NEWS

A.W.RIDDOLLS, B.E.(CIVIL), B.Sc., A.M.I.MECH.E., A.M.N.Z.I.E., M.I.Ag.E.

READER IN AGRICULTURAL ENGINEERING AND HEAD OF DEPARTMENT

The death of A.W. Riddolls occurred in Christchurch on 18 May 1963.

The same week he had run a very successful course in agricultural hydrology at Lincoln College. His sudden death came as a shock to those who had associated with him, so recently, while the course was being held.

Mr. Riddolls realised the need for hydrology in agricultural engineering more than anyone else and he was one of the pioneers in the teaching of hydrology at University level. His work in this field will always be remembered by those associated with hydrology in New Zealand.

NEW ZEALAND HYDROLOGICAL SOCIETY

Membership total now stands at 123. This figure comprises 35 Members, 73 Affiliate members and 15 Student members. A list of members, as at 31 May 1963, is printed elsewhere in this number.

The Secretary will be pleased to receive subscriptions for 1963 so that publication costs can be met.

ENGINEERING HYDROLOGY COURSE
THE UNIVERSITY OF NEW SOUTH WALES

A full-time, 12 weeks, special course in Engineering Hydrology will be conducted by the School of Civil Engineering of The University of New South Wales from 26 August to 15 November 1963, subject to sufficient applications being received.

The course will cover the principles, practice and application of Engineering Hydrology from the elementary to the post-graduate level.

In general, a first degree in engineering or science will be required for admission to the course, but consideration will be given to applicants, holding a lower qualification, with suitable experience in the field of hydrology.

Enquiries about the course should be addressed to Professor C.H. Munro, School of Civil Engineering, The University of New South Wales, Broadway, New South Wales, Australia.

SEMINAR ON CONSERVATION HYDROLOGY

A most successful seminar on conservation hydrology was held at Lincoln College, 13-17 May, 1963.

There were 33 participants from throughout New Zealand. These widely represented various government and local organizations and embraced soil conservators, hydrologists, engineers and other scientists.

The main purpose was to make known various modern techniques in the interpretation and use of hydrological data; with special reference to data on catchment condition and erosion. An incidental, but important associated purpose, was to enhance the co-operation between users and potential users of hydrological data.

The seminar was attended by Mr. N.W. Collins, Chief Soil Conservation & Rivers Control Engineer, who has summed up the effectiveness of the work in his official report as follows:

> The seminar served its purpose very well. Apart from the aspect of more formal exposition it is helpful, in fact essential, for hydrological experts and the users of hydrological techniques and information, to get together periodically in order to understand adequately one another's problems, methods and achievements, and to appreciate the field for fruitful co-operation and mutual assistance. Hydrology is not just a matter of river gaugings, useful though these are for particular purposes, but a complicated science dealing with all the intricacies of the behaviour of natural water on the earth. One of the very important applications of hydrology is in the field of soil conservation and the seminar made significant progress in showing how hydrology can give a service to soil conservation and how this service can be progressively improved if good, standard hydrological techniques are used instead of effort being dispersed on non standard work, which produces results of doubtful validity and meaning and of little use in building up a fund of basic information .

Although Council staff provided much of the material for the seminar and arranged with authorities for participants, the organization was entirely that of the late Mr. A.W. Riddolls. Council has acknowledged elsewhere its indebtedness to Mr Alec Riddolls for his great contributions to education in soil conservation but an added tribute is due for the success of the seminar and it is most fitting that his last work was to organize a pioneering seminar which was so significant a step in the cause which he had chosen to serve.

SYMPOSIUM ON WATER RESOURCES AND THE CONTROL OF WATER IN NEW ZEALAND

The Executive members of the Society were told at their last meeting, held at Lincoln College, of the intention of the New Zealand Institution of Engineers to hold a major symposium on water resources and the control of water in New Zealand.

The symposium is intended to provide a broad survey to help the development of a national water policy and to give definite guidance on scientific requirements in hydrological data, education and training, and certain other subjects of common interest.

The programme, probably extending over two days, will deal in successive sections with:

(a) resources, (b) control and protection requirements, and (c) proposals for improvements.

A specific date has not been fixed but inclusion on the Wellington programme in the latter half of 1964 is likely. The Society, along with other organizations interested in water, is to be kept informed of developments. The convenor of the symposium is Mr. A.P. Campbell.

