45 H—34

GENERAL PUBLICITY

Public Relations.—Frequent contact with the press has been maintained by arranging interviews for journalists and press conferences, and by the issue of special articles and notices to newspapers, magazines, and the Press Association. Supplementing this publicity from early in 1949, a regular series of press releases were sent to all the New Zealand newspapers, to a selection of the magazines, to overseas' newspaper representatives, &c., and a good coverage was obtained. Preliminary arrangements were made for a series of six broadcasts on the work of the Department, and for the loaning of technical films to interested organizations.

Displays.—Exhibits were staged at Dunedin's Centennial Industries' Fair (on the work of the Dominion Physical Laboratory) and at Christchurch (on the work of the Wheat Research Institute).

PHOTOGRAPHIC SECTION

The library of photographs was increased by approximately 1,000, and considerable use was made of the prints for both departmental and other publications. Cine films have been made of the models of the Cobb River hydro-electric scheme and of the plastic packing of frozen mutton. Other services have included Gestefilms, photocopies, lantern-slides, printing of microfilms, and general developing and printing for the branches.

Photographic Copying.—The reflex photographic process was used to copy 937 articles, ranging from 1 page to 400 pages.

WAR HISTORY

A separate volume is to be allocated to the Department in the official war history of New Zealand, and is to be entitled "Defence Science." Professor P. W. Burbidge has been appointed to write the volume, and has been supplied with the greater part of the background material. It is expected to be ready for publication within the next two years.

MAGNETIC SURVEY

Director: Mr. H. F. BAIRD

Terrestrial Magnetism.—The three types of magnetographs—Eschenhagen, Adie, and La Cour—were operated, and continuous records of the magnetic elements D, H, and Z were obtained. The weekly programme of absolute observations for base-line control was maintained. Local data of international magnetic character figures and K indices or the three-hour-range index of geomagnetic activity were forwarded regularly to Carnegie Institution, Washington, D.C., the Ionospheric Prediction Service, Department of Electrical Engineering, University of Sydney, Australia, and to the Carter Observatory, Wellington, until December, 1948.

Intercomparison of Instruments.—Arrangements were made through the Secretary and Director of the Central Bureau of Association de Magnetism et Electricité Terrestres for comparing the H instrument at Amberley with the International Magnetic Standard. In February, 1949, the Association's set of three Q.H.M.s (quartz horizontal magnetometers) were received by air mail from the Meteorological Institute, Copenhagen. Preliminary results indicate that little or no change has occurred in the Q.H.M.s at Amberley.

Magnetic Survey.—During the year further field-work was carried out, and twenty-cight magnetic stations were occupied on the mainland and six magnetic stations were occupied on the outlying islands. In April, 1948, the co-operation of the Aerodromes Branch, Ministry of Works, made it possible for observations to be made on the Auckland Islands and the Campbell Islands. Exact reoccupations were made on the