for latitude, longitude, and azimuth made at nine La Place stations were received, and work in connection with them was to commence early in the financial year.

The computations in connection with the base-line measurements were

completed, and final values for the lengths of the base lines determined.

### (b) Tidal Analysis

Analyses for the port of Bluff for the years 1940 and 1943 were completed and the hourly heights for 1946 measured and tabulated in readiness for analysis. Lack of staff has once more restricted the tidal work, but the position is improving and it is expected that some of the arrears will be overtaken in the coming year.

# (c) Photogrammetric Control

The co-ordinates of the centres of 208 photographs, in 15 runs, were computed from measurements made in the stereocomparator by the Photogrammetric Branch.

### (d) Mapping Control

('harts for the conversion of meridional circuit co-ordinates (in links) to national grid yard co-ordinates were drawn in connection with the mosaic-map programme (N.Z.M.S. 3 and 4). Drawn on scales of 80, 100, or 200 chains to an inch, they covered an area of approximately 16,500 square miles in the North Island and 2,200 square miles in the South Island.

The co-ordinates of sheet corners, latitude and longitude intersections, convergences, and magnetic declinations and variations were supplied for all topographical maps published, and the computation of transverse mercator and conical orthomorphic graticules for aeronautical and small-scale maps was

another of the Branch's regular activities.

#### DRAUGHTING EXAMINATIONS

This year saw the introduction of the new Public Service Draughting Examination. Ninety candidates entered for this examination, while 41 sat for the old Draughting and Computing Examinations.

Passes were obtained as follows:-

Public Service Draughting Examination, November-December, 1948: 16 completed; 28 passed Stage I.

Draughting and Computing Examinations, November, 1948: 7 passed 1st Grade Draughting; 6 passed 2nd Grade Draughting; 9 passed 2nd Grade Computing.

## STAFF TRAINING

An organized scheme of staff training for cadets and junior draughtsmen was established in all offices in 1948. The cadet trainees were tested at two points during the year and the results have shown that the instruction given has enabled the juniors to reach a higher standard of workmanship in a shorter time than previously.

The pursuance of this scheme of training will assist materially in overcoming some of the problems created at present by the shortage of senior

experienced staff.