

Ship's place in science history

NOAA ship *John N. Cobb*, a former fisheries research vessel based in Seattle, has been named to the National Register of Historic Places, the federal government's official list of the nation's historic places worthy of preservation.

Cobb will join more than 80,000 places deemed significant in American history, architecture, archeology, engineering, and culture. The register lists notable places as diverse as the Brooklyn Bridge and the Paul Bunyan

statue in Portland, Ore. The register is maintained by the Department of the Interior's National Park Service.

"John N. Cobb leaves behind a rich legacy of fisheries research and maritime traditions that served NOAA and the country well

for nearly 60 years," said Mary Glackin, deputy under secretary for oceans and atmosphere. "Being named to the National Register of Historic Places is an indication of the great maritime history behind the Cobb, the people who served on it, and its importance to America."

NOAA announced the naming during NOAA Heritage Week, an annual event that highlights the people and events in the agency's history that have shaped not only NOAA but the nation.

The vessel is eligible for the list because of her significant contribution to the nation's understanding of fisheries in the north Pacific Ocean and identification of new sampling methods. John N. Cobb also represents an architectural masterpiece and is largely intact, retaining sufficient structural integrity to keep its historical importance. NOAA decommissioned John N. Cobb on August 13, 2008.

Unlike any other vessel of its time, the 93-foot John N. Cobb, a wooden-hulled modified purse seiner, was capable of purse seining, trawling, trolling, gillnetting and long lining. While the vessel was used for a number of important studies, one of the most noteworthy contributions to fisheries was the ground fish survey that stretched from the coast of California to the Bering Sea during the 1960s. This information continues to be used today as baseline environmental data. Recently, John N. Cobb conducted fisheries, oceanographic and marine mammal research in southeast Alaska in support of NOAA's Fisheries Service Auke Bay Laboratory in Juneau, Alaska. Some of the longest killer whale and harbor seal

time series data exist today as a result of this classic research vessel.

The vessel was operated by NOAA's Office of Marine and Aviation Operations. The John N. Cobb's home port was at the Marine Operations Center - Pacific in Seattle.

NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources.



West Coast Ocean Research, Management

On January 12th, senior federal officials dedicated a specially equipped twin-engine NOAA aircraft at a ceremony in Monterey, California. The aircraft will support ocean research and management along the West Coast.

NOAA will use the DHC-6 Twin Otter aircraft to observe marine mammals and other living ocean resources, conduct offshore and coastal surveys, and support emergency response and enforcement missions.

Built by de Havilland Canada, the Twin Otter is a maneuverable, versatile aircraft that can be flown at slow speeds and in tight circles. The NOAA version of this high-winged turboprop plane is equipped with color weather radar, dual GPS/Loran-C navigation systems, radar altimeter, and camera ports in the nose and belly areas. A standard flight crew consists of two pilots and up to six scientists.

By basing the aircraft in Monterey, NOAA will have the ability to quickly monitor and protect the waters off the West Coast and Alaska, including five national marine sanctuaries that encompass more than 9,000 square nautical miles of open ocean and remote, rugged coastlines from Washington to the Mexico border. They include Olympic Coast National Marine Sanctuary in Washington, Cordell Bank and Gulf of the Farallones national marine sanctuaries off San Francisco, Monterey Bay National Marine Sanctuary and Channel Islands National Marine Sanctuary off Santa Barbara.

The NOAA Twin Otter will be operated, managed, and maintained by NOAA Corps officers and civilians working with the NOAA Aircraft Operations Center. Specific research instrumentation or remote sensing technologies will be supplied by program scientists. [<http://www.noaa.gov>]

ESRI goes solar

ESRI, a GIS software company founded on a principle of environmental responsibility, recently commissioned the installation of 2,737 rooftop solar panels on three office buildings at its main campus in Redlands, California, as part of its continuing efforts to offset energy usage.

ESRI's solar energy system will reduce global carbon emissions by more than one million pounds annually, the equivalent of planting 70,000 mature trees. The 195-watt solar panels will produce 533 kW of electricity—enough to power 100 average homes.

In line with its goal to be carbon neutral, ESRI maintains a fleet of electric vehicles and reduces cooling costs with strategically planted shade trees. On a larger scale, ESRI enjoys a history of supporting environmental sustainability. GIS software donated by ESRI is used internationally for myriad conservation projects, from mapping animal



and plant habitats to measuring human impact on the ecosystem. With the installation of solar panels on its offices, ESRI has turned that scope inward as well.

LORAN re-evaluated

The U.S. Coast Guard (USCG) invited, in January, public comment on a Draft Programmatic Environmental Impact Statement (PEIS) prepared to assess the potential environmental impacts associated with the future use of the Long Range Aids to Navigation (LORAN) Program.

LORAN is a radio-navigation system first developed during World War II and thereafter operated by USCG. The current system (LORAN-C) is a low frequency hyperbolic radio-navigation system approved for use in the U.S. Coastal Confluence Zone (CCZ), and as a supplemental air navigation aid. LORAN-C provides navigation, location, and timing services for civil as well as military air, land, and marine users. LORAN-C is approved as an en route supplemental air navigation system for both Instrument Flight Rule (IFR) and Visual Flight Rule (VFR) operations.

The PEIS reviews the impacts of five alternatives described at <http://loranpeis.uscg.e2m-inc.com/>. The top recommendation is to decommission the USCG LORAN-C Program and terminate the North American LORAN-C Signal. Under this alternative, all USCG LORAN-C signals would be terminated at one time. All USCG LORAN-C stations, monitoring sites, and the LORAN Support Unit (LSU) would be decommissioned; LORAN artifacts, documents, and equipment would be removed; and USCG personnel would be reassigned. Other USCG programs could acquire the LORAN-C station, tower, and monitoring site property for its use.

The other options are for USCG to continue to operate the LORAN-C Program, while reducing staffing where

practical, or transfer the program to another government agency. If none of the above options is exercised, USCG will be required to modernize LORAN-C equipment in order to keep the system operational.

The LORAN-C Program is operated by USCG's Navigation Center (NAVCEN) from 24 LORAN stations and monitoring sites in the Continental United States. The Center is also responsible for such navigation-related projects as the Integrated ATONIS and serves as the civilian interface to the Department of Defense on Global Positioning System (GPS) operations and management. Redundant timing is currently the primary use of the LORAN-C signal.

