2008 3rd Quarter

J. Ray NEWS

AN OFFICIAL PUBLICATION OF J. RAY McDERMOTT, S.A.

the SHAPE of THINGS to COME

Special Focus

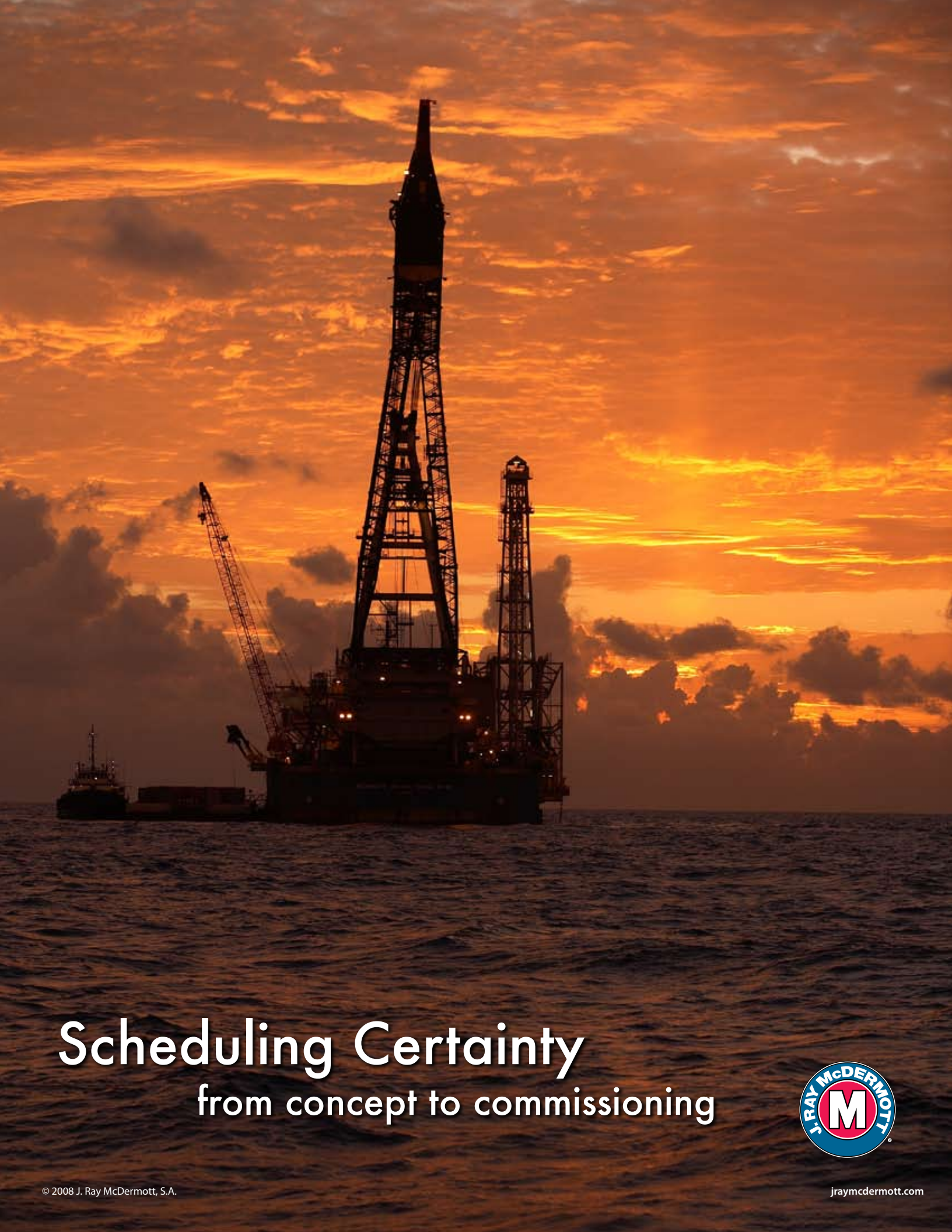
J. Ray engineers are motivated as much by the art, as the technology, of their craft

SUCCESS BY DESIGN

Engineering adds value from concept to commissioning

Qingdao

Vibrant, diverse and popular port city in China has become a major economic and cultural powerhouse



Scheduling Certainty

from concept to commissioning

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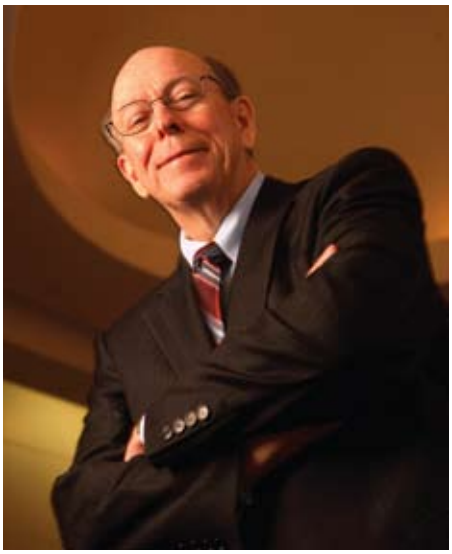
Letter from Bob Deason



President and Chief Executive Officer of J. Ray McDermott

The first half of the year has been active and promising. Our primary focus continues to be on executing projects and making investments that continuously improve our ability to meet customer and market needs.

On the investments side, we are pleased to announce our new joint venture, McDermott Wuchuan, and its plans to establish a 111-acre facility in Qingdao, China. Optimizing one of the fastest-growing segments of our industry today, this facility will initially offer FPSO construction and integration, and eventually grow to provide full service on all types of offshore construction projects internationally.

In addition, we are pushing forward with investments to expand our physical presence in Kazakhstan and our Caspian fabrication capability to meet the emerging market demands.

We are also proud of significant project milestones, including subsea installation in the Gulf of Mexico and Morgan City's load-out of two projects bound for Trinidad; load-out and installation of Su Tu Vang in the Asia Pacific region; the Baku facility's completion of the three-phase Azeri-Chirag-Gunashli (ACG) development project for Azerbaijan International Operating Company; and a number of achievements in the Middle East.

Many of these events and locations are highlighted in this issue of *J. Ray News*, which features a special focus on our capabilities and growth in the construction portion of EPCI.

Financially, J. Ray's revenues during the second quarter of this year increased from US$580 million to US$872 million, and operating income increased to US$98 million from US$91 million, compared to the second quarter a year ago. These strong results contributed to parent company McDermott International's all-time record of nearly US$1.8 billion in revenue and US$231 million in operating income for the quarter.

With a very active market, sound financials, robust new award levels, a growing backlog and world-class execution capabilities, our outlook is increasingly positive. J. Ray is positioned and eager to make a real difference in helping your projects become reality.

Bob Deason

J.RayNEWS

an official publication of J. Ray McDermott

2008 3rd Quarter

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On the cover	The National Center for the Performing Arts is the first of "Four Grand Projects" of 21st century China. Formally known as the National Grand Theatre, and colloquially described as "The Egg," the Centre is an ellipsoid dome of titanium and glass surrounded by an artificial lake. Its three halls seat 6,500 people.
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Securing Productivity

from seafloor to shore

J. RAY McDERMOTT

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Energy Events 2008

Upcoming energy events around the world

AFRICA

Africa Oil Week
October 6-10
BMW Pavilion & IMAX Theatre, Cape Town, South Africa. The 10th annual "Scramble for Africa: Strategy Briefing" on Oct. 6, 5th annual "African Independents Forum" on Oct. 7, and 15th "Africa Upstream" Oct. 8-10 are included in this week-long event highlighting Africa's oil exploration success and new venture opprotunities along the value chain.

AMERICAS

Oil and Gas Exchange Houston 2008
September 17-18
Crowne Plaza-Reliant Park, Houston, TX. The 7th annual event facilitates discussion among senior decision makers from across the globe features cutting-edge technological developments.

Canadian Offshore Resources Exhibition and Conference (CORE) 2008
October 7-10
World Trade & Convention Center, Halifax, Nova Scotia. Canada's oldest and most prestigious oil and gas event, CORE promotes the development of ideas and opportunities in hydrocarbon and related industries.

Deepwater Operations Conference and Exhibition 2008
November 4-6
Moody Gardens Hotel and Conference Center, Galveston, Texas. This conference covers issues and challenges for succeeding in the complex and expensive deepwater environment.

ASIA PACIFIC

FPSO Technology for Offshore Oil and Gas Production 2008
August 11-13
Shangri-La Hotel, Kuala Lumpur, Malaysia. This three-day event highlights system and field layout requirements, model testing, Mooring Systems and Risers and other aspects of one of the fastest-growing offshore construction segments in the industry.

Deepwater Asia Pacific 2008
September 10 -12
Westin Hotel, Guangzhou, China. With the theme "Perform on the New Stage with Technical Innovation and Cooperation," DAP focuses on the latest developments and issues.

Asia Oil & Gas Investment Congress 2008
November 3-7
Grand Hyatt, Singapore. This conference brings together regional and international oil and gas organizations to showcase and discuss opportunities for exploration and investment in Asia.

CASPIAN

Kazakhstan International Oil and Gas Exhibition (KIOGE) 2008
October 7-10
Atakent Exhibition Center, Almaty. In its 16th year, KIOGE offers an exclusive platform for potential interests in the country's oil and gas industry.

EUROPE

International Pipeline & Offshore Contractors Association (IPLOCA) 2008
September 29- October 3
Athenaeum Intercontinental, Athens, Greece. J. Ray is sponsoring the 2008 IPLOCA conference, which promotes the sharing of ideas and facilitates business opportunities.

Northern Arabian Plate Oil and Gas Summit (NAPOGS) 2008
October 8-10
Maritin Pine Beach Resort, Antalya, Turkey. NAPOGS provides a forum for effective communication and creating a cooperative working environment between national and international energy participants.

Offshore Technology Days 2008
October 15-16
Arenum Exhibition Center, Bergen, Norway. With over 8,000 visitors last year, this 9th annual conference enables oil and energy companies to explore and recruit future engineers.

2008 Offshore Technology Conference, Houston, Texas

Dia National Del Ingeniero 2008, Tabasco Mexico

MIDDLE EAST & INDIA

Offshore Middle East 2008
October 28-30
Qatar International Exhibition Center, Doha. This first-ever, three-day event highlights the growing Middle Eastern oil and gas market, and issues concerning its development and technology.

Abu Dhabi International Petroleum Conference & Exhibition (ADIPEC) 2008
November 3-6
Abu Dhabi National Exhibition Center. One of the largest oil and gas events in the world, this four-day event focuses on the latest technologies, services, products and trends from across the region. J. Ray Middle East is an exhibitor and participant in this major event.

J. RAY McDERMOTT
makes headlines across the globe

CASPIAN EXPANSION

Tub-Karagansky Bay, in the Mangistau region of the Republic of Kazakhstan, is the site of the latest fabrication facility planned by J. Ray McDermott. The Kazakhstan branch of J. Ray's Caspian operating subsidiary and TenizService LLP (TS), a subsidiary of JSC "NC KazMunaiGas," signed appropriate agreements to build and operate a fabrication facility on 49 acres of land reclaimed by and leased from TS. Tub-Karagansky Bay is located approximately 106 miles north of Aktau, the capital of the Mangistau Region and main sea gate of Kazakhstan to the Northern Caspian Sea.

