## Naselle students gather data for NOAA

Maverick Jr. goes to work

By MALLORY GRUBEN The Daily News

The unmanned miniboat built by Naselle Elementary School students has officially set sail.

A Coast Guard crew launched the Maverick Jr., a 6-foot long vessel equipped with a GPS tracker and temperature sensors, off the coast of Nicaragua in July.

The miniboat will sail through the Pacific Ocean, collecting water and air temperature data for the National Oceanic and Atmospheric Administration.

It is one of about 20 watercraft that are part of the Columbia River Maritime Museum's miniboat program.

"I'm really excited about the Maverick Jr. because that's our first boat with temperature and water sensors on it," said Nate Sandel, the museum's education director, who oversees the program.

The boat already has started collecting information for NOAA since it set sail at sunset on July 18, Sandel said. That data will later be shared with the public on the museum's website for the miniboat program.

People can also use the website to track the boat as it receives "pings" from the GPS tracker students installed in the hull.

With the help of the wind, the nonmotorized miniboat will sail across the Pacific Ocean. It's intended destination is Japan, where students at Choshi Secondary Junior High, a Japanese school participating in the program, have also launched a miniboat from their school. That boat launched in November

The boats were built by



Photos by Columbia River Maritime Museum

Coast Guard Lt. Stephen Atwell speaks with Naselle students before they handed off their miniboat to his crew in May.



Maverick Jr., a miniboat built by Naselle students, sets sail off the coast of Nicaragua.

fourth- and fifth-graders at Naselle Elementary School, who then shipped one vessel to the Japanese school to launch. Students at both schools will write letters and trade theories about the boats' sailing path.

Naselle is one of four elementary schools in the

region to participate in the miniboat program this year.

The museum covers all costs for the miniboats, including about \$10,000 for two build kits from Educational Passages, the group that sells the parts for the GPS-equipped vessels. This is the second year Sandel

selected Naselle as a program participant.

He said he tries to pick underserved schools that might not otherwise have the opportunity to fund hands-on projects like this

Prior to the Maverick Jr.'s launch, the Naselle students researched wind patterns and ocean currents to select their launch site. This year they chose to launch the boat near Nicaragua because they noticed most of the miniboats launched from the mouth of the Columbia River had crashed, but boats "launched off of Central America and Mexico tend to pick up on the trade winds," Sandel said.

The schools worked with Lt. Stephen Atwell of the Coast Guard to take the boat to the Central American coast. Students performed a christening ceremony before handing the Maverick Jr. off to Atwell's crew late in May.

Atwell's crew traveled to Central America on a separate mission, Sandel said. As they performed their military duties, they waited for favorable wind conditions and an opening in their schedule to launch the

"The kids had said to the crew, 'We trust you. This is where we want it to be launched from, but when that happens is up to you, because you have the best judgment on the wind," " Sandel said.

Next school year, Sandel will continue to visit the Naselle students to update them on their miniboat's progress and help them track its journey.

The miniboat program's aim is to provide lessons in science, writing, art and Japanese culture. The American students complete precise measurements

as they build the boat, paint and design the ships, send letters to their peers at Choshi and coordinate media coverage for their project, among other tasks.

New lessons can also arise as the students track the progress of their miniboats, Sandel said. For example, students learned about atolls, or coral reef-enclosed lagoons, when one of the ships crashed in Kiribati, an island nation in Micronesia in the central Pacific Ocean.

"Most of the kids didn't even know what an atoll was," Sandel said. So he helped teachers design a lesson to talk about the coral-surrounded lagoons, how they form and what life is like for the people living in Kiribati, he said.

Sandel said the program "broadens horizons" for students as they learn about different cultures and new places across the ocean.

"It's the sense of exploration, the sense of discovery and getting to meet new people," Sandel said. "I think especially for the local kids here who are out at the beach and looking across the ocean, it makes the world feel smaller. ... They realize that the world doesn't revolve around (Naselle)."















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