to New Orleans after the War of 1812 (about 30 years before the town existed), marked trees in the wilderness with three notches so he could find his way back to South Carolina. Going even further back, Ponce de Leon once traversed the area, originally inhabited by Creek Indians.

Not everyone, of course, rushed through on the way to someplace else. Sit a spell on a sun-dappled porch, perhaps with a huge cinnamon roll from the Sugar Rush Bakery or a tall glass of sweet tea, and the Old South spirit exerts a powerful tug. Nostalgic lamps line streets in the old part of town, where Court Square also draws crowds for holiday festivals. An abundance of genteel homes with manicured landscapes suggest a quiet prosperity. At dinnertime, friends greet friends at Dave's Catfish House and the fancier new C.J.'s Grill.

Native sons John Robinson, Rickey Veasey, Walter Musgrove and Zachary L. Bass also love the charms of the surrounding countryside, with its gently rolling fields and swampy forests. Careers with Diamond Offshore have enabled them to enjoy a life focused on simple pleasures—devoted to time with family, fishing, hunting and vegetable gardening.

Robinson, a welder/fitter; Musgrove, a motorhand; and Veasey, a mechanic, have known each other for years and share rides to and from Louisiana en route to hitches on the *Ocean Saratoga*. Bass, a roustabout on the *Ocean Confidence*, belongs to a younger generation but appreciates home just as deeply.

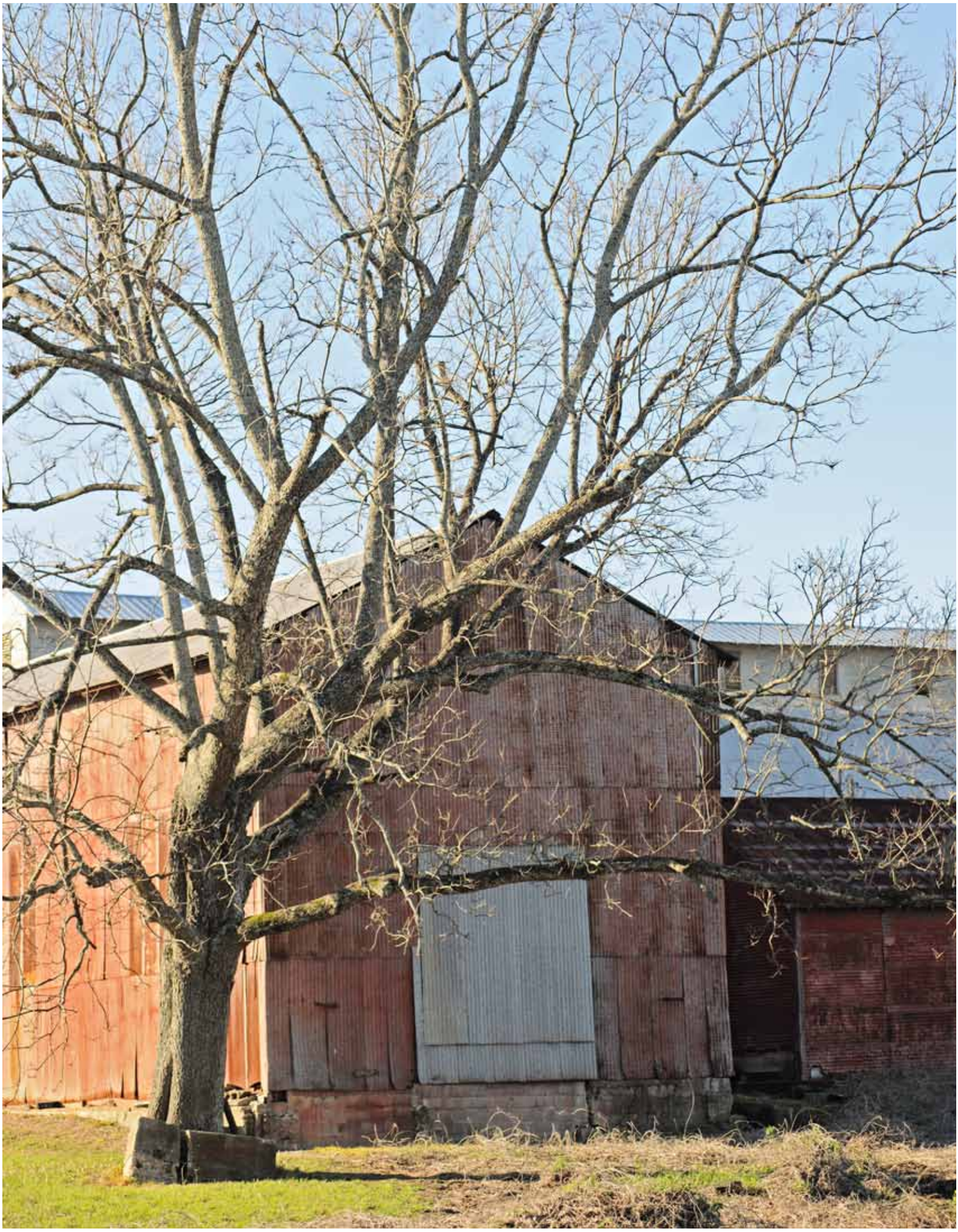
Bass grew up on land his granddad owned in the Pleasant Home community about 15 miles from Andalusia. "All of us that live out there have the last name of Bass," he added, "so some people call it Bassville." He and his fiancé, Krystal Lee, recently bought a house about five miles from town. He helped furnish it, but Bass conceded he's "an outside person."

