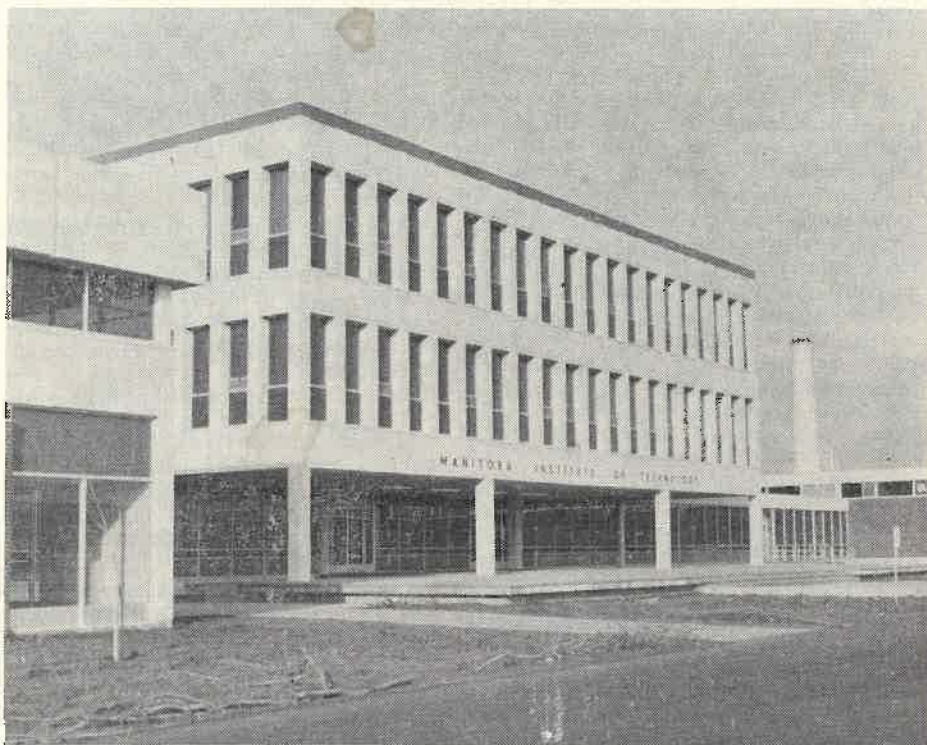




THE MANITOBA PROFESSIONAL ENGINEER

March, 1964

Bulletin of the Association of Professional Engineers of the
Province of Manitoba



MANITOBA INSTITUTE OF TECHNOLOGY — STORY ON PAGE 5.

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NB 1963 Annual General Meeting

By C. R. MCBAIN, P. Eng.

The Annual Meeting of the Association of Professional Engineers was held in the Fort Garry Hotel on November 28th, with President Weber in the Chair. Some one hundred and sixty engineers attended the meeting which consisted of an afternoon business meeting, a pre-dinner cocktail hour, and a dinner. The dinner was addressed by Professor George Ford, Head, Department of Mechanical Engineering, University of Alberta. Prof. Ford's topic was "Engineering Education."

Committee reports were read during the business session. These reports were also published in the Annual Meeting copy of the Bulletin. New members elected to Council were: G. A. Russell and W. H. Finnbogason, while B. Chappell and O. Marantz were re-elected. Officers elected were Ben Chappell, President, and S. J. Borgford, Vice-President.

There was some criticism and there were several suggestions put forward toward the close of the annual meeting. One of the suggestions was that the ballot should outline the committee work done by candidates, because, as the proponents of this scheme maintained, they had no way of knowing if the candidates had done any committee work.

We take strong issue with this viewpoint. Anyone reading this Bulletin during the year would know the names of many committee members. They are all listed at least once during the year. In the Annual Meeting Edition which was mailed to members about the same

time as the ballot the names of two candidates appeared twice and the names of three other candidates appeared once each.

With regard to the complaints about the type and form of the annual general meeting, it should be pointed out that we are bound by the companies Act of the Province of Manitoba, by our own by-laws and by the provisions of the Engineering Profession Act. At the annual meeting officers must be elected, financial statements must be presented, auditors must be appointed. It is the accepted practice in all organizations or companies to report to the membership at this time on the activities during the 12 months just completed.

No. 29 of the Association's by-laws, states that the proceedings of all meetings shall be governed by the rules laid down in Bourinot's Rules of Order. This is a legally constituted organization and its affairs must be conducted in the prescribed manner.

