

NEW ZEALAND

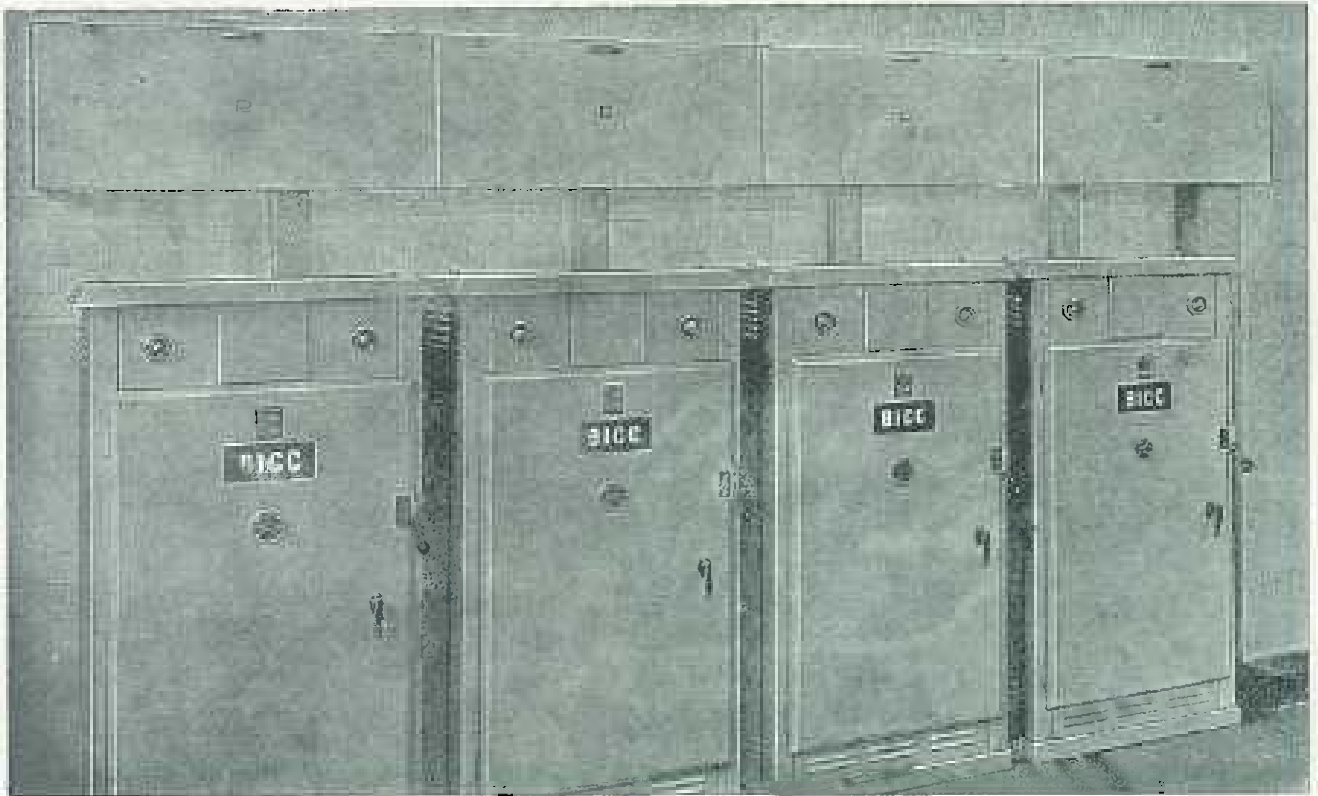
Engineering

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THE JOURNAL OF THE NEW ZEALAND INSTITUTION OF ENGINEERS

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Capacitors in your system improve the power factor

DO YOU APPRECIATE THEIR OTHER BENEFITS

The installation of capacitors reduces the current in the line and thus— (1) Reduces the voltage drop. (2) Relieves overloading in overhead lines and cables. (3) Reduces the load on transformers and switchgear.

If you are faced with the problem of reinforcing your system to carry increased loads why not consider the installation of capacitors instead?



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CAPACITORS

For Power Factor Correction call in the experts — contact your nearest branch
NEECO WHOLESALERS LIMITED. (Branches throughout New Zealand).



N. Z. I. E.

news section

A supplement to "New Zealand Engineering" sent to all members of the N.Z. Institution of Engineers

President: J. C. North, B.E., C.Eng., F.N.Z.I.E., F.I.C.E., F.I.E.Aust., F.R.S.H.

Secretary: R. W. K. Stevens, C.B.E.

The Secretary's Newsletter

General Conditions of Contract

THE Executive Committee for Engineering Science considered amendments to NZS 623 drafted by J. B. Rowntree when they met on 4 August 1969. E. H. Hitchcock, chief technical officer of the Standards Association informed the committee that S.A.N.Z. proposed to set up a committee to study the recommendation from Mr Rowntree and others with a view to the amendment of NZS 623 to make it a more acceptable document. At a later stage that committee might be asked to again review NZS 623 with the object of producing an entirely new standard.

The executive committee also considered a letter from the N.Z. Institute of Architects in which they suggested that it was impracticable to produce a single standard for conditions of contract which could meet all requirements and cover all types of civil engineering and building construction. The N.Z.I.A. further suggested that there could exist one form of contract for building works whether under the direction of an architect or an engineer. This form of contract could be the recently issued N.Z.I.A. form, modified as and if necessary, to become a New Zealand standard. In addition to this there would be a need for one other New Zealand standard form of contract for civil engineering works, and a form of contract for use by builders and house-owners when no architect or engineer was employed.