When we visited in late February, he and a friend had already been out "listening and scouting" in preparation for turkey hunting season from mid-March through April. "They like to roost in pine trees over water," he said. "You have to go out in the morning at the crack of daylight and listen for the gobbling. Turkeys are a real smart bird."

He likes that game sliced and fried. "We eat it all year," he added. Come fall, deer season will occupy some of his off hours. (Krystal let him claim one wall in the house for his buck head trophies.)

Veasey's more likely to spend his free time building trailers in his shop or working alongside his wife, Calmese, in their vegetable garden. "It's a great life," he said as we sat on the high porch of the house he built in 1986 from Florida cypress wood. The home sits on about 14 acres.

Veasey gazed over the two acres he tills each year for white peas, butter beans, corn and tomatoes.



"We've always tried to have a garden. It's good fresh and good out of the freezer, too," he said. The biggest challenge, he added, is hungry deer. "We try to plant enough for all of them."

Behind a fence, his granddaughter Hanna's barrel racing horses grazed in their pasture. Daffodils bloomed near statues in the front yard, which is hidden from the road by natural brush.

"I was about 27 when I went offshore the first time," Veasey said. "I went out there to work two or three hitches to catch my bills up, and stayed 30 years."

Robinson has worked on the *Saratoga* a long time, too—about 22 years. He and his wife, Marcia, live near the small settlement of Red Level. They keep a dozen Angus-Brangus cows on their 75-acre spread, also growing about five acres of corn to feed the cattle. The Robinsons' sons live nearby; their granddaughters, aged 8 and 9, "like to come over to papa's house to help me feed the cows," he said.

"The job has worked out well with the little farm," he added. "I couldn't have kept it up without the time off." Although he used to hunt and fish a lot, these days when he arrives home from a hitch, "if it's not dark, I just get out and ride around my place," Robinson said. He owns two pickups, two cars and two tractors, he added jokingly, "and I still can't get to it all."

The land originally belonged to his great-grandfather's plantation. "He lost a lot during the Civil War, and my grandfather and father lost a lot during the Depression,"

- **John Robinson** (opposite, top)
  Welder/Fitter
  Ocean Saratoga
- **Walter Musgrove** (opposite, lower left)
  Motorhand
  Ocean Saratoga
- **Rickey Veasey** (left)
  Mechanic
  Ocean Saratoga

Robinson said. "I could sell it and have a pile of money, but I'm not interested in that. Retirement without this place would be miserable." When visitors call, Robinson likes to show them the Sepulga River Bridge, built in 1924, not far from his house. "It's a great old iron overhead bridge," he said.

Summers bring a cornucopia of homegrown beans, squash, sweet corn, watermelon and cucumbers. Marcia cooks a mean pot of peas and butter beans with whole okra pods, Robinson said. "Whatever the economy does, we're not going to starve."

