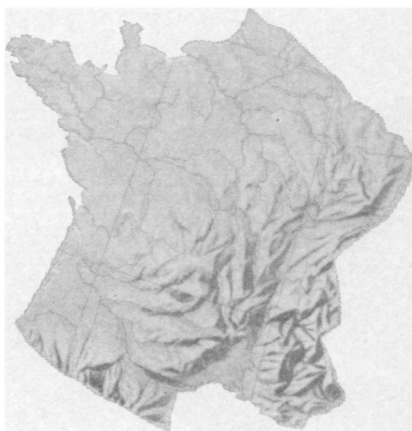


LETTER FROM PARIS



Exploring the shelf

France is moving its oceanography out of the warm Mediterranean

by Noah Hardy

Brittany is as far west as you can get in France. And in a country traditionally oriented around its eastern provinces, the Bretons have had much to complain of. Although Brittany's chief city, Brest, has always been an important naval station, industry and commercial shipping have gone to locations farther east. Brittany has remained largely rural, supporting a peasantry that doesn't even speak French, but clings to its own Celtic language, a kin to Welsh and the extinct Cornish.

Yet it is in Brittany, at a beach near Brest with the very un-French name of Ste.-Anne-du-Portzic, that the French Government is constructing a new Centre Oceanologique de Bretagne, a research center that will be both a symbol and the first fruits of a new concentrated national attack on oceanographic problems.

France's Atlantic coast has few harbors, cold water, much fog and many storms. French oceanography developed mainly in the Mediterranean where the climate is milder and the sea gentler. But the Mediterranean has almost no continental shelf. It is the continental shelf that France now wants to exploit, and her Atlantic coast has a shelf that is equal to 30 percent of her dry land area.

Exploitation is a large reason for founding the new laboratory: its first two aims are "exploitation of marine life" and "exploitation of marine minerals and fossils." These are followed by exploration and development of the continental shelf, antipollution measures and the role of the seas in weather and climate.

Some point is also made of national defense aspects of oceanography.

The way to exploitation was paved by a 1958 International Convention on the Continental Plateau that allows nations to claim sovereignty over continental shelf areas under less than 200 meters of water. France is the first nation to take steps to make claims under the convention.

For this reason, when the French Government formed the Centre National pour l'Exploitation des Océans (CNEXO) to bring some coordination into an oceanographic effort that had been carried on by more than 100 laboratories and stations dependent on 50 organizations, CNEXO looked for an Atlantic site for a large interdisciplinary laboratory.

The land at Ste.-Anne-du-Portzic was

offered free of charge by the city of Brest and quickly accepted. It is an ideal location from many points of view. It neighbors a large navy base, it has 100 acres of beach with all-year port facilities near deep, clean ocean water. The local population is sensitive to things marine and represents a large potential source of all kinds of labor. University facilities and other marine laboratories are nearby, though not so near that they threaten the decentralization principle so important to the French Government nowadays.

The new laboratory is also expected to encourage development of industry related to marine matters in Brittany. Such an outcome would be a political benefit to President de Gaulle's Government, which has been plagued by hostile demonstrations in Brittany and even by terrorists who bomb police stations in the name of Breton independence. Bretons, and other residents of western France, accuse the Government of neglecting them in favor of a Common Market strategy of developing the so-called Rhine-Rhone-Po axis.

Early this year President de Gaulle toured Brittany in an attempt to respond to the unrest. At Brest he was shown the site of the new laboratory, and in a speech in the town of Quimper remarked that one of the ways for Brittany to take her place as part of "the French ensemble for today and tomorrow" was for Brest to become a capital of oceanography.

The laboratory that the French Government hopes will fulfill the President's prediction is proceeding rapidly. A temporary laboratory is already occupied by a few staff members. The aim is to build up a critical mass of researchers in the various oceanographic disciplines over the next few years. Administrators anticipate a staff of some 200 scientists and engineers by 1972 and 400 by 1975.

The French Government is giving CNEXO healthy injections of money. Its 1968 budget, only part of which goes to the Brest laboratory, was 32 million francs (\$6.25 million). In 1969, it will be 58 million francs (\$11.5 million) and will represent about a third of the total French expenditure on oceanography.

Such amounts are small compared with the billions that other nations spend on such things as the space race, but the French seem to feel that in oceanography an investment of this size will keep them in a competitive position with regard to other nations.