

HISTORY OF A SHOAL OFF THE WEST COAST OF FRANCE (THE ROCHEBONNE PLATEAU)

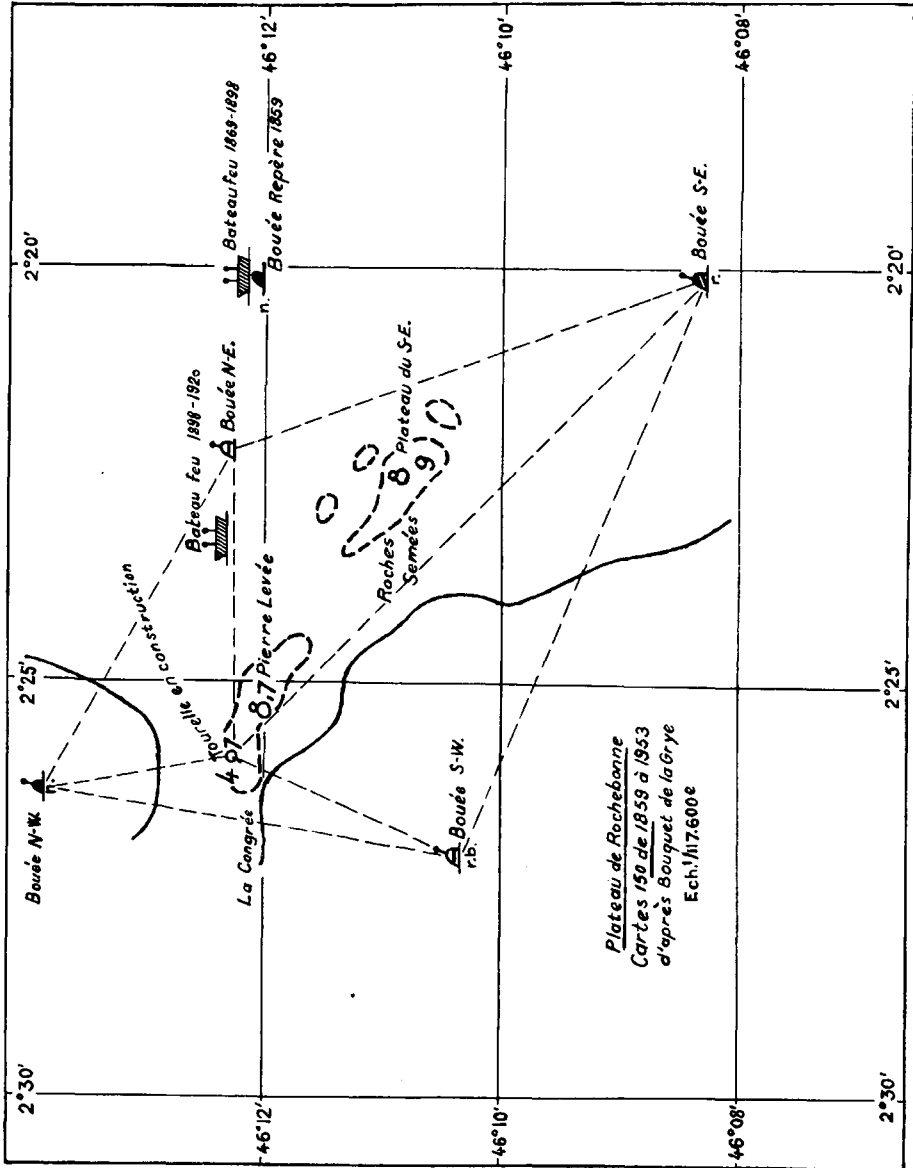
Note prepared by the Hydrographic Office of the French Navy

If the fishermen of the Sables d'Olonne and La Rochelle are well acquainted with the three breakers which mark the Plateau of Rochebonne, a stronghold of enormous conger eels and giant kelp, the general public hardly realizes that there exists, over sixty kilometres off the coast of Charente, a mass of submerged rocks which is roughly the same size as the island of Yeu, and of which the three highest peaks, covered by less than 4 metres of water at low tide, have long been considered one of the greatest dangers in the Bay of Biscay, and the cause of numerous shipwrecks involving loss of life and property.

Even less known is the fact that, until June 1960, there was doubt amounting to danger concerning the position of this vast shoal as well as to its exact form, in spite of a careful survey carried out in 1859.