FROM SOIL CONSERVATION AND RIVERS CONTROL COUNCIL, WELLINGTON

HYDROLOGY AND LAND MANAGEMENT - ACKNOWLEDGMENT BY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Those associated with the Council's work will be glad to note the comments made recently by the Chief Engineer of the Los Angeles County Flood Control District:

> "We wish to acknowledge with thanks the receipt of a copy of "Hydrology and Land Management", the proceedings of a Technical Symposium held at Canterbury Agricultural College.
>
> We have been highly impressed with the breadth of vision and enthusiasm of the scientific officers, hydrologists, soil conservators and other technical contributors to the Symposium. A program based upon such fundamental research as presented cannot help but succeed. The separate papers contain a great deal of well-presented methods of hydrologic analysis which will form profitable reference for District use".

INTENSITY - DURATION - FREQUENCY RELATIONSHIPS FOR NEW ZEALAND RAINFALLS

Mr. N.G. Robertson, Assistant Director, Meteorological Service, has advised that the task of tabulating and analysing data on intensity - duration - frequency relationships has been completed.

The data will be published within the next two months, with maps and charts from which an estimate can be made of the possibilities of intense rainfall in any area of New Zealand. Using the given data, intensities can be estimated for durations between 10 minutes and 72 hours and frequencies extending to a recurrence interval of 50 years. A greater range may be obtained by extrapolation.

Council will arrange for a distribution to authorities holding copies of Technical Memorandum No.61.

In some parts of New Zealand supplementary local data on rainfall intensities will be necessary to supplement information given by the present network of automatic raingauges.

ANALOG-TO-DIGITAL RECORDERS

100 Fisher and Porter Analog-to-Digital water-level recorders have been ordered. They will be delivered at intervals, in batches of 10, during the next 18 months. The first consignment should arrive early in August.

The recorders will be fitted with cams to give a 15 minute punch-out. Cams will be available from Christchurch for alternative punch-out intervals of 5 minutes or 1 hour.

The new recorders will be used initially at power investigation and regional stations only, because the full range of data processing is required for these stations.

Photos of the recorders appeared in the 1960 Hydrology Annual.

REGIONAL HYDROLOGY MAPS

A set of maps outlining provisional hydrological regions of New Zealand will shortly be issued. The maps will be printed in the form of transparent overlays to fit the Hydrological Maps (N.Z.M.S.19B) now in use. A legend will accompany the map.

The map is intended to be used mainly as a guide in selecting regional stations. It is to be regarded as a preliminary map only and will be subject to change.

NEUTRON SCATTERER FOR MEASUREMENT OF SOIL MOISTURE

A Neutron Scatterer has been made available, for testing, by the Dominion Physical Laboratory.

The instrument is being used by B. Treeby and M. Yates at the Makara Experimental Station on one of the benchmark catchments where the Department of Agriculture were already doing gravimetric sampling to determine soil moisture over the catchment.

Testing has been going on for about six weeks using the instrument as a surface detector only. Tests using the instrument as a probe in bore holes are about to begin.

Results obtained so far are promising but the soil moisture content of the catchment has not varied sufficiently for a full evaluation of the instrument to be made.

Trouble has been experienced with the low count rate of the instrument. It is hoped to increase the count rate, and the accuracy of the instrument, by partially shielding the neutron source with paraffin.

NEW ZEALAND HYDROLOGICAL SOCIETY

LIST OF MEMBERS AT 31 MAY, 1963

(M denotes Member, A is Affiliate Member, S is Student Member.)

