Zeitschrift: Helvetia : magazine of the Swiss Society of New Zealand
Herausgeber: Swiss Society of New Zealand
Band: 38 (1974)
Heft: [11]

Artikel: Quartz transmitter for fish and lobsters
Autor: [s.n.]
DOI: https://doi.org/10.5169/seals-942146

Quartz Transmitter for Fish and Lobsters

For many years now, careful research has been carried out in various parts of the world in order to safeguard the development of marine fauna and to ensure a more rational use of this invaluable source of protein, which is bound to become increasingly important in world food supplies. Within the framework of experimental work on the migration of fish, the Norwegian Institute of Industrial Technology, Sintef, at Trondheim, has made use of a new technique for following these movements. It consists in fixing an ultra-miniaturised transmitter to the back of the test animal. A very sensitive receiver then makes it possible to record the movements of the fish once it has been put back into the water. In constructing this transmitter, the Sintef institute turned to Swiss watchmakers. Thus for example the firm of Oscilloquartz Ltd. at Neuchatel, a branch of Ebauches Co. Ltd., supplied the watch quartzes used as oscillators. These are quartz crystals with a frequency of 32 kilocycles, normally used in wrist-watches. Apart from their small size, these high quality oscillators have the advantage of working perfectly under the most severe conditions. It should be remembered that Oscilloquartz Co. Ltd. specialises in the production of electronic components for high performance oscillators and timepieces, such as atomic clocks, whose precision is phenomenal, being only one second out in every 6000 years. Research, which is still going on, has made it possible to appreciate the reliability of this device, which has been tried out on salmon, coalfish and even lobsters. (SODT).