Out toward the town of Opp, Musgrove's 96 acres—also a mix of pasture and woods—looked similarly blessed. He and his wife, Susan, a barrel racing coach, bought their place not long after they were married 26 years ago.

Fifteen gorgeous horses, Susan's passion, roamed their pastures. Tucked here and there around the long drive circling one pasture, patches of winter greens and root vegetables flourished in February. And in the big fish bait bed Musgrove keeps, wigglers multiplied in the compost.

During fishing season, the Musgroves spend plenty of time at their cabin at Point A Lake—one of several in the area—hauling in blue gill, shell crackers (brim) and catfish. Then they're likely to invite the whole clan over for a fish fry. (The older of their two sons, Brian, a crane operator on the *Ocean Confidence*, joins the fun when he can.)

In a neat shed on their property, stacks of chopped pine sat ready to fire up their 1864 Home Comfort cooking stove for the next party. "My brother found it at a yard sale," Musgrove said. "Food tastes so much better cooked on a wood stove." The vegetables, too, can be a family affair. After we met, Musgrove headed to a brother's place to help plant potatoes, English peas and onions.

No matter that Veasey said it would be April before he planted anything, and Robinson usually doesn't plant until May. ("It has to do with rainfall," he explained. "June is usually dry, and in July we get showers.")

"Everyone's got their opinion about it," said Musgrove, smiling.

And in the event somebody guesses wrong, there's always a neighbor or friend willing to share.

FREELANCE WRITER **MOLLY GLENTZER** IS BASED IN HOUSTON, TEXAS.

Green Diamond

By Beverly Freeman *Photography By* Chris Shinn

Diamond Offshore is expanding its efforts in environmental stewardship in 2009. New proactive programs include the formation of "green" committees, environmental tracking reports and ongoing communications efforts designed to prevent pollution and sharpen employees' skills for identifying and responding to environmental risks.

"Our goal with the new programs is to further integrate and reinforce the necessity of environmental protection into all of our activities so as to better manage the risks that are inherent in drilling for oil and gas," says Tim Gibson, manager of environmental affairs.

Diamond Offshore has long accepted its responsibility as a steward of the environment. Its approach to environmental risk management is reflected in the Company's Environmental Management System (EMS), which has been in place since 1994. The EMS has been reinforced by a comprehensive Environmental Policy, and its policies and procedures are compliant with ISO-14001 environmental management standards.

The EMS is complemented by an extensive training program for each offshore employee that includes working with simulators to practice responses to well control and other emergency situations. The Company also holds quarterly drills on each of its rigs to practice coordination, spill assessment, establishment of decontamination zones and proper use of personal protective equipment.

A proactive effort

The 2009 additions to the program are part of an ongoing effort to further heighten awareness of environmental issues among all employees and to ensure that the Company meets or exceeds all regulatory requirements while working toward continuous improvement.

"Diamond Offshore and the industry have a great environmental track record overall. Our goal is to keep it that way by targeting zero spills or environmental incidents," Gibson says. "Still, accidents can happen, and these new programs provide more tools for us to ensure that accidental spills are small scale and infrequent, and that past experience is used for future prevention."

Green Committee

Since environmental hazards aren't always apparent at first glance, Green Committees are being formed on each of the Company's drilling rigs to identify environmental conditions or impacts that are not obvious in daily operations. These cross-functional groups of rig personnel come together on a quarterly basis to audit the environmental management system for compliance with applicable laws and internal policies, and to identify opportunities for improvement.

Environmental tracking

Another aspect of the program is an environmental tracking report that helps the Company trace its carbon footprint. The report, which will be completed monthly for each rig, will allow the Company to track performance in terms of spills and pollutants, and will also provide information about the amount of waste generated and goods consumed by each offshore rig.

"Our goal with the new programs is to further integrate and reinforce the necessity of environmental protection into all of our activities so as to better manage the risks that are inherent in drilling for oil and gas."

Open communications

In addition, Diamond Offshore's long-standing policy of open communication about environmental performance will be reinforced with an E Newsletter, which made its debut in March. The newsletter contains vital information about environmental issues and details the Company's policies and programs around the world.