Acheson, A.R., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024, Wgtn (A)
Adie, W.J., Flat 1, 10 Fairview Rd , Papatoetoe (M)
Air Dept Library, Bunny St, Wellington (The Librarian) (A)
Applied Mathematics Laboratory, D.S.I.R., 21A Courtenay Plc., Wgtn (Director)(A)
Ardmore School of Engineering Library, Auckland (Librarian) (A)
Bartleet, J.R., 95 Anzac Road, Whangarei (M)
Bauld, R.G., Poverty Bay Catchment Board, Box 338, Gisborne (S)
Blunt, D., 22 Greenhill Road, Annesbrook, Nelson (S)
Caddie, G.H., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024,Wgtn (M)
Campbell, A.P., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024, Wgtn (M)
Chaloupka, G., Water Resources Branch, N.T.A., Darwin, N.T., Aust. (S)
Chandler, A., South Canterbury Catchment Board, Box 160, Timaru (M)
Chapman, T.G., C.S.I.R.O., Box 77, Alice Springs, N.T., Aust. (A)
Christchurch Drainage Board, Box 406, Christchurch (Engineer) (A)
Collins, B.W., D.S.I.R., Box 8008, Wellington (A)
Collins, N.W., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024, Wgtn (M)
Cunningham, A., Forest & Range Expt Stn, Box 348, Napier (A)
D.S.I.R. Central Library, Box 8018, Wellington (Chief Librarian) (A)
Dalen, F. van, Power Design Office, M.O.W., Wgtn (M)
Dick, R.D., North Canterbury Catchment Board, Box 788, Christchurch (A)
Dixie, R.C., Department of Agriculture, Nelson (A)
Drost, H., M.O.W., Box 641, Whangarei (M)
Drummond, R.G., Hawke's Bay Catchment Board, Box 233, Napier (A)
Evison, R.D., Ian Macallan & Co., Maritime Bldg, Customhouse Quay, Wgtn (A)
Finkelstein, J., Meteorological Service, Box 722, Wellington (A)
Fitzgerald, P.D., Winchmore Irrigation Research Stn, P.B., Ashburton (A)
Forth, J.R., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024, Wgtn (M)
General Assembly Library, Wellington, C.1. (Librarian) (A)
Gillies, A.J., Otago Catchment Board, Box 858, Dunedin (A)
Glew, S.G., M.O.W., Soil Cons. & Rivers Control Branch, Box 8024,Wgtn (A)
Goodyear, A.S., Power Design Office, M.O.W., Wgtn (A)
Grant, P.J., Hawke's Bay Catchment Board, Box 233, Napier (M)
Grant-Taylor, T.L., N.Z. Geological Survey, Box 368, Lower Hutt (A)
Greef, J.D. de, Power Design Office, M.O.W., Wgtn (A)
Grindley, J.W., 39 Shakespeare St, Te Aroha (A)
Groenewegen, T., 31 Opoia Road, Hamilton (S)
Grundy, C.A.F., Rangitikei Catchment Board, Box 92, Marton (A)
Hamblett, S.G., M.O.W., Christchurch (A)
Harris, R.W., Hauraki Catchment Board, Box 7, Te Aroha (A)
Hartog, H.G., Bayne Tce, Company's Bay, Otago Peninsula (S)
Heine, A.J., N.Z. Geological Survey, Box 368, Lower Hutt (A)
Henderson, F.M., Dept of Civil Eng., Univ. of Canterbury, Christchurch (M)
Hirst, L.H.S., M.O.W., Box 5040, Auckland (A)
Hogg, J.T., Rangitikei Catchment Board, Box 92, Marton (A)
Holloway, J.T., Forest & Range Expt Stn, Box 106, Rangiora (A)
Hopkins, A.C., N.I. Hydrological Survey, M.O.W., Palmerston North (M)
Hughes, J.G., Tussock Grasslands Institute, Box 56, Lincoln College (A)
Huseyin, Conturk, Karayollari, Etut ve Proje Md., Ankara, Turkey (A)
Jackson, R.J., D.S.I.R., Soil Bureau, Taita (A)
Jones, H.C.C., Waikato Valley Authority, Box 4010, Hamilton East (A)
Jones, I.E., Poverty Bay Catchment Board, Box 338, Gisborne (A)
Jonge, B. de, N.I. Hydrological Survey, M.O.W., Palmerston North (S)
Knowles, D.G., Hawke's Bay Catchment Board, Box 233, Napier (A)
Lamont, D.J., 14 Selkirk St, Hamilton (A)
Leon, P.R.L. de, Eastern Bay of Plenty Catchment Commission, Whakatane (A)
Lincoln College Library, Canterbury (Librarian) (A)
Lovatt, D.R., M.O.W., Box 8008, Wellington (A)
Loveridge, C.W., Waikato Valley Authority, Box 10, Hamilton East (A)
Massey University College Library, Palmerston North (Librarian) (A)
Maxwell, R.V., Department of Agriculture, Box 110, Kurow (A)
McCaskill, L.W., Tussock Grasslands Institute, Box 56, Lincoln College (A)
McKellar, I.C., N.Z. Geological Survey, D.S.I.R., Box 79, Dunedin (A)
McKelvey, P.J., N.Z. Forest Service, Private Bag, Wellington (A)
McKillop, E.R., Flat 1, 17 Brougham St, Wellington (A)
McMillan, N.A., Southland Catchment Board, Box 408, Invercargill (M)
Meteors, A., Poverty Bay Catchment Board, Box 338, Gisborne (M)
Ministry of Works Central Library, Box 8013, Wellington (Librarian) (A)
Moreton, R.K., N.I. Hydrological Survey, M.O.W., Palmerston North (S)
Moores, A., Onerahi Road, Sherwood, Whangarei (A)
Morris, J.Y., Forest & Range Expt Stn, Box 106, Rangiora (A)
Morrissey, W.B., M.O.W., 21 Kainga Road, Belfast (M)
Munro, C.H., University of N.S.W., School of Eng., Sydney, Aust. (M)