

ARTICLES IN REVIEW

AN ACOUSTIC AID TO SEA BED SURVEY

by W. D. CHESTERMAN, P. R. CLYNICK and A. H. STRIDE

Acustica, S. Hirzel Verlag, Stuttgart, Vol. 8, 1958
No. 256 of Collected Reprints, Vol. 7, National Institute of Oceanography,
Wormley, Godalming, Surrey, England, Dec. 1959

The article describes a rapid acoustic method of charting the small scale topography of the sea floor. The results of this survey are presented as a chart-like facsimile of its surface, which can be interpreted with only a limited use of conventional procedures.

The acoustic method employs an instrument which is virtually an echosounder with a narrow beam, depressed only a few degrees below the horizontal and orientated normal to a ship's course. The advantages of this asdic method are that a belt of sea floor about 500 yards in width can be examined, the results of which are recorded continuously as the ship moves, which is virtually a facsimile of the sea floor itself, the composition and topography being shown by variations in the intensity of the tone.

The article gives illustrations of the nature of the sea floor recorded with the aid of this method.

PHOTOGRAPHY OF THE OCEAN FLOOR

by A. S. LAUGHTON

Endeavour, Vol. XVIII, No. 72, pp. 178-185, October 1959
No. 267 of Collected Reprints, Vol. 7, National Institute of Oceanography
Wormley, Godalming, Surrey, England, December 1959

Although some underwater photographs were successfully taken as long ago as 1893, it is only recently that automatic cameras suitable for photography at depths of up to 3 000 fathoms have been developed. This article describes one such type of camera, and discusses the information about the geology and zoology of the sea floor that has been obtained with it.

THE SEA FLOOR

by Dr. A. S. LAUGHTON

The New Scientist, Vol. 6, pp. 237-240, 1959
No. 275 of Collected Reprints, Vol. 7, National Institute of Oceanography
Wormley, Godalming, Surrey, England, December 1959

Precision echo-sounding is enabling us to build up a picture of the features of the sea floor : the great abyssal plains, the deep channels, the mountain peaks. Photography has shown that, far from being a wilderness, the sea floor is the home of a numerous and fascinating fauna.

The article gives some illustrations of certain typical profiles and two photographs of the sea floor.

DESIGN FOR AN OCEAN GOING RESEARCH SHIP

by H. F. P. HERDMAN, D. Sc.

Engineering, Vol. 188, pp. 414-416, 30 October 1959
No. 280 of Collected Reprints, Vol. 7, National Institute of Oceanography
Wormley, Godalming, Surrey, England, December 1959

This article studies the plan of an oceanographic ship which can remain at sea for months at a time and undertake a wide range of research projects. The author successively deals with the various functions which this ship would have to fulfil, its optimum size, its range and its speed, propulsion and manoeuvrability, laboratories, workshops and stores, deck arrangements and navigation equipment.
