



# The Manitoba Professional Engineer

Published by The Association of Professional Engineers of the Province of Manitoba  
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Vol 3.

WINNIPEG, MANITOBA, MAY, 1960

No. 2

## More Members in 1960

Your Membership Committee has just had, from all accounts, a successful visit to The University of Manitoba campus. Here they spoke to the 1960 graduating class.

The response from the students was good; they showed great interest in the Association. Many questions were asked of the committee members and Mr. Wardrop and Dr. Landon who were also in attendance.

The "On the Campus" programme initiated by last year's committee appears to be a worthwhile project. Registration of Engineers in Training in 1959 increased by 32 (to 57) in the period following the Committee's visit to the campus.

Let's hope that this increase will be maintained or bettered.

Accompanying this issue of the Bulletin is a reply card. This card was used last year with considerable success.

The card is essentially a request for an application form. Give this card to a prospective member or carry it with you for the time when you do meet one.

Item: The total number of new members by registration for 1959 was 140.

Registration figures for the previous four years are given below:

1955—77	1957—97
1956—256	1958—123

The Committee asks for your continued help in servicing the membership function. "Be an unofficial member of the Membership Committee, an official member of the Association."

Let's have a bigger membership for increased activity, increased activity for a stronger, more effective Association.—M.C.

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## London Ho!

By W. A. CORBETT, P. Eng.

On January 20, 1960, eighty-four people climbed aboard a DC-7C in Winnipeg destined for London, England. On February 12 the same people boarded the same plane to make the return journey. The trip both ways was uneventful and accomplished with complete tranquility. A bubble has been broken. A myth exploded. Why? Well, this group was made up of engineers and architects and who would have thought that a mixture such as this could be kept in such close proximity for a period

of eighteen hours at a time without at least some minor eruptions? Not a tremor. And on top of this, at no time during the intervening three weeks was anyone seen baring his teeth or making a fist. A very interesting study in human relations.

The trip was organized to carry to Britain as many engineers and architects as one plane could hold, to study the practices and techniques the English employ in the use of concrete. To accomplish this in the short time available was quite a challenge to the organizers. However, the challenge was met very ably, and in two weeks the subject of concrete was covered, from forming to finishing, from poured-in-place to prestressing. Visits to plants, buildings and bridges were also included. The third week was open for individuals to pursue their own interests. Many of these interests took quite a few of the group to various locations on the continent, among them, and by no means the least, Paris, with its "homey" charms.

The gain in technical knowledge is not the only product from a trip such as this. Old friendships are renewed, new ones made, and a better understanding of the others' customs, problems and aspirations are the inevitable by-products of such migrations. Let's do it more often.

Plaudits go to Jim Zimmerman whose brain child it was, to Dr. Andrew of the British Cement and Concrete Association, who handled operations on "the other side", and to their helpmates who made the exercise a complete success.

Among those who ventured forth were the following members of the Association:

W. H. Milley	C. E. Locke
J. F. Boux	W. A. Corbett
J. E. Whenham	G. A. DePauw
A. M. Bourque	R. H. Banks
W. D. Hurst	D. J. Sampson
E. Lexier	A. E. Macdonald
J. F. Zimmerman	G. J. Foley
W. R. C. Taylor	J. E. Rettie
W. W. Popiel	J. G. Broda
R. Diamond	D. R. Grimes
L. Bookbinder	

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## TRANSFERS

The following have been registered on transfer from other Associations:

K. J. Steele (Ont.), N. S. Kerr (Ont.), H. Meronek (Alta.), D. M. Stewart (Ont.), J. A. Donoghue (Ont.), T. G. H. McKibbin (Ont.), R. G. Hatton (Ont.), F. G. Stewart (N.S.), J. F. Savard (Ont.).

## 17th Alumni Bonspiel

By I. W. THOMAS, P. Eng.

The Bonspiel was held this year on February 29th and March 1st at the Granite, Fort Garry, Fort Rouge and Grain Exchange Rinks.

Winner of the Dr. A. B. Alexander Memorial Trophy was the rink of Medicine Men, skipped by Dr. W. B. McTavish. Playing third was Dr. R. Handford; second, Dr. T. Goodhand, and lead, Dr. E. Stephenson. They defeated the Accountancy rink, skipped by M. Nichol; third, T. Elliott; second, L. Matthews; lead, E. Moore.

In the Consolation Event, Dennis Parsons' Accountancy Rink extra-ended their way to win over M. D. Green and his Engineers. Playing third, second and lead respectively were A. Black, R. King and C. Curtis, for the Parsons rink, and R. Crawford, J. Adam and E. MacKenzie for the Green rink.

Third prize money in the Main event went to the Dentists: Dr. Paul LaFleche, skip; Dr. Dave McCord, third; Dr. Orwell Brown, Second, and Dr. Ralph Connors, lead. Fourth money went to last year's winners, George Weldon and his fellow engineers T. Woodhall, S. Thorvaldson and H. L. Dahl.

Third winner in the Consolations was the Agriculture rink skipped by S. B. Helgason with L. Shebeski, J. D. Truscott and L. E. Evans. Fourth in the event was another Aggie rink, skipped by Walter Romanow with P. H. Westdal, T. V. Cole and H. P. Richardson.

There were 52 entries this year with two rinks dropping out at the last minute. Probably next year there will be a 64 rink bonspiel as there were several late applicants this year whose entries could not be accepted.