The presentation of reports, financial statements, etc., may make a dull meeting for those who have not participated. Even in our day to day work, we all have to do chores that are routine and not very stimulating. But they are important and they must be done. The Association's by-laws require that 40 members must attend an Annual General Meeting in order to form a quorum to transact the business necessary to the occasion. These meetings may be generally regarded as dull, routine affairs, but four times the number of members required to

form a quorum continue to turn out to the Annual Meeting.

If there are indeed several people who are dissatisfied with any phase of the Association's activities, the format of the Annual Meeting included, they may document their views and present them to Council, or they may sign a request for a Special Meeting. Any individual may present a submission to Council, and any six members may request a Special Meeting.

In this Association we are fortunate indeed to have so many dedicated members willing to give freely of their time and their talents to the affairs of the Association. One has only to attend a Council meeting as a reporter to get some insight into the tremendous amount of work done by the members of Council. And any of you who think an annual meeting is dull should attend a Council meeting and witness the amount of dull, routine and involved, business which Council must transact.

We are not implying that members should not be critical and should not offer suggestions. We feel sure, that Council would welcome any constructive suggestions. What we are implying is that members should be conversant with the facts and should think twice before they level undue criticism at a group of sincere, hard-working dedicated men, whose only rewards are intangible indeed.

The one item which was overlooked at the Annual Meeting was a motion expressing a sincere vote of thanks to Mr. Weber, who devoted an unbelievable amount of time to the affairs of this Association during his term of office, and to the members of his Council and those serving on Committees who so ably supported him. We want to take this opportunity to extend a belated vote of thanks to them now.

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IS AREA REPRESENTATION THE ANSWER?

By C. R. McBAIN, P. Eng.

From time to time we hear various members of the profession express opinions to the effect that: "it would be nice to have a mining man on council", or "there is no one to represent the north on council", or "it seems a shame to have all council members from Greater Winnipeg". Unfortunately the net result of comments like these has been, to date, similar to Mark Twain's remarks about the weather in that everybody talks about it but nobody does anything about it.

A study of the roster of the association will show that some 25 per cent of the total mem-

bership of the association reside outside of the Greater Winnipeg area. Of this 25 per cent probably half, or at least 10 per cent of the membership, reside in Manitoba. The simple fact of their membership is proof of their interest in the association, yet due to the tremendous concentration of membership in the Greater Winnipeg area it is difficult, if not impossible, for these rural members to gain a seat on council.

This is not to suggest that the Greater Winnipeg membership is trying to run a closed shop and is deliberately trying to keep council membership strictly Urban in nature. It merely reflects the obvious fact that people will vote for persons whom they know personally, or are known to them by reputation, and it is usually much easier for persons to get to know people living in the same area and possibly working in the same or allied business than it is to know people living and working hundreds of miles away.

No one seems to seriously question the desirability of including on council a member from outside Greater Winnipeg. To do so would indeed be shortsighted for surely someone from Flin Flon, Thompson, Lynn Lake, The Pas, Brandon, Dauphin, the Whiteshell, or some other area would have a different, but fresh and interesting, opinion on Association work which could only strengthen council.

Surely if such a proposal is thought desirable it should not be too difficult to implement. A method for ensuring the election of at least one and possibly two council members from outside Greater Winnipeg could be worked out. Northern Manitoba should certainly be represented on council, and, with the increasing number of professional engineers working in Southern Manitoba, but outside Greater Winnipeg, representation for them on council is becoming increasingly desirable.

Council would do well to initiate action which will ensure that all areas of the province are given an equal chance to obtain council membership. By doing so, they will be strengthening the association and ensuring that it will be more representative of the thinking of all professional engineers in Manitoba.

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ENGINEERING ACHIEVEMENT

The Winnipeg Tribune recently ran an article about the Manitoba Telephone System's proposed direct distance dialing. According to The Tribune "The city will then have the latest and most up-to-date communication system *not* developed." Congratulations to Bert Muir and his engineering staff.

President's Message

By B. CHAPPELL, P. Eng.

The Association in Review

What are our problems today? How best can your Association meet them? These are common questions and frequently to the forefront.

We will inevitably continue through changes in our business and social environment, and the story of progress in this respect is gradual, and we hope, for the better.

To plan for the future, we must carefully survey our conditions and problems of today; and also review the past to at least evaluate the trends or developments that must proceed forward in an orderly and rational manner; and provide continuity to well-established practices. Engineering, with its knowledge, practices, and ethics, has progressed in a well-defined and orderly way; has maintained a tempo in its various and accelerated branches which can be conveyed in such a way and accepted by those in all phases of its application.

