Bay shipping faces danger

LACK OF FUNDING THREATENS HIGH-TECH SYSTEM USED TO SAFELY GUIDE VESSELS

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Less than a month after the worst oil spill in San Francisco Bay in more than a decade, a high-tech system that ship captains and pilots use to reduce the risk of accidents is in danger of being shut down next summer for lack of money.

The system, known as PORTS - for Physical Oceanographic Real Time System - is made up of seven reporting stations located along piers, docks and other shoreline locations from Redwood City to San Francisco, Oakland, Richmond and Martinez.

In each station, sensitive equipment provides real-time measurements, every six minutes, about tides, currents, wind and other conditions to Web sites that ship captains rely upon for the most up-to-date snapshot of San Francisco Bay.

The system requires about $250,000 a year to operate.

But state funding expires June 30 and there's no plan to renew it. So now Bay Area marine safety officials are scrambling to find money to keep the system going.

"If we lose it, the bay won't be as safe and the risks of accidents will go up," said Joan Lundstrom, a Larkspur councilwoman who chairs the San Francisco Bay Harbor Safety Committee. "Here is a very cost-effective tool that has already proven its worth."

Lundstrom's committee, which has no power to tax boaters or the shipping industry, was set up by a state law in 1990 after the Exxon Valdez spill to reduce the risk of oil spills in San Francisco Bay.

The PORTS network is important, Lundstrom and other marine safety officials say, because traditional tide books often contain inaccurate information about the speed of currents or the depth of the bay, particularly during winter storms.

A 1998 study by the San Francisco Marine Exchange, for example, found that water levels in the bay were up to three feet higher in February than listed in tide tables, and nearly a foot lower in December of that year.

A big spring rainstorm that melts snow in the Sierra can send billions of gallons of fresh water into the bay without warning. Droughts can reduce the amount of water. Yet tide books are based on averages.

Not knowing the exact conditions on the water can cause problems, experts say.

For example, a pilot of an oil tanker or large cargo ship might see in a tide book that a "slack tide" - relatively still water with weak currents - is under way. But if unusual conditions have created currents of 2 or 3 mph, ships can be at greater risk when moving past bridges and other tight spots.

Similarly, some fully loaded oil tankers and freighters can have two feet or less between the bottom of the ship and the muddy bottom of the bay. If a captain assumes from a tide book that the water is a certain depth, but that depth is actually one or two feet lower, the ship could run aground.

"We don't want pilots hitting things, either the bottom of the bay or the bridges," said Alan Steinbrugge, director of external operations at the San Francisco Marine Exchange.

"As ships get bigger, the channels aren't. The margins of error are becoming less."

The PORTS system also can create computer models to track oil spills, such as the one Nov. 7 that occurred when the cargo ship Cosco Busan hit the Bay Bridge.

The network is used by everyone from windsurfers to weekend sailors to cruise ships. The system can be accessed by going to www.sfmx.org and clicking "PORTS," or by calling (866) 727-6787.

The first such system was set up in Tampa Bay after a 1980 collision in a storm between a freighter and the Sunshine Skyway Bridge. That accident killed 35 people after it sent six cars and a Greyhound bus into the water.

In San Francisco Bay, the PORTS network was created in 1996 by the National Oceanographic and Atmospheric Administration (NOAA). Yet as with a dozen similar systems in New York, Los Angeles and other harbors, NOAA offered only enough money to get the project running, then stopped funding it.

The San Francisco Marine Exchange, a non-profit group in San Francisco that provides information to the shipping industry, agreed to maintain the gauges, sensors and other gear around the bay. It cobbled together funding from a variety of state sources, including penalties paid after the 1996 Cape Mohican oil spill in San Francisco.

But the most recent source of funding - roughly $126,000 to $170,000 a year for three years from the state Office of Spill Prevention and Response - expires June 30.

Steinbrugge hopes to put out two buoys with new equipment near Oakland and Richmond. Lundstrom said that to properly maintain and upgrade the whole system, they'll need $250,000 a year.

She hopes to have a state legislator introduce a bill in early 2008 to guarantee annual funding.

But the clock is ticking.

"The system enhances the safety of navigation," said Marc Bayer, manager of marine assurance for Tesoro Refinery in Martinez. "Any tool you have like this is welcome."