

## NEWS

### FIRST ANNUAL GENERAL MEETING N.Z. HYDROLOGICAL SOCIETY

The First Annual General Meeting was held in Christchurch on Monday, 9 December, 1963. In attendance were 20 members and two guests.

#### RULES

The proposed Rules were discussed and variously amended, and finally adopted as the Rules of the Society.

#### OFFICERS 1964-65 (Effective from 9 February, 1964)

President:	C. Toebes
Sec./Treasurer:	I Simmers
Editor:	P.J. Grant
Asst. Editor:	G.T. Ridall
Council:	B. Douglass, J. Finkelstein, A.C. Hopkins, W.B. Morrissey, A.J. Raudkivi, E.J. Speight.

#### ADDRESSES

Following the Presidential Address, the text of which is printed herein, Mr. A.P. Campbell - Soil Conservation and Rivers Control Branch, Ministry of Works, Wellington - gave a very interesting and well illustrated talk on his recent visit to the United States.

#### NEXT MEETING

The 1964 Annual General Meeting will probably be held in Wellington near the end of the year. Further information will appear in the June 1964 issue of the Journal.

#### INTERNATIONAL HYDROLOGICAL DECADE

It has been agreed that New Zealand should support and actively participate in the work of the IHD and to coordinate efforts a National Committee has been proposed. Initiative for its formation rests with the New Zealand National Commission for UNESCO which invited the Ministry of Works to nominate an officer to convene a National Committee. Mr. A.P. Campbell has now been nominated and will convene a committee representative of scientific societies and organisations concerned with hydrological phenomena.

Mr. C. Toebes has been appointed to represent the N.Z. Hydrological Society on the IHD National Committee.

FROM SOIL CONSERVATION  
AND RIVERS CONTROL COUNCIL, WELLINGTON

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COURSE ON PROCESSING OF HYDROLOGICAL DATA

A course was held in Wellington from 22-26 July 1963 by the Ministry of Works on the routine analysis of hydrological data. This was the first course of its kind held and is intended to be a standard course (C2 course) to follow up on the A and B field hydrology courses which are held at Belfast regularly and the proposed C1 field hydrology course which will also be conducted at Belfast. The course was attended by 11 officers from the Ministry of Works and included instruction on hydrograph analysis, statistics, gauging calculations; analysis of precipitation data; stage discharge curves; flow duration curves; flood estimation and preparation of data for the Hydrology Annual.

FRIDEN CALCULATORS

As a further step in the mechanisation of data analysis one Friden SBQ desk calculator was purchased for each Hydrological Survey Office. These calculators are very versatile and are particularly suited to gauging calculations. When operators are fully trained all gauging calculations will be done on the Friden allowing an increasing amount of fieldwork to be undertaken.

JONES RAINFALL INTENSITY GAUGES.

During mid 1962 Council issued one Jones rainfall intensity gauge to each water authority for trial. Recently comments have been invited with a view to ascertaining the usefulness of this gauge and whether a further order was warranted.

The response has been poor but it appears that it is essential to have a conscientious and enthusiastic observer. Accuracies seem reasonable for high intensity falls; for storms over about  $\frac{1}{2}$  inch an accuracy of less than 5% is obtainable. For similar storms - the error is sometimes very large. Council will invite further comments in about six months time.

CABLEWAY TESTING

Mr. J.H. Fyson of the ministry of Works has recently reviewed the results of gauging cableway surveys and District Commissioners of Works have since been notified of a testing procedure which is to be used for annual inspections of existing cableways.

The main revision is that cableway sags are to be set at a safe limit with a 1500 lb central load. This provision gets over the somewhat unpredictable variation in elasticity of individual cableways.

Safe limits are to be calculated so that the following provisions are satisfied:

(i) Max. tension, T, in rope to be less than 1/5 of ultimate tension.

$$(ii) D = \frac{S(W S + 3000)}{8H}$$

where D = laden sag in feet with 1500 lb central load

S = span in feet

W = lb wt. per foot of cable

H = T COS  $\phi$

$\phi$  = maximum angle made with the horizontal by the back stay portion of main cable.

New ropes will be "Smooth-coil Track Strand" or "Tramway Track Strand" which give a better performance.

#### CURRENT METER RATING

Construction work on the current meter rating tank and equipment at the N.Z. Hydrological Instrument Depot, Kainga Road, Christchurch, has now been completed.

The tank, which is completely enclosed by a building, is 150 ft long, 6½ ft wide and has a water depth of 6 ft.

The towing carriage, manufactured by A. Ott of West Germany, will rate meters at speeds up to 15 ft per sec., and it is likely that up to three meters can be rated simultaneously.

Test rating will commence soon to establish techniques and to train staff for rating work. New Zealand hydrology will benefit greatly by having an accurate modern rating tank for the routine checking of current meters.