Congratulations to the winners, and to the non-winners... better luck in the 18th Annual Alumni Bonspiel.

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## CONGRATULATIONS

To T. N. McLenaghan, P. Eng., of Pine Falls, who has been appointed a Civilian Aide-de-Camp to the Lieutenant-Governor of Manitoba.

To Mr. and Mrs. O. S. Eagleton on the arrival of their son, Donald Stanley, on March 27th.

To Mr. and Mrs. M. A. Gange, on the arrival of their son, Gregory Ruston Frederick, on March 29th.

To Mr. and Mrs. T. N. McLenaghan on the arrival of their daughter, Joanne, on March 31st.

To Mr. and Mrs. H. O. Coish on the arrival of a daughter, Barbara Louise, on March 30, 1960.

# Golf Tournament, Southwood, June 17

Published by the Association of Professional Engineers of the Province of Manitoba  
418 — 265 Portage Avenue, Winnipeg 2, Manitoba

President — W. L. WARDROP, P. Eng.

Vice-President — R. E. CHANT, P. Eng.

Secretary and Registrar — C. S. LANDON, P. Eng.

The Manitoba Professional Engineer is published under the direction of the Bulletin Committee,

Editor: R. C. Sommerville, P. Eng.

Associate Editors: I. W. Thomas, P. Eng.; K. Hallson, P. Eng.; C. R. McBain, P. Eng.; E. Dolhun, P. Eng.

Managing Editor: J. C. Gillespie, P. Eng.

Feature Writers: G. A. Kirk, P. Eng.; W. A. Corbett, P. Eng.

Photographers: G. A. Tough, P. Eng.; D. R. Dawson, P. Eng.

## President's Report

By W. L. WARDROP, P. Eng.

The work of the Engineers Confederation Commission is reported to be progressing satisfactorily. There is a tremendous amount of detail to be worked out before any part of the proposed plan can be finalized. Confederation is not a new subject and it might be of interest to review some of the background leading up to the study which is underway at this time.

The first steps towards conferring a legal status upon the profession of Engineering in Canada, occurred back in 1896 with the inactment in Manitoba of an Act respecting the profession of Civil Engineering. Two years later, a similar Act was passed in Quebec. Because these Acts contained no administrative machinery, they could not be enforced and fell into disuse. About 1922 the Quebec Act was revised to provide for the creation of an administrative council and other necessary provisions which made it conform to the general pattern of Acts brought into effect in the other provinces. Between 1912 and 1918 there was considerable interest in this question of providing legal status for the Engineering profession. In April, 1918, the Canadian Society of Civil Engineers became the Engineering Institute of Canada as it is known today. New branches were created in many cities which made it possible for the idea of legislation to be discussed at meetings and in print in the various provinces.

The Western Provinces were keenly interested in this matter and made representations to the Council of the Institute in the Fall of 1918. As a result of these representations, a resolution was presented to the following Annual Meeting, which called for the setting up of a special committee consisting of one delegate from each of the thirteen branches then existing, with the main purpose of drawing up legislation in the form of a "Model Act" to be submitted to all members of the Institute for approval. The Committee met on April 7, 1919, in the offices of the Institute in Montreal, and after five days, produced the required "Model Act". The outstanding feature proposed in this Act was the creation of provincial associations of professional engineers to be quite independent of the Engineering Institute of Canada. This was a radical departure from the principle of state licensing as developed in the United States. In the Canadian system, the act of registration conveys membership in a corporate body, with a voice in the conduct of affairs in supervision of the profession, where the American system does not.

Throughout the earlier considerations given to the subject of ideal legislation for the Engineering profession, hope was held that eventually Dominion legislation, similar to that enjoyed by the Medical profession, would be obtained. It was with that in view that so much importance was attached to a "Model Act". The results of the several provincial enactments varied so much from the "Model Act" that it was quite apparent that appreciable work would have to be done to bring them into greater harmony.

In 1926, representatives of the Provincial

Associations held a meeting in Montreal. This Committee met for three days and discussed the way the several acts had worked out up to that time, and the reasons for many of their distinctive features. It is reported that the minutes of this meeting covered some eighty-five pages of foolscap, which indicated an exhaustive study of the subject. Other committees of the Institute studied this matter in 1929 and again in 1930. In 1931, the Associations formed a Committee of Four which met in Montreal and affirmed its belief that a Dominion-wide body embracing the entire Engineering profession and all its activities is a practical, ultimate possibility. This Committee also recommended the formation of an Interim Dominion Council, which has now been changed to Canadian Council. The reactions of the several Associations to this report, were so varied that the Committee, after considering them, recommended the formation of a Committee of Eight to carry on the work. This newly-formed Committee of Eight met in Montreal in February, 1933, and its report contained the following resolution: "In view of the expressed views of the Provincial Associations, it is felt that any attempt to create a new national organization embracing technical and social activities, as well as the legislative powers of the Provincial Associations, is inadvisable at the present time, as it would tend to bring the new body into conflict with existing Engineering societies, associations, and organizations." It also recommended the formation of a Dominion Council as the first logical step towards the complete co-ordination of engineering activities at a future and more favourable time.

