

Washington Manufacturing Alert

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A Duckworth Advantage Inboard Jet tackles a stretch of whitewater.
Photo courtesy Renaissance Marine Group Inc.

From The Snake River To Europe: Boatbuilders Seek Export Markets

BY BILL VIRGIN
Publisher and Editor

The twin cities of Clarkston, Wash., and Lewiston, Idaho, are home to a remarkable number of aluminum boat builders. That this seemingly landlocked region has such a concentration of marine manufacturers is due to a simple geographic fact: There's a river there, and people wanted to run it.

But it wasn't just any piece of water; it was the Hells Canyon of the Snake River, infamous for stretches of churning whitewater and shallow drafts. It would require more than just any watercraft to navigate it; running the Snake would require powerful and maneuverable jet boats.

And so in the 1960s a regional cluster of companies was born, including some started by the pioneers of the industry that are still operating, others that spun off from the original founders of the business.

From a regional business those companies built a national customer base for their welded aluminum watercraft for recreational, commercial and governmental purposes.

Now they're looking to go global, in an organized and concerted way. A consortium of nine companies, along with economic development organizations and city, county and federal government agencies, has launched the Snake River Boat Builders' Export Program 2010.

The consortium's goal is to target "one quality foreign market with outstanding potential for export success," says an outline of the program.

That market: Germany and, by extension, the European Union.

The program is already under way with a visit last week from the editor of a German boating magazine and a U.S. Commercial Service officer from Frankfurt. The consortium also plans training programs on doing business in Europe, a trade mission of European boat buyers to Lewiston-Clarkston in November to

Display Week: Room For Smaller Firms In A Big Industry?

Electronic displays are ubiquitous – from giant screens in sports stadiums to tiny devices included in cell phones and handheld computers.

It's an industry dominated by well-known names of very large companies, but one that Washington manufacturers are trying to carve a piece out of.

The display industry was itself on display in Seattle recently when the Society for Information Display had its annual conference and exhibition.

A few Washington companies with booths at Display Week are competing directly in the business of building and marketing display devices.

One such company is Belle-

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Display Week: Washington Companies Make Their Pitch

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vue-based eMagin Corp., which makes small organic-LED screens for use in such applications as head-mounted displays used by soldiers in the field.

Wearable displays that could be used by doctors performing surgery, industrial workers doing training or assembly work or consumers playing video games have long been a pursuit of many companies, including some in Washington. EMagin was started in North Carolina more than a decade ago, but moved its headquarters to the Northwest with its acquisition of Virtual Vision (manufacturing is done at an IBM facility in New York state).

The challenge is to come up with devices that offer a wider field of vision and higher resolution while also consuming less power. "Combining all these things makes these products more viable," said Bruce Ridley, eMagin vice president of business development and special projects.

Getting even higher resolution will be key to breaking open the consumer market, Ridley added. "The consumer is so used to big displays, (a small, low-resolution image) doesn't excite them that much."

Microvision Inc. had on display its first mass-market product, a laser-based handheld projector that connects to a computer or other device to project large images on a wall or screen. (The device and the company were profiled in WMA March 15.)

Next up for the company are an HD-ready projector, a handheld projection game controller to provide users with a 360-degree image, a see-through eyewear display unit to project images on the user's eye and a full-color heads-up display for cars.

Spokane-based Pacinian Corp. is developing what it calls HapticTouch surface actuation feedback to give users of touch-pad screens the tactile sense that a button on that screen has been pressed.

Two Washington companies hope to capitalize on the display market by making products for those who produce the video screens or make products with them.

GM Nameplate of Seattle is better known for producing labels and faceplates found on products, but at Display Week it was marketing a product and technology for liquid bonding of films or coverplates to a display screen. Filling the void with the material helps reduce glare, improve readability, provide greater resis-

tance to surface scratches and impact and ward off dust and condensation.

Radiant Imaging of Redmond makes devices to measure how well all those displays are performing in terms of qualities including brightness and light intensity. Those devices are used for calibration, testing and defect detection, since they're designed to "measure light and color the way the eye perceives it," said Hubert Kostal, vice president of sales.

The 30-employee company started in Duvall in 1992 as a lighting design consultant; to evaluate its designs it began developing tools to measure lighting, and found a market for those tools.

The demand for more and better display devices is likely to grow, according to executives of two major companies who spoke at the conference's keynote session.

Steve Bathiche, director of research in the applied science group of the entertainment and devices division of Microsoft, said the push will be for displays that are more interactive and immersive. Microsoft has been developing a technology it calls Surface, a sort of supercharged touch screen that not only senses objects placed on it but what the object is.

