POW/ERSOURCE A publication of John Deere Power Systems – Marine Edition Spring 2020

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ON THE COVER

Swallow is a superyacht custom-designed for chartered tours along the Dalmatian coast in Croatia.

POWERSOURCE

COVER STORY

IO Cruising along the Croatian coastline is the 49-meter (160-feet) Swallow. Making its splash in 2019, the custombuilt superyacht features high-end hotel amenities, including a whirlpool, sauna, massage services, and restaurant. "Thirteen years ago, we installed John Deere engines in our classic Croatian sailing ship Lastavica. These always performed well, so we decided to stay with John Deere," says captain Filip Stančić. Two PowerTech™ 13.5L engines propel Swallow, while John Deere-powered bow thrusters make easy work of maneuvering in and out of coves and ports.



CREW BOATS

17 Corpus Christi crew boat cruises cleaner with three PowerTech 13.5L engines





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To learn more about John Deere engines and drivetrain components, visit JohnDeere.com/JDPower.



LAKE POWELL WITH JEPOWELL WITH

Three John Deere engines drive new tourism vessel built by Bentz Boats

S traddling the border of Arizona and Utah, Lake Powell is a blue oasis stretching through red and orange sandstone canyons with stunning rock formations.

Each season, visitors come to Lake Powell Resorts & Marinas near Page, Arizona, to enjoy the lake and explore some of the geological wonders. Among the most popular are Antelope Canyon, Cathedral in the Desert, and Rainbow Bridge National Monument.

Lady Emma wants to take you there, too. The 15-meter (50-foot) touring vessel is a recent addition to the marina's fleet. Built by Bentz Boats, the new vessel sports an aluminum planing hull and jet propulsion powered by three John Deere PowerTech[™] 6090SFM85 marine engines.

Capable of reaching a top speed of 45 knots, *Lady Emma* is the fastest in the marina's fleet. "She's primarily used to go up to Rainbow Bridge National Monument, which is 49 miles (79 kilometers) upriver. We can do a round trip in about four and a half hours, while our other vessels do that trip in six or seven hours," says Robert Knowlton, general manager of boat rentals, tours, and river operations for Lake Powell Resorts & Marinas.

Lady Emma made a grand entrance on Lake Powell in 2019. Knowlton says the marina has been in the process of replacing aging vessels with new boats. After considering various options, Knowlton and his team came to the conclusion that an aluminum tour boat with jet propulsion would be the best fit on Lake Powell. "Our other boats have propellers, and the draft on these vessels ranges from 4 to 5 feet (1 to 1.5 meters)," says Knowlton. "On Lake Powell, there are places where rocks lie just below the water surface, depending on water level. Having a draft of only 2.5 feet (73 centimeters) with jet propulsion makes it easier to get around on the lake and helps us avoid possible damage to the vessel."

He also points out that jet propulsion offers exceptional maneuverability. With one engine in forward and two in reverse, the boat turns 360 degrees on a dime and can walk sideways

for easy docking — a strong selling point at Lake Powell. "The captains operating the vessel really enjoy the maneuverability and versatility that the propulsion package offers in narrow passages such as Antelope Canyon."

Picking the pros

After researching boat builders and evaluating reviews, Knowlton selected Bentz Boats in Lewiston, Idaho, to build *Lady Emma*. Family owned and operated, Bentz Boats has been crafting rugged aluminum-hull vessels since 1972. The company builds custom, high-end commercial and recreational aluminum boats that have a proven track record for safely operating in a variety of water conditions throughout the world. A vast majority of these vessels are powered by jet propulsion.

When selecting a power source for the jet propulsion system, Knowlton leaned on the advice of Bentz Boats, who recommended John Deere engines supplied by Cascade Engine Center. This John Deere engine distributor has years of experience and expertise pairing John Deere engines with HamiltonJet propulsion systems in tour boats, water taxis, and commercial fishing vessels throughout the Pacific Northwest.