At the Annual Meeting of the Institute in 1935, a Committee was formed which had as its object "to develop the possibilities of consolidation of the Engineering profession in Canada." It became known as the Committee on Consolidation. The activities of this Committee resulted in the withdrawal of active support to the Dominion Council idea by the Council of the Corporation of Professional Engineers of Quebec, which was opposed to holding a meeting of the Dominion Council until the report of the Institute's Committee was available. The Manitoba Association did not favour a meeting in 1935, preferring first, to continue on its own provincial plan of co-ordination with the Institute, on which it had been working for some time. The other six Associations held a meeting concurrent with the Annual Meeting of the Institute at Hamilton in 1936. The delegates from Manitoba and Quebec attended this meeting with watching briefs only. Dominion Council was established at this meeting, and a joint meeting was held between the Institute's "Committee on Consolidation" and Dominion Council, which resulted in the unanimous acceptance of the terms of the joint memorandum, the preamble of which read:

"We record with satisfaction, an appreciation of the opportunity afforded in Hamilton this day for the first time for a credited representation of all provincial professional associations of Canada (the Association's Dominion Council), and also the Engineering Institute of Canada (the Committee

on Consolidation) to confer for the common good of the Engineering profession." "We feel the opportunity thus afforded to be of such great moment to the Engineering profession in Canada that it must be taken full advantage of. Therefore we desire to place on record the following preliminary conclusion as a basis for definite progress."...

And, now after twenty-five years, we still find the subject of Confederation a primary consideration before us.

The Annual Meeting of Canadian Council is being held in Saint John, N.B., May 11 to 13. The main topics for discussion will centre around the following:

1. Progress Report on Engineers' Confederation Commission.
2. Progress Report on Uniform Professional Engineers' Act.
3. Progress Report on Tariff Item 180E.
4. Progress Report on Uniform Registration Requirements.
5. Miscellaneous Committee Reports.

As your President, I had the pleasure of attending the Annual Meeting of the Alberta Association in Edmonton on March 26th. Alberta has a unique problem due to the large number of geologists working in the Province and the fact that the Alberta membership wishes to give due recognition to this group by changing the name of the Alberta Association to include geologists and geophysicists in its title. A large part of the discussion centered around the change of name and other amendments to the Act. I found this meeting most informative and I feel it is beneficial to have a representative at the Alberta and Saskatchewan meetings, since our three Associations have much in common.

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## Engineers' Confederation Commission

The Co-ordinating Committee of the Engineers' Confederation Commission held its first meeting in Toronto on March 6, 1960, with Mr. J. H. Fox, Chairman of the Commission, in the Chair.

All committees of the Commission were represented by their respective Chairman and/or Vice-Chairman and submitted reports of their activities to date.

The main purpose of this meeting was to give an opportunity to committee Chairmen to discuss the work of their own committee with representatives of other committees and to ascertain that all committees are reasonably in agreement on major issues.

It is reported that the progress made since the first meeting of the Commission in October, 1959, is very substantial and that the work assigned to the various committees is being carried out on schedule. There remains, however, a considerable amount of detail work to be done before any part of the final plan can be published.

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## ENGINEERS IN TRAINING

The following have been enrolled as Engineers in Training:

J. D. Lowood, N. A. Bobey, S. E. Solmundson, H. G. Mazinke, C. C. G. Edgar, O. J. Green, E. P. Hain, R. C. Salmon, P. S. Jawanda, L. B. Sylvester, N. J. Slobodzin, F. D. McCarthy.

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## Employment

The Association office has requests for civil, electrical and mechanical engineers with varying degrees of experience. Would any interested parties please contact the office. All inquiries are treated as confidential.

### 3:30 p.m.—

#### Panel Discussion. The Yard or the Metre — Which?

Continued.

#### Economic Aspects of Industrial Power Plants.

H. R. Wright, M.E.I.C.,  
*Vice-President,*  
Swanson Wright & Co. Engineers Limited,  
Vancouver, B.C.

#### Whitehorse Rapids Power Development.

L. A. Carey,  
Montreal Engineering,  
Niagara Falls, Ont.

#### An Exercise in Operations Research — RCAF Aircraft Maintenance.

Wing Commander A. B. Howell,  
*Staff Officer — Aeronautical Engineering,*  
Training Command,  
RCAF Station, Winnipeg, Man.

### 4:30 p.m.—

#### A High-Pressure Steam Plant for a Modern Paper Factory.

F. W. Buckley, M.E.I.C.,  
*Chief Engineer,*  
Bathurst Power & Paper,  
Bathurst, N.B.

#### Moran Dam and the Fraser River.

R. E. Potter, M.E.I.C.,  
*Consulting Engineer,*  
Victoria, B.C.

#### Management — Horse Trading or Trusteeship?

Lyndall F. Urwick,  
*President,*  
Urwick, Currie Limited,  
Montreal, Que.

## FRIDAY — MAY 27th

### 9:00 a.m.—

#### Liquid Petroleum Gases as Fuels for Automotive Engines.

H. A. Spencer, M.E.I.C.,  
*Associate Research Officer,*  
Industrial Engineering Services,  
Research Council of Alberta,  
Edmonton, Alberta.

#### Application of Microwave Radio Links.

R. W. Wilson, M.E.I.C.,  
*Supervising Radio Systems and General Communications Engineering,*  
Maritime Telegraph & Telephone Company,  
Halifax, N.S.

#### Development of Western and Northern Canada's Mineral Resources.

John Convey,  
*Director,*  
Dept. of Mines & Technical Surveys,  
Ottawa, Ont.