As a global organization, Diamond Offshore faces the challenge of conducting operations in many geographic regions with unique and sensitive environmental characteristics. The Company's offices in each region work closely with regulatory agencies and local governments to ensure that the ecosystem in that area is protected.

The Company's environmental programs are also important to customers. Because of the potential for harm to the environment from any spill, Diamond Offshore's customers place strong emphasis on the environmental records of the companies that help them drill for oil and gas.

"We share the responsibility for protecting the environment with our customers," Gibson says. "When we are working for the larger oil companies, our employees must comply with all of their policies and procedures as well as our own. However, smaller operators often depend on us to be sure that all regulations are met."

Improved technologies, higher safety standards and training programs like the one at Diamond Offshore have greatly reduced the risk of blowouts and major spills. As a result, the industry's record for oil spill frequency and environmental incidents has improved dramatically over the past 30 years. Today, major problems are rare, but the risk is ever present.

"People tend to focus on the potential for a major pollution event, but most incidents we deal with are relatively small," Gibson says. "For example, in addition to drilling activity, each rig is a small 'island' community with up to 150 people on board, generating residue from work activities as well as sewage and waste. Everything from oily rags and paint chips to the kitchen trash has to be collected, stored and disposed of correctly. And taking out the trash is no small feat on an offshore rig. Each vessel is equipped with a giant trash compactor for waste disposal, but once the trash is collected, it has to be stored, manifested to shore by boat and recycled or disposed of properly, all at a significant cost.

"The environment is very much on everyone's mind these days," he continues. "But those of us who work offshore have been aware of the impact that oil and gas drilling has on the world around us for a very long time. Preserving the environment and protecting the health and safety of our employees isn't just good business. It's also the right thing to do."

BEVERLY FREEMAN HAS WORKED IN COMMUNICATIONS FOR THE ENERGY INDUSTRY SINCE THE 1970S

Cycling for a Cure

Designed to raise awareness and funds to help find a cure for multiple sclerosis (MS), the BP MS150 has taken place every April since 1984. Some 13,000 riders take part in the 180-mile ride from Houston to Austin, and in recent years the event has raised funds approaching $10 million. The title sponsor, BP, along with over 100 team captains, organizes and orchestrates the event, which is just one in a series of rides taking place across the country.

MS is a chronic, progressive illness that affects nerves in the brain, spinal cord and other parts of the central nervous system. It is an autoimmune disease, which means the body's immune system targets itself; attacking cells, tissues and organs. This crippling disease affects over 400,000 people in the U.S. and 2.5 million people worldwide. It affects 2-3 times more women than men, and is often onset in early adulthood.

"For some of us the ride is personal," says Neil Hall, who served as team captain, "because we have close family suffering from MS. Others just want to help those who cannot help themselves. And for some, finishing the 180-mile ride is a personal challenge. Whatever the reason, we all live in the hope that we have made a little bit of a difference to the millions of people who suffer from this terrible disease."

The team is already planning the 2010 ride and is looking for more members! If you are interested in being part of the Diamond Offshore Cycling Team, please contact Neil Hall (nhall@dodi.com) or Webster Jones (wjones@dodi.com).

Diamond Offshore Team MS150 Front Row left to right: Samira Craig (Project Accountant), Mary Berner (Marketing, Cameron); **Center Row, kneeling left to right:** Web Jones (Drilling Superintendent, *Ocean Baroness*), Tyler Jones (Web's Brother), Tushar Desai (Structural Engineer), Larry Dickerson (President and Chief Executive Officer); **Back Row, standing left to right:** Kelly Kipper (Web's roommate), Mike Trahan (Chief Information Officer), Neil Hall (Operations Manager, *Ocean Confidence*), Richard "Red" Holley (Operations Manager, *Ocean Victory*).

Ocean Lexington
People Make a Difference

We would like to express our sincere gratitude to the entire rig crew and management of the *Ocean Lexington* semi-sub. We have just completed operations on the very challenging D4-137N project offshore Libya. Technically, all the objectives of this well were met and a big part of this professional success is due to the performance of your rig.