"Cascade Engine Center has been a long-term supplier of engines for us, offering solutions and support from initial sales to aftersales service, regardless of vessel location," relates Bryan Bentz, owner of Bentz Boats. "My trust in their recommendation is high — they have a proven track record of quality and support. The depth of knowledge that Tim Sandeman and his team at Cascade Engine possess of the products they represent is impressive. I often use them as a sounding board. We are very fortunate to have them as a resource."

Cascade Engine Center recommended John Deere PowerTech 6090SFM85 engines for *Lady Emma*. "Cascade Engine preassembles the components to ensure they are compatible and operational before they even ship," says Bentz. "Receiving everything preassembled prior to delivery reduces the initial startup time. If there are startup issues, they can often be easily resolved over the phone while at the water."

Bentz Boats paired the John Deere 9.0L engines with HamiltonJet 322 waterjets through a ZF transmission with a 1:1 gear ratio. "Most of our clientele is looking for higher speeds. We have learned that oftentimes smaller triple applications provide better performance at a lesser cost both initially and long term than twin engines," says Bentz. "As a result, we have a history of installing a lot of triple propulsion packages."

In fact, Bentz Boats is building another triple-engine vessel for Lake Powell Resorts & Marinas. The new jet-propulsion tourism vessel measures 21 meters (68 feet) in length and will be powered by three John Deere PowerTech 6135SFM85 marine engines.

"Bentz Boats is approaching 50 years in this business, and you learn what works and what doesn't," says Bentz. "The John Deere engines were the perfect fit for durability and performance."

Distributor: Cascade Engine Center in Seattle, Washington; www.cascadeengine.com



Each engine consumes 57 liters (15 gallons) per hour at a 30-knot cruise.



Three John Deere 9.0L engines power HamiltonJet 322 waterjets through a ZF transmission with a 1:1 gear ratio.

FOUR FUN FACTS ABOUT LAKE POWELL



The lake is named in honor of John Wesley Powell, who explored the Colorado River in 1869.



Lake Powell is 299 kilometers (186 miles) long with 96 major side canyons, making it the second-largest man-made reservoir in the United States.



After Glen Canyon Dam was built, it took 17 years for the Colorado River to fill it up.



Rainbow Bridge National Monument, one of the largest known natural arches in the world, can be reached with a twohour boat ride on Lake Powell. magine cruising on a chartered yacht in Canadian waters and spotting a pod of humpback whales. From a distance, passengers watch as a whale circles a school of herring, sending out a stream of shimmering bubbles from its blow hole below the water's surface. Minutes quietly pass, followed by the sudden rise of multiple whales simultaneously exploding from the water's surface to feed on the fish.

This incredible wildlife moment is one of many unexpected experiences shared by clientele of Bluewater Adventures of North Vancouver. "The British Columbia coastline offers an outstanding combination of beautiful scenery, amazing wildlife, fascinating native culture, and history," says Randy Burke, director of Bluewater Adventures. "I honestly believe that this is the best coastline in the world, and that's one of the things we try and prove to our guests."

The popularity of the wilderness experience cruises prompted the addition of a new flagship yacht, *Island Solitude*, in spring 2018. The 25-meter (82-foot) luxury motorsailor accommodates 12 guests and offers adventure tours into the archipelago of Haida Gwaii (formerly known as Queen Charlotte Islands) and southeast Alaska. Depending on the itinerary, highlights may include navigating the Great Bear Rainforest or Gwaii Haanas National Park Reserve, where passengers can witness abundant marine life, soaring bald eagles, and bears feasting on spawning salmon.

Continued on page 8

"THE BRITISH COLUMBIA COASTLINE OFFERS AN OUTSTANDING COMBINATION OF BEAUTIFUL SCENERY, AMAZING WILDLIFE, FASCINATING NATIVE CULTURE, AND HISTORY. I HONESTLY BELIEVE THAT THIS IS THE BEST COASTLINE IN THE WORLD."

Randy Burke, director of Bluewater Adventures

THE ENGINE FOR ECOTOURSM

John Deere engines prove to be an asset on Bluewater Adventures wilderness expeditions

Island Solitude offers 8- to 11-day ecotours in Haida Gwaii, Great Bear Rainforest, and Southeast Alaska. (Photo by C. Wheeler)



"People really want to experience these remote, wild areas on smaller vessels like SV *Island Solitude*. Cruising on a smaller yacht offers a whole different experience compared to a large cruise ship. If we see whales or a lovely beach, we have the flexibility and opportunity to stop," says Burke.