#### Silver Falls Tunnel and Surge Tank Design Considerations.

L. A. Leeyus, M.E.I.C.,  
*Assistant Civil Design Engineer,*  
Hydro-Electric Power Commission of Ont.,  
Toronto, Ont.

### 10:00 a.m.—

#### The Khulna Newsprint Project.

D. P. Wyness,  
*Plant Engineer,*  
Sandwell & Company Limited,  
East Pakistan.

#### Microwave Radio Application to an Electric Utility Load Dispatch System.

E. M. Scott, M.E.I.C.,  
*Assistant Manager,*  
Engineering & Construction Division,  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

#### Soil Problems Encountered in Mining on the Canadian Shield.

R. F. Legget, M.E.I.C.,  
*Director,*  
Division of Building Research,  
National Research Council,  
Ottawa, Ont.

#### Concrete Lining of the Tunnel at Silver Falls G.S.

J. H. Jackson, M.E.I.C.,  
*Construction Manager,*  
Otter Rapids Project,  
Hydro-Electric Power Commission of Ont.,  
Otter Rapids, Ont.

C. T. Bath,  
*Construction Project Engineer,*  
Hydro-Electric Power Commission of Ont.,  
Toronto, Ont.

### 11:00 a.m.—

#### Salient Mechanical Design Aspects of Selkirk Generating Station.

C. W. Hodgson, M.E.I.C.,  
*Director and Chief Engineer,*  
Ewbank & Partners,  
Toronto, Ont.

A. C. Blue, M.E.I.C.,  
*Mechanical Section,*  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

#### Braking of Hydro-Electric Generators.

H. O. Wilson, M.E.I.C.,  
*Chief Engineer, Electrical Div.,*  
Shawinigan Engineering,  
Montreal, Que.

#### Future of Western Canadian Potash.

Dr. W. J. Pearson,  
Saskatchewan Dept. of Mineral Resources,  
Regina, Sask.

#### Development of Power on the Churchill River.

R. W. Davis, M.E.I.C.,  
*Consulting Engineer,*  
Hudson Bay Mining & Smelting Company,  
Winnipeg, Man.

### 1:30 p.m.—

#### An Analytical Procedure for Determination of Natural Frequencies of Machine Foundations.

Dr. George Ford, M.E.I.C.,  
*Head, Dept. of Mechanical Engineering,*  
University of Alberta,  
Edmonton, Alta.

#### Recent Advances in Experimental Stress Analysis.

J. B. Mantle, M.E.I.C.,  
*Head, Dept. of Mechanical Engineering,*  
University of Saskatchewan,  
Saskatoon, Sask.

#### Load and Frequency Control System of the Manitoba Hydro-Electric Board.

K. H. Williamson, Jr. E.I.C.,  
*Communications Engineer,*  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

### 2:30 p.m.—

#### Joints in Precast Concrete Building Frames.

E. M. Rensaa, M.E.I.C.,  
Rensaa & Minsos,  
Edmonton, Alta.

#### The Formation of Continuous Chips in Metal Cutting.

W. B. Rice, M.E.I.C.,  
*Associate Professor,*  
Dept. of Mechanical Engineering,  
Queen's University,  
Kingston, Ont.

#### The Evolution of Large Synchronous and Induction Motors in Canada.

G. W. Herzog, M.E.I.C.,  
*Design Engineer,*  
Synchronous Machines,  
Canadian General Electric,  
Peterborough, Ont.

K. Z. Lukaszewicz,  
*Design Engineer,*  
Canadian General Electric,  
Peterborough, Ont.

### 3:30 p.m.—

#### The Work of the Column Research Council.

D. T. Wright, M.E.I.C.,  
*Dean of Engineering,*  
University of Waterloo,  
Waterloo, Ont.

#### The Potential in the Free-Piston Engine Principle.

Anton Braun,  
*Vice-President and Technical Director,*  
Free Piston Development Co., Limited,  
Kingston, Ont.

#### The Standard Aluminum Sub Station Design.

J. Barnett,  
*Chief Engineer,*  
James R. Kearney Corp. of Canada,  
Guelph, Ont.

Ladies will be welcome at all Functions  
on the General Programme

## Ladies Programme

### WEDNESDAY, MAY 25th

9:00 a.m.—Registration.  
10:00 a.m.—Coffee Hour.  
12:00 noon—Muriel's Room.  
12:30 p.m.—Luncheon (with the men).  
3:00 p.m.—Reception at Government House for Visiting Ladies only.  
6:30 p.m.—Muriel's Room.  
7:00 p.m.—Informal Dinner (Royal Axeandra).  
9:00 p.m.—Muriel's Room.

### THURSDAY, MAY 26th

10:00 a.m.—Tour of the City by Bus.  
12:30 p.m.—Luncheon — "Town & Country".  
Celebrating the Winnipeg Engineers' Wives 20th Anniversary. Fashion Show.  
9:15 p.m.—Muriel's Room.  
10:00 p.m.—Entertainment.  
11:30 p.m.—Coffee and Sandwiches.

### FRIDAY, MAY 27th

10:00 a.m.—Reports of the Engineers' Wives Associations.—Coffee.

### WANDERING PARTIES

We will arrange for the Ladies wishing to shop, visit our Canadian Handicraft House, Art Gallery, Legislative Buildings, Seven Oaks House, Lower Fort Garry.

6:30 p.m.—Muriel's Room.  
7:30 p.m.—Annual Dinner.  
10:00 p.m.—Annual Dance.