We are strong believers in the fact that "people make a difference." Both Total E&P Libye and all third parties involved in the D4-137N well recognize *Ocean Lexington* personnel for their teamwork, safety culture and dedication to professional excellence.

We do believe also that this well was a good opportunity to mark up Diamond Offshore's name in the Mediterranean offshore market and among Total Group worldwide.

One more time, we thank you very much for your efforts and wish you all the best in your upcoming projects.

We would welcome the opportunity to work with you in the future.

On behalf of Total E&P Libye,

Mikhail Krasik
Drilling Manager

Ocean Saratoga
No LTAs & Ahead of Drilling Curve

DGE and our partners Royal and Newfield would like to thank you for such an excellent job with the *Ocean Saratoga* on our recent Sargent well. The operations were performed without an LTA and in 41 days, compared to our AFE estimate of 56 days. Non-productive time outside of weather was only 5%, and of this only about nine hours was Diamond related, an outstanding accomplishment.

We appreciate the excellent performance and professionalism of your entire team, starting with the marketing, through contracting and finally in offshore operations.

We look forward to drilling our next well with Diamond and many more in the future.

Regards,

David S. Huber
Sr. Vice President, Operations & Projects
Deep Gulf Energy LP

Ocean Baroness
Another Ultra-Deep Well Successfully Completed

The *Ocean Baroness* completed drilling the Bass Prospect well for Devon in 6,450-feet. of water (just short of the *Baroness*'s rated depth of 6,500-feet.). The total depth of the well is 29,663 feet. The heavy casing string on this well was the 13 ⅝" string, which weighed approximately 1.5 million pounds when it was successfully landed out. The Bass well follows the *Baroness*'s previous two wells for Hess (Pony 1 and Pony 2), drilling to depths of approximately 30,000 feet.

Ocean Endeavor
Houma District SAFE Award—Zero Noncompliance

The Minerals Management Service (MMS) named Diamond Offshore and the *Ocean Endeavor* as winners of the District Safety Award for Excellence (SAFE) for the Houma Division of the GOM for 2008.

In presenting the award, the MMS noted that it "conducted 10 complete inspections of the *Endeavor* without an Incident of Noncompliance being noted. The .000 Incident of Noncompliance-to-Inspection ratio for this rig is substantially lower than the .096 industry average for drilling contractors in the Houma District. There have been no lost time accidents reported in seven years. All records are kept up-to-date, accurate and accessible. The rig and equipment are well maintained by highly motivated personnel. The crews of the *Endeavor* are to be commended for their recognition of the importance of our mission."

The SAFE program recognizes those operating companies that conduct their operations in a safe manner, adhering to all regulatory requirements, employing trained and motivated personnel and enhancing safe operations. The MMS Gulf of Mexico Region is focused on having the safest and most environmentally sound operations in the country.

Ocean Patriot
Safely Drilled Best Performance Wells To Date

On behalf of Apache, I would like to personally thank all of the DODI and ESS (catering company) crews on board the rig for an excellent job done on the Gippsland drilling project. As a team, we have safely drilled the three best performance wells to date in the Bass Strait. It has been an excellent experience that I will remember for many years to come.

Pat Brown,
Company Representative
Apache Energy Ltd.

I think everyone at Apache Drilling was very impressed with the work attitude and capability of the *Ocean Patriot* crews. It was a pleasure to work with everyone involved. They do an excellent job of keeping an older rig running as smoothly as possible.

Randy Scott
Drilling Superintendent
Apache Energy Ltd.

Ocean Vanguard
Job Well Done

Yesterday evening, 26 January, 2009, the *Ocean Vanguard* left the contract for Dompap and PL 128, and a long drilling expedition is over.

I wish to thank each and every one of you for your contribution to the drilling operation. In spite of not having the pressure point we should on the sidetrack, and a lot of WOW, which made this an expensive well, we got lots of valuable information from the wells. The data from the sidetrack can even be of great importance for further development of the site. Especially the process concerning the sidetrack was very impressive. I saw that all the personnel with different skills contributed to us making the correct decision, and I feel that the organization, in this case worked very well. I am also mighty impressed over B&B and what you accomplished during the planning of the sidetrack, given the time pressure you all faced.