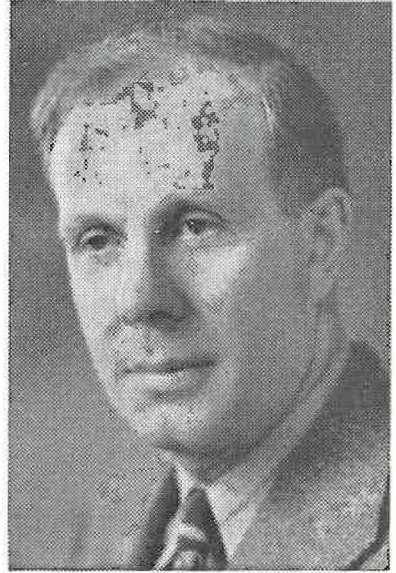
The greater in size an organization becomes, the greater the problems may become; and more difficult to cope with, unless we are equipped in every respect to meet new challenges.

What about our organization in Manitoba? its development? and of course those comments in my opening remarks.

Firstly, the Association is a body of practising Engineers who elect and delegate yearly a Council to enforce the legislative laws pertaining to the practice of Engineering principles, and to those responsible and essential for the protection of life, health, and property of the public.

I recently came across one of the initial copies of the Act and By-laws of this Association, printed in 1921. It is evident, and a tribute to those responsible for this first order among Engineers; it is complete, and reveals also the membership established at that time; names well known and remembered today by many as Engineers who made an outstanding contribution to their profession and the Association.

The story from that date to this would include much of historical interest in the development of the Province, and would also reveal the problems and achievements of the Association. Each Council no doubt faced something new, something baffling, something challenging, and in the evolution gave to us a more



B. CHAPPELL, P. Eng.

solid foundation and secure path to follow in future deliberations and decisions.

A brief digression in the normal Association function occurred in 1951, when the Joint Agreement with the E.I.C. was signed; and now dissolved some 12 years later, at the end of 1963.

The plans and aspirations of many Engineers to accomplish greater unification by Confederation were dispelled also during 1963. This was an opportunity which may not come again for many years, but one which, I am sure, all Engineers will seek with greater purpose of achievement and co-operation.

A closer tie and relationship between all Professional Engineers in Canada is being accomplished by Canadian Council; and with representation from all Provinces, the goal to uniformity in purpose and assistance to the Engineer, individually or in groups, can be better achieved.

The many activities of the Association are served well and unselfishly by numerous Engineers on Committees; each group ready and willing to process assignments as required.

There are matters within the legal scope of our organization which can be readily dealt with; while others require careful consideration, direction, and approval. To this end we will endeavor to meet these problems so that the status of the Engineer, his integrity, and his public image will always continue and remain of a high order.

Manitoba Institute of Technology

T. G. H. MCKIBBIN, P. Eng.

"A girl in the Drafting Office!" you may say. "Never heard of such a thing!" Well the chances are that you may not only hear of such a thing but be quite happy with the idea within the next few years. However, let us go back a bit to see how this and other possibilities in the engineering field, of maybe not so startling a nature, may be explained.

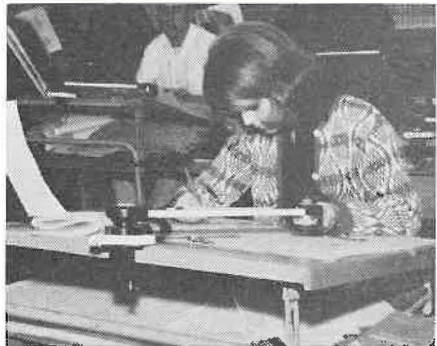
The old Manitoba Technical Institute, a familiar sight to many passers-by on Portage Avenue, was established as a trades training centre in 1946 just after World War II. In this building, surmounted by its well-known water tower, such trades as woodworking, stenography, welding and automotive repair were taught. While these courses were all very well for those intending to follow a specific craft or trade, no training for other forms of employment, particularly in the technological field, existed. It was also becoming increasingly evident during the 1950's that there was a widening gap between the professional engineer and the various contracting trades. In other words, for the engineer to get his ideas down on plans it was necessary for him to act as a part-time technologist in transferring his ideas into a form readily understood by the trades people or craftsmen, thus losing some of his creative potential. Along with those of other provinces, the Manitoba Department of Education realized that there was a shortage of engineering and other technologists. The result has been that the new Manitoba Institute of Technology opened its doors for the first time in September, 1963. Financing of the Institute has been done on a Federal-Provincial Government basis with the Federal Government contributing 75 per cent of the cost of construction. As this cost-sharing agreement was due to terminate at the end of March, 1963, a tight schedule of design and construction had to be adopted.