Inside and out, *Island Solitude* offers the elegance, comfort, and safety needed for multi-day coastal exploring. "It is very much an expedition yacht," explains Burke. A 6.4-meter (21-foot) beam, wide stern, and hard chine contribute to stability and comfort, even in rough seas. "We're not always in calm water. We are out there on the continental shelf and a long way from support services, so a lot of what went into the vessel design was for both strength and durability. It was a great achievement to build a brand-new expedition yacht licensed to the highest standards of safety in Canada. You can't run a business without having that dependability built in."

Adding to this dependability are twin 198-kW (265-hp) John Deere PowerTech[™] 6068AFM85 EPA Tier 3 marine engines supplied by Frontier Power Products. "Reputation is everything for our business. I wanted engines that met the latest environmental standards while also being dependable. I've got a longtime friend who commercial fishes in southeast Alaska, and he highly recommended John Deere engines. Plus, having companies like Frontier Power Products and John Deere dealers for support is really important to us."

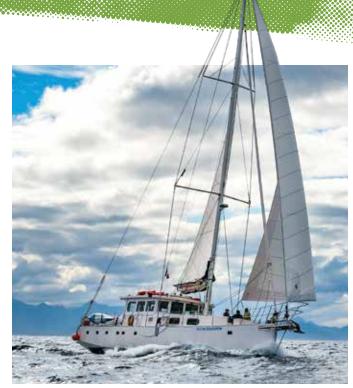
Island Solitude's design was a collaborative effort by Martin Yachts, E.R. Yacht Design, and West Coast Custom Yachts, the latter owned by renowned boat builder Forbes Cooper. "We're already operating two yachts that Forbes Cooper built in the 1980s, and that's absolutely one of the main reasons we went to Forbes to build this boat. He built two great boats for us in the past, and he understood what we needed."

West Coast Custom Yachts installed twin John Deere 6068AFM85 engines, pairing them to ZF transmissions. "Another consideration when selecting an engine was the ability to run 8 to 9 knots at 1600 rpm, which we consider a 'sweet spot' in terms of fuel economy and the least amount of background noise," says Burke. "I like the sound of the John Deere engine; the general tone is more pleasant compared to other engines we've used in the past." Fuel economy is important to Bluewater Adventures. "If I can adjust the throttles and make us more fuel-efficient, it saves us money on fuel and mitigates our operational footprint." Burke adds.

Bluewater Adventures will strongly consider John Deere engines when other vessels in its fleet are up for repower, Burke says. "Some years back, we repowered one of our other vessels with competitive engines, and I like the John Deere engines more. So far, we're very happy and look forward to many, many years of great service."

Distributor: Frontier Power Products in Delta, British Columbia; Edmonton and Calgary, Alberta; Winnipeg, Manitoba; www.frontierpower.com







(Top, right) The modern hull was designed for improved sailing performance, making it efficient for travel under sail or motoring with twin PowerTech 6068AFM engines. (Photo by C. Wheeler)

(Middle, right) When Island Solitude is at anchor, passengers can explore the area on two motorized Zodiacs and five sea kayaks. (Photo by S. Kirkvold)

(Middle, left) Passengers aboard Island Solitude enjoy Butedale Falls on Princess Royal Island in British Columbia. (Photo by S. Kirkvold)

(Bottom, left) Crewmembers include a captain, a naturalist, and a chef. The extended wheelhouse offers a common area where the entire group can gather for meals and socializing.

The coastal cruising superyacht MS *Swallow* has a cruising speed of around 9.5 knots and a top speed of 12 to 13 knots.



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Iong the Croatian coast, swallows are a welcome sign of spring. And in 2019, the brand-new MS *Swallow* kicked off the tourist season in a big way. Designed to give guests a taste of Croatian shipbuilding heritage, this firstof-its-kind coastal cruising superyacht offers its guests an unforgettable, stylish, and luxurious experience exploring the wonders of the Dalmatian seashore.