Thank you so much everybody,

Statoil

RIGS & LOCATIONS

DIAMOND OFFSHORE RIGS BY TYPE AND LOCATION

SEMISUBMERSIBLES

AUSTRALIA	DEPTH	EQUIPMENT
OCEAN EPOCH	1,640	3M
OCEAN BOUNTY	1,500	VC; 3M
OCEAN PATRIOT	1,500	15K; 3M
BRAZIL		
OCEAN ALLIANCE	5,000	DP; 15K; 3M
OCEAN WINNER	4,000	3M
OCEAN WORKER	3,500	3M
OCEAN QUEST	3,500	VC; 15K; 3M
OCEAN YATZY	3,300	DP
OCEAN YORKTOWN	2,850	3M
OCEAN CONCORD	2,200	3M
OCEAN WHITTINGTON	1,500	3M
GOM–US		
OCEAN ENDEAVOR	10,000	VC; 15K; 4M
OCEAN MONARCH	10,000	VC; 15K; 4M
OCEAN CONFIDENCE	7,500	DP; 15K; 4M
OCEAN BARONESS	7,000+	VC; 15K; 4M
OCEAN AMERICA	5,500	SP; 15K; 3M
OCEAN STAR	5,500	VC; 15K; 3M
OCEAN VALIANT	5,500	SP; 15K; 3M
OCEAN VICTORY	5,500	VC; 15K; 3M
OCEAN SARATOGA	2,200	3M
OCEAN AMBASSADOR	1,100	3M
EGYPT		
OCEAN LEXINGTON	2,200	3M
MALAYSIA		
OCEAN ROVER	7,000+	VC; 15K; 4M
MEXICO		
OCEAN VOYAGER	3,200	VC
OCEAN NEW ERA	1,500	3M
NORWAY		
OCEAN VANGUARD	1,500	15K; 3M
UNITED KINGDOM		
OCEAN NOMAD	1,200	3M
OCEAN GUARDIAN	1,500	15K; 3M
OCEAN PRINCESS	1,500	15K; 3M
VIETNAM		
OCEAN GENERAL	1,640	3M

JACK-UPS

ARGENTINA	DEPTH	EQUIPMENT
OCEAN SCEPTER	350	IC; 3-4M
CROATIA		
OCEAN KING	300	IC; 3M
EGYPT		
OCEAN SPUR	300	IC
OCEAN HERITAGE	300	IC
GOM–US		
OCEAN TITAN	350	IC; 15K; 3
OCEAN SPARTAN	300	IC
OCEAN SUMMIT	300	IC
OCEAN CHAMPION	250	MS
OCEAN CRUSADER	200	MC
OCEAN DRAKE	200	MC
INDONESIA		
OCEAN SOVEREIGN	300	IC
AUSTRALIA		
OCEAN SHIELD	350	IC; 3-4M
MEXICO		
OCEAN NUGGET	300	IC
OCEAN COLUMBIA	250	IC

INTERNATIONAL DRILLSHIP

BRAZIL		
OCEAN CLIPPER	7,500	DP; 15K; 3M

1 **Gulf of Mexico**
11 Semisubmersibles
8 Jack–Ups

2 **Brazil / Argentina**
8 Semisubmersibles
1 Drill Ship
1 Jack-Up

3 **North Sea**
4 Semisubmersibles

4 **Mid-East / Mediterranean**
1 Semisubmersible
3 Jack–Ups

5 **Asia Pacific**
6 Semisubmersibles
2 Jack–Ups

Key

- **DP** Dynamically Positioned / Self-Propelled
- **IC** Independent-Leg Cantilevered Rig
- **MC** Mat-Supported Cantilevered Rig
- **MS** Mat-Supported Slot Rig
- **VC** Victory-Class
- **SP** Self-Propelled
- **3M** Three Mud Pumps
- **4M** Four Mud Pumps
- **15K** 15,000 PSI Well-Control System

Neil Hall — Operations Manager, Ocean Confidence.
2009 Diamond Offshore Team MS 150

DIAMOND
OFFSHORE