

Tsunami pod inventor hopes it'll help families stay safe when disaster hits

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In Ocean Park, on Long Beach Peninsula in Washington state, Jeanne Johnson, with her dog, Trixie, peers out of her two-person tsunami survival pod. The sphere has a hatch with a waterproof seal, and two small windows and two air vents that also can be made watertight.

Photo by: Greg Gilbert/Seattle Times/TNS

OCEAN PARK, Wash. — When Jeanne Johnson lived in New Orleans, she figured out how to survive a hurricane. When the family moved to Kansas City, she taught her kids to stay safe during a tornado. So when Johnson bought a house near the ocean in Washington state, she set out to improve her odds of living through a tsunami wave. Johnson is betting her life on a new, high-tech solution: a tsunami survival capsule made by a new company near Seattle.

The neon-orange sphere is meant to protect people from drowning or being crushed by debris. It's made of aluminum, with a watertight marine door. Tiny porthole windows are equipped with bulletproof glass. There is also a GPS beacon that will send out a signal to rescuers, and it even has its own air supply.

Johnson is the company's first customer, and she has been experimenting with the quickest way to climb in and close the hatch before a tsunami hits. "It's going to be terrible," said Johnson, who

works for Microsoft. “But it’s better than the alternative.”

“I Would Use This For My Family”

The pod is the brainchild of aerospace engineer Julian Sharpe, who started Survival Capsule LLC. He got the idea after the 2004 Indian Ocean quake and tsunami, which killed more than 200,000 people. Sharpe and his family were staying at a waterfront hotel in Oregon, and he wondered how they could get to safety if a tsunami struck the Pacific Northwest.

“Our kids were very little. We had two huskies. How could we evacuate in time?” he said.

In 2011, an earthquake and tsunami killed 16,000 people in Japan. It was at that point that Sharpe and his coworkers started to work seriously on their escape pod.

In his day job, Sharpe runs a small company that specializes in analyzing and testing airplane parts. He used the same methods to design capsules strong enough to withstand the tremendous force of a tsunami wave.

They hit a capsule with 40,000 pounds of pressure to ensure its door wouldn’t bend and leak. They even wired a pod with sensors and sent it over a 200-foot-tall waterfall, but there was no serious damage.

“I would use this for my family,” Sharpe said.

What If It Leaks?

Chuck Wallace, an emergency management director for Grays Harbor County, questions whether the pod will work as it's supposed to.

“What if you get stuck under debris, or something tears it and it leaks?” asked Wallace. “You’re just not going to convince me they’re safe.”

Heading for high ground is the best way to escape a tsunami. However, escape pods offer an alternative for those who would never be able to make it, like the elderly or disabled, said Eddie Bernard. He is a former director of the National Oceanic and Atmospheric Administration’s Pacific Marine Environmental Laboratory in Seattle.

“We need to be thinking about all the tools available to save lives,” he said.

The Long Beach Peninsula, where Johnson lives, is one of the most vulnerable spots for a tsunami on the Northwest coast. The city of Long Beach got government money to build an armored hill, or berm, which can protect about 800 people from a tsunami.

However, even if the berm were built, it would be too far away for Johnson to reach.

Increasing Chance Of Survival

Johnson took out a loan to buy her 4.5-foot-diameter, two-person pod for \$13,500. When a four-person version is available, she intends to get that instead. “I want to have room, in case my kids come to visit,” she said.

She is stocking the capsule with water, a 40-day supply of dehydrated food, warm clothing and an emergency radio.

Sharpe says he's got a list of about 400 potential customers around the world, but he is focused mainly on Japan where it's important to be prepared. One coastal area in Japan is even thinking about helping residents buy survival pods.

"What we're trying to do is increase people's chances of survival," Sharpe said. "If you have no other means of escape this is a very viable option."

Ready For Whatever Happens

Johnson says having the pod gives her the freedom to enjoy her new home without fear.

"I can hear the ocean in my windows," she said. "I can walk on the beach with my dog."

The Cascadia Subduction Zone is an earthquake zone in the Pacific that runs from Canada to northern California. It has unleashed at least 40 major quakes and tsunamis over the past 10,000 years. Although the most recent one was in 1700, it's impossible to know when the next one will strike, and Johnson says she doesn't worry about it too much since buying the capsule.

"I bought that capsule to give me peace of mind, so I can sleep at night and not worry," she said.