"The Bautino fabrication yard in Tub-Karagansky Bay complements our existing fabrication capabilities in Baku, Azerbaijan," said Dan Houser, Vice President and General Manager, Caspian Operations. "We expect sustained high demand for large-scale fabrication work in Kazakhstan and elsewhere in the North Caspian. I expect that with our world-class employees and industry-leading practices, McDermott will add tremendous value to Kazakhstan's offshore oil and gas industry."

TS will reclaim 49 acres of land from the Caspian Sea to build the yard, including landfill and sheet piling, all to the requirements applicable in the Republic of Kazakhstan and to J. Ray's specifications. J. Ray will provide engineering and construction of fabrication facilities and install utilities, procure yard equipment, and recruit and train Kazakhstan personnel to manage and operate the facility.

The Bautino yard will have 2,188 feet of quayside length with an average water depth of 21 feet, dedicated fabrication and erection areas, and other structures including offices, warehouse, training center, canteen and dual-bay fabrication shop. Layout provides flexibility to cater to future market needs.

"We are very pleased to be working with TenizService and we may even explore further opportunities for cooperation in projects and services," said Houser.

Pearl 1 and 2 topsides in Jebel Ali fabrication yard, Dubai

RETURN TO ESSO AUSTRALIA

Esso Australia Resources Pty Ltd awarded an EPCI contract to J. Ray for work on the Kipper Tuna Gas Project. Located in 328 feet of water in the Bass Strait, about 28 miles from Ninety Mile Beach on the south-eastern coastline of Victoria, Australia, this project will supply additional natural gas to the region.

"This is a very significant contract encompassing a wide range of services and marks a return to working with Esso Australia," said Bob Deason, Chief Executive Officer of J. Ray.

CHALLENGING STACK

The Pearl 1 lower deck was successfully stacked in a precisely coordinated two-stage process. In order to minimize the impact on adjacent project activities, six cranes were used to lift the lower deck pancacke structure over the top of the upper deck and mezzanine decks, and place it in its final location on the skidway shoes, with the cellar deck beneath.

The platforms EPCI contract for the Qatar Petroleum and Shell-sponsored Pearl GTL project includes two 15-slot topsides with flare boom (Pearl 1 and Pearl 2), and

Su Tu Vang deck load-out was completed August 6-8 for transport to its final destination: Vietnam's Mekong Basin.

Danny Lott and Rick Johnson (standing, from far right) accepted the Energy award on behalf of J. Ray.

Seli Vicente, HSE Manager, PMT for Qatargas 3&4, helps host "HSE Day" in Qatar.

procurement, construction and installation of two four-legged jackets, at a total weight of 8,575 tons in 92 and 118 feet of water.

FEED for BARZAN

J. Ray McDermott announced it has recently been awarded the contract to provide Front-End Engineering and Design (FEED) services for a proposed gas project in the State of Qatar.

Additional engineering services for the detailed design of the wellhead jackets, temporary work decks and subsea templates is also being carried out under a separate work order to allow for accelerated jack-up rig drilling operations. J. Ray will coordinate a comprehensive interface management plan between the two work orders.

Commenting on the successful award, Stewart Mitchell, Vice President and General Manager of J. Ray McDermott Middle East and India, said, "J. Ray has a long history of working successfully with companies in Qatar for more than 45 years. We have earned an undisputed reputation for industry-leading quality, productivity, safety and ethics through our work."

The FEED work will study offshore facilites for a natural gas offshore production system with conventional wellhead platforms, intrafield pipelines and export pipelines to the proposed onshore Gas Plant, located at Ras Laffan Industrial City.

The offshore development will consist of at least the following facilities:

- Topsides for three, 15-slot well bay, six-leg deck wellhead platforms
- Two 24-inch CRA clad intrafield pipelines
- Two 32-inch export pipelines

STRONG HSE CULTURE

Around the world, J. Ray operations consistently demonstrate their dedication to HSE standards and improvement.

In Qatar, J. Ray Middle East participated in "HSE Day," highlighting the company's long history in the country and latest involvement in the Qatargas 3&4 project, which represents a significant addition to the country's rapidly expanding LNG capacity.

In the Americas, the U.S. Department of Energy presented an award to J. Ray's Morgan City fabrication facility in recognition of its energy conservation achievements 2006-2007.

SU TU VANG Load-out

Load-out of the 16,535-ton integrated deck for the Su Tu Vang EPCI project took place August 6-8 at J. Ray's Batam Island, Indonesia facility. The deck was towed to Mekong Basin, offshore Vietnam for float-over installation in 170 feet of water.

J. Ray's Asia Pacific resources undertook this challenging project — from FEED to commissioning — including a 4,409-ton jacket, 21 miles of infield pipelines and two PLEMs, in addition to the topsides.

The central processing platform is designed to process crude oil from the Su Tu Vang reservoir, as well as an existing and future wellhead platform, seawater injection and gaslift compression.

FINANCIAL OVERVIEW

During the second quarter of 2008, J. Ray McDermott's offshore oil and gas construction revenues set a quarterly record of US$872 million, up 50 percent compared to revenues (US$580 million) in the same period a year ago. Operating income of US$98 million in the second quarter also represents an increase over last year's second-quarter $91 million.

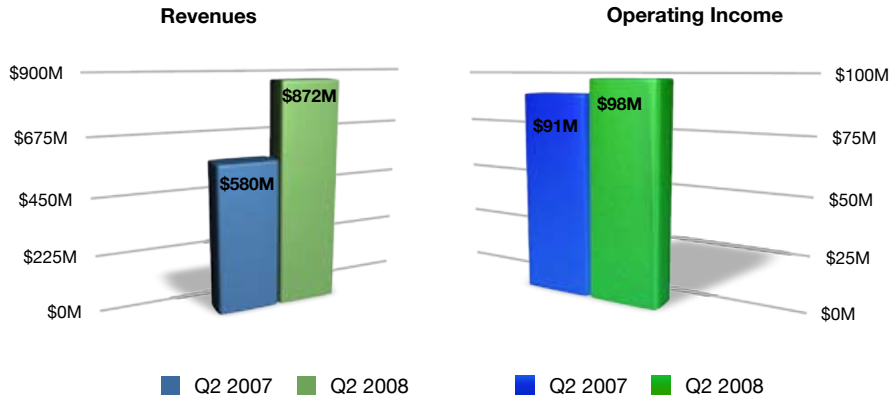
Booked work at the end of the second quarter totaled US$5.3 billion, compared to a backlog of US$4.6 billion at the same time a year ago.

Representing improvement over this year's inclement-weather-impacted first quarter results, as well as a year-over-year increase, these strong second-quarter results reflect activities in the Middle East, Caspian and Asia Pacific regions, including worldwide marine projects.

Also in the news recently was the upgrading of the credit ratings of parent company, McDermott International, and its rated subsidiaries by both of the major corporate credit rating services, Standard & Poor's Ratings Services ("S&P") and Moody's Investors Service ("Moody's")

Included among the recent ratings activity, McDermott's corporate credit rating at S&P was raised to BB+ from BB, with a positive outlook, and the Company's corporate family rating at Moody's was raised to Ba2 from Ba3, also with a positive outlook.

"These credit rating upgrades are further external recognition of our strong operating performance, record backlog and conservative balance sheet," said Michael S. Taff, McDermott International's Senior Vice President and CFO.



PEOPLE

J. Ray recognizes employee achievements

PROMOTIONS

Angela Mejia, Corporate Attorney, is promoted to Senior Counsel & Legal Manager for the Americas.

Jeff Hightower, Controller of Financial Planning and Analysis, is promoted to Worldwide Controller, assuming the duties vacated by Louis Burkart, retired.

Percy "Mac" Pitts is promoted to Quality Manager, reporting directly to Dick Cain, General Manager of Engineering, and functionally to Kevin Ahern, Global Director of Quality.

Mark Boudreaux, Estimating Manager for Morgan City Fabrication, is now its Director of Business Development, reporting to Jim Ermon, Director of Business Development, Americas.

Ryan Siebenkittel is promoted to Area Procurement Director, Middle East, reporting administratively to Raja Vedantam, General Manager of Project Services, Middle East, and functionally to Skip Lee, Director, Global Procurement.

PRESENTATIONS/PUBLICATIONS

Lisa Seeker, Vice President HR, authored and was highlighted by articles published in the *Houston Chronicle* and E&P's 2008 OTC edition on successful turnaround and retention strategies.

Presentations at the 3rd Annual International Oil Congress and Exhibit (EXPETRO) held in Monterrey, Mexico, May 28-31 included two by **Oscar Serna**, Structural Engineer, representing J. Ray's Altamira facility: "Devil's Tower: The Deepest Spar in the World" and a session on J. Ray's general EPCI capabilities.

Cheng-Yo Chen authored "Two Dry Tree Semi-Submersible Designs for Ultra Deep Water Post-Katrina Gulf of Mexico," presented at the 27th International Conference on Offshore Mechanics and Arctic Engineering, June 15, Estoril, Portugal.

"Nonlinear Dynamic Soil-Pile-Structure-Interaction Analysis of Offshore Platform for Ductility Level Earthquake under Soil Liquefaction Conditions," by **Bor-Feng Peng**, **Ben Chang** and **Bee-Lay Leow**, J. Ray Engineers, and **Sam Nandlal**, BG Trinidad & Tobago, Ltd., will be presented at the 14th World Conference on Earthquake Engineering, Oct. 12-17, Beijing, China.

Integrating Complexity

from upstream to downstream

J. RAY McDERMOTT

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NEIGHBORHOOD WATCH

Initiatives around the world keep J. Ray connected to the community

J. Ray vessel personnel complete certification training through a partnership with Singapore Polytechnic.

Partners in training

By partnering with a Singapore resource, for its expertise in electrical and electronic engineering, a stronger bond is growing between J. Ray and the community. Stronger skill sets are also growing among J. Ray vessel personnel across the company.

In response to customer inquiries about formal certification of vessel personnel in the Asia Pacific and Middle East regions, Dan Sullivan, Global Director of Equipment and Machinery, and Steve Sheldrick, Equipment and Machinery Manager, Asia Pacific, decided a program was needed. As input for designing the most effective and valuable certification criteria, strengths and needs were first assessed.

Beginning in May 2006, Ron Gowens, Senior Equipment & Machinery Training Supervisor and former Offshore Chief Engineer, conducted the evaluation process using the UK's internationally accepted and recognized National Vocational Qualifications (NVQ) Competency Assessment. Skill inventories include everything related to basic safety knowledge, safe work practices, specific job knowledge, and work practices for detailed tasks.

After reviewing various institutions and areas for the most practical location, amenities and facilities for training Asia Pacific and Middle East crews, J. Ray decided on the physical features, friendliness, and expertise of Singapore Polytechnic School of Electrical and Electronic Engineering.

The facility allowed J. Ray to hold classes at night and on the weekends to accommodate schedules. Singapore Polytechnic was also helpful in customizing its syllabuses and courses to NVQ requirements and to J. Ray's machinery and processes; quality, safety and environmental standards.

