

Midship Marine newbuild positioned to fight Gulf spills

by Susan Buchanan

he 95-foot *J.L. O'Brien*, delivered in February, is the fourth oil spill response vessel (OSRV) built by Midship Marine Inc. for Clean Gulf Associates, a nonprofit cooperative in New Orleans. The \$5 million boat is docked in Leeville, La., next to the

offshore hub of Port Fourchon, for around-the-clock cleanups in the Gulf of Mexico.

Rick Hinojosa, design manager at Midship Marine in Harvey, La., explained how his company landed the work. "After we repaired a CGA



Capt. Kyle
Plaisance turns
on J.L. O'Brien's
bridge electronics.
In addition to the
latest navigation
equipment, the
95-foot OSRV has
an infrared system
for detecting oil
spills at night.

J.L. O'Brien, Clean Gulf Associates' new oil spill response vessel, skims with its portside Lamor boom on Bayou LaFourche in Leeville, La. The latest in a four-boat series, it features expanded fuel capacity and a gyrostabilizer for added control.

vessel seven years ago, CGA management asked us for price quotes to build three (Coast Guard)-approved, live-aboard 95-foot oil skimmers," he said. "Until then, no vessels like that had been built. There were hurdles to cross, particularly because live-aboard skimmers are typically constructed of steel, which easily meets fire criteria."

After meetings with the Coast Guard, plans were hammered out and construction began on the nation's

Responding in the Gulf

Clean Gulf Associates, formed in 1972 by 33 operators mostly from the oil and gas industry, is among the nation's oldest spill cooperatives. It now has more than 110 exploration and production (E&P) and pipeline members.

With bases that extend from
Aransas Pass, Texas, to Venice, La.,
CGA resources and personnel cut spill
response costs for member companies. The co-op responds to offshore,
near-shore and in-shore threats with
the latest oil surveillance and detection
systems, skimming, boom deployment,
in-situ burning and dispersant spraying.
CGA's wildlife rehabilitation services
include wash-and-rinse stations and
water heating.

CGA owns tens of millions of dollars in equipment maintained by its contractor, Clean Gulf Associates Services LLC. CGAS runs PRO, a network of response services that partner with CGA employees when an accident occurs. With access to response assets, CGA's members meet spill preparedness rules from the federal Bureau of Safety and Environmental Enforcement.

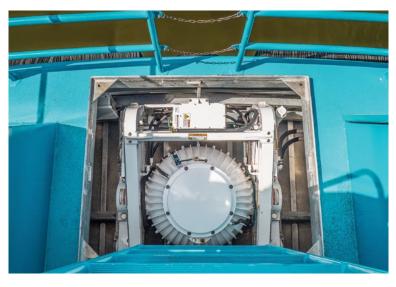
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first fleet of all-aluminum OSRVs.
"Our goal was to make these vessels user-friendly and not complicated to operate," Hinojosa said. "It was a joint effort between us and CGA to accomplish this."

In April 2013, Midship delivered *Breton Island*, following *H.I. Rich* and

Galveston Island in the series. The boats, positioned in Venice, La., the Port of Vermilion, La., and Galveston, Texas, respectively, exceeded everyone's expectations, Hinojosa said.

"Then CGA contracted us to build *M/V O'Brien*," he said. "The first three vessels were performing well, and they



Crewmembers retrieve the OSRV's port skimmer boom, right, on Bayou LaFourche. The vessel can recover more than 22,000 barrels of oil per day. J.L. O'Brien's Seakeeper 35 gyrostabilizer, left, decreases its roll by about 70 percent, an improvement that has led Clean **Gulf Associates to** install the system on the boat's series predecessors in the Gulf.



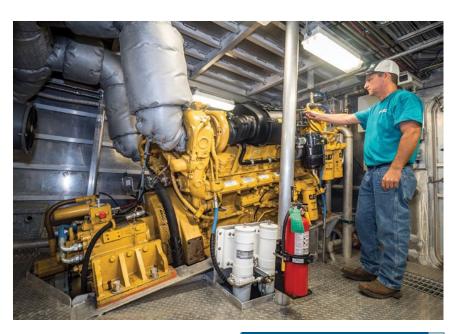


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were the building blocks for this new boat. CGA wanted room for more fuel, which we accommodated by putting two more (500-gallon) fuel tanks in the stern of the boat." The cabin on *J.L. O'Brien* is also about 2 feet wider and 3 feet longer than its predecessors, said CGA President Frank Paskewich.

Because the vessels have electronic equipment that locates oil, they need to maintain a stable base in all sea states. "Head-on into the sea, the first three boats were satisfactory," Hinojosa said. "But in a side sea, they rolled too much for oil-spotting equipment to work well."

