

RECORDINGS

The observational and recording programmes have been maintained. Absolute magnetic observations were made each week and scale values determined on alternative days. The measurement of hourly values is well forward. International Magnetic Character figures and the "K" indices of geomagnetic activity have been supplied monthly to the Department of Terrestrial Magnetism, Carnegie Institution, of Washington. Descriptions of magnetic disturbances recorded have also been sent to this institution for publication in the *Journal of Terrestrial Magnetism and Atmospheric Electricity*. Some progress has been made in overcoming the arrears of annual report work, and the years 1941-46 inclusive are almost ready for publication. The mean values of the magnetic elements at Apia for the last three years, obtained from autographic records, are as follows :—

Year.	Declination.	Horizontal Force.	Vertical Force.	Inclination.
1944	11° 08.0 E.	34,857.1 γ	-20,653.9 γ	-30° 38.9
1945	11° 11.41 E.	34,861.7 γ	-20,651.3 γ	-30° 38.5
1946	11° 13.70 E.	34,834.1 γ	-20,637.9 γ	-30° 38.7

Until the end of September, earthquake recordings were obtained from the vertical seismograph only. Many shocks that should have been recorded were lost, either through lack of sensitivity of the instrument or because of failure of the driving mechanism. Since the return of the recording-clock of the horizontal seismograph this instrument has been operated again. Because of the large number of local shocks experienced the pens are frequently thrown out of adjustment.

Measurement of tide-gauge charts is up to date and the hourly heights have been forwarded periodically to the United States Coast and Geodetic Survey. The tidal waves resulting from the Unimak earthquake of 1st April, 1946, were very marked in Apia Harbour and were well recorded on the tide gauge.

METEOROLOGY

This branch of the work is still being performed by Air Department.

GENERAL

Office and Library.—The filing system was overhauled and a new method of letter numbering introduced. The addition of steel filing-cabinets has also made an improvement which was badly needed. A more satisfactory system of keeping office accounts was instituted.

AUCKLAND INDUSTRIAL DEVELOPMENT LABORATORIES

Director: Mr. J. B. BROOKE

Although this is the second annual report of the Auckland Laboratories, it is in reality the first report covering a full year's operation, and as such is indicative of the settled policy of the Laboratories and, to a lesser degree, the progress made by the branch since its inception.

The broad general policy of immediate scientific and technical assistance to industry has been followed as the guiding principle of this section, and it has been most gratifying to note the increase in the number, variety, and perhaps complexity of the industrial problems in which assistance has been sought.

It will be of interest to note that, of the 406 jobs undertaken during the year, 302 have been industrial, or an average of 75 per cent.

The Advisory Committee to the Laboratories has met regularly throughout the year and, in addition to assisting the Director in furthering the activities of the branch, has brought forward in report form a number of constructive recommendations of interest to all branches of the Department.