The Institute is located in Brooklands on 121 acres of land which is bordered on two sides by Notre Dame Avenue and Rosser Road with access to the building complex and its parking lots from either thoroughfare. The complex faces east and is quite close to the north-east side of the Winnipeg International Airport. Viewed from the frontal approach, there is a three-storey building which houses the library, administration areas and the technology section of the Institute. To the left is

the auditorium/gymnasium which has a full-size stage, motion picture projection facilities and ample room for a full-scale basketball court. A combined balcony and running track surrounds the auditorium/gymnasium. The length around the track is one-sixth of a mile. To the immediate right of the central administration and technology block, the low section houses the cafeteria, school of meat cutting, cooking and baking, the student lounges and a garden court. Further to the right is the low outline of the Trades School which houses various trades instruction shops, including the automotive repair training shops and the main boiler room. The boiler room lies at the junction of the main traffic corridors between the Trades School and the Technological Institute and features one wall, partly glazed. The Trades School extends well out towards the east from the front of the building complex and forms a wind shelter to the pedestrian square.

The Architects for the Institute were Moody, Moore and Partners while the General Contractor was Arlington Builders Limited. The Institute is constructed principally of structural steel with the exterior finished in facing brick and pre-cast exposed-aggregate panels. The dark brown facing brick is also used inside the building to line the corridor walls of the Technological Institute and the Trade School.

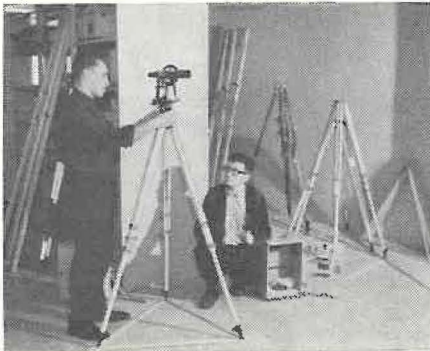
Floors in the corridors are either of terrazzo or vinyl tile, while classrooms and laboratories have lino floors. The floors in the shops in the Trades School section are of hardened concrete while the walls in the shops are of exposed concrete block. In the laboratories and classrooms, particularly in the Technological





Institute, good lighting is assured by the use of many windows and fluorescent lighting units. Two elevators serve the different levels in the Technological Institute and are intended primarily for members of the instructional staff and students with physical disabilities. To allow future extension, the Technological Institute was designed so that a fourth floor could be added in future. The time for this extension will likely be soon as there has been a very encouraging number of students enrolling. Flexibility in operation of the Institute is the keynote and the building was designed on a five-foot module with all ducts being put underfloor. Partitions between classrooms and laboratories are easily moveable so that any particular classroom may be made larger or smaller as the need arises.

As mentioned earlier, a tight construction schedule was necessary and this resulted in the Manitoba Institute of Technology being built under three separate stages of one general contract at a total value of approximately \$5 million. The first stage of the contract was awarded in November, 1961. The excavation of 50,000 cubic yards, the concrete for the foundations, piles and floor slabs were completed during the winter of 1961/62. The whole of this stage



was carried out, following excavation, under a hoarding 400 feet long by 72 feet wide, consisting of two layers of polythene over a wooden framework. About 1,100 combined piles and caissons and 10,000 cubic yards of reinforced concrete were used in the piling stage. The second stage of the contract involved the erection of 1000 tons of structural steel by Bridge and Tank Western and included all the columns and roof joists. The erection of the structural steel was phased-in so that it commenced before completion of the first stage and was to be complete by the end of May, 1962. In May, 1962, the third contract stage was commenced. This included the remaining superstructure work, plumbing, electrical, masonry, sheet metal work, the ceilings and floor finishes. Approximately ninety sub-trades were involved in this stage of the construction. Final installation of finishings, furniture, laboratory equipment and other allied items was completed in time to allow opening of the new Institute for the scholastic year starting September, 1963. This was quite a feat of engineering design and construction since the Manitoba Department of Education had only finalized its requirements for the new Institute in May, 1961.

Electrical service to the building complex is 4160 volts, three phase, underground