LORAN-C Operates on Pacific Coast

West Coast mariners have had a helping hand to guide them in navigating the waters of the Pacific from the Canadian border to Baja California since 25 April when the West Coast chain of the LORAN-C radio navigation system became operational.

LORAN (for Long Range Navigation) is an electronic system using shore-based radio transmitters and shipboard receivers to allow ships to pinpoint their position at sea. The LORAN-C system provides 95 percent assurance that a vessel can fix its position to an accuracy of 0.25 nautical mile. It will replace the less accurate LORAN-A system developed during World War II.

The Secretary of Transportation plans to provide LORAN-C coverage for all mariners throughout the U.S. Coastal Confluence Zone and Alaska. The west coast chain is the first of three Pacific area chains which were scheduled to cover the Pacific Coast from Alaska to Baja by midsummer.

Four newly constructed stations in Fallon, Nev.; George, Wash.; Middletown, Calif.; and Searchlight, Nev., make up the West Coast chain which is the first such chain constructed specifically for civilian maritime users.

The stations began transmitting before 25 April for calibration purposes and commenced service to west coast mariners at 1600 hours Pacific Daylight time on 25 April. Charts for use with the system have been printed and are available from the National Oceanic and Atmospheric Administration's National Ocean Survey.

Other chains in the LORAN-C system were scheduled to become operational as follows: Canadian West Coast—May 1977; Gulf of Alaska expansion—June 1977; Gulf of Mexico (Southeast U.S.)—July 1978; East Coast reconfiguration (Northeast U.S.)—July 1978; Great Lakes expansion—February 1980.

Secretary Adams' decision to implement LORAN-C was based on the results of a study of navigation systems by the Coast Guard. Four radio navigation systems were considered: LORAN-A, LORAN-C, differential Omega, and Decca. Factors considered in the study included capability to meet the technical requirement and costs including system installation, operating expenses, present investments, and availability and cost of user equipment. Navigational requirements of the various user groups, including merchant mariners, commercial fishermen, and the scientific community, were also considered.

Oysters Transplanted To Corpus Christi Bay

About 16 sacks of live oysters were transplanted to formerly productive reefs in Corpus Christi Bay from South Bay near Port Isabel earlier this year, the Texas Parks and Wildlife Department reports. Over the past several years, producing reefs have almost disappeared from the Corpus Christi Bay area, according to Tom Moore, Texas Parks and Wildlife Department coastal fisheries director. While different factors may have contributed to the decline of live reefs in Corpus Christi Bay, disease may well have played a major role, Moore said.

South Bay oysters were selected for the project because they are disease-free, are of a hardy strain and have a wide tolerance to salinity variation.

"These oysters taken from South Bay will hopefully form the seed broodstock in Corpus Christi Bay," said Moore.

Rock Shrimp May Aid Commercial Trawlers

Rock shrimp, an offshore species of shellfish, may provide supplemental catches for South Carolina commercial shrimpers faced this year with a much reduced population of white shrimp, an industry mainstay. A survey of rock shrimp by the South Carolina Wildlife and Marine Resources Department has located possible commercial quantities of rock shrimp from 40 to 65 miles offshore. Although most of the sampling was done with a small try net, one 30-minute drag with twin 80-foot shrimp nets produced 92 pounds of rock shrimp. The survey was conducted aboard the Marine Resources Division research vessel, *Atlantic Sun*, a 70-foot shrimp trawler.

Of the 42 sites sampled only two failed to produce any rock shrimp. Using the try net, researchers caught an average of one shrimp per minute which is indicative of possible commercial quantities of shrimp. The offshore survey area extended from St. Catherine's Island in Georgia to Charleston Harbor, all within 7 hours running time of Port Royal Sound. Information on where rock shrimp were caught, how many were caught, and the methods and gear used has been made available on request to anyone in the industry.

Biologists stressed that rock shrimp fishing would not replace the normal catches of inshore shrimp species, but would at best supplement these catches during the offseason.

AOAC Plans 91st Annual Meeting

The 91st Annual Meeting of the Association of Official Analytical Chemists (AOAC) is scheduled for 17-20 October 1977, reports Luther G. Ensminger, Executive Secretary. It will be held at the Marriott Hotel, Twin Bridges, Washington, DC 20001.

Papers and symposia will be presented on methods of analysis for materials and products important to the environment, health, and agriculture (ie., drugs, pesticides, food, beverages, food additives, cosmetics, feed, fertilizers, microbiological contamination of foods, forensic materials, environmental pollutants, and related subjects.) For further information, contact L.G. Ensminger, Executive Secretary, AOAC, Box 540, Benjamin Franklin Station, Washington, DC 20044.