### LADIES' COMMITTEE

Mrs. C. V. Antenbring, Convener  
Mrs. D. Stratton, Co-convener  
Mrs. H. Aikens  
Mrs. R. Booth  
Mrs. L. Bunting  
Mrs. H. Hopper  
Mrs. W. D. Hurst  
Mrs. J. Rettie  
Mrs. W. L. Wardrop

# 74th E. I. C. Annual Meeting, Winnipeg - May 25 - 26 - 27, 1960

The following is the advance programme for the E.I.C. Winnipeg Convention. All engineers, whether members of the E.I.C. or not, are urged to attend. Registration commences at 12:00 noon Tuesday, May 24th. The fee is \$5.00 for E.I.C. members and \$6.00 for non-members. Besides the papers, which you will see are outstanding, interesting social events are scheduled, including a dinner Friday at which Max Freedman will speak, followed by a dance. See you there!

## WEDNESDAY — MAY 25th

### 9:00 a.m.—

Registration continues.

### 10:00 a.m.—

Annual General Meeting.

### 2:30 p.m.—

**Design and Construction of Kelsey Generating Station Dam and Dykes.**

R. A. Pillman, Jr. E.I.C.,  
*Sr. Project Engineer,*  
H. G. Acres,  
Niagara Falls, Ont.

D. H. MacDonald, M.E.I.C.,  
*Soils Engineer,*  
H. G. Acres,  
Niagara Falls, Ont.

H. R. Hopper, Jr. E.I.C.,  
*Hydraulic Engineer,*  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

**Design of Industrial Gears.**

R. D. Mutch,  
*Product Engineer — Cranes,*  
Dominion Bridge,  
Montreal, Que.

**The Dunvegan Suspension Bridge.**

T. Lamb, M.E.I.C.,  
T. Lamb, McManus and Associates,  
Edmonton, Alta.

R. N. McManus,  
T. Lamb, McManus & Associates,  
Edmonton, Alta.

**Supervisory and Automatic Control for Winnipeg Unattended Pumping Station.**

J. W. MacLaren, M.E.I.C.,  
*Partner,*  
James F. MacLaren Associates,  
Toronto, Ont.

D. J. Moon, M.E.I.C.,  
*Electrical Engineer,*  
James F. MacLaren Associates,  
Toronto, Ont.

W. D. Hurst, M.E.I.C.,  
*City Engineer,*  
City of Winnipeg, Man.

F. G. Denson, M.E.I.C.,  
*Engineer of Waterworks,*  
City of Winnipeg, Man.

### 3:30 p.m.—

**The Warsak Hydro-Electric Project.**

J. H. Ings, M.E.I.C.,  
*Vice-President,*  
H. G. Acres,  
Niagara Falls, Ont.

**The Application of High Powered Epicyclic Gears for Marine and Industrial Use.**

H. N. G. Allen,  
*Managing Director,*  
W. H. Allen Sons & Co. Limited,  
Bedford, England.

T. P. Jones,  
*Chief Engineer and Manager,*  
Gearing Department,  
W. H. Allen Sons & Co. Limited,  
Worcestershire, England.