A major consumer of display technology is Boeing. Mike Sinnett, vice president of engineering and chief project engineer on the 787, said displays are already helping to consolidate the information once provided on hundreds of gauges and present it in a more useful way. Electronic charts help cut the weight of paper that has to be carried in each plane, while electronic checklists assist pilots by diagnosing problems and making sure no steps have been missed.

Displays also enhance safety by providing more information about terrain hazards or on-the-ground navigation.

More is coming, Sinnett said, from wearable displays that maintenance workers can use when repairing planes to 3-D systems that let engineers walk through the virtual plane they're designing, and infrared and "synthetic" vision for pilots.

Display technology might even be used to provide virtual windows for crew and passengers, since future generations of planes that seek to increase speed or fuel efficiency may reduce or eliminate windows in the fuselage, he said.

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Seattle Company Lands Contract To Supply Crucial Ingredient: Ice

A basic fact about concrete: As it cures it releases heat.

A lot of concrete curing releases a lot of heat – enough so that in large, contained pours of concrete, such as in a hydroelectric dam, the strength of the concrete can be compromised.

The way to get around that problem is to substitute ice for water in the concrete mix to control the curing temperature.

Which is why Seattle-based North Star Ice Equipment Corp. has won a contract to supply ice making, storage and transporting equipment for the Panama Canal expansion project.

North Star is supplying 12 of its largest industrial flake-ice production units, four modular ice rakes (units that store and move flake ice) and eight day tanks (for measuring ice for concrete batches). Terms of the contract weren't disclosed.

The canal expansion project is a huge one, essentially adding a third shipping lane to what is now a two-lane water highway. But it's not just the added capacity that matters; the new lane will be wider than existing locks, to accommodate so-called post-Panamax ships that are too large for the current canal.

The project entails adding new locks on the Atlantic end of the canal and another set on the Pacific end. The canal expansion project isn't due to be completed until 2014.

North Star Ice says its systems will have a daily capacity of 672 metric tons of flake ice a day to be used in the 5 million cubic meters of concrete.

Tom Crawford, vice president of sales for North Star, says this isn't the largest construction project to

use North Star Ice machines; the Itaipu Dam, built in the 1970s between Brazil and Paraguay, was larger.

But being included in the Panama Canal expansion project is a significant accomplishment for a small company like North Star, he added. "These mass-pour concrete projects are really awarded to world-class (construction) companies," Crawford said.

North Star began delivering ice-making machines in April to NR Koeling, a Dutch company that is putting together two containerized ice plants, one for each end of the canal. North Star has sold equipment to NR Koeling before for projects in Turkey, Ethiopia and Venezuela.

North Star will continue shipping units through late July, Crawford said.

It will later ship buffer tanks and the conveyor systems directly to Panama. Test pouring of concrete is to begin in September.

Flake ice differs from conventional ice in its dimensions, only 1.5 to 2 millimeters thick, and the temperatures at which it's made and stored (minus 25 degrees Fahrenheit, so that it won't clump together and will take longer to melt). Flake ice offers greater cooling area than other shapes, the company says.

North Star built its business on supplying ice makers to the fishing industry, but concrete curing for construction has become one of its primary markets.

Crawford said the large-scale construction market is promising, with big hydro projects planned for China and India.

But he also believes there could be opportunities in the U.S. if the nuclear-power industry resumes building generating plants.

Export Campaign: Rivals Working Together On Developing Markets

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build relationships and negotiate deals and a booth at a boat show in Dusseldorf in January 2011.

Bruce Larson, director of administration, finance and marketing for Renaissance Marine Group Inc. in Clarkston, says the group's formation is itself an achievement given that "the industry was started with real rugged individualists," each of whom thought he could build a better boat than anyone else and wasn't reluctant to try proving it.

But the consortium's "end goals are much bigger" than what those boatbuilders could individually accomplish on their own, he says.

The export program picked Germany as its target market not only because of its size but because it "tends to be a benchmark on the common market," Larson says; if companies can get through various regulatory requirements there, it's likely they'll do well in other

countries within the European Union.

And Larson believes the American companies can have success in markets such as Spain, the United Kingdom and Italy, each with large marine markets. "These are products the European consumer isn't seeing," he says.

"We kind of accidentally got involved in the export business," Larson says, thanks to some persistent customers from Russia who wanted the company to build boats that could be sold in their home country.

That new market came at a welcome time, what with the recession in the U.S. market. Renaissance cut a third of its production staff in 2008, then cut back work hours in 2009.

"Had we not had that foreign piece of business, the layoffs would have been bigger and the cutbacks would have been bigger," Larson says.