When DB30 left the Singapore area for Australia in October 2007, Gowens saw it as an opportunity to launch the first training session at Singapore Polytechnic. Since then, other DB30 crews, as well as personnel from DB101, DB26, DB27 and KP1; the Dubai Electrical and Mechanical department; and the Batam Electrical and Mechanical department have attended four additional sessions. A sixth event, a course focused on switchboard training for electricians, was completed June 28 this year.

Positive feedback

All sessions have received great reviews. Feedback on many evaluation forms gave "Excellent" ratings to the trainers, training objectives, content and materials, and the facilities. Write-in comments often echoed this one: "The training sessions were very helpful to me because they refreshed my memory on subjects that I learned years ago. Thank you for this opportunity."

The training has made a difference back on the job, too. "Many of the mechanics who completed the training session showed remarkable changes in terms of attitude, urgency, pride in their work, responsibility and confidence levels," said Chris Nathan, Senior Mechanical Supervisor, Batam Island, Indonesia.

Along with ongoing updates of existing courses, future plans include Caterpillar engine control training, courses for the Americas region and working with National Fluid Power to develop Hydraulic

syllabuses regarding specific machinery installed on the DB50.

"These courses, in my opinion, are a step towards putting the young mechanics, electricians and other craftsmen through an apprenticeship system," said Ian Drummond, Chief Engineer, KP1.

An apprenticeship approach brings the optimum blend of work experience and education, correct exposure to all facets of the job and all the necessary technical and diagnostic information. Upon completion, workers attain certification, professional recognition, and personal confidence and satisfaction.

An added benefit is the "good camaraderie that has developed between J. Ray and Singapore Polytechnic," concluded Gowens. "We have learned so much from each other."

"No one can whistle a symphony"

A unique knowledge- and team-building event in Dubai proved that a symphony is not an individual undertaking; "it takes a whole orchestra to play it." The exercise also demonstrated that "it takes a community" to build a well-rounded engineer, by taking participants on a route along Dubai Creek, exploring Old Dubai and various historical monuments.

Called the first Walking Rally Paper, it was organized for J. Ray Middle East Graduate Engineering Development Program trainees by the Graduate Representative Committee (GRC), which is elected from and by program graduates. The six-hour interactive event combined general knowledge questions, brain teasers and riddles, specific tasks and challenges that five teams of five members each solved to earn points.

"The purpose was to develop teamwork and leadership skills in a mentally and physically engaging way, and enable effective learning transfer," said Anna Doueihi, GRC representative.

Team tasks and challenges included taking a picture of a local landmark or monument, such as a camel or of Sikka 80 (street number); and identifying 20 different spices, herbs and powders by sense of smell alone. Examples of around-the-area, general knowledge, puzzle and brain teaser items were: What are the colors of the Dubai flag? Who wrote the *Origin of Species*? What eight-letter word has one letter in it?*

"It was not only a great lesson on teamwork, strategizing and motivation, it also gave us a great opportunity to discover the history and culture of Dubai," said Astrid Dsouza about the rally.

At the end, members teamed up to perform one musical piece with lyrics and instruments also collected along the way. Prizes and bragging rights were awarded to the team with the most points.

"Winning the rally was only a bonus," said Desmond Dsa. "The participation and enthusiasm of the teams, along with the support of the organizers, was what made this an experience that will be etched into our minds for eternity."

Participants agreed that they gained basic but vital tools for working in teams and supporting their teammates.

"The rally paper was a unique team building event," said Meet Kachhy. "It tested one's physical, intellectual, organizational and time management skills — with large doses of fun, frolic and friends! It gave us a unique opportunity to mix and interact with other fellow trainees in a manner that wouldn't happen otherwise. Kudos to the GRC team for organizing the whole thing so brilliantly!"

Tomorrow's welders

To encourage and support advanced training and education for key personnel, J. Ray's Welding Technology Council sponsors two employees per year to attend the Masters in Welding Engineering program at Cranfield University. The U.K. college is one of only two institutions in the world to offer an advanced degree in Welding Engineering.

During the two-year program, students complete three components, including classroom lectures, tutorials, case studies and lab demonstrations; a design project requiring review and analysis; and an individual research project (Masters Thesis) on a topic with relevance to J. Ray.

"Qualification for acceptance into the program is based on a combination of previous education, as well as work experience," explained Dan Sullivan, Global Director of Equipment and Machinery.

The first Walking Rally Paper developed teamwork and leadership skills in Dubai.

* **Answers**: *Red and white; Charles Darwin; envelope*

SUCCESS BY DESIGN

Engineering brings **complex projects** — and careers — to **reality**


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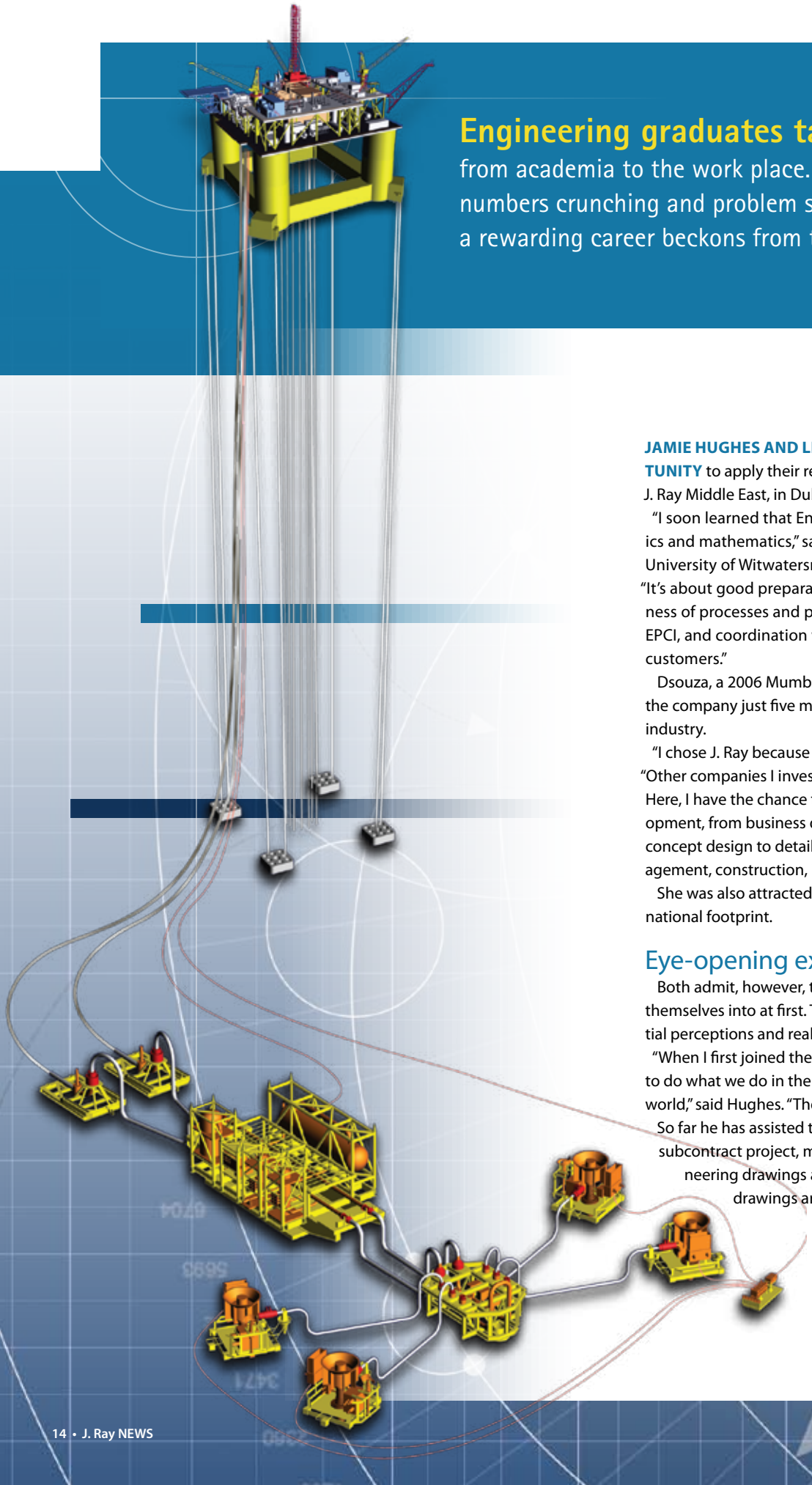

Engineering graduates take the brave step

from academia to the work place. After the all-nighters, endless numbers crunching and problem sets, the prospect of designing a rewarding career beckons from the horizon.

JAMIE HUGHES AND LEISHA DSOUZA EXPECTED AN OPPORTUNITY to apply their recent engineering degrees to new jobs with J. Ray Middle East, in Dubai. They got so much more.

"I soon learned that Engineering at J. Ray is not just about physics and mathematics," said Hughes, who graduated from the University of Witwatersrand, Johannesburg, South Africa, in 2004. "It's about good preparation and planning, knowledge and awareness of processes and procedures, involvement in all facets of EPCI, and coordination with other departments, as well as with customers."

Dsouza, a 2006 Mumbai University (India) graduate, started with the company just five months ago, after working briefly in another industry.

"I chose J. Ray because of the EPCI nature of its projects," she said. "Other companies I investigated are just involved in engineering. Here, I have the chance to experience all aspects of project development, from business development and proposal preparation, concept design to detailed design and procurement, project management, construction, installation support and commissioning."

She was also attracted by the diversity of J. Ray's worldwide, multinational footprint.

Eye-opening experience

Both admit, however, they didn't know what they were getting themselves into at first. There was a big difference between their initial perceptions and reality.

"When I first joined the company, I really didn't know what it took to do what we do in the 'real' world, as opposed to in the academic world," said Hughes. "There's a lot more involved."

So far he has assisted the Construction Manager on a fabrication subcontract project, making sure materials are organized, engineering drawings are up to customer requirements, shop drawings are correct and monitoring progress.

"I have witnessed a whole subcontract cycle from inquiry stage up to delivery and was involved in a mini-EPCI project, including engineering drawings, procurement, fabrication and quality inspection," said Hughes.

He has also experienced how quality, safety and productivity are integral parts of the job and culture at J. Ray.

"As a structural production engineer my main task was to assist in developing work packs for the fabrication teams, so that they have everything they need ahead of time to accomplish their jobs," he said. " I was also involved in measuring yard progress, preparing revision orders and helping develop practical solutions to issues and problems that arose during fabrication."

Another realization has been how important communication and coordination are in Engineering.

"You have to work closely with the customer, subcontractors, vendors and other J. Ray entities in order to work effectively and efficiently," Hughes added. "Everything is geared towards meeting the customer's requirements, while maintaining outstanding safety and quality."

Best of both worlds

To help new engineers make the transition, they start as participants in J. Ray's Graduate Engineer Development (GED) program. This gives the new hires an opportunity to gain a breadth of expertise as part of a multi-discipline team comprised of process, civil, structural, mechanical and electrical engineers.

The three-year program stresses both personal development and teamwork, hands-on and classroom training. It also encourages leadership and emphasizes early responsibility.