**Design and Erection of Structural Steel for the Thompson Project.**

W. H. Bender,  
*Project Engineer,*  
Dominion Bridge,  
Winnipeg, Man.

**Automation in Thermal Power Plants.**

A. R. Scott,  
*Apparatus Department,*  
Canadian General Electric,  
Peterborough, Ont.

### 4:30 p.m.—

**Construction of the Warsak Hydro-Electric and Irrigation Project.**

C. G. Kingsmill, M.E.I.C.,  
*Vice-President,*  
Angus Robertson Limited,  
Montreal, Que.

**The Application of High Powered Epicyclic Gears for Marine and Industrial Use. (Cont'd)**

**Sault Ste. Marie International Bridge.**

C. H. Gronquist,  
*Partner,*  
Gronquist, Steinman, Boynton & London,  
New York, N.Y.

**The Principles of Automatic Control.**

A. Porter, M.E.I.C.,  
*Dean of Engineering,*  
University of Saskatchewan,  
Saskatoon, Sask.

## THURSDAY, MAY 26th

### 9:00 a.m.—

**Engineering Computation in the Chemical Industry Using Digital and Analog Computers.**

V. J. Bakanowski, M.E.I.C.,  
*Principal Computation Engineer,*  
DuPont of Canada,  
Montreal, Que.

R. N. Boyd, M.E.I.C.,  
*Supervising Engineer — Design Services,*  
DuPont of Canada,  
Montreal, Que.

**The Greater Winnipeg Water District's Second Branch Aqueduct and Low Lift Pumping Station.**

N. S. Bubbis, M.E.I.C.,  
*General Manager and Chief Engineer,*  
Greater Winnipeg Water District,  
Winnipeg, Man.

R. C. Sommerville,  
*Design Engineer,*  
Greater Winnipeg Water District,  
Winnipeg, Man.

**A New Canadian Structural Test Installation.**

W. R. Schriever,  
*Building Structures Section,*  
National Research Council,  
Ottawa, Ont.

W. G. Plewes,  
*Assistant Research Officer,*  
National Research Council,  
Ottawa, Ont.

**Design and Construction of Chute-des-Passes 345 KV Transmission Line.**

H. B. White, M.E.I.C.,  
*Sales Development Engineer,*  
Aluminum Company of Canada,  
Montreal, Que.

### 10:00 a.m.—

**The Measurement of Industrial Water Pollution.**

T. W. Beak,  
*Consulting Biologist,*  
Kingston, Ont.

**Benefit Cost Analysis of Greater Winnipeg Floodway.**

C. H. Templeton, M.E.I.C.,  
*President,*  
Templeton Engineering,  
Winnipeg, Man.

**The Structural Behaviour of Highway Bridge Decks.**

S. D. Lash, M.E.I.C.,  
*Head, Dept. of Civil Engineering,*  
Queen's University,  
Kingston, Ont.

B. B. Hope,  
*Research Assistant,*  
Queen's University,  
Kingston, Ont.

**Long Range Planning for the Manitoba Hydro-Electric Board.**

L. A. Bateman, M.E.I.C.,  
*Systems Planning Engineer,*  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

### 11:00 a.m.—

**A Water Supply and Sewerage System for Uranium City, Saskatchewan.**

H. P. Klassen, M.E.I.C.,  
*Chief Municipal Engineer,*  
Underwood, McLellan & Associates,  
Saskatoon, Sask.

**Hydrological Investigations for the South Saskatchewan River Project.**

E. F. Durrant, M.E.I.C.,  
*Prairie Farm Rehabilitation Office,*  
Regina, Sask.

**Use of Test Buildings in Building Research.**

N. B. Hutcheon, M.E.I.C.,  
*Assistant Director,*  
Div. of Bldg. Research,  
National Research Council,  
Ottawa, Ontario.

G. O. Handegord, M.E.I.C.,  
*Officer in Charge,*  
Prairie Regional Station,  
National Research Council,  
Ottawa, Ont.

**Optimum Adjustment of Governors at the Hydro Generating Station of the Manitoba Hydro-Electric Board.**

L. M. Hovey, M.E.I.C.,  
*Assistant to the General Manager—Planning,*  
The Manitoba Hydro-Electric Board,  
Winnipeg, Man.

### 2:30 p.m.—

**Panel Discussion. The Yard or the Metre — Which?**

Panelists to be announced.

**The Economics of an Industrial Gas Turbine Installation.**

Prof. D. Panar, M.E.I.C.,  
*Dept. of Mechanical Engineering,*  
University of Alberta,  
Edmonton, Alta.

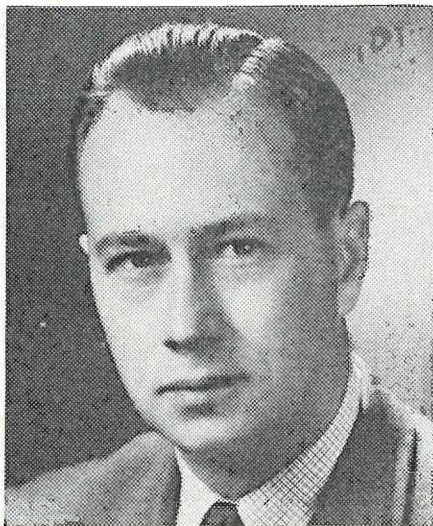
**Silver Falls Project.**

R. A. Forrester, M.E.I.C.,  
*Project Engineer,*  
Hydro-Electric Power Commission of Ont.,  
Toronto, Ont.

**Statistical Quality Control as a Management Tool.**

B. H. Lloyd,  
*Price Waterhouse & Company,*  
Montreal, Que.

## Member of Council



T. E. WEBER  
Member of Council, 1960

It is obvious that water control is the calling of Tom Weber, just elected to the council of this Association. Tom was born in Portage la Prairie during spring flooding on the Assiniboine River in 1923 and he was married during the disastrous flood of the Red River. As Chief Engineer of the Water Control and Conservation Branch of the Manitoba Department of Agriculture and Conservation and Chairman of the Drainage Maintenance Boards, he is responsible for the general supervision and investigation of all water control and conservation works in the province.

Your new councillor is a Past President of the Grain Exchange Curling Club, a member of the session of Silver Heights United Church, a director of Silver Heights Community Club, Past councillor of the United Commercial Travellers and a member of the Soil Conservation Society of America. Engineering activities include service on the Association Social Committee (8 years), Technicians Committee and Legislation Committee. Past Chairman of the Civil Section, Winnipeg Branch of the E.I.C., he is now on the local arrangements committee helping to prepare for the national E.I.C. meeting here this May.

After attending elementary and high school in Portage, Mr. Weber entered the University of Manitoba, graduating in Civil Engineering in 1945. He immediately enlisted for Army officer training in the COTC, being discharged in September, 1945.

He then spent a year at Lingman Lake in northwestern Ontario working on geological mapping and diamond drilling with ECO Explorations. Following a short period as resident engineer on highway construction, he was transferred to the Drainage Office of the Department of Highways in 1946, becoming Assistant Drainage Engineer in 1947. In January, 1956 he took on the dual job of Drainage Engineer and Chairman of the Drainage Maintenance Boards. On the recent reorganization of the government he became Chief Engineer of the Water Control and Conservation Branch while maintaining the duty of Chairman of the D.M.B.

Tom and Hilda Weber have two children: Bryan, 6, and Pamela, 2. His hobbies include curling, coaching of boys hockey in the winter and gardening around his Silver Heights home in the summer. In his younger days, Tom was, for a time, quite a horse fancier. It is reported that when he was 11 years old, he decided to ride a pony from Portage to the family summer cottage at Delta, a distance of 16 miles. The pony had other ideas but 16 hours later, Tom arrived, tired, saddle-sore

and leading the pony in a deep ditch so it could stray no more.

Such resourcefulness and tenacity augur well for the continuing contribution Tom Weber will make to this Association while serving on Council.—R.C.S.