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Newswire: The Latest In Washington Manufacturing

EVERETT: Fluke Corp. said it has acquired the Ruska and Pressurements businesses, both located in Houston, from General Electric's Sensing and Inspecting Technologies division for an undisclosed price. Ruska makes precision laboratory instrumentation, Pressurements makes pressure-measuring instruments.

BOTHELL: Sonosite Inc. said it is acquiring Toronto-based Visualsonics, which concentrates on ultra-high-frequency micro-ultrasound technology, for \$71 million in cash and debt. Visualsonics' technology allows analysis of much smaller anatomical structures than is possible with conventional ultrasound. Sonosite, which specializes in portable and handheld ultrasound devices, said it sees applications for Visualsonics' technology in diagnostic radiology, neonatology, pediatric cardiology, orthopedic medicine, tissue regeneration, and dermatology for cosmetic and clinical disease management, and for cardiovascular research, gene therapy, cancer and evaluating drug therapy.

SEATTLE: Seattle Business Monthly magazine has recognized companies from Pullman, Woodinville and Seattle as its manufacturers of the year in the first edition of its Washington Manufacturing Awards.

The winners were:

- Manufacturer of the year, small companies: Digilent Inc., Pullman. Runners-up: Cascade Quality Molding, Yakima; AG Engineering & Development, Kennewick.
- Manufacturer of the year, mid-sized companies: Cashmere Molding Inc., Woodinville. Runners-up: The Bogert Group, Pasco; Haskins Steel Co., Spokane.
- Manufacturer of the year, large companies: Kvichak Marine Industries Inc., Seattle. Runners-up: Grays Harbor Paper, Hoquiam; Cascade DAFO, Ferndale.
- Manufacturer of the year, non-profits: Lighthouse for the Blind. Runner-up: Bridgeways, Everett.

- Innovation of the year, small companies: Micro-Green Polymers, Arlington. Runners-up: Hydrovolts, Seattle; Viper Aircraft, Pasco.

- Innovation of the year, mid-sized companies: Renewable Energy Composite Solutions, LLC., Vancouver. Runners-up: 3 Phase Energy Systems, Auburn; Safe Boats International, Port Orchard.

- Innovation of the year, large companies: Cascade DAFO, Ferndale. Runners-up: Nature's Path, Blaine; TiLite, Kennewick.

- Executive of the year, mid-sized companies: J.D. Sitton, Infinia, Kennewick. Runners-up: Roy and Connie Haskins, Haskins Steel, Spokane.

- Executive of the year, large companies: David Giuliani, Pacific Bioscience Laboratories, Bellevue. Runners-up: Bryan Goodman, Columbia Machine, Vancouver; Don Root, GM Nameplate, Seattle.

Narratives of the winning companies can be found in the June issue of the magazine or at www.seattlebusinessmonthly.com.

SHELTON: Mason County Forest Products has issued a layoff warning notice for 130 workers at its Shelton mill effective July 31, but the state Employment Security Department said the filing was not due to a closure. The Olympian reported that the mill is being sold to Simpson Investment Co., which operates a lumber mill in Shelton. A spokesperson for Simpson wasn't available for comment.

RENTON: WMA's editor was named the Northwest's top business columnist for large newspapers in the recent Society of Professional Journalists competition, to go along with awards this year from the Washington Press Association and the Society of American Business Editors and Writers. His columns appears every Sunday in The News Tribune of Tacoma and every month in Seattle Business magazine.

Export Campaign: First Germany, Then The Rest Of The EU

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Larson credits three men with pioneering the region's boatbuilding industry: Ernie Duckworth (whose company is part of Renaissance Marine Group), Norm Riddle and Darell Bentz. "It started strictly because of the waters we're on."

While the industry initially grew through competition over who could build a better boat to navigate the Snake, over time each of the companies "developed their own niche of the market," Larson says.

"In the last 15 years, the businesses that are still here have recognized that the jet market has been a static market, and if they wanted to grow they had to build boats compatible with other waters."

That led to diversification into lake boats, recreational fishing craft, cabin cruisers and boats for tour operators, law enforcement, the military, fish and wildlife agencies and environmental testing.

Today the Lewiston-Clarkston boatbuilders employ about 140 people. Renaissance includes the Duckworth, Weldcraft and Columbia brand names, and recently purchased Northwest Jet Boats in Pasco.

The other companies participating in the consortium are Aztec Fabrication/Phantom Jet Boats, Hells Canyon Marine and Thunder Jet, all of Clarkston; Bentz Boats, Custom Weld Boats, Gateway Trailers and Riddle Marine, all of Lewiston; and SJX Jet Boats of Orofino, Idaho.