Swallow is the brainchild of Igor and Irena Stančić, and their son Filip. The family owns Lastavica Cruising, a brand by Morska Lastavica (Sea Swallow) Ltd. tourist charter company in Betina, Croatia. The family wants to make sure *Swallow* embodies the spirit of Croatia's shipbuilding and maritime history. They also want to achieve the sumptuousness of a superyacht — including the latest cruiser-style technology and propulsion. To accomplish this, the family involved three major naval design experts (see sidebar at end of article).

"Traveling enriches people's lives. We want our guests to do so in style and comfort," explains Filip Stančić, captain of the new cruiser. "Aboard *Swallow*, our guests immerse themselves in the treasures of the Dalmatian coast. In a single day, they can explore ancient towns and breathtaking islands and swim in beautiful bays." *Swallow* easily slips in and out of coves and ports, enabling guests to hop on and off as they please.

The 49-meter-long by 8.5-meter-wide (160x28-feet) vessel accommodates up to 36 guests. Its classy, sleek exterior showcases a steel hull and marine resin deck floors, while the inside spaces are designed for indulgence and comfort. The reception space, 18 cabins, restaurant, bar, and lounge are all built and finished to hotel standards. Guests can enjoy a jacuzzi, sauna, massage, and laundry service. The deck crew, hostess, tour manager, housekeeper, two on-board chefs, and two waiters guarantee sincere, thoughtful, and personal hospitality.

The Stančić family worked closely with three naval designers, a local shipyard, and local subcontractors to ensure structural integrity, space optimization, and maximum comfort. *Swallow's* hull was launched and tested in December 2018. The exterior details were completed and the interior and engines were installed. The vessel was officially launched in June 2019, just in time for the summer season.

Stability, no matter what

For Swallow's propulsion system, the Stančić family chose two 373-kW (500-hp) John Deere PowerTech[™] 6135SFM85 EU Stage III A and EPA Tier 3 engines, each driving a Dong gearbox and Michigan Marine 4-blade propeller. The engines drive the propellers through a gearbox ratio of 5.04:1.



Guest comfort and safety are enhanced with the latest technologies in navigation, communication, safety, and leisure equipment. Plus, the vessel is equipped with a fast rescue boat and service tender, and two launch cranes.

"Eleven years ago, we installed John Deere engines in our classic Croatian sailing ship *Lastavica*," Filip Stančić recalls. "These always performed well, so we decided to stay with John Deere. As the captain of *Swallow*, I need to be sure that I can get her and our guests out of any potentially dangerous situations, whether at sea or in the busy coastal waters. The power of the engines combined with this gearbox ratio gives me the capacity and the confidence I need!" Low noise and vibration, plus stability at sea, were also prerequisites, all while meeting emission regulations and delivering excellent fuel efficiency.

> Offering five-star comfort, the new *Swallow* is expected to attract more guests from outside Europe.

A larger ship such as *Swallow* catches a lot of wind, which can complicate mooring and docking. The engines and bow thruster provide Stančić with the power and agility to moor safely in confined spaces. The bow thruster is powered by a Linz 97-kWe generator set powered by a 120-kW (160-hp) John Deere PowerTech E 6068T Tier 3/Stage III A industrial engine.

John Deere engine distributor GM Turbo d.o.o. from Split, Croatia, helped select the perfect power range and supplied 3D drawings to simplify and speed up integration of the engine into the engine room. They also assisted in installation and testing. "Our collaboration goes back 11 years to the construction of *Lastavica*. We were one of the first to order John Deere engines from GM Turbo, and in Croatia in general," says Stančić. "Meanwhile, we've developed a special bond that goes beyond business cooperation; we've become friends."

Distributor: GM Turbo d.o.o. in Split, Croatia; www.gm-turbo.hr



Twin John Deere 13.5L engines propel *Swallow* through a Dong gearbox with a 5.04:1 gear ratio.

