

Finally, some of the work based on the experience of the operational research team, which visits foundries by invitation and provides advice on problems of production and layout, was shown, and included recommended suitable foundry layouts, improvements in production flow lines, the correct use of patterns and moulding equipment, and data on output and costs.

J. G. PEARCE

ORGANIZATION OF THE METEOROLOGICAL OFFICE

IN a written answer in the House of Commons on June 28, the Secretary of State for Air, Mr. G. Ward, said that the Committee appointed in 1955 under Lord Brabazon to review the organization of the Meteorological Office in relation to current and future requirements saw no reason to question the wisdom of the decision to entrust responsibility for the State meteorological service to the Air Ministry, and was satisfied that the close association of the Meteorological Office with aviation since 1919 had been mutually advantageous. The Committee considered that the present standing of the Meteorological Office as a scientific institution was high, and that users had great confidence in the services provided. The Committee welcomed the work being done by the research staff in the development of numerical methods of forecasting, and the decision to install an electronic computer at the Central Forecasting Office. It considered that greater precision in local forecasting might be achieved by more detailed study of local weather characteristics, coupled with the use of radar scanners. The development of a combined headquarters at Bracknell should eliminate the present loss of effort due to dispersal of the Office.

As a result of the Committee's recommendations, the Meteorological Office had been reorganized under a director-general with two sections, concerned with forecasting and services and with research, each under a chief scientific officer, and a third section, under an assistant secretary, with administration and general duties. Measures approved as a result of the report, including an increased number of higher level posts, and an increase in the number of senior appointments open to the experimental officer class, would improve the prospects available to both the experimental and the scientific officer classes. The Committee expressed the hope that it would be possible to bring home to the universities the challenge which meteorology presented to the imagination of the first-class physicist or mathematician.

The Committee suggested no changes in the constitution or terms of reference of the Meteorological Research Committee or in the division of the research programme between the Meteorological Office and the universities, but recommended that the arrangement under which a separate grant is made to the Royal Society for fundamental research should be reviewed at the end of the current five-year period and that grants for research emanating from the Air Ministry should thereafter normally be channelled through the Meteorological Research Committee. This recommendation was still under discussion. The Committee also recommended a system of research grants for postgraduate study in meteorology, and the Department of Scientific and Industrial Research was willing to consider awards under the scheme it administers.

The Committee also recommended a review of the man-power requirements for aviation services. The requirements of civil aviation were being reviewed in conjunction with the Ministry of Transport and Civil Aviation. Local forecasting units were desirable for other purposes, particularly in agricultural and horticultural districts, but a more detailed examination was required before any pattern of development could be approved. The Minister said that he had accepted the Committee's recommendation that the existing Meteorological Committee should be replaced by an advisory committee of not more than five members, all of whom would be outside the Government service. The new Committee would consist of an independent chairman, and four members, including the chairman of the Meteorological Research Committee *ex-officio* and another scientist, appointed after consultation with the president of the Royal Society, and normally two laymen. Lord Hurcombe had accepted the invitation to become chairman of the new Committee, which would be required to keep under review the progress and efficiency of the Meteorological Office and the broad lines of its current and future policy, the general scale of effort and expenditure devoted to the Meteorological Office, and the contacts between the Office and those using its services.

WATER RESOURCES OF GREAT BRITAIN

THE publication of the Surface Water Year Book 1954-55* is a further welcome addition to the growing body of hydrological knowledge for Great Britain. The first four Surface Water volumes dealt with the periods 1935-36, 1936-37, 1937-45 and 1945-53: since that date the volume has been appearing annually and the time-lag in publication has been steadily reduced.

There has been an increase from 102 gauging stations in 1953-54 to 116 gauging stations in this latest volume; but some changes have been made in the presentation of the statistics for 1954-55 in order to reduce both the size and the cost of the volume. The daily mean discharge tables have been omitted, while hydrometric records of 'reservoired areas' have been summarized on a single page. The station descriptions have been rearranged and condensed, and the surface geology particulars omitted. Complete records and details are, however, available for consultation at the Surface Water Survey Centre.

While progress is thus being made in the collection and dissemination of these basic hydrological data concern is still being expressed at the lack of a much-needed water policy for Great Britain. A notable debate in the House of Lords on May 29 surveyed the steadily increasing consumption of water per day, and also the rising consumption of water per head per day throughout the country. Emphasis was laid upon the very great and continuing increase in the industrial use of water over the past two decades, to which must be added the demand likely to arise in agriculture with the application of summer irrigation methods. Some areas now face the prospect of permanent water shortages even under normal

* Ministry of Housing and Local Government, and Scottish Office. The Surface Water Year-Book of Great Britain 1954-55. (Hydro-metric statistics for British Rivers, together with related rainfalls, for the year-ended 30th September, 1955.) Pp. xi+54. (London: H.M.S.O., 1957.) 15s. net.