



Sailmaker sews speed, quality into every stitch

Patrick Flanigan • Staff writer • March 30, 2008 www.democratandchronicle.com

Steve Haarstick knows the wind. He knows how to catch it to make a boat go fast — real fast.

"Speed kills in this business," said Haarstick, owner of Haarstick Sailmakers Inc. on Hudson Avenue in Rochester. "Usually, the fastest boat wins. If you got an edge on somebody coming off the starting line, it's pretty hard to overcome that with smarts."

The ability to provide racing sailboats with that killer speed has powered Haarstick's success as a custom sailmaker for almost 40 years. In an industry dominated by mass production, Haarstick's eight employees make 600 to 800 sails a year by hand. The company does not disclose revenues.

Haarstick uses a variety of techniques and materials to make his sails, including sewing panels of polyester fabric together on the raised floor of his factory. He makes sails from carbon fibers that are woven into a grid and sandwiched between sheets of clear membrane.

His sails combine light weight with strength and durability, said Joel Roemer of Irondequoit, a racing sailor who has won several championships with boats propelled by Haarstick sails.

"It's hard to argue with that kind of success," Roemer said.

For Haarstick, 66, the road to sailmaking started at a yacht club on Long Island when he was 14. He said his mother pushed him to take sailing classes, even though he thought water skiing was more fun.

"I didn't want to do it, but there were girls there (in sailing class)," Haarstick said. "If it hadn't been for those girls, I'd probably be selling cars."

Haarstick, a native of Philadelphia who summered on Long Island, earned a bachelor's degree in engineering from Trinity College in Hartford, Conn., and a master's in engineering from the Stevens Institute of Technology in Hoboken, N.J.

He started working for a sailmaker in college and continued after he finished. He moved to Ithaca to work for another sailmaker in 1968 and started his own shop in 1970, which he moved to Rochester in 1981.

Haarstick said he and a former partner were among the pioneers of computer automation in sailmaking. For a while, he aspired to create one of the world's largest sailmaking operations, which are called "lofts."

But to do that, Haarstick said he would have had to travel the country attending sailing races to promote his business. He and his wife were separated and his son was living in Ithaca.

Haarstick said he wanted to spend his weekends with his son rather than on the racing circuit.

"I realized I didn't have to be the biggest loft in the world to be happy," he said. "I just want to build great sails."



JAMIE GERMANO staff photographer

Eric Christensen of Brighton inspects a type of sail called a Genoa at Haarstick Sailmakers Inc. on Hudson Avenue. Haarstick's eight employees make 600 to 800 sails a year by hand.

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Custom sail design keep local maker on fast tack

By Richard Mullins
Staff Writer, Democrat and Chronicle

(May 31, 2004) — In a workshop tucked in an unassuming storefront on Hudson Avenue , Stephen Haarstick stands watch as his employees pull triangles of fabric across the wide wooden floor and through huge sewing machines.

Stitched together, these triangles of fabric take shape to form enormous sails for some of the fastest sailboats in the world, making Haarstick one of the best-known names in sailing.

"Racing is a sport of skill and equipment," says Haarstick, 62, a self-professed maverick in the sail-making world. "People want to win. It's the same reason people pay \$300 each for tires on a fast car."

For more than 30 years, Haarstick has made a career of custom-making sails, one at a time, for an individual customer, an individual boat or an individual type of weather. Even in a sport known for its wealthy enthusiasts, such custom work does not come cheap.

Haarstick points to one sail stretched out on the floor and destined for a 40-foot boat; price: \$7,600. But boaters say the sails are worth every penny.

"You know a sail is fast when you're in a race and you're going up against a boat that you know is faster than yours, but you're keeping up or passing them," said Kurt Sertl, whose family is well-known in sailing circles. "Haarstick has been making sails for my family's boats for more than 20 years."

Sertl credits Haarstick sails for helping him "win just about any race there is to be won on the Great Lakes , and several others along the East Coast."

Much of the company's edge comes from painstaking attention to the materials at hand.

Haarstick regularly uses woven polyester fabric for sails. But increasingly, Haarstick and his eight full-time employees use a material that isn't a fabric at all. It's a combination of super-strong black carbon fiber threads, woven together into a grid and sandwiched inside a clear membrane.

With such material, Haarstick can make a sail more than 50 feet tall that weighs less than 40 pounds, but is strong enough to withstand thousands of pounds of tension without losing its shape. That shape is important because sails act like a wing on an airplane, pulling the boat forward. If a sail bows too much in the wind, or stretches out over years of use, it loses power and the boat slows.

Haarstick ships 350 to 400 sails a year.

A lifelong sailing enthusiast, Haarstick has immersed himself in such sailing physics. After earning a graduate engineering degree in the late '60s, he applied a scientific approach to sail design and helped start a sail-making business in Annapolis , Md.

There, he adapted a fabric-cutting machine made to cut clothing into a machine for cutting parts of sails. "The only other machines of this type were cutting canvas for Converse sneakers and the manufacturer thought I was crazy to try it with sails, but it worked," Haarstick said.



WILL YURMAN STAFF PHOTOGRAPHER

Jon Faudree puts finishing touches on a sail for a 40-foot boat at Haarstick Sailmakers on Hudson Avenue . Owner Stephen Haarstick says offering customers individual attention allows him to compete with big manufacturers.

In the '70s and '80s, Haarstick ran a sail-making business in Ithaca . After a fire, he moved to a site on Clinton Avenue , then to Hudson Avenue in a storefront building across from Wal-Mart Supercenter .

Haarstick still designs each sail individually, a credit to his dedication, customers say.

"He's one of the smartest engineers I know in sailing and he does this work with a passion, which is missing in a lot of modern day manufacturing," said Paul Petronello, president of Freedom Yachts Inc. in Middletown, R.I.

Petronello credits Haarstick with some of the most advanced designs in sails, including new sails he made in the 1970s that oriented seams in fabric to limit stretching, without losing power.

In the 1980s, Haarstick helped Petronello design sails for a Freedom-brand sailboat without the kind of cables running up to the mast that boaters often ran into while crossing the deck.

The challenge was designing a sail that could power the boat without snapping a free-standing mast. "Some people thought we were crazy, but Steve embraced the design and became the guru of our type of rig."

Since then, Freedom has bought more than 1,000 sets of Haarstick sails for its boats.

Large sail companies have approached Haarstick to join their operations, Haarstick said, but many of large firms lack the kind of attention to individual customers that he enjoys. And too many employ low-wage labor abroad to make "cookie-cutter" designs that aren't made for specific boats or specific kinds of weather.

"Where I fit in, is (as) a thorn in the side of the big guys, and every year I am still around," Haarstick says. "I'll probably be doing this until they roll me out of here."