

REPORTS

THE COMMISSION ON CONTINENTAL AND OCEANIC STRUCTURE OF THE INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS

I. HISTORICAL

IN 1932 the Dutch Geodetic Commission tabled a resolution advocating the appointment of a Joint Committee for the Study of the Earth's Crust for discussion by the union at its Lisbon meeting. It was resolved at Lisbon that the bureau of the union should appoint such a committee before the Edinburgh meeting in 1936. Early in 1936 the American Geophysical Union brought forward a similar, but perhaps more specific, proposition in advocating a joint discussion on "The use and value of geophysical methods in the attack upon the structural problems of oceanic and continental areas." The value of the cooperation of geologists is given special emphasis in this proposal. During the last Pacific Science Congress the same general question was also raised. On April 6, 1936, all associations were informed by the secretary of the International Union that a joint discussion would be arranged on the subject. As announced by the secretary on June 6, 1936, the president of the International Union called a "Committee on Continental and Oceanic Structure" into being, this committee to hold such scientific discussions, open to all those interested, as it considered desirable. The original committee consisted of 37 members as listed in the printed circular of June 6, 1936. R. M. Field was appointed chairman and H. Jeffreys was asked to collaborate with the president in organizing the collection and framing of the initial questions. The president of the International Union further suggested that the committee consider:

- (a) The composition and personalities of a semi-permanent organization and office.
- (b) The necessity for the tabulation and printing of essential data (such as the International Seismological Summary).
- (c) Any other matters which require the approval and financial assistance of the General Assembly.

II. COMMITTEE MEETINGS

The meetings of the committee, at the request of the chairman, were open to all delegates to the Edinburgh Assembly. The following papers were discussed:

- (1) "Recent Developments in the Geophysical Study of Oceanic Basins," by R. M. Field.
- (2) "The Problems of Oceanic Structure," by H. Jeffreys.

- (3) "The Importance of Submarine Topography and Geomorphology" (personal communication from D. W. Johnson), read by R. M. Field.
- (4) "Recent and Additional Data Regarding the Significance of Oceanic Gravity Anomalies," by F. A. Vening Meinesz.
- (5) "Terrestrial Magnetism and the Earth's Crust and Oceanic Structure," by J. A. Fleming.
- (6) "Importance of Geophysical Methods, with Special Reference to Seismology," by N. H. Heck.

Recommendations as to the formation of a Commission of the International Union on Continental and Oceanic Structure were passed by the committee at its final meeting on September 21, 1936.

III. ACTION OF GENERAL ASSEMBLY ON SEPTEMBER 24, 1936

The General Assembly unanimously approved the formation of a Commission on Continental and Oceanic Structure and, with certain exceptions and amendments of the committee's original report, voted as follows:

- (1) *Personnel of Commission*: G. Angenheister; R. M. Field, *chairman*; J. A. Fleming, *secretary*; B. Helland-Hansen, Harold Jeffreys, F. A. Vening Meinesz and O. T. Jones. It was the consensus of opinion that, rather than to greatly enlarge the membership of the commission, it would be wiser to coopt the services of experts in the formation of subcommittees.
- (2) The commission shall pay particular attention during the next three years to the structural study of oceanic basins and their margins.
- (3) The supporting nations shall be urged to create similar national committees.
- (4) The chairman and secretary of the commission were instructed to take steps which would insure the distribution of the proceedings of the International Union, with special reference to the organization of the commission, to the International Geological Congress, the Pan-Pacific Science Congress, National Geological Surveys, National Geographic and Geological Societies and other national organizations and agencies whose abilities and interests are related to the aims and business of the commission.

The commission will deeply appreciate advice relating to any and all matters which have to do with the development of the geophysical exploration of that great international terra incognita, the sub-oceanic lithosphere.

R. M. FIELD, *Chairman*
JNO. A. FLEMING, *Secretary*