However, the three peaks which break the swell offshore were already well-known to the pilots of the 17th century, and quite extensive surveys were carried out in this area as early as 1677, but their position, especially in longitude, was veiled in uncertainty which at that time affected all fixing of position out of sight of land. Considerable progress had been made in this respect when, in 1824, Ingénieur hydrographe BEAUTEMPS-BEAUPRÉ the *father of hydrography*, conducting a resurvey in the area, determined the position of the shoals by taking bearings on boats placed between Rochebonne and the coast; but the almost continual high seas created so many difficulties that he believed his own determinations to be questionable, which was not conducive to allaying the fears of sea captains, and various wrecks continued to be blamed on the Plateau of Rochebonne.

In 1858, the Ministry for the Navy considered it necessary to place buoys around this danger. The preliminary survey in 1859 was entrusted to Ingénieur hydrographe BOUQUET de la GRYE who, using a new process for measuring long distances based on the difference between the times of observing the flash and hearing the sound of a cannon shot, succeeded in accurately determining the position, in relation to the coast, of the south-east rock of the plateau which was covered by 8 metres of water at low tide. The sea was as rough as in 1824, but it was probably on an exceptionally calm day that the sounding team, working from east to west, reached depths of 50 metres and stopped work, not knowing that they were missing, 3 nautical miles to the west, an isolated peak separated from the rest of the plateau by great depths, which was in fact the Congrée,



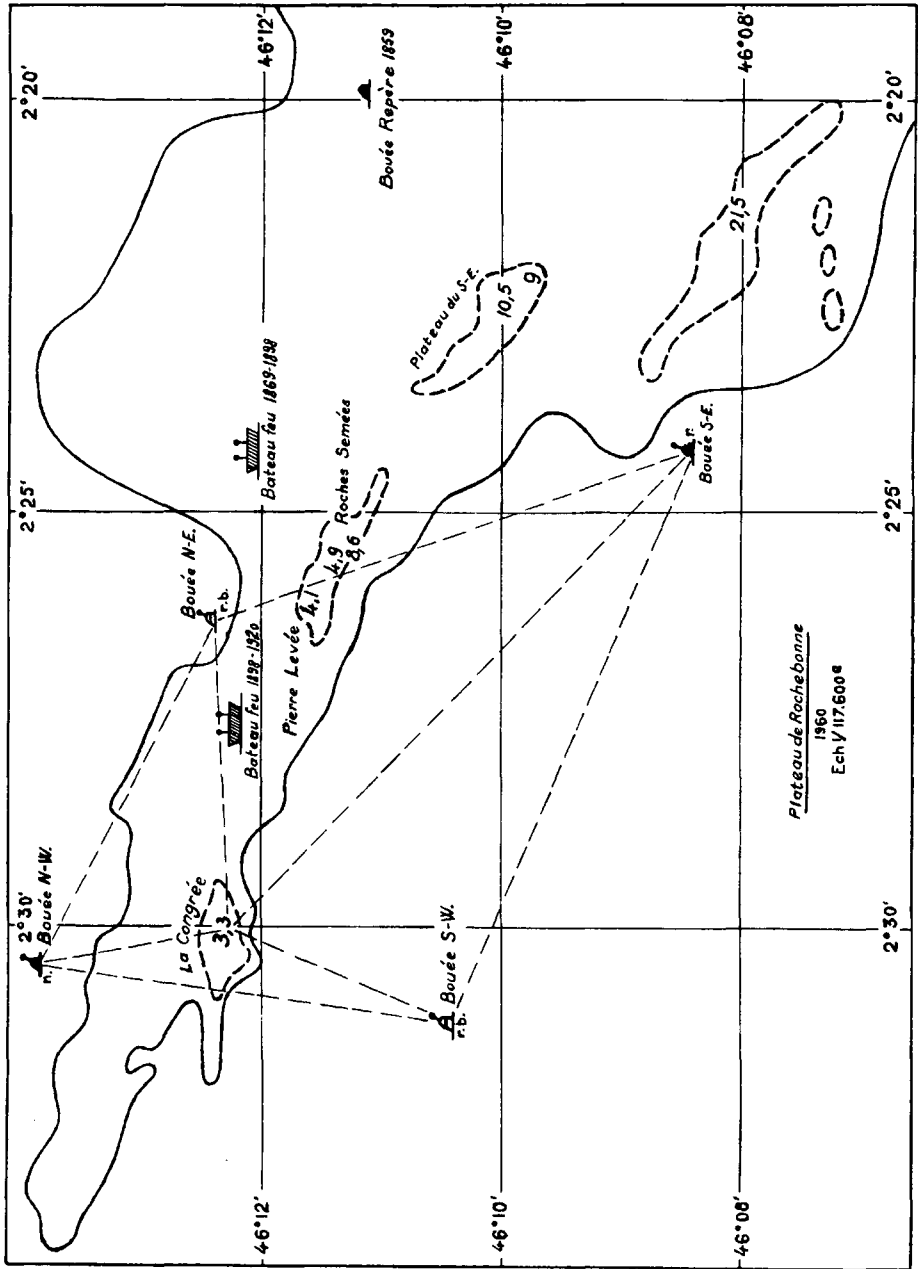
the breaker known to be the most dangerous, but over which, on that day, the waves only broke slightly. BOUQUET de la GRYE, who, like his predecessors, had only found three main peaks, thought he had completed the survey of the plateau, without realizing that the rock furthest to the east, of which he had determined the position to serve as a base of his work, had hitherto remained undiscovered and that on the other hand he had ignored the Congr e to the west. The latter thus disappeared from the charts, but its name continued to exist, BOUQUET de la GRYE obviously having given it to the most westerly shoal he had discovered. The result, from the cartographic point of view, was as if the Rochebonne Plateau had shifted 3 miles to the east.