Working on a rotational basis, graduates gain an overview of the company and better understanding of its EPCI involvement. Through every rotation, they are considered full-time members of the team, engaged in design, proposals, project management, procurement, construction and offshore installation.

"Getting real-life experience and being assisted by helpful supervisors enhances my learning curve. It's much easier than learning it in a book," said Hughes. "It also helps in the way I deal with people. It enhances my communication skills and gives me better exposure and knowledge of the processes."

Dsouza is currently working as a Commissioning Engineer, writing procedures, marking up drawings, establishing and updating the technical database and participating in meetings related to these activities.

"The more I get involved, the more I get interested," she said. "I am eagerly waiting to join other teams, and looking forward to growing with the company."

Hughes is also optimistic and enthusiastic: "I look forward to the chance to move to different J. Ray locations in the world, experience new types of projects and discover new things I have never seen before."

Jamie Hughes and Leisha Dsouza are learning and growing in their engineering careers with J. Ray.

Increasing **brain gain**

Rather than leaving it up to chance, J. Ray is using its brains to connect valuable resources with the people who need them.

Knowledge and experience are terrible things to waste.

It happens all the time, especially in large companies with thousands of employees stretched across the world. Without efficient ways to capture and share these valuable intellectual assets, re-work, delays and inefficiencies can slow down progress, compromise the quality of products and services, increase costs, decrease response time and diminish the ability to recruit and retain talent. People are forever re-inventing the wheel, getting dizzy and going nowhere fast.

So-called "brain drain" is especially a concern with the large numbers of older workers on the brink of retirement, ready to take their lifetime of experience and legacy of skills with them.

To avoid this fate, J. Ray has taken concrete steps to increase "brain gain" by implementing knowledge-management tools that identify, create, represent and distribute knowledge for reuse, awareness and learning.

K.now

Launched in March of this year, K.now is a web-based system that leverages and optimizes J. Ray's collective Engineering knowledge

"It reaches across organizational and geographic boundaries to integrate our intellectual property, leverage our know-how, speed up knowledge transfer, facilitate collaboration, and provide a connection among employees and between offices," explained Bill Soester, J. Ray Vice President, Worldwide Engineering.

Instead of hoping that knowledge currently kept in peoples' heads and file cabinets, scattered across computers and servers, on the Internet and even with third parties somehow gets shared, K.now creates the infrastructure to support the rapid, efficient transfer of complex knowledge.

Features include content submittal process and procedures for sharing best-in-class information, and easy access to company and industry reference material. "Ask the Expert" provides streamlined contact with bona fide specialists. Discussion forums facilitate collaboration across time zones on technical issues.

"Our vision with K.now is to become smarter at transferring know-how across the organization, particularly as we expand on a global scale, and to maximize the value J. Ray delivers to customers and their projects around the world," added Soester.

Lessons Learned

Another important part of J. Ray's knowledge management is its Lessons Learned system. Also web-based, it is available to all employees throughout the company, regardless of title, function or discipline.

"Lessons Learned is geared towards building knowledge from experience for the purpose of improving future performance," said Bill Pender, Vice President of Project Services.

In this context, a "lesson" is a success to be repeated, or a mistake to be avoided. Anyone who has experienced a situation that could be helpful to others is encouraged to submit it.

Both K-now and Lessons Learned are related to continuous improvement, since they drive learning and shared knowledge. The power that such large-scale interaction yields far out-smarts what individuals or small teams, however brilliant or effective, can accomplish alone.


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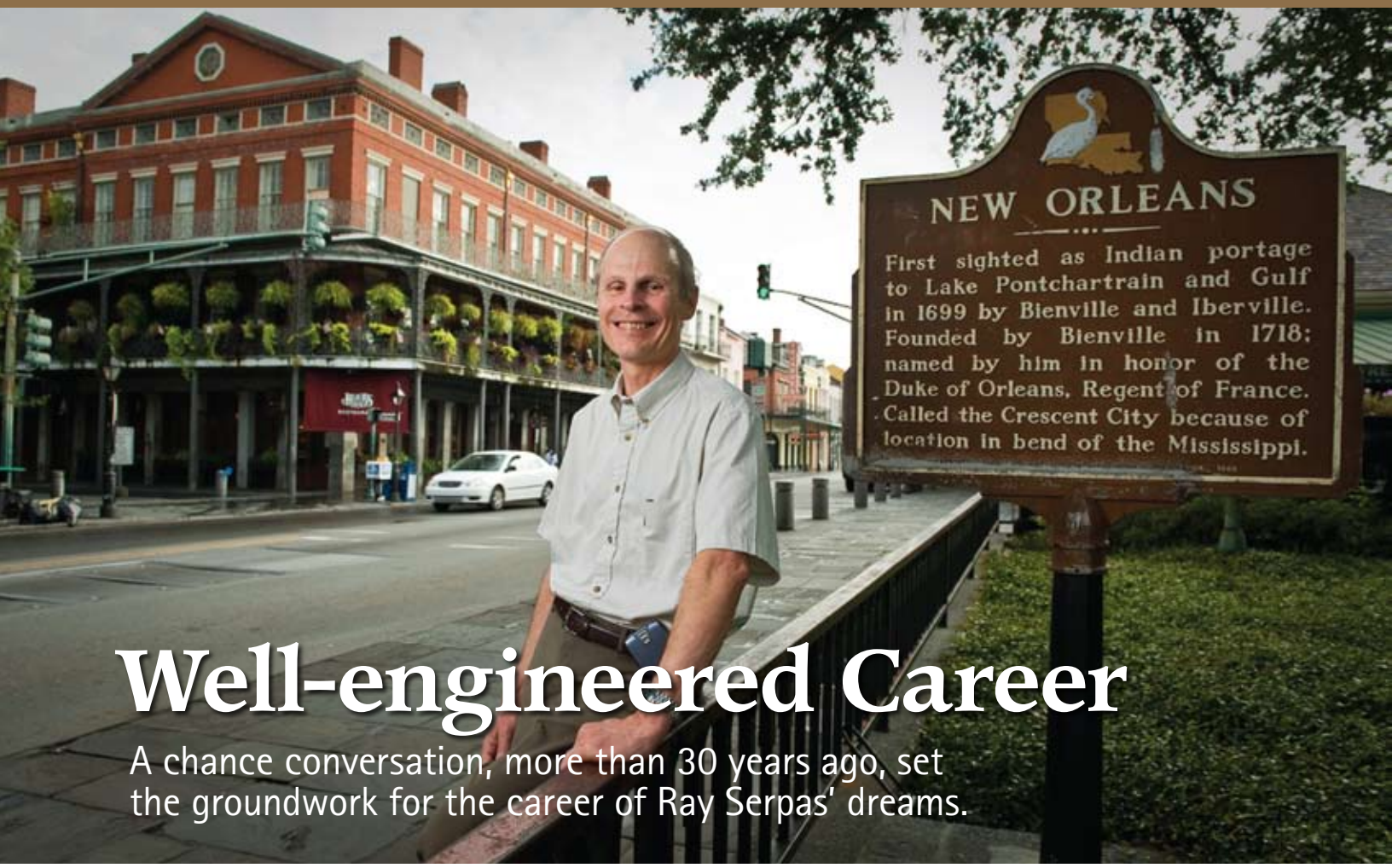


Well-engineered Career

A chance conversation, more than 30 years ago, set the groundwork for the career of Ray Serpas' dreams.

During Serpas' post-graduate studies at Rice University in Houston, Texas, a fellow graduate student mentioned that he worked at J. Ray McDermott. Shortly after earning a Master's degree in mechanical engineering, Serpas interviewed with a New Orleans-based company and found himself with time to kill afterward. Recalling the earlier discussion, he pulled open a phonebook, wrote down the address to J. Ray, and walked to its offices, which were in downtown New Orleans at the time.

"I literally walked in off the street," said Serpas. "Back in 1974, the oil and gas industry was booming and everyone was hiring; it was good timing."

Today, more than 30 years later, Ray Serpas is division manager for J. Ray McDermott Engineering in New Orleans. He has spent a long and distinguished career, lending his expertise on projects all over the world.

With professional engineering certifications in Louisiana, Texas, Alaska and California, Serpas has worked in a variety of capacities in the company, starting out in the New Orleans Pipeline Group, executing design and construction projects. Since Serpas was born in New Orleans, the job and location made a perfect match. In 1983, he transferred to Houston to work on projects in Cook Inlet, Alaska; and Santa Barbara, California.

"The California project required evaluation of earthquake loading, which is common today, but back then we had to figure out the best way to do it," he said. Serpas has also worked on projects in the Caspian Sea and the Gulf of Mexico's Bay of Campeche.

When McDermott International re-established J. Ray as its offshore segment in 1995, Serpas transferred back to his beloved birth city of New Orleans. There, he was involved in deepwater platform and pipeline installation, and marine equipment development, including design, engineering and support of the construction.

Best practices

Among the dramatic changes he has witnessed over the years, the biggest is the advent and evolution of the computer age. "The computer has allowed us to do much better analysis and to evaluate numerous design combinations. When I started my career, 300-foot water was considered deepwater," he

said. "Now we're looking at 7,000 or 8,000 feet. Without the ability to analyze the complicated situations that occur at those depths, we would not have gotten there."

Serpas has also seen big changes in the consolidation and competition within the oil industry. At the start of his career, he found only a few firms claiming expertise in platform design. "Today there is a lot more competition, with a lot more engineering firms," he said.

Despite the competition, Serpas believes J. Ray is uniquely poised for even greater success because of the company's innovative thinking and ability to provide comprehensive services under one roof.

"We can engineer a project, buy the material, fabricate it, install and commission it," he said. "There are very few companies that do all of that from start to finish, which is why we tend to get involved in big, complex projects."

Serpas highlights two of the many examples of innovation that make J. Ray a leader. The Lessons Learned system encourages employees throughout the company to input and retrieve information about what has worked — and what hasn't.

"It allows people to repeat their successes and learn from each other, instead of reinventing the wheel," he said.

A Knowledge Management system, known as K.now, records valuable information and connects engineers around the world in solving issues.

"It's a system to document and archive procedures," Serpas said. "It helps us break down silos of knowledge that are isolated in different departments and various areas of the world. Through K.now, we're able to say, 'This is how we approached that problem,' and spread that knowledge quickly and easily."

Defining moments

The most glaring defining moment in Serpas' career was the morning of August 29, 2005, when Hurricane Katrina ripped across the southern part of Louisiana. The infamous storm and its surge that damaged drainage canal levees sent residents of New Orleans, including employees from J. Ray, scattering to safety. Serpas drove to the temporary office set up in Houston (a second temporary office was in Morgan City, La.), where he remained until the New Orleans location re-opened nine months later.

"I will be forever grateful to J. Ray for the support extended to the people flooded out of New Orleans," he said. "It was never a question of doing something or not; it was, 'What do we need to do to take care of our people?'"

In its aftermath, Katrina offered a wealth of lessons for the offshore industry. "Hurricanes are our proof load," said Serpas. "We don't like storms, but we need to design for them. With Katrina, we got a good data point."

