Rio Controls & Hydraulics Inc. Introduces New Vessel Steering System

BY DAVID MURRAY

For a brand-new company, Rio Controls & Hydraulics is moving aggressively to make its mark on the inland waterways. Formed only last year, it has developed a patent-pending steering and propulsion-control system for towboats that operates on totally new principles, promising to deliver significant increases in longevity and to save time in calibrating steering. It also develops and markets alarm and propulsion-control systems.

Rio Controls & Hydraulics Inc. was officially formed in June 2013 as a subsidiary of Rio Marine, which has been providing service, repair and maintenance to the marine industry since 1929.

Rio Controls & Hydraulics has a full staff of engineers, programmers and production personnel, and a hydraulic division providing fabrication and repair services.

RCHI is headed by President Shane Faucheux, who spent more than five years in the Marine Corps serving as a communications and signals intelligence analyst. Faucheux later earned a B.S. in electrical engineering at Louisiana State University and is pursuing an MBA at Colorado State University. His work experience includes a nine-year stint as operations manager and electrical engineering manager at Engine Monitor Inc., and a year as a field engineer at Northrop Grumman Ship Systems.

No Moving Parts

Like so many technical advances in the towing and barge industry, this one had its origins in the oil and gas industry, where similar sensors are used. Faucheux said it took about eight months for his team to develop the patent-pending system to steer towboats. They began development in March 2013 and introduced their systems to the market that fall.

The new inductive steering systems can calibrate a boat’s steering in 30 minutes, versus four or five hours for older systems, said Faucheux. After setting limits, the steering system can be set up from the pilothouse in less than a minute, the company says.

Instead of failing in two to four years, these command and feedback sensors can operate for up to 15 years without failure, according to Faucheux. That’s because they have no moving parts, relying instead on inductive-technology sensors, which use an electric current to sense the boat’s position, to replace the older mechanical and rheostat sensors.

The system includes its own touchscreen controls, so there is no need for a laptop or any other software, the company says. Although the system itself is patent-pending, all its components are nonproprietary and ABS-approved.

Jack Crowley Leads Way

The first one was installed on the mv. Jack Crowley in December, said Faucheux. Since then, RCHI steering systems have been installed on six more vessels, with orders for 12 more.

“Half of these installs have been new builds, and half retrofits,” said Faucheux.

The company says its focus is on simplicity and ease of use—but it has a force of 100 technicians around the Gulf Coast, should issues arise.

Besides the steering system it installed on the Jack Crowley, the company has so far installed steering systems, alarms, and propulsion control systems on Settoon’s Mark K; provided the steering and propulsion control systems for Blessey’s new Tim Scott, just christened (see an upcoming WJ for that story); retrofitted steering systems on Lebeuf Bros’ Merle Gonsselin and Enterprise’s Gregory, Henri, and Kitty; and provided alarm systems for seven Marquette boats, three Martin Gas boats, and three Kirby boats.

Rio currently has commitments to outfit an additional 18 boats with its systems in the coming months.