EXCEPTIONAL YACHTS For VISIONARY PEOPLE

The Stančić family worked closely with a team of naval experts to design and build *Swallow*.

Naval architect Vinko Strizić, owner and director of Promar Design d.o.o., designed the vessel.

The shipyard Gulet d.o.o., owned by Mirko Purić in Split, Croatia, built the complete hull, including stern tubes, shafting, steering, and propellers.

Branko Vuković, naval architect for Naval and Special Vessel Shipyard in Split, supervised the installation of the vessel's interior and exterior finish at the Port of Vranjic.

Naval designer Marlena Dapčić, owner of A.D. Group d.o.o., contributed technical drawings to the vessel's overall design, interior floor plan, and fine finishes.

Reliability is key in the competitive river tourism industry. The new John Deere 6.8L engine helps *Melba Star* depart on time and as scheduled.



Tourists get new perspectives of Melbourne's enchanting riverbank aboard repowered *Melba Star* river cruiser

he Yarra River Precinct is the vibrant heart of Melbourne's tourism industry, where every sightseer heads to experience the life and soul of the city. But, to get a unique perspective of this bustling area, savvy visitors explore the river aboard Yarra River Cruises' repowered cruiser *Melba Star*. And thanks to new John Deere engines, they can enjoy the full Yarra experience in quiet, calm solitude.

Yarra River Cruises has been traveling the river for more than 30 years. Capitalizing on their experience in the entertainment and hospitality industries, Con Sarrou and Shelley Xu purchased the company in 2018 with aspirations to bring a fresh approach to the business. "We feel very comfortable with events and venue management, and this is at heart a tourism business on the water," says Sarrou.

A lively experience

Sarrou and Xu aim to enhance the overall experience on the Yarra River cruise. "We want people to return from a cruise and say: 'We had a really good time.'" To deliver their vision of a total cruising experience, they decided to upgrade the aging propulsion system and refresh the vessel's interior. "We run tours every day with up to 100 people on board, and we want to offer them top-notch safety and comfort," adds Sarrou.

The couple approached Mariner Engineering, a local marine dealer of John Deere engine distributor Power Equipment Pty Ltd., to repower *Melba Star* with a new diesel engine as part of a major four-month refurbishment, which included new interior trim and a new, lively, corporate style. Mariner Engineering replaced the old stern leg propeller drive with a jet propulsion unit to maximize the 22-meter (72-foot) boat's maneuverability.

A reputation for excellence

Power Equipment Marine Sales Engineer Darren Bird worked with Sarrou and Mariner Engineering on the engine refit. Bird suggested the turbocharged and intercooled six-cylinder John Deere PowerTech™ 6068AFM85 engine, which would meet the operational profile perfectly. Sarrou grew up on a fruit orchard by Mildura (on the Murray River), and was quite familiar with the excellent reputation of John Deere amongst farmers and growers.

"The John Deere 6.8L is a fully commercial engine, with 250-hour service intervals," explains Bird. "On the *Melba Star*, it is configured to its M4 rating of 223 kW (300 hp) at 2500 rpm. This engine is common-rail fuel injected, so it is very fuel-efficient compared to the previous engine." An excellent choice for cruising the Yarra River.



Melba Star passengers can enjoy the captain's commentary and a conversation without engine noise and vibration.



Melba Star captain Michael Lauwers is very pleased with the new John Deere 6.8L marine engine.

"WE WANT PEOPLE TO RETURN FROM A CRUISE AND SAY: 'WE HAD A REALLY GOOD TIME.' WE RUN TOURS EVERY DAY WITH UP TO 100 PEOPLE ON BOARD, AND WE WANT TO OFFER THEM TOP-NOTCH SAFETY AND COMFORT."

Con Sarrou, Melba Star's business co-owner

The sound of silence

Sarrou and Xu say the engine and propulsion system operate with less noise and vibration than before, offering a more peaceful, relaxing experience on the water. Cruise passengers can easily hear captain Michael Lauwers' commentary and hold a conversation. This quiet, smooth operation is also a major attraction for on-board events such as weddings, parties, corporate functions, and night cruises.