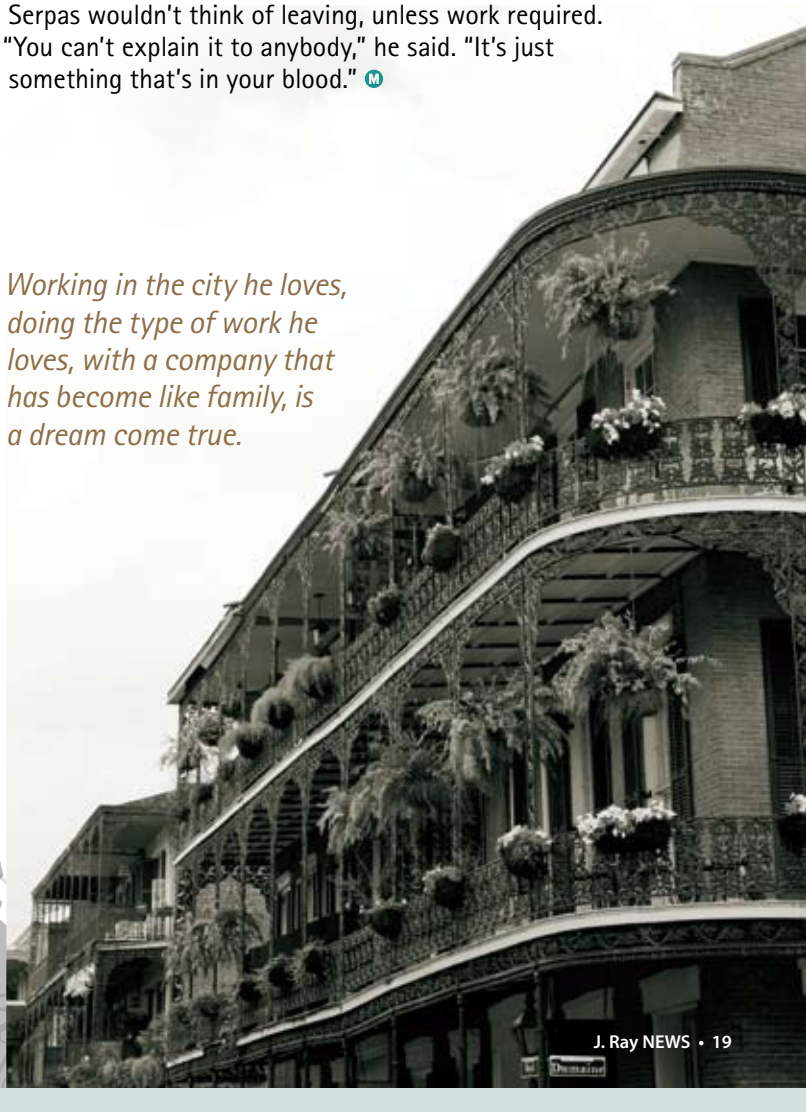
The lessons were tested when Hurricane Gustav caused another evacuation three years later, August 2008. "We were much better prepared, and the entire group remained in contact," Serpas reported. "Fortunately, the levees held and we all weathered the storm intact, allowing us to return to work a week after."

Outside of work, Serpas generously gives his time to the University of New Orleans' Advisory Council, a group of industry professionals who advise the engineering school. "It allows the college to get feedback from the people who hire its students," he said.

He also loves to jog a five-mile route through his neighborhood several times a week. Another favorite pastime is enjoying the world-famous New Orleans food. "A lot of restaurants were destroyed by Katrina. But they've all come back, and the food is just as good."

Despite all that he and New Orleans have been through, Serpas wouldn't think of leaving, unless work required. "You can't explain it to anybody," he said. "It's just something that's in your blood."

Working in the city he loves, doing the type of work he loves, with a company that has become like family, is a dream come true.



the SHAPE of THINGS to COME


J. RAY ENGINEERS ARE MOTIVATED AS MUCH
BY THE ART AS THE TECHNOLOGY OF THEIR CRAFT.

What J. Ray fabrication engineers enjoy most about their jobs is the opportunity to bring creativity, innovation and individuality to each project. Ultimately, even more satisfying is "the ability to help shape the future," by "building structures that supply the world with oil and gas."

J. Ray has a rich tradition in terms of having an impact on the industry. From the first shallow-water offshore fixed platform in the Gulf of Mexico, J. Ray fabrication has delivered on increasingly complex needs for larger structures in deeper water or unstable bottom conditions, lighter and stronger structures, floating structures, lightweight tripod platforms for marginal field developments, large topsides for tension leg platforms, compliant towers, subsea templates and lifting equipment.

"No matter what the challenge, J. Ray meets it with often groundbreaking, trend-setting construction solutions," said Bill Pender, Vice President of Project Services. "We are equally proud of the consistent level of quality and cost-effective deliverables that we provide to our customers on a daily basis, handling multiple, large-scale, fast-track projects through individual or combined facilities and teams around the world."

Building stronger

These accomplishments are not by chance. They are the result of thousands of hard-working, highly skilled, committed and focused crafts people, supported by the latest technology and systems, standardized processes and methods, training, seamless integration with other departments and industry-leading quality, safety, productivity and ethics culture.

A commitment to excellence is evidenced by ISO09001-2000, ISO14001 and OSHAS 18001 accreditation, guiding quality, safety and environmental standards. A commitment to continuous improvement is illustrated by recent investments in equipment and infrastructure to increase the efficiency of J. Ray fabrication facilities and expand them to construct structures and components for the world's major oil and gas producing regions.

"Expansion into new areas is designed from scratch, taking into account everything we've learned," said Pender. "For example in material handling optimization, we have learned a lot about work flow that has become part of the master plan for our new facilities."

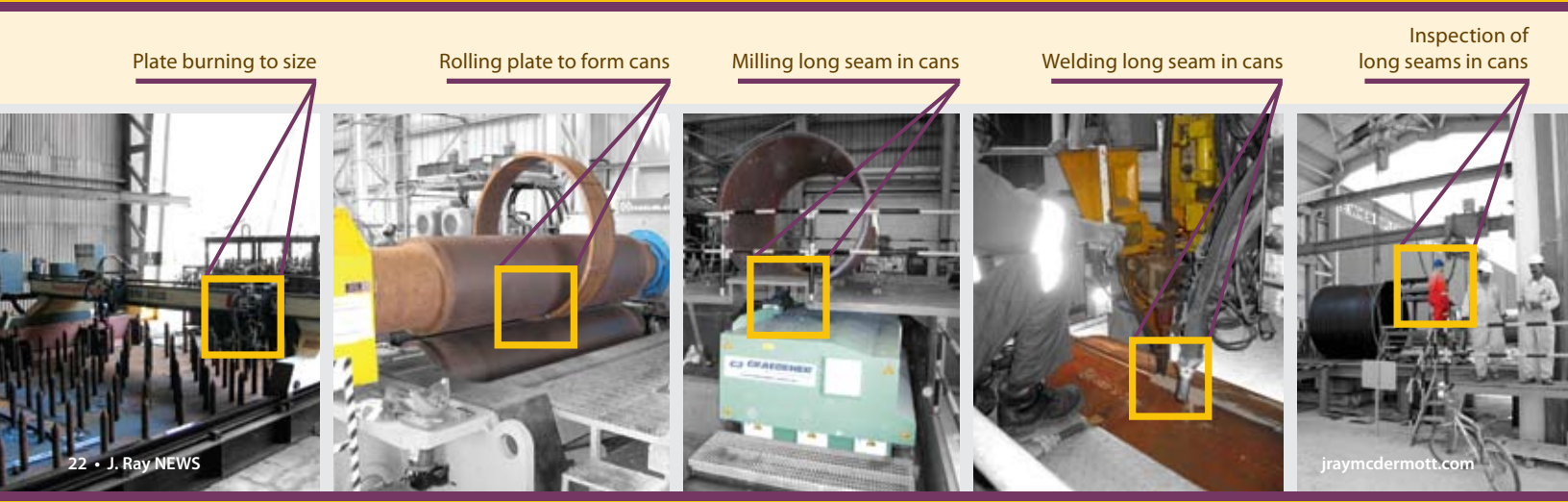
In the Americas, the new Altamira, Mexico, facility incorporates all these standards, processes and procedures. Major and small improvements at the Morgan City, Louisiana, facility include an alloy shop, upgraded equipment, new transport equipment and diversifying services into commercial work barges and power generation.

Both expansion and improvement also apply to the Asia Pacific region. Through a joint venture with a subsidiary of state-owned China Shipbuilding Industry Corporation (CSIC), J. Ray is establishing an 111-acre fabrication facility in Qindgao, Shandong, China.

Upgrades to Asia Pacific's existing Batam Island, Indonesia, fabrication facility include a new pipe spool shop, revamped painting facility, new cranes, major upgrades to the pipe mill and pile rack, and

The life cycle of a piece of steel

From cutting, to formation and joining to create a pile



Safety team members, like these in Baku, Azerbaijan, help ensure fabrication engineering and all operations are executed safely and effectively.

skidways to handle large integrated decks.

"With these improvements, Batam's capacity has doubled from four million man hours to eight million, and will be 12 million in the near future," reported Pender.

Similar increases have been achieved in Dubai. Capacity at Jebel Ali has grown from three million man hours to six million, and is headed towards eight million.

Consummate craftsmen

The ability to continuously improve, handle challenging tasks and adapt to constantly changing technology are both hallmarks and perks of the job.

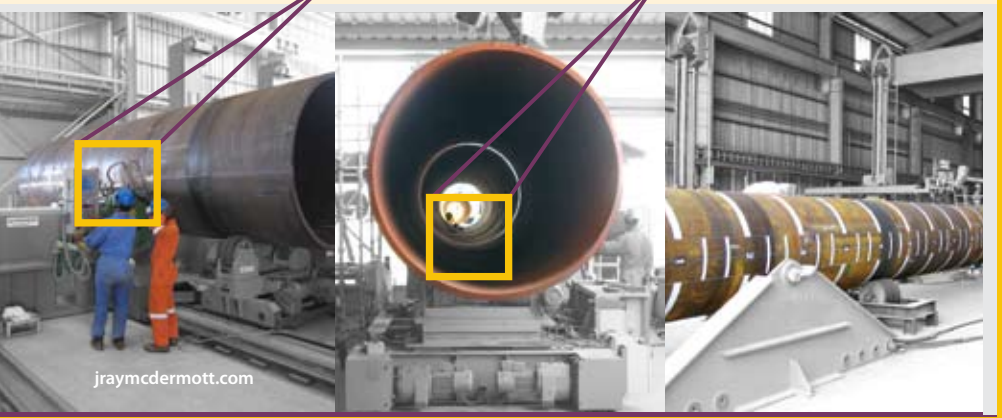
"A key ingredient of a good fabrication engineer is an internal drive to constantly stretch beyond your comfort zone," said Ricky Escalante, Proudction Engineer with J. Ray Asia Pacific. "Technological advances and process improvements keep the work fresh and interesting, The only way to stay ahead is to keep moving."

In addition to company-sponsored competency training, other avenues for involvement and learning are the Fabrication Council and Welding Technology Council. Representing fabrication and welding engineers throughout the company, these councils serve as the focal point for identifying, evaluating and recommending improvemement opportunities by sharing best practices, exploring new ideas, and researching other industries to gain additional insight and inspiration.