♦ ♦ ♦

## Prof. O. Marantz, P. Eng.

By E. DOLHUN, P. Eng.

It was recently announced at the annual meeting that Professor Oscar Marantz had emerged as one of the successful candidates for a position on council. This announcement was not by any means a surprise to the membership at large. His avid support of the Association as well as his active participation in its endeavours made it quite clear that it was only a matter of time that this event would come about.

Oscar is a native Winnipegger who took his preliminary education at the Daniel MacIntyre High School. Prior to his entrance to the University of Manitoba, Oscar "migrated" to Flin Flon for a period of four years where he worked at several varied jobs. These ranged from clerical work to the underground work of a mucker and an ore-train brakeman.

In 1938 he entered the University intent on an engineering career. The following year, in 1939, he married Miss Mary Matas whom he had previously met through his sister. While attending college Oscar, not unlike many of us, had to work during the summer in order to supplement his income — this included one summer working underground at the Madsen Mine in the Red Lake District.

Upon graduation in Civil Engineering in 1942, Mr. Marantz was appointed to the staff of Civil Engineering at the University. His summers during the next few years were spent on airport construction in the Peace River country. This work sparked his interest in Soil Mechanics and Highway Engineering and therefore in the summer of 1947 Oscar went to the University of Michigan at Ann Arbor to take several advanced courses in that line. The following five summers were spent with the Department of Transport — again on airport construction. His continued interest and research enabled him to attain his Master's Degree from the University of Manitoba in 1954. His subsequent work and interest in this particular line are well known in engineering circles.

As a long-standing member of our Association, Professor Marantz has been on the Board of Examiners since its inception in 1954, and served as its chairman during the first three fledgling years. He is a very active participant in the Association of the Academic Staff of the University of Manitoba (AASUM) and is at present serving his second term on the executive committee. He also takes an interest in the activities of the National Research Council and with the collaboration of Professor A. Baracos presented a soils paper at one of their annual meetings.

Although an extremely active sportsman in his "younger years", as he refers to them, he now concentrates his activities to the "less strenuous" sports of hiking, swimming and golfing.

Professor Marantz's forthright manner and his direct but pleasant personality combined with his great attention to detail should provide added stimuli to future council meetings.

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## Passing Thoughts

The Post Office is taking one hell of a long time to deliver my copy of the Advisory Committee Report on the proposed building.

Congratulations to the Free Press on its re-

cent special supplement on Development of Manitoba. In spite of paragraphs devoted to local engineering firms, they managed to avoid mentioning engineers or engineering entirely.

Wonder how Council's making out on the clamp-down on unsealed plans. Seem to be a lot of big firms using unsealed engineering drawings, and a lot of Federal, Provincial and local government departments accepting them.

Seems to me that one reason why there's not much progress on general acceptance of "P. Eng." is that no one particularly likes the thing. Maybe it would be better if we used "R.P.E." as they do in the U.S. or perhaps R.C.E., R.M.E., R.E.E., etc.

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## BRANDON BRIEFS

By J. B. THORSTEINSSON, P. Eng.

The Brandon Branch of the E.I.C., at a dinner meeting in the Prince Edward Hotel on February 22nd, was honoured with the presence of Mr. J. J. Hanna, president of the Engineering Institute of Canada, who addressed the meeting on "The Engineering Profession's Responsibilities Today in Canada." Mr. Hanna emphasized particularly the Engineer's responsibility in civic affairs. Dr. Landon and Messrs. Wardrop and Antenbring accompanied the president on his visit to Brandon.

On March 24th Mr. Andrew Currie, Provincial Civil Defence Coordinator, addressed the Branch and stressed the point that civil defence merely means the extension of normal services that would be strained in time of stress. The C.D. director said the keynote of civil defence is continuity on all levels in government, in industry and in population. In particular, industry has to take a look at alternate site plans, both from their own point of view and from that of the country and Mr. Currie emphasized that industry has the same responsibility as government to continue functioning in time of emergency. The meeting concluded with a very stimulating question and answer period and it was the general consensus of the members that this meeting was a very timely one in view of the general apathy that exists regarding potential nuclear warfare.

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## FLIN FLON NEWS

By M. N. COLLISON, P. Eng.

A letter has been received from J. A. Haskin, P. Eng., who retired from the Hudson Bay Mining and Smelting Co., Limited last year, telling us how much Joe is enjoying his life in St. Augustine, Florida. His main pastime right now, in addition to doing some shopping and loafing, is the construction of a boat. He reports he is feeling fine and is not putting too much time into the construction of his boat.

W. A. Green, P. Eng., Executive Vice-President of the Hudson Bay Mining and Smelting Co., Limited has been in town for the past week on business, and we have all enjoyed seeing him again.

R. L. Price, P. Eng., is as busy as ever with his singing efforts in local choirs, The Barber Polecats Quartette and the Glee Club. In connection with the latter, he is the co-producer for the production "Oklahoma" that will be staged late in April. As far as the job is concerned, Ron says he is looking hard and steadily for a new mine.

If you will refer to the November issue of *The Professional Engineer* you will note there was a little bit of crowing being done over the fact that we had no snow; however, the weatherman during a recent week certainly took care of that and we have had about the same amount of snow during this period as we have had all winter, so, while your snow shovels in Winnipeg may have been busy last fall, ours were really flying this spring.

