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The Green Laker



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**It floats.
It hovers.
It runs on snow.
Meet The Hovertoont!**

**Berlin Mayor
Richard Schramer
designs, builds,
patents prototype
land-sea craft**



BERLIN MAYOR RICHARD Schramer displays the model of his patented Hovertoont after piloting the craft out of the garage where it was built. It took Schramer 12 years to take the Hovertoont from concept to prototype. For more on the Hovertoont, see pages 8 and 9.
Joe Schulz photo

Also in this issue:

- 13.1 race organizers pass the baton
- Ripon Clydesdales captivate crowds
- Whooping Crane festival still ultra-fun
- Chili Cookoff offers hot time
- Harvest Faire returns Sept. 8

It's a hovercraft ... No, it's a pontoon ...

No, it's a Hovertoon

A NEW PROTOTYPE Hovertoon completed by Berlin Mayor Richard Schramer in August sits in a storage building. When Schramer begins performance testing the craft, he will post links to videos on the Hovertoon website. *Joe Schulz photo*

Schramer creates, patents new land/water vehicle

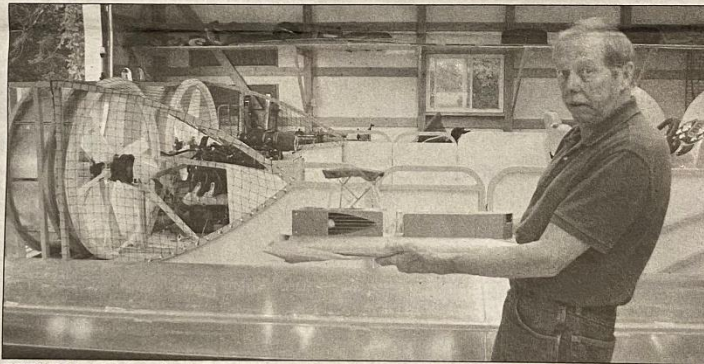
by Joe Schulz

When Berlin Mayor Richard Schramer isn't holding city council meetings, helping the Berlin Boat Club or spending time with his wife, he can be found in the garage tinkering on his patented Hovertoon.

The Hovertoon, as the name suggests, is part pontoon and part hovercraft.

The vessel looks like a pontoon, with large hydraulic fans on the back. The craft can switch between pontoon mode, and hovercraft mode.

When in hovercraft mode, the pontoons fold out, a large cushion below the vessel fills with air, the motor hums and the propellers in the back begin to spin.



BERLIN MAYOR RICHARD Schramer holds a remote-controlled 1/12 scale model Hovertoon, in front of his full-scale prototype. *Joe Schulz photo*

The hovercraft is entirely designed by Schramer, who

studied engineering at Michigan Tech after graduating from

Berlin High School in 1969. Engineering took Schramer

all over the country, from Michigan to Texas, but in 2001 he returned home.

Schramer worked from home for five years after moving back, before retiring in 2006. About a year into retirement, he came up with the concept of the Hovertoon.

He was piloting his boat down the Fox River and had recently taken a ride in a hovercraft made by a pair of Australians, when he thought, "I think I can make this float."

Schramer crunched the numbers and quickly realized the boat would not hover, because there was too much weight per square foot.

He realized that if he could make the craft wider, it would spread the weight out and the

vessel would hover.

"That's where I came up with the idea of rotating the pontoons out," Schramer said.

After he figured out how to distribute the weight, Schramer began sketching blueprints.

"Then, to take the less expensive route, I made a model of it just to see what it would look like," Schramer said.

One of his friends — who happens to be a patent attorney — took one look at the remote-controlled model and told Schramer, "We could patent this."

They filed a provisional patent, which is good for a year, before filing for a utility patent, which was granted April 16, 2013.

With patent in hand, Schramer reached out to pontoon manufacturers to see if they were interested in taking his concept to production.

None of the manufacturers replied.

With no interest from manufacturers and a wife who was upset about the large amount of time he was dedicating

to the Hovertoon, Schramer shelved the project in 2014.

Two years later, and after



PLYWOOD AND PARTICLE board were used for the fake front ends on Richard Schramer's Hovertoon test platform.

Joe Schulz photo

a long talk with his wife, Schramer began working on a full-scale prototype.

"I finally just had to do it," Schramer said. "It was one of those things that was just kind of sitting in my head and if I had just left it there, I would've gone crazy."

He started out by designing a test platform, which Schramer described as a wooden silhouette of a pontoon.

After conducting multiple hover tests with the test platform, he was ready to begin constructing the real proto-

type Hovertoon.

Schramer used pontoon parts from supply outlets, marine plywood and various other parts to create the working prototype.

"It took longer to build the test platform because you had to design it as you went," Schramer said. "Once I had the test platform all put together, building the pontoon version of it took about four months."

He completed the prototype this month. In the coming months Schramer will begin



RICHARD SCHRAMER SITS in the driver's seat of his Hovertoon.

Joe Schulz photo

testing to see how the vessel performs on land and water, and how it handles transitioning from land to water.

"This is the first time I've had a completed prototype," he said.

Schramer noted hovercrafts aren't exactly commercial products, but pontoons are.

He believes combining the two makes the Hovertoon the ideal vessel for search and rescue operations.

"Say a hurricane comes through and you need to get to someone; you can deploy the pontoon and go right down flooded streets," Schramer said as an example. He added rescuers can fold the pontoons out and inflate the skirt to hover over dry streets.

In terms of recreation, Schramer noted the craft can be used to navigate shallow spots in the river.

"Once you get onto the river, if there's sandbars, you just go right over them," he said.

He believes the vessel could even allow folks to go boating in the winter, as the craft should hover over frozen

bodies of water.

"I plan to take it out on the river when it's frozen and try it out," Schramer said. "If you have early spring fishing or late fall fishing, where the shoreline's frozen, just set this down in the parking lot, drive it right onto the ice and enter the water and go out and fish."

Seeing the Hovertoon transform from a sketch on a notepad to a physical hovercraft sitting in the garage has been rewarding for Schramer.

"It's been a long-term project," he said reflecting on the 12 years since he initially came up with the concept.

Despite the progress made, Schramer is still looking for an established manufacturer to add the Hovertoon to its product line.

"I don't have the resources to start a company, unless there's an investor out there that has one already established," he said.

For more information, or links to videos of the Hovertoon in action visit www.hovertoon.com.



BERLIN MAYOR RICHARD Schramer pilots his Hovertoon test platform, which is a cross between a pontoon and a hovercraft, in his backyard.

submitted photo