"As grassroots efforts, the councils empower fabrication engineers to share and adopt best practices that improve our processes, procedures and faciities in meeting customer needs," added Pender.

And the involvement goes beyond engineers' own craft. Integration with other functions is also important. With Procurement, the goal is to optimize schedules so that the right equipment and materials arrive at the right place and time. With Engineering, Fabrication provides feedback on preferred details and construction methods for turning drawings into the best-possible product. Fabrication is also an integral part of the customer relationship, reacting quickly and efficiently to changing project requirements.

While challenging and hard work, the rewards for fabrication engineers are priceless: The chance to create and see the results of their efforts at the end of every day .



Jebel Ali, Dubai
SHAPING HISTORY

Sometimes J. Ray fabricated structures take a shape of epic proportions — beyond the industry, or even supplying oil and gas to the world.

That's the case with the jackets and decks the Jebel Ali facility constructed (and installed) under a 2003-2006 contract with Dolphin Energy for the North Field, offshore Qatar. With about 900 trillion cubic feet of reserves, North Field is the largest gas deposit in the world. It is located about 10,000 feet underground in the extensive Khuff zone.

The integrated drilling and production complexes, DOL-1 and DOL-2, support the venture's upstream facilities, handling extraction of gas from 12 wells each. Both platforms are located to the north east of Qatar's Ras Laffan Industrial City.

Totaling 16,187 tons, each consists of a four-leg drilling and production platform, two bridge-support tripod platforms, two bridges and a flare tower.

The project presented a number of challenges, explained Karl Kesser, J. Ray's Project Manager. "A key challenge was for us to repackage the front-end design for the drilling platform topsides into a series of offshore lifts that were construction friendly."

J. Ray adopted a vertical split between the utility and process modules in the second week of the project, which allowed the two modules to be assembled in their offshore configuration while still in the fabrication yard.

"This approach allowed us to test all of the module installation aids onshore and complete a high percentage of the total project's pre-commissioning and commissioning work onshore, which was a great benefit," said Kesser.

The modules were split for load out and transportation, and precisely re-assembled at the offshore site in a very smooth operation.

J. Ray achieved an impressive safety record during the project, completing more than 2.5 million man hours with zero lost time incidents or medical treatment cases.

First gas from the wells was produced on June 25, 2007. By the time full production was achieved February 2008, each platform was producing 1.3 billion scf/d of raw gas for transportation to Ras Laffan for processing.

The ultimate significance of the project was realized in May 2008 with the official launch of the Arabian Gulf's landmark cross-border gas pipeline, linking the vast North Field to the UAE and Oman.

This unprecedented achievement for the first time physically brings together three nations — the UAE, Qatar and Oman — with economic and efficiency benefits, laying the foundation for stronger relationships and marking the beginning of a new era of social and cultural cooperation.

ENGINEERS' PERSPECTIVE

Engineers who make such achievements possible at Jebel Ali are representative of the skill, dedication and drive throughout J. Ray construction operations.

Jaikrishnan, Structural Fitter, Plate Shop team, for example, enjoys and appreciates that his "technical and engineering skills are being continuously developed."

Communication skills are also important. "To excel in our work, a pipe fitter needs the right type of tools and equipment for the job, as well as always making sure we have the correct drawings and understand

them," said Saji Semuel Daniel, Pipe Fitter, Deck Erection area.

For Jaikrishnan, communication means interacting with and learning about different nationalities and cultures. Such diversity in the work force, and in the work itself, is a motivator. "Every day is different," he added. "There's just a lot of variety in the things we do."

A welcome constant, however, is the focus on safety.

"J. Ray really takes care of its employees, especially when it comes to safety," said Saji.

"I like the emphasis on improving the quality of our work without compromising safety," Jaikrishnan added.

QATAR TRADITION

Along with taking care of people, J. Ray invests in the Jebel Ali fabrication facility to enhance its capabilities, building a long tradition of meeting challenging project needs over the years.

In Qatar, for example, that tradition covers nearly half-a-century. The recent DOL-1 and DOL-2 platforms are two of approximately 67 Jebel Ali-fabricated offshore structures completed for Qatar. In the last 15 years alone, J. Ray has designed, procured, fabricated and installed more than 92,263 tons of facilities in Qatar's waters. And since the massive North Field started in 1988, J. Ray has engineered, procured, fabricated and installed the vast majority of its upstream LNG facilities.

"I am particularly proud of our long association with Qatar's offshore oil and, more recently, gas developments," said Stewart Mitchell, J. Ray's Vice President and General Manager, Middle East and India. "We believe that given Qatar's vision of growth in the oil and gas sector, we will be able to mirror this growth to support Qatar for many years to come."

Jebel Ali
Dubai

Fabrication Facility
Total Area: 145 acres
Fabrication Area: 2 acres (covered); 6 acres (open)
Warehousing & Storage: 0.74 acres (covered); 23 acres (open)
Assembly/Erection Area: 47.5 acres
Deck Assembly Area: 351 feet x 82 feet x 39 feet
Pipe Fabrication Workshops: 43,056 square feet
Cladding Facility: 26,910 square feet
Plate Cutting Workshop: 46,715 square feet
Pipe Rolling Mill: 30,516 square feet

Blasting & Painting Facility: 3.7 acres (total), including 1.1 acres covered
Maintenance Workshop: 31,861 square feet

Bulkhead
Total Length: 3,406 feet
Reinforced Bulkhead Length: 1,194 feet
Load Out Capability: structures up to 27,560 tons
Quayside Water Depth: 39 feet
Distance to Open Sea: 3.4 miles

Morgan City, Louisiana
J. RAY ORIGINAL

Established in 1956, the Morgan City, Louisiana facility is J. Ray's original facility and a pioneer in innovative and diverse marine construction that has shaped much of the past and future.

"Starting with the first shallow-water tubular steel jackets for oil and gas development in the Gulf of Mexico, J. Ray has amassed an unequaled base of experience," said Steve Becnel, Morgan City General Manager. "The structures built here over the past five decades are a litany of the offshore industry's most significant projects. At the time they were built, these projects set the standard for offshore development, representing many firsts for the industry." (See sidebar, page 27.)

Achieving these accomplishments has required continually improving and streamlining the facility's capabilities to meet customer needs. Among the most recent enhancements is the state-of-the-art Multi-Joint Welding Facility (MJWF) designed to provide high-quality welding for deepwater pipeline operations.

At the core of MJWF is the advanced technology of J. Ray's Bug and Band Welding System (JBBS), an updated dual-torch version of the Vermaat Technics Veraweld system developed with input from J. Ray welders. Together MJWF and JBBS produce a time- and cost-efficient process for quad joint production that meets the strictest welding criteria.

Adjusting to meet market needs, Morgan City has diversified to be competitive on small and non-traditional projects, including onshore refinery modules, commercial work barges and power generation flue and duct components, as well as traditional offshore construction.

OFFSHORE STRUCTURES

Two jackets under construction at Morgan City are soon destined for waters off the coast of Trinidad, the southern-most island in the Caribbean Sea.

Construction of a a four-leg, eight-skirt pile jacket, completed for a customer in Trinidad, was loaded out in mid-August for transport and offshore installation in 433 feet of water. At peak construction, 140 people were involved in the project, which was completed without any lost-time accidents. This jacket, which was awarded in May 2007, cut steel in August 2007 and sailed one year later.

Poinsettia is an EPCI project with BG Trinidad & Tobago (BGTT) and its joint venture partners, in consortium with Fluor, to be installed offshore the northern coast of Trinidad in 530 feet of water. J. Ray's fabrication portion included the largest such facility ever installed in Trinidadian waters, a 9,100-ton, four-leg, 12-skirt jacket and 4,656 tons of piles.

The fast-track project began in mid-2007 and loaded out in August 2008. At peak construction, 375 people were involved in completing this massive jacket.

Poinsettia is part of BGTT's North Coast Marine Area Phase 3 field development to supply gas to trains 2, 3 and 4 of the Atlantic LNG Co., which will significantly increase gas production in the area.

Both projects represent key efforts in the Trinidad and Tobago Energy Sector's "Vision 2020" for creating long-term growth.

▼ Project diversification at Morgan City includes ductwork modules for Allegheny Energy Supply's power station in Masontown, Pennsylvania.

DIVERSIFIED PROJECTS

One of Morgan City's first non-traditional projects — a barge for Coastal Drilling — led to a second, which included construction of modules for the multi-million-dollar renovation and expansion project of a major casino operator.

"When customer representatives visited Morgan City fabrication facility they were extremely impressed," said Becnel. "They actually walked on to the barge we were building for Coastal and immediately commented on the high quality of workmanship."

The entire project's six modules were split among three companies building two modules each, due to unique time constraints. Equivalent to one American football field each, measuring 276 feet by 102 feet, the total weight of the two hull modules was 1,700 and 1,850 tons, respectively. The modules were too wide to be built in the bays of the Morgan City facility's Assembly Buildings. Instead, each was fabricated in two main sections which were then brought outside for final assembly.

Even though the project grew in size and complexity beyond the original parameters — with no additional time granted — J. Ray was the only one of the three contractors involved in the project to complete its two modules within the original time frame. In fact, one module was completed 15 days ahead of schedule; the other was almost two months early.

The customer recognized the exceptional performance in a letter stating, "The tough timelines and complex design did not deter your group's

J. Ray Firsts

In the Gulf of Mexico

First Offshore Platform in the Gulf of Mexico
1947 Kerr McGee, 20 feet of water

First Fixed Platform in Greater than 1,000 feet Water Depth
1978 Shell Cognac Platform, 1,025 feet of water

First Single Piece Deepwater Jacket
1981 Unocal Cervesa project, 935 feet of water

Longest and Heaviest Offshore Bridge/Thickest and Highest Strength Pile
1992 Freeport McMoran, Main Pass 299, 212 feet of water

World's Tallest Man-made Structure
1994 Shell Auger Tension Leg Platform, 2,860 feet of water

Deepest Tripod Jacket in the World
1998 Shell Cinnamon, 670 feet of water

World's Only Two Compliant Towers
1998 Amerada Hess Baldplate and Texaco Petronius, 1,650 feet and 1,750 feet of water, respectively

Sole Fabrication of 70,000 Tons of Topsides
2001 BP Holstein, Mad Dog, Thunder Horse and Atlantis

Deepest Dry Tree Spar Platform
2004 Dominion Devils Tower, 5,610 feet of water

resolve to deliver our project ahead of schedule … I send my personal thanks to all J. Ray McDermott employees who have shown, through the results produced for our project as an example, the pride they take in their trade, discipline and expertise."

Confidence and pride in these abilities were exhibited, and appreciated, throughout the facility.

"We knew our craftsmen could adapt to this type of work," said Becnel. "And by incorporating Lessons Learned from the previous Coastal barge project, we knew we could flesh out ways to be more productive and efficient."

Some of those methods included new welding techniques and greater use of semi-automatic equipment.

The modules arrived at their destination in January 2008 and combined with the other four to form the world's largest floating casino vessel.

