



existed. On subsequent cruises, the hitherto unknown Guinea Undercurrent has been confirmed, and the measurement of its role in the Gulf of Guinea circulation has been accomplished.

The wide-ranging tuna are found where their food is most abundant--generally near the boundary between ocean water of differing types and origin. In February such a boundary was found offshore from Senegal to Sierra Leone, West Africa, by scientists aboard the Geronimo. As predicted, great concentrations of tuna schools were located just to the south of this boundary.

A new oceanographic instrument, developed at the University of Miami, was tested from the Geronimo on this cruise. When lowered into the water, it records aboard ship simultaneously and continuously the depth, temperature, salinity, and time. Its use will greatly increase the speed and efficiency of data collection on future oceanographic surveys.

While on the cruise, the Geronimo made a rendezvous with the John E. Pillsbury, general fishery and oceanographic research vessel of the Institute of Marine Science, University of Miami. Particular concern of the joint research was a study of variations in rate of flow of the Atlantic Equatorial Undercurrent and changes in its north-south location.

The cruise of the Geronimo had other international aspects. Two French scientists--Jean Claude De Guen, and Francis Poinard of the ORSTOM Laboratory at Pointe-Noire, Republic of Congo (Brazzaville), worked aboard the Geronimo during the tuna surveys. They are studying the population dynamics of the tunas of West Africa. At Monrovia, Liberia, about 20 biology students from the University of Liberia were shown the ship's laboratories and its oceanographic equipment. And during the tuna survey off Republic of Ivory Coast a one-day cruise was arranged for fishery administrators, fishery scientists, and fish processors of that nation to demonstrate various oceanographic techniques.

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