

Kitsap Transit's new fast ferry shows off high speed, low wake

By Ed Friedrich

Tuesday, November 22, 2011

BREMERTON — U.S. Rep. Norm Dicks, who helped obtain millions in federal dollars for the low-wake research ferry Rich Passage I, got to see the returns Tuesday.

Dicks, D-Belfair, and other VIPs took a test cruise on the high-tech boat designed to bring back 30-minute trips between Bremerton and Seattle.

"I think this is going to work," Dicks said. "It looks to me like the wake's going to be way, way down. It should solve the problem with Rich Passage."

The state has run a few different types of passenger ferries through Rich Passage over the years. All of them damaged the shoreline and had to be slowed, negating their raison d'être.

[Washington Department of Transportation](#), after shutting down its passenger ferries in September 2003, began research to solve the Rich Passage wake problem the next spring. [Kitsap Transit](#) took over the project in 2005. By the time the work wraps up in spring 2013, they together will have spent \$5.4 million for the boat and \$8 million for the research, in federal grants, said Carla Sawyer, a consultant for the project.

On Tuesday morning, the high-tech, lightweight catamaran pulled away from the Bremerton dock and headed straight for Rich Passage at 28 knots, not an optimum wake speed. Slow or fast are good, medium not so much.

"We're not going through Rich Passage, are we?" Kitsap Transit Executive Director Dick Hayes asked skipper Bob Patrosky of Four Seasons Marine, the agency's owner representative. "What are you doing to me? I'm going to get a thousand phone calls."

Patrosky slowed to 12 knots and coasted through the passage, then stepped on it and blasted toward Blake Island at 40 knots, or 46 mph. As the boat whipped around the state park, water shot out of the jets, churned and flattened into a white foam trail.

The faster the boat goes, the less wake generated. Researchers figure about 37 knots is optimum for limiting wake in Rich Passage, then 32 knots the rest of the way for best fuel consumption. Several advancements combine to minimize the wake. Building the cabin out of composites instead of metal saved about 1,000 pounds. An already-good Teknicraft hull was refined by supercomputer. A 14-foot composite foil extends across

the catamaran's tunnel. A 2-foot-wide interceptor is hinged onto each of two transoms, functioning like trim tabs. The foil and interceptors are adjusted from the pilothouse.

The boat was tested off Illahee this month, running back and forth at different speeds, and foil and interceptor settings, searching for the best combinations. It appears to have easily bettered the specifications to allow Kitsap Transit to accept the boat from builder [All American Marine](#) of Bellingham, though the final report isn't complete.

"The hydrofoil is like a plane wing," said Matt Mullett, chief executive officer of All American Marine. "It gives lift. At higher speed, it's giving more lift, so the boat's displacing less water, and the interceptors are picking up the stern so it's displacing even less water."

The boat was tested off Illahee with equipment mounted on floating buoys because there wasn't time to get the permits to attach them to the seabed. On Tuesday, it motored to Port Townsend, where it will be dry-docked for the winter, then return early next spring for testing with pressure sensors attached to the bay floor.

The final research will be a six-month operation with passengers and regular weekday service between Bremerton and Seattle to evaluate beach response and service demand. There's no money to operate the ferry after that, but Dicks said he doesn't see it going to waste.

"We're going to have to work with Kitsap Transit and other agencies and look at the options," he said. "A lot of (the research) was done with earmarks, but there are other programs we can compete for. We hope to find a way forward. We're going to talk to everybody in the region and see what we can do."



© 2012 Scripps Newspaper Group — Online