Captain Lauwers is also a fan of the power upgrade. "Storms in the river's headwaters or along the metropolitan tributaries quickly change the Yarra's water levels and currents, which can push boats around. Our central city mooring at Federation Wharf is also subject to tidal influence and westerly winds blowing upstream from the Port of Melbourne. So the 6.8L engine's power and torque are not wasted! It is a beautiful engine: quiet and smooth," Lauwers says. *Melba Star* now shines brighter than ever on the Yarra.

Distributor: Power Equipment Pty Ltd. in Lynbrook, Victoria, Australia; www.powerequipment.com.au

Dealer: Mariner Engineering in Spotswood, Victoria, Australia; www.mareng.com.au

HELPING AUSTRALIA'S FIRE VICTIMS

Tragic brushfires across Australia in recent months initiated a global response to help fire victims who lost homes, businesses, or natural habitat. Aid has been pouring in to provide much-needed relief to those in need; not only from those nearest the affected area, but from across the world.

Among those offering financial assistance is Power Equipment Pty Ltd. in Lynbrook. The John Deere engine distributor donated \$10,000 Australian dollars to the local charity Foodbank Victoria, a relief organization that has been providing essential supplies, including food and bottled water, to local townships in the firestricken areas. The state of Victoria, located in southeastern Australia, was among the hardest hit.

"Many of these communities have been loyal to us over the years, and we have no hesitation in repaying this loyalty

at a time when they most need our support," writes Luke Foster, general manager of Power Equipment. "By donating money, we enable fantastic organizations like Foodbank Victoria to have their greatest impact."

> Along with food supplied to Australian residents, extra carrots and sweet potatoes that were no longer suitable for human consumption were also being fed to wildlife through Foodbank Victoria's relationship with the National Parks and Wildlife Service, according to the organization's news reports.

The John Deere Foundation also initiated a campaign to match all Red Cross donations made by John Deere employees.

The Australian wildfires have been described as "the worst wildfires in recorded history" by the Climate Change Research Centre at the University of New South Wales in Sydney.



A Corpus Christi crew boat runs with renewed power and grace

iss Vivian has a commanding presence while plying the waters off the Texas Gulf Coast.

This hardworking crew boat serves offshore oil platforms and large ships moored in Corpus Christi Harbor. Owned by Sea Level Marine, Inc., in Aransas Pass, Texas, the 28-meter (91-foot) welded aluminum vessel is U.S. Coast Guard-approved for 50 passengers, and its 15x5-meter (50x15-foot) deck offers ample space to transport food provisions, equipment, and other supplies to offshore locations. There's a rather heroic side to *Miss Vivian*, too. Fitted with two life rafts and 50 life preservers, the crew boat responds to calls of distress. *Miss Vivian* was used to retrieve personnel from an offshore oil platform during an approaching hurricane. It rescued a shrimp boat that lost engine power. Equipped with fire pumps, the vessel was also used to help extinguish a shoreline fire in Aransas Pass.

However, after years of dutiful service, the 1979 vessel needed a new lease on life, according to Richard Palmietto, owner of Sea Level Marine. *Miss Vivian* underwent a refurbishing that included interior updates, new exterior paint, and a plan to replace its aging two-cycle diesel engines.

Getting the grant

Knowing a repower would be a smart decision for *Miss Vivian* and the future of the business, Sea Level Marine applied for a grant through the Texas Emissions Reduction Plan (TERP), a program administered by the Texas Commission on Environmental Quality. Once approved, Palmietto turned to Land & Sea Services, a certified John Deere marine dealer in La Marque, Texas, which recommended three John Deere PowerTech[™] 6135SFM85 marine engines.

Palmietto and the vessel's captain, Rueben Molina, were confident about their decision to repower with John Deere engines. "We know of other boat owners who were getting rid of their two-cycle diesel engines and going to John Deere," says Palmietto. "We also liked having the support of two John Deere marine dealers for warranty work and parts with Land & Sea in La Marque and Mid Coast Engine & Transmission, Inc., in Aransas Pass."