To solve the problem, CGA asked Midship to install a Seakeeper 35 gyrostabilizer on *J.L. O'Brien*. "It





Capt. Curtis
Bruce, above,
starts one of
J.L. O'Brien's
Caterpillar
C32 main
engines.
Auxiliary
power on the
response vessel is provided
by a pair of
Northern
Lights 65-kW
generators,
left.

addresses a side sea and lessens the roll of the vessel," Hinojosa said.
"The difference in sea trials with the Seakeeper unit engaged was like night and day, so much so that we're now installing Seakeepers in the first three boats."

Paskewich said the gyrostabilizer reduces *J.L. O'Brien*'s roll by about 70 percent. Maggie Meredith, marketing manager for Maryland-based Seakeeper, said the additional stability "increases crew safety and eliminates seasickness. It reduces fatigue since crewmembers don't have to fight the roll. The crew can spend more time on the water, fulfilling (their) mission."

For spill cleanup, *J.L. O'Brien* has two side-mounted, three-brush skimmers from Lamor of Finland. The equipment allows oil to stick to the bristles while excess water is repelled. The oil is then scraped into a sump and pumped into a 249-barrel holding tank for offloading. The boat also has a MarQuipt deck crane and an infrared oil-detection system for tracking at night.

J.L. O'Brien has yet to be put to the test in an actual oil spill in the Gulf. Fortunately, the spills that CGA responds to have declined since the Deepwater Horizon disaster in April 2010, Paskewich said. The group sent

J.L. O'BRIEN

OWNER/ Clean Gulf Associates,
OPERATOR: New Orleans, La.

DESIGNER: Midship Marine Inc.,
BUILDER: Harvey, La.

DIMENSIONS: L: 95' B: 21' D: 5'

MISSION: Gulf of Mexico oil spill response

CREW SIZE: Six for 24-hour skimming

HULL

□ Aluminum monohull

PERFORMANCE

- Maximum speed: 24 knots
- Cruising speed: 20 knots

PROPULSION

- (2) Caterpillar C32 diesel engines, 1,320 hp at 2,100 rpm
- Twin Disc QuickShift marine gears with 2.44:1 reduction ratio
- (2) ZF Marine 40-by-42-inch, five-blade propellers
- Thrustmaster 16TT60 tunnel thruster
 (2) Northern Lights
- 65-kW gensets

 Jastram DSC100
 steering system with dual 3-hp hydraulic
- □ Twin Disc EC300 power control system

CAPACITIES

pumps

- Deadweight tonnage:90 tonsFuel: 3 500 gallons
- Fuel: 3,500 gallonsPotable water: 1,500 gallons
- Daily recovery capacity: 22,885 barrels of oil, with 249 barrels of

recovered-oil storage

CIFICATIO

Deck/cargo area: 150 square feet

DECK EQUIPMENT

- MarQuipt crane,
 2,500-pound capacity
 at 15 feet
- (2) Lamor sidemounted, three-brush skimmers

NAVIGATION/ COMMUNICATIONS

- □ Furuno FAR-2117
- X-band radar
- □ Furuno DRS12A radar
- Immarsat data and voice communications
- □ Icom VHF/aircraft/ SSB radio
- □ Simrad autopilot

ACCOMODATIONS

- Six bunks
- Full-function galleyTwo heads

ADDITIONAL EQUIPMENT

- Aptomar-Rutter integrated X-band oil spill detection system
- Seakeeper 35 gyrostabilizer

CLASSIFICATIONS

22,885 barrels of USCG certified (OSRV)

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virtually all of its assets to that Gulf well blowout, where they stayed for more than three months. CGA has aided in other incidents, including a 9,000-barrel Mississippi River spill when the tanker *Tintomara* collided with the towboat *Mel Oliver* and barge *DM 932* in New Orleans in July 2008, and a platform fire off the coast of Venice, La., in May 2015.

"In our operation, crews prepositioned on the Gulf can mobilize resources within two hours of notice," Paskewich said. *J.L. O'Brien* is homeported in the "epicenter" of oil and gas production in the region, he added, allowing CGA to rapidly get necessary resources on the scene.

The new response vessel is named after Jim O'Brien, a former Coast Guard officer who died in 2014. He founded an oil pollution service in Slidell, La., in 1983 and provided training and response services to clients around the world. O'Brien developed cleanup techniques and

J.L. O'Brien
heads out
for a cleanup
drill on Bayou
LaFourche.
The newbuild
from Midship
Marine carries the name
of one of
the world's
pioneers
in oil spill
response.



equipment that are widely used today.

In addition to oil skimmers, Midship Marine builds aluminum passenger ferries, crew boats and sailboats. "Passenger ferries have been our constant in recent years because oil field needs are unpredictable with the ups and downs in oil prices,"
Hinojosa said.



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Twin Disc and Sewart Supply are honored to have partnered with Seacor on the *Liam J. McCall*, and Clean Gulf Associates on the *J.L. O'Brien*. Congratulations to both vessels for being recognized for innovations in design and construction in Professional Mariner's American Ship Review 2018.





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