Morgan City's diversification has also included power generation projects, such as ductwork modules fabricated for Allegheny Energy Supply's Hatfield Ferry Power Station in Masontown, Pennsylvania. When completed in 2009, the flue-gas desulfurization system will remove approximately 95 percent of the sulfur dioxide emissions from the plant.

For team members, such diversification adds welcome variety and challenges.

"Each day is similar, yet the tasks are always changing," said one engineer in response to an informal survey. "You come to work every day knowing that you will be welding and fitting, but one day you might be working on a jacket that is going to supply the world with oil and the next, you are welding on devices that are part of an energy plant."

The facility is also making the most of a symbiotic relationship with the Americas region's geographically diverse, second location, in Altamira, Mexico.

"We are rotating craftsmen, supervisors and managers between the two facilities to share best practices and knowledge," said Becnel. "And we share tasks, for example, pre-fabricating project components for Altamira. By complementing each other, we meet the needs of our Americas customer base regardless of project type or location."

Morgan City

Louisiana

Fabrication Facility Total Area:
589 acres

Covered Work Area:
35 acres

Alloy Shop:
40,000 square feet

Warehousing and Storage:
167,000 square feet (covered); 31 acres (open)

Bulkhead Total Length:
13,000 feet

Slip Accommodation:
Vessels up to 750 feet long with a 20-foot draft

Distance to Open Sea:
35 miles, access by Mississippi River System & Gulf Coast Intracoastal Waterway

Channel Depth:
20 feet

Height Restrictions:
None

Altamira

Mexico

Fabrication Facility Total Area:
119 acres

Covered Work Area:
Assembly building with four bays; two sub-assembly buildings (2009)

Warehousing and Storage:
230 feet x 295 feet

Lay Down Area:
7 acres

Skidway Adjustable Width:
Up to 108 feet

Skidway Length:
328 feet

Bulkhead Total Length:
984 feet, to extend to 3,280 feet

Load Out Capacity:
Structures up to 11,023 tons; to increase to 22,046 tons

Quayside Water Depth:
49 feet

Distance to Open Sea:
2 miles

Channel Depth:
148 feet

Height Restrictions:
None

Altamira, Mexico
EXPANDING SERVICES

As an expansion of capabilities in the Americas region, J. Ray's Altamira, Mexico facility is ideal for shaping deepwater floating hull assembly projects and large topsides integration. It features direct, unrestricted access to the Gulf of Mexico and quayside water depths to accommodate large transportation barges and transport ships.

Currently, work continues on the facility's first contract, fabrication of the Maloob-C drilling platform for Pemex Exploracion y Produccion's northeast Marine Region.

The drilling platform includes a 3,200-ton eight-leg jacket and a two-level deck weighing over 2,500 tons, with more than 3,300 tons of piles. Designed to sustain 18 wells, it will be located in the Ku-Maloob-Zaap field in the Bay of Campeche, Mexico, in 269 feet of water, when completed the first quarter of next year.

At the same time, Altamira is under going its own expansion, with plans to double the capacity of its skidways and build a heavy-lift device to further support deepwater floating hull assembly projects.

Modeled after J. Ray facilities and experience-worldwide in terms of infrastructure, equipment, processes and procedures, Altamira offers the only EPCI capabilities to customers in the Gulf of Mexico and Atlantic.

▼ A steel-cutting ceremony marked the start of Altamira's first project, Pemex's Maloob-C drilling platform.

Baku, Azerbaijan
RE-SHAPING FABRICATION

As part of its fabrication contracts with Azerbaijan International Operating Company (AIOC), J. Ray's Caspian subsidiary executed a comprehensive upgrade program at the Baku Deepwater Jacket Factory (BDJF), a subsidiary of the State Oil Company of the Azerbaijan Republic, to establish a full project infrastructure. Originally predominately a jacket fabrication facility, BDJF was modified by J. Ray and adapted to cater to large integrated deck fabrication and assembly.

"It has been an amazing transformation into a world-class facility — fully safety compliant, satisfying international standards, and operated by highly skilled and trained craftsmen, most of which were locally hired," said Dan Houser, Vice President & General Manager of the Caspian operations. "At the same time, we were actively involved in major construction projects."

An example is completion of a three-phase development of AIOC's Azeri, Chirag and deepwater portion of the Gunashli field (ACG). Operated by BP and producing more than 800,000b/d, the ACG projects also encompassed float-over installation, expansion of existing offshore and onshore terminals, and subsea pipelines and manifolds, as well as offshore structures.

Baku's scope of fabrication work in Phase 1 was construction of the Central Azeri integrated deck (CA). At a total weight of 17,092 tons and water depth of 420 feet, the CA deck consists of a 48-slot production, drilling and living quarters platform with capacity for 200 personnel.

J. Ray's Phase 2 fabrication included two topsides, for West Azeri (WA) and East Azeri (EA), operating in 400 feet and 492 feet of water, respectively. Each consists of a 48-slot platform supporting drilling facilities, living quarters, power generation facilities and other production equipment and facilities.

At 17,650 tons, the EA deck represents the largest deck built to date by J. Ray in the Caspian. Slightly smaller, the WA deck weighs 17,497 tons. These facilities were integrated with Phase 1 facilities to create an Azeri offshore and onshore development complex.

In Phase 3, the 17,264-ton Drilling, Utilities and Quarters (DUQ) integrated topsides deck, designed for installation in 505 feet of water, was constructed at Baku.

Its three modules consisted of a main deck and living quarters, which was fabricated in Sweden as 48 mini-modules delivered to Baku on three transportation barges for assembly. The third, drilling, module included three main components: A drilling support module, drilling equipment set and drilling derrick.

"With the sail-away of the DUQ topsides, we achieved the significant milestone of completing four topsides fabrication projects, totalling more than 69,503 tons, within the agreed schedule, for the first three phases of the ACG development," Houser added.

Also significant is the fact that more than 85 percent of the work was performed by locally trained craftsmen.

The Caspian region is also the site of J. Ray's newest fabrication facility (see page 6).

Baku,
Azerbaijan

Fabrication Facility
Total Area: 76 acres (plus a 1.5-acre marine base)
Fabrication Area: 6 acres (covered); six acres (open)
Warehousing and Storage: 0.44 acres (covered); 27 acres (open)
Assembly/Erection Area: 30 acres

Bulkhead
Total Length: 1,122 feet
Load Out Capability: North Skidway, up to 29,760 tons; South Skidway, up to 19,800 tons
Quayside Water Depth: 36 feet
Distance to Open Sea: 0.31 miles
No Channel Restrictions

Batam Island, Indonesia
OPPORTUNITY KNOCKS

The shape of the future in Asia Pacific is full of opportunity.

"The Asia-Pacific region is currently very active and is poised to become the world's most significant oil and gas producer, with demand forecasted to grow dramatically by 2030," said Mike Jeffers, General Manager of Fabrication, Batam Island, Indonesia. "J. Ray is well-positioned to help satisfy current and future demand."

And with this opportunity, comes responsibility.

"Being prepared for this work will require diligent planning so that we have the trained resources in place to execute projects safely and efficiently. In addition, we will continue to seek innovative ways to become more competitive and effective," he added.

The facility is also well-prepared by having fabricated more than 660 structures weighing a total of over 694,456 tons in 37 years of experience. Continual expansion and improvement of equipment and infrastructure has included new cranes, strengthened bulkheads and new skidways for the fabrication of large integrated decks. Also, significant process improvements were recently completed that will dramatcially improve productivity and efficiency.

One such project is an EPCI contract with Chevron for its Platong Gas 2 development in the Gulf of Thailand. The contract encompasses a central processing platform (CPP) with float-over deck weight of approximately 20,000 tons and associated 200-person living quarters platform, flare tripod and three bridges. The CPP consists of one or two treatment trains and ancillary systems. Expected daily production capacity is between 250 and 350 mmscfd; design capacity is 418 mmscfd.

"Platong Gas 2 has the potential to satisfy approximately 7 percent of Thailand's projected total natural gas consumption, or almost 14 percent of the natural gas used for power generation," said Tara Triadnakorn, president of Chevron Thailand Exploration & Production. "It will generate thousands of new job opportunities in the region and will also provide a secure new energy source for the Kingdom of Thailand for decades to come."

Construction will start in the fourth quarter of this year, with installation scheduled in 2010. Start-up of the project is expected in 2011, with the CPP initially tied into five wellhead platforms.

"This substantial award signifies the beginning of a new relationship between J. Ray and Chevron in the region," said Jeffers. "Working with our engineering and procurement capabilities in Singapore, our fabrication facility in Indonesia and our regional marine construction vessels, the Platong Gas II Project takes full advantage of J. Ray's extensive capabilities and experience."

Opportunity for Batam Island's deepwater mooring for large transport vessels includes a floating, production, storage and offloading ("FPSO") vessel for A.P. Moller-Maersk A/S.

Construction of the 7,165-ton topsides will commence in the third quarter 2008 and will employ up to 1,200 craftsmen by its completion in the fourth quarter of 2009.

The FPSO will ultimately be operated in the Peregrino field, located in the Campos Basin approximately 53 miles offshore Brazil.

Further illustrating the diverse capabilities and opportunity in the region, Batam Island supports the growing onshore LNG module fabrication market and should be in excellent position to respond to these types of projects in the future.

Batam Island

Indonesia

Fabrication Facility

Total Area: 272 acres
Fabrication Area: 3.5 acres (covered); 1 acre (open)
Warehousing and Storage: 1 acre (covered); 104 acres (open)
Assembly/Erection Area: 2 acres (covered); 104 acres (open)
Blasting and Painting Area: 4 acres

Bulkhead

Total Length: North Yard, 131 feet; South Yard, two bulkheads 600 feet each; FPSO berth, 1,280 feet
Load Out Capacity North Yard: 27,558 tons; water depth 26 feet
Load Out Capacity South Yard: 11,023 tons; water depth 20 feet
Load Out Capacity West Yard: 22,046 tons; water depth 29 feet
FPSO Dock: Berthing for vessels up to 300,000DWT; water depth 29 feet
Quayside Water Depth: North Yard, 28 feet; South Yard, 18 feet
Distance to Open Sea: North **Yard, direct access;** South Yard, 656 feet

Qingdao, China
BUILDING ON TRADITION

Through a joint venture with a subsidiary of state-owned China Shipbuilding Industry Corporation (CSIC), J. Ray will have further presence in the Asia Pacific region. The new company, Qingdao McDermott Wuchuan Offshore Engineering Company, Ltd. (McDermott Wuchuan) is forming a fabrication facility in Qingdao, Shandong, China.

The two partners complement each other well. As a leading shipbuilder in China — the third-largest country in the world in the shipbuilding industry — CSIC has a solid reputation, extensive market penetration, ability to produce hulls and access to a large, skilled workforce. Nearby resources include two new CSIC shipyards adjacent to the new facility, Wuchuan and Beihai Shipyards, offering one floating dock and five dry docks capable of accommodating vessels up to 50,000 deadweight tons.

"Our joint venture will benefit from J. Ray's integrated EPCI capabilities and more than 60 years of international market experience, consistency of methods, standards and procedures, continuity of mature accredited project management systems and a highly advanced HSE culture," said Bob Deason, J. Ray President and CEO.