Sea Level Marine worked closely with Land & Sea Services to repower the vessel in early 2019, mounting all three John Deere engines onto the original engine beds. Making some modifications to the motor mounts, the John Deere dealer paired the 429-kW (575-hp) engines with new ZF transmissions, along with the original shafts and 84x76-centimeter (33x30-inch) props. "We were fortunate our shafts and propellers paired well with the new engines and transmissions," says Pamietto.

A trio with torque

After the repower, the gear ratio increased from 2:1 to 2.3:1, and the overall weight of the engines decreased by 1,860 kilograms (4,100 pounds). "To prevent a change in stability of our deck carrying capacity, we bolted lead plates below the engines in the bilge," explains Palmietto.

An increase in horsepower and torque improved *Miss Vivian's* speed and performance. "I'm running about 21 knots, which is pretty fast for a boat this size," says Captain Molina. "The additional torque helps me maneuver the boat in tight spaces in the wind and waves."

The increase in speed is also attracting more business from offshore clients needing equipment and supplies as soon as possible. Molina says *Miss Vivian* has a reputation for reaching platform destinations in half the time as other crew boats that are running top speeds of only 8 to 10 knots.

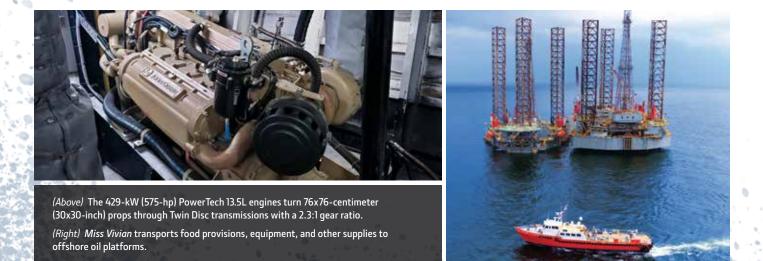
The engines are proving to be financially rewarding in other ways, too. "They are extremely economical compared to the previous engines," adds Molina. "Before, I would run hard six hours and burn 500 to 600 gallons (1,893 to 2,271 liters) of diesel fuel under heavy load. Now, I run the same amount of time — with a comparable load — and the John Deere engines only consume 375 gallons (1,420 liters)."

Faster, more powerful, and fuel-efficient, *Miss Vivian* is better than ever, according to Molina and Palmietto. Plus, *Miss Vivian* is emissions-compliant now and is able to cruise into inner harbors.

"We took a 1979 boat and made it like brand-new," says Palmietto. "We gave *Miss Vivian* another life, and hopefully she'll run another 20 years."

Distributor: *engines, inc.,* in Jonesboro, Arkansas; *www.enginespower.com*

Dealers: Land & Sea Services in La Marque, Texas; www.landandseaservices.com; Mid Coast Engine & Transmission, Inc., in Aransas Pass, Texas; www.midcoasttx.com





LOOK FOR JOHN DEERE ENGINES AT THESE UPCOMING TRADE SHOWS, CONVENTIONS, AND EXHIBITS

CHECK OFFICIAL TRADE SHOW WEBSITES FOR DATES.

JOHN DEERE

NAVEXPO	Port Lorient, France
OFFSHORE TECHNOLOGY CONFERENCE	
INLAND MARINE EXPO	St. Louis, Missouri, USA
SEAWORK	Southampton, UK
BRISTOL BAY FISH EXPO	Naknek, Alaska, USA
MACC	Baltimore, Maryland, USA
SMM	Hamburg, Germany
YACHTING FESTIVAL CANNES	Cannes, France
GENOA INTERNATIONAL BOAT SHOW	Genoa, Italy
UNITED STATES POWERBOAT SHOW	Annapolis, Maryland, USA
FT. LAUDERDALE INTERNATIONAL BOAT SHOW	Ft. Lauderdale, Florida, USA
METSTRADE	Amsterdam, Netherlands
PACIFIC MARINE EXPO	Seattle, Washington, USA
INTERNATIONAL WORKBOAT SHOW	New Orleans, Louisiana, USA

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PartsCatalog.Deere.com



DKEDM311 Litho in U.S.A. (2020-03)