However, in the extreme west, the real Congr e still existed and the sea continued to break above it, and when, ten years later, the establishment of a light ship was undertaken, it was placed in the most suitable position according to the topography of the plateau furnished by BOUQUET de la GRYE. It was in fact anchored in relation to this shoal, the furthest out to sea and the largest. It was also on the real Congr e that an attempt to build a small tower was made, but this attempt soon had to be abandoned. The subsequent buoys were also placed with reference to this same rock, but still according to the data from the 1859 survey, therefore according to topography which was undoubtedly accurate, but which did not apply to the shoal in question. These buoys which were, in principle, reassuring were therefore never, in any of their various positions, capable of marking all the breakers.

This was a dangerous situation if ever there was one, which lasted however until our time, but no other wreck was recorded as having been caused by the Congr e except the liner *Afrique*, lost with all hands on the Rochebonne Plateau in 1920. This disaster did not, however, throw any suspicion on the data of 1859.

Although those responsible for the buoys were surprised that they systematically took ten minutes longer to reach the Congr e than the time calculated for the run according to the chart, only by using radiolocation methods which were brought into use after the last war did serious doubts arise on the accuracy of the cartographic position of the Rochebonne bank. In 1953, the pilot training vessel *Ancre* obtained for the real Congr e, by means of an astronomical fix confirmed by observation of the Decca network for radionavigation, a correct position near to that determined by BEAUTEMPS-BEAUPR E in 1824. Four years later, the liner *Djibouti*, working with radar, obtained the same result.

Following these concordant results, the Hydrographic Office shifted the Rochebonne Plateau three miles to the west on the charts until they were able precisely to verify this information with an accurate instrument. Indeed, since 1954, the Hydrographic Mission for the coasts of France and North Africa has been equipped with a Rana radiolocation chain, an instrument which gives positions at sea to the nearest 10 or 15 metres, at a distance approaching 150 km from the coast. Using this chain, this Mission surveyed nearly 700 km of the Atlantic coast of Morocco before 1959, thus enabling French hydrographers to establish high quality marine



cartography for this coastline. Having completed this work, the Mission was allotted the task of the survey of the Rochebonne Plateau for the summer of 1960.

With Rana stations installed on the Charente and Vendée coasts, in June 1960 they were able to determine the position of the actual Congr e accurately, and whilst making soundings in the area surrounding this rock, on one of the rare days when the sea was calm enough over the plateau, they were able to get to the root of the trouble and clear up the confusion which arose in 1859, with the immediate result of the reappearance on the charts of a peak which had disappeared from them more than 100 years earlier.

The Rochebonne Plateau, previously a much-feared danger, yesterday a misunderstood danger, thus seems this time to have been perfectly mastered. From now on, buoys corresponding to the exact form of the shoal will guard these dangers, but in the eyes of those who have known it, it will still remain a mighty reef where the great force of the open sea rarely ceases to break on an invisible obstacle.