Design of the 111-acre facility's infrastructure also benefits from the knowledge and experience of both companies. Features include structural and pipe shops, blasting and painting facilities, module assembly buildings, covered warehousing and lay down areas, and will permit annual throughout of more than 33,000 tons.

Work on McDermott Wuchuan development has already started, including ground preparation, the structural workshop, piping workshop, bulkhead and drainage.

"Our primary focus will be on FPSO projects, from concept to commissioning," said Asan Sofian, General Manager, McDermott Wuchuan. "Our initial pursuit will be FPSO topside-module fabrication, and as we develop the infrastructure we will carry out topsides-to-hull integration and commissioning at the quayside. Our secondary focus will be on constructing integrated decks, jackets, Spar hulls, and modules for the onshore and offshore energy industry."

Most of the yard development work will be completed by the third quarter of 2009, except for the module shop and office building that will be completed in the fourth quarter next year. The facility is expected to be able to perform simple fabrication work locally, around the fourth quarter of 2009, and ready to take on international projects in 2010.

Staffing, which will ramp up to a total of about 3,800 personnel, is underway, with training provided at the J. Ray Asia Pacific Peregrino FPSO project at Batam Island, Indonesia.

"FPSOs represent one of the fastest growing offshore construction segments in our industry today," added Deason. "China already commands a significant share of this market and has developed a proven project track record. Establishing this new joint venture focusing on FPSOs will add a critical component to J. Ray's comprehensive opportunities — seafloor to shore."

McDermott Wuchuan
Qingdao, China

Fabrication Facility
Total Area: 111 acres
Structural Shop and Shop Office
Pipe shop and Pipe Shop Office
Module Assembly shop
Operation Building
Blast and Paint facility
Welding School and Lab
Warehouse
Maintenance Shop
Main Offices, Canteen
Utilities: Air compressor station, Gas store, CO2 Gasification Station, Substation and Transformers
Capacity: 33,069 tons throughput

Bulkhead
Designed for load out of up to 27,558 tons

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Qingdao

A vibrant kaleidoscope of ancient lands, sophisticated architecture, magnificent coastlines and rich tradition

As one of China's most popular and famous port cities, Qingdao has rapidly developed into a major economic and cultural powerhouse. Located in China's beautiful Shandong Province, Qingdao has molded itself into a significant trade port and marine research base; industrial, technological, and manufacturing center; international financial and banking hub; and culturally diverse resort destination. This model city of environmental protection has also taken its place as one of China's most important international convention sites.

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Plum blossoms are among the most beloved Chinese flowers. Blossoming in the Winter, they are seen as an example of resilience and perseverance in the face of adversity.

Weaving a tapestry of old and new, Qingdao is a mix of pre-World War II colonialism and polished post-modernism, still evidenced by its unique European and colonial architecture. The seaside city is nestled in the southern tip of Shandong Peninsula, on the coast of the Yellow Sea, a short distance from Japan and Korea.

Literally meaning "green" or "lush" "island," Qingdao perfectly describes the city with 454 miles of coastline and five significant rivers flowing throughout the region. It's no wonder that *China Daily* named Qingdao China's ninth most livable city. Often known as the "Switzerland of the Orient," Qingdao's kaleidoscope of blue sea, azure sky, quaint and sophisticated architecture, and coastal capes and bays blend into a mosaic of breathtaking beauty.

Inviting environment

The city attracts foreign investment from all over the world because of the pleasant climate and lower cost of land and labor. In fact, 99 countries and more than 40 globally recognized companies have invested more than US$20 billion into the city in the past few years. The return on that investment has not disappointed.

Offering opportunities for manufacturers and investors alike, Qingdao has flourished under its foreign trade and tourism focus. Qingdao is home to some of China's biggest manufacturers and brands, including Haier and Aucma, air conditioners and home appliances; Doublestar, rubber and plastics machinery; and Hisense, major electronics. Guitar manufacturer Epiphone has opened a factory — all netting the city by the sea awards as the "nation's most economically energetic city" and "entrepreneurs' most favorite city."

Designated as a Special Economic and Technology Development Zone (SETDZ) by the Chinese government, Qingdao's desire to construct a modern industrial system, centered on port, ocean development, and tourism, is well on track. Four pillar industries: electronics and home appliances; shipbuilding, locomotives, rolling stock and container manufacture; petrochemicals; and new materials set the cornerstone of its industrial framework, leading to Qingdao Port's distinction as one of the largest container transportation hubs in the Yellow River region.

Its foreign trade handling capacity of 82 million tons makes Qingdao Port the largest port in Mainland China and the second-largest foreign trade seaport in the country. This has given rise to trade relations with more than 450 ports in more than 130 countries and regions around the world, contributing to China's 9.9 percent growth in gross domestic product in 2005.

Tsingtao (pronounced "ching-dow") Brewery is a landmark of Qingdao's business and culture, as China's largest producer of beer. Founded in 1903 by German settlers, the company's logo displays an image of Zhanqiao, the famous pier on Qingdao's southern shore that serves as the city's symbol. Sold today in more than 50 countries worldwide, and accounting for more than 50 percent of China's beer exports, Tsingtao beer is popular for its taste that comes from the pure water of eastern Qingdao's Mt. Laoshan spring.

A recent development has been the city's growth as a film and TV production center. Since the 1990s, filmmakers have increasingly been attracted to Qingdao's scenic coastal regions, with six main beaches, and Badaguan ("Eight Passes") for its architectural showcase of Russian, British, French, German and Danish construction.

As might be expected, the rise in the city's political, economic, financial and cultural fortunes has supported an increase in personal income and spending. This influx of money has transformed the city into a region of graceful estates and sleek modern high rises. Young people flock to the downtown entertainment district to participate in the city's growing cultural events and nightlife.

Fascinating culture

And with the Qingdao Liuting International Airport connecting the city to more than 30 other large Chinese cities, as well as Tokyo, Osaka, Singapore and Hong Kong, tourism

The naval history of China dates back thousands of years to 722 BC. Now, the most populist nation on earth and the third-largest country in shipbuilding has emerged as a dominant player in both shipbuilding and as an international trade port. These distinctions help underscore its deserved place as an undisputed industrial power.

Chinese shipyards have also decisively entered the offshore oil and gas arena with an intense demand for Floating Production, Storage and Offloading (FPSO) vessel facilities. With FPSOs representing one of the fastest growing offshore construction segments in the oil industry today, China aspires to be a respected player in this field.

It is fitting, against this backdrop of shipbuilding and international sea trade, that the port city of Qingdao is the sailing venue for the 2008 Summer Olympics.

With a focus on "Green Olympics," "High-Tech Olympics" and "Humanistic Olympics" as its foundation, the Qingdao Olympic Sailing Center events are located in Fushan Bay, near the city's political, cultural and commercial center. The new center includes a state-of-the-art national sailing athlete training center, an Olympic village, a boat park, a news center, an international passenger liner wharf, a conference

center, a five-star tourist hotel, a yachting club and a seaside marina. The entire area covers more than 111 acres and is located on the former site of Beihai Shipyard, also owned by J. Ray's China joint venture partner CSIC. As a test run of the facilities, the center hosted two yacht races earlier this year.

To make this Olympic event possible, the municipal government of Qingdao moved the Beihai Shipyard to West Sea Bay in the Huangdao District of the city (next to the McDermott Wuchuan joint venture), to make room for the new sailing center. At a cost of US$9.5 billion, it was the largest investment of its kind in China.

The new Beihai Shipyard is bigger and more modern than ever with new factories, workshops, piers, boiler stations, sewage pumping stations, and power stations. Additional investment has been raised to construct leisure water vessels on the property. About 60 percent of the repair work on the 150,000- and 30,000-ton docks should be completed by the end of the year.

For a city that wanted to host the 20th Olympic Sailing events in style, Qingdao has built a green, high-tech Olympic metropolis that boasts one of the highest world-class sailing venues in Asia today.

has become a linchpin of the area's economy. In 2005, Qingdao had almost 685,000 foreign tourists who infused US$415 million in foreign exchange. The region hosted another 24 million domestic tourists, all drawn to venues such as Zhan Bridge, Huashi Iou (Granite Mansion), Tianhou Palace, Huiquan Square ("urban lobby"), Lu Xun Park, (above), Zhongshan Park, Wusi Square, "May Breeze" (right) and Qingdao Arboretum.

An International Dragon Boat Festival, Ocean Festival, Beer Festival, Arts Carnival and Festival of the Hungry Ghosts are just some of the myriad festivities that help draw millions of tourists to the region every year.

Thirty trains also operate between Qingdao and other cities, shuttling people every day to and from their jobs and tourist attractions. By mid-2009 the two-way, six-lane Qingdao Haiwan Bridge and two seabed tunnels will connect the east and west crossing of the Jiaozhou Bay rim, further promoting regional development in the area.

Originally colonized by the Germans and Japanese, the current majority of Qingdao's 4.3 million residents are immigrants, who have migrated from other locations to take advantage of the economic and cultural opportunities that Qingdao offers. At least 30,000 South Korean nationals reside in the city. Despite this surge of immigration, Qingdao still manages to keep its local accent known as "Qingdao Hua," which distinguishes the residents of the city from those of the surrounding province.

Long a hub of professional sports in China, through such events as the Chinese Super League Football and Jia League, Qingdao now finds itself in the world spotlight as co-host of the 2008 Summer Olympics and Paralympics (September 6 to September 17). Olympics sailing events took place at Qingdao's newly constructed Sailing Center, located in Fushan Bay, in the eastern part of the city.

Reward for years of hard work and forward vision, this crowning achievement ushers in a new era for one of the most economically and culturally dynamic cities in China.

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Emerald Sea / 2006

Purchased by Secunda in late 2006, the Emerald Sea was built for Maersk at Ulsteinvik Shipyard, Norway, in 1996. Originally designed as a cable-laying vessel, it had a large deadweight of 8,455 tons for carrying cable and related equipment, and accommodations for 56 people. Secunda recognized its suitability to a subsea role, with potential for a large crane and longevity at sea with large fuel capacity and provisions storage.

Emerald Sea / 2008

Upgrades completed in late 2007 converted the Emerald Sea into a subsea support vessel by removing the cable-slicing shop on the cargo deck, installing new features and additional living quarters. This versatile ship is now DP Class 2 with a 10,764-square-foot deck area for storage of lay spreads, dive spreads and other equipment and systems. It is equipped with a saturation dive system for subsea construction support, a 100-ton specialized crane for lifting subsea equipment to and from the sea floor during construction work, a moonpool, and a helideck to facilitate in-field personnel changes. Living quarters were increased to 110 to accommodate the multi-disciplinary crews necessary for subsea construction.

INVESTING IN OPPORTUNITY

J. Ray McDermott celebrates its new joint venture with China Shipbuilding Industry Corporation (CSIC) subsidiary Wuchuan Shipyard, which plans to establish a 111-acre fabrication facility in Qingdao, Shandong, China. The facility will primarily focus on FPSO projects and secondarily on integrated decks, modules and Spar hulls.

Grounded in mutual understanding, support and respect, we envision long-term success in providing world-class service to our customers worldwide.