## Letter to the Editor

The Editor,  
Manitoba Professional Engineer.  
Dear Sir:

During the past year I have read several articles and letters in your publication regarding the proposed new building. For the record I would like to pass on my observations concerning this matter.

On the surface there would appear to be several reasons as to why a new building is required. The following list presents the main ones as I see them:

1. The present quarters are unsuitable for female staff and too small for the permanent staff.
2. There is no parking available for committee members.
3. The office is too small for committee meetings.
4. The existing office lowers the prestige of the profession.

Suppose we examine these one at a time.

1. Anyone having seen the existing office would have to agree that there is ample room for the existing two occupants. In fact if there were any more I think they would suffer from a feeling of loneliness. As to the observation that the nearest ladies' rest room is on the next floor, I know several businesses where the ladies' rest rooms are not on the same floor as their work and if commercial businesses cannot afford to provide these luxuries I am sure that the Association cannot. I would also like to say that during my visits to the office I did not notice a men's room either.

2. As far as I can determine there are at least two city and two private (one having six storeys) parking lots within short walking distance of the existing office. Perhaps then the real problem is not the lack of parking but the horror produced in our committee members' minds at the thought of walking more than one hundred feet from their cars to the elevator. This would appear to be a general disease of the present human race and not a valid reason for erecting a new building.

3. I do not believe that any of our twelve standing committees requires more than a dozen members to carry out their work. There is room in the existing office for a meeting of this size and if the work load of any committee requires more members than this, I think that that committee should sub-divide into smaller sections. This would overcome the problem of the size of the existing office.

4. I think that the question of prestige is the most serious complaint. What outside people think of the professional engineer affects each and every member. But I am not convinced that because the Association has a brand new modern building that people are going to think any more highly of it. They are just as likely to think we are making more money than we need. The prestige of the Association depends more on the quality of the work of each individual member, rather than on the type of office it has. As far as that is concerned, I doubt whether very many outside people even know that the Association has an office, let alone where it is.

Another common reason for considering a building seems to be that other professional organizations have them. I do not feel that I should spend my money just to "keep up with the Joneses." If they want to spend their money foolishly, let them.

If these are the only reasons that the Advisory Committee will have to offer in their report, then I will certainly vote against the



"Some one told him the punch was watered and he's been checking on it ever since."

building and I hope that other members will consider the above observations and vote likewise.

I would also like to point out that all of these minor problems could be solved equally well by renting some other offices, rather than going to the expense of a new building. Although I have no figures to prove it, I think that the annual charges on a new building would be much higher than the annual charges of renting a new office.

If any of the members can point out errors in my reasoning or provide me with additional information, I would appreciate hearing from them.

—A Professional Engineer.

Editors Note: Any members wishing to reply to the above letter may address their reply to The Editor, Manitoba Professional Engineer, 418—265 Portage Avenue, Winnipeg 2. We will forward them to the writer but unless specifically requested not to, we reserve the right to print them in the following issues of this publication.

### NEW MEMBERS

The following have been registered as members of the Association of Professional Engineers of the Province of Manitoba:

R. J. Bradshaw, D. H. Anderson, E. G. Brown, R. M. Fraser, F. A. M. M. Kahn, T. N. McLenaghan, D. N. Maclean, A. W. Miller, J. T. Mitchell, H. A. Pearson, R. G. Strachan, D. H. Anderson, B. A. Ellis, T. R. Gledhill, W. P. Harland, A. B. Howell, P. Langeman, J. M. Legate, I. D. MacKenzie, J. G. Malus, M. A. J. Matic, H. E. T. North, R. A. Parsons, J. B. Prendergast, M. C. Richard, G. R. Rinfret, W. J. Tishinski, E. G. Willis, W. G. Armstrong, E. H. Balchen, H. S. Banasuik, H. I. Bonne, R. G. Caughey, J. G. Dargerfield, J. J. Dennis, B. A. Ferguson, M. B. Hansen, S. Korbutiak, D. C. Marshall, D. W. Miller, D. A. Oakes, A. F. Potter, H. C. Ryndard, V. G. Shelton, I. Teranishi, A. D. Turnbull, S. Lipkovsky, C. S. Irvine, C. E. Locke,

D. P. Robertson, F. M. McGuire, A. A. MacLeod, B. K. Stinson, N. E. Wilson, P. Yurkiw.

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## Public Relations Committee

By W. N. ISBERG, P. Eng.

As mentioned in the February issue of the Bulletin, the Public Relations Committee plans to re-publish the roster of members originally published late in 1958. It is tentatively planned to bring this list "up to date" every two years and a target date of October, 1960, has been set for the second edition. Postcards will soon be distributed to each Association member and the information mailed back on these cards will be the basis for the entry opposite your name in the new roster. Essentially the same format is planned for the new roster, however, the cover will be a different color to distinguish it from the 1958 edition.

The career advisory programme for this year is well under way, with several talks already completed. Requests for speakers have come in from several schools in towns outside of Winnipeg and we are endeavoring to enlist the support of either engineers living in these areas, or engineers who visit the town on business. We now have copies of a typical text for these talks, as well as the booklet prepared last year entitled "The Engineering Profession", both of which are made available to any person who volunteers to deliver a talk to high school students.

Several other interesting committee projects are still in the planning stages and more information will be forthcoming about these as they develop.

### ROSTER ADVERTISING

Applications for advertising space in the forthcoming membership roster are now being accepted at the Association office. If you wish to book space in this roster please contact the office regarding rates and size.