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NOT JUST A SIMULATION

CCC can now train students on anything from a tugboat to an LNG carrier

By EDWARD STRATTON The Daily Astorian

Students at Clatsop Community College, Oregon's official maritime college, can now train on any type of vessel, from a tug boat to a liquefied natural gas trainer, in a calm, sunny San Francisco Bay to gale-force winds in the Atlantic Ocean.

The college recently added a simulator for the Electronic Chart Display Information System (ECDIS), quickly becoming a standard navigational system on oceangoing boats and a requirement by 2016 for anyone wanting to stand watch at sea.

"It's basically taking all the information from the sensors on the vessel and integrates it into one system," said Bill Ham, a marine science instructor at CCC for 17 years and a former U.S. Coast Guardsman of 30 years.

CCC's simulator, created by Dutch simulator company VSTEP, looks like a gaming machine with three monitors, a visual reference out the window of a pilothouse, navigational charts, GPS, radar, a Fathometer and other navigational sensors.

Ham selects the type of vessel he wants to captain, the weather he wants to operate in and where he wants to start. In a few short minutes, he's in the pilothouse of a Coast Guard cutter, pulling away from the dock in the Inner Oakland Harbor.

The college has a student and instructor simulator. Instructors can program in vessels on a course for students to avoid, and they can control their own vessels to work with students, such as a tug pushing or pulling a cargo ship.

Ham and other instructors already use the ECDIS simulator to augment radar plotting and bridge resource management courses. The college is getting approval from the Coast Guard for a specific ECDIS electronic navigation course, which Ham said should be ready by spring term.

The college acquired the



Bill Ham, a maritime sciences instructor, shows the Electronic Chart Display and Information System (ECDIS) computer-based navigation system simulator at the Clatsop Community College.



ECDIS system for more than \$50,000 using its Credential, Acceleration and Support for Employment (CASE) grant, funded by the U.S. Department of Labor and part of the Trade Adjustment Assistance Community College and Career Training initiative.

> Bill Ham sits behind the instructor's desk. JOSHUA BESSEX -





JOSHUA BESSEX — The Daily Astorian

The control panel of the ECDIS simulator at Clatsop Community College allows students to control the simulated vessels using information from the digital navigational

One acre for terns is latest U.S. Army Corps plan

Engineers wrestle with how to protect birds and the salmon they eat

> By KATIE WILSON EO Media Group

CHINOOK, Wash. After years of managing a growing Caspian tern colony on East Sand Island — the largest such colony in the world in terms of nesting pairs — the U.S. Army Corps of Engineers has published draft plans to further reduce nesting habitat available to the birds.

This is not as simple as it sounds.

"Neither the ... objectives for juvenile salmon survival nor the purpose and need of the Caspian Tern Plan have been met," states a draft of the Environmental Assessment, that went out for public comment March 3.

The Corps is proposing two options: doing nothing and continuing current management; or reducing current



DAMIAN MULINIX —EO Media Group

Caspian terns are elegant fliers and adept fishermen. The U.S. Army Corps of Engineers has endeavored for several years to encourage fewer of them to nest within the main migratory route for Columbia River salmon, which they eat by the million.

nesting habitat on East Sand Island to 1 acre and then dissuading and hazing birds to keep them from nesting in even closer quarters.

The comment period ends Tuesday, a day after the end of another public comment period for another salmon-eating bird colony that nests seasonally on the

island: the double-crested cormorants. The Corps plans to reduce the number of those birds by shooting adults and preventing thousands of eggs from hatching through a process called egg oiling.

Caspian terns have continued to eat large numbers of endangered or threatened young salmon while the Corps' reduction of the terns' nesting habitat over the years has failed to encourage them to move elsewhere — in many cases, to islands the Corps had prepared for them. Instead, the birds have squeezed closer together.

"Management of Cas-

pian terns in the Columbia River estuary is intrinsically challenging because of the need to satisfy competing interests; the well-being of the Caspian tern colony ... and the (Endangered Species Act)-listed salmonids on which they prey," the EA states.

But the birds are also a global conservation concern. The worldwide population is likely no more than 100,000 pairs. These colonies are small and scattered and many are in decline over what used to be their range, according to the Corps.

"Because of habitat modification and water management, colonies have been virtually eliminated from the interior states of the west," the EA states

Moving the habitat

Last month, the Corps finished several man-made islands for the Caspian terns at Don Edwards National Wildlife Refuge in California. According to the Corps, these islands could be available as alternative nesting habitat as early as next year.

In total, the Corps has

constructed 10 acres of new habitat for the terns in the last six years.

Since 2006, the Corps and its contractors have reduced the terns' nesting habitat from about 6.5 acres to 1.5 acres, accommodating approximately 6,269 breeding pairs, the smallest colony size recorded at the island since 2008.

The terns first inhabited the island in the 1980s, nesting on dredge spoils left there by the Corps, but vegetation took over and the birds moved to Rice Island, a dredge disposal site located farther upriver.

The Corps determined that the birds were eating too many juvenile salmon and steelhead there. Under orders from NOAA to mitigate for impacts on salmonids caused by the dams, the Corps lured the terns back to East Sand Island in 1999 and 2000.

The birds have more or less flourished — although there have been hang-ups. In 2011, the balance of nature zealously reasserted itself when eagles and gulls destroyed all 5,000 of that year's nests and nearly decimated the colony.



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