The executive committee expressed the view that the N.Z.I.A. suggestion merited further study and advised the N.Z.I.A. of the action proposed for the immediate amendment of NZS 623 and for the eventual review of that document. The executive committee hoped that the N.Z.I.A. would participate in that review and that the joint effort would result in the production of a comprehensive document embodying special conditions for special types of contract.

The executive committee is most appreciative of the work of Mr Rowntree in the preparation of the recommendation received.

N.Z.I.E. Award to N.Z.C.E. Students

Each year the Institution presents an award to the value of \$20.00 to the student obtaining the best result in the final year of study for a New Zealand Certificate in Engineering. The Council had decided that for the year 1970 and onwards the value of the award would be increased to \$40.00.

N.Z.I.E. Conference, Dunedin 1970

THE preliminary notice of the 1970 conference of the Institution was mailed to all members during the first week of August. Staff members responsible for the mailing thought that there would be less likelihood of the notice falling out of unsealed envelopes if the conference papers were tucked inside the brochure on the New Zealand Water Conference 1970. It now transpires that some members saw the brochure and not being interested in the Water Conference consigned the brochure, complete with contents, to the nearest receptacle.

The Institution has some spare copies of the conference notice and accommodation reservation forms and these will be sent to any member requiring them.

Care will be taken in future to ensure that when mailing papers on a variety of subjects they are kept separate.

Formation of a Union, Society or Association Registered Under the I.C. and A. Act

The Council has given further consideration to the formation of a union, society, or association which can be registered under the Industrial Conciliation and Arbitration Act and would thus have access to the Arbitration Court. It has been decided to seek the views of the branches and a background paper has been sent out with a request that opinions be submitted to the Institution headquarters by 31 October 1969.

A meeting of the chairmen and secretaries of the divisions of the Institution was held on 14 August to consider the same background paper. Members who have views on this subject should pass them to their branch secretaries without delay.

The Institution Coat-of-Arms

A suggestion has been received from a member that the Institution investigate the practicability and cost of reproduction of the Institution's armorial bearings mounted on polished wooden bases in a form similar to that used for regimental and other badges.

An estimate for the reproduction of the whole achievement mounted on a wooden shield approximately 8 in. by 7 in., amounts to \$40.00 each. It would be possible, however, to produce a replica of the coat-of-arms—i.e., the part shown on the shield, surmounted by the crest, which is the wreath, tripod and globe and with the motto below the shield. This replica, mounted on a polished wood shield measuring 5½ in. by 6½ in. would cost \$5.50 each, for an initial order of 50.

Any members who would like to have reproductions of the coat-of-arms at the price of \$5.50 each are requested to notify the secretary as soon as possible.

Management Training Courses Sponsored by the Institution

Discussions are continuing on the content of the courses that are expected to be held in May 1970, in Wellington

CONFERENCE ON GEOMECHANICS

THE Sixth Australia-New Zealand Conference on Geomechanics (incorporating soil and rock mechanics) will be held in Melbourne from 10 to 17 August 1971.

The main theme of the conference will be "Structure and its effect on soil and rock properties". Professor T. Lambe, of the Massachusetts Institute of Technology, has accepted an invitation to attend the conference and to deliver the keynote address. Authors are also invited to submit papers on topics in soil and rock mechanics other than on the main theme.

Papers for consideration must be submitted by 30 November 1970, but it would assist the Organising Committee if authors would advise (as early as possible) their intention, with a brief indication of the subject matter. Papers

which are accepted will be preprinted for circulation in advance to those who will be attending the Conference.

Further information may be obtained from the Secretary, The Institution of Engineers, Australia, Science House, 157 Gloucester Street, Sydney, N.S.W., 2000.

QUANTITY SURVEYORS' REGISTRATION BOARD

(Constituted under The Quantity
Surveyors Act 1968)

Persons intending to apply for registration under the Act are invited to lodge their names and addresses with The Registrar, who will forward application forms to them in due course.
The Registrar,
Quantity Surveyors Registration Board,
P.O. Box 3635,
Wellington.

BRANCH NOTES

Nelson-Marlborough

At the June meeting of the Nelson-Marlborough Branch the following motions were debated:

(1) That engineers require management training.

(2) That salary scales for New Zealand engineers should be in line with that of the Australian Professional Engineers Association.

(3) That the N.Z. Institute of Engineers, as a body, is timid.

These motions gave rise to some serious proposals and covered wide aspects pertaining to the subjects under debate. At the conclusion of the debate it was moved that the motions be published in *New Zealand Engineering* with the hope that other branches would also conduct similar debates.

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Secretary, R. W. K. STEVENS, C.B.E.

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Cover picture

One of the two 250-ton floating cranes, especially constructed for the Auckland Harbour Bridge extensions, lifting one of the girders into place. (See article on page 296.)

Fibrolite LARGE DIAMETER Pipes



A 24 inch diameter Fibrolite Pipe is ready for laying while rubber rings are placed inside a 'Supertite' coupling. This sewer rising main was designed by the Christchurch Drainage Board. Installation Contractor: George Challey Ltd, Christchurch.



Pipe is lowered into trench ready for jointing.



Application of 'Supertite' lubricant to pipe end before insertion into Fibrolite 'Supertite' coupling.

For further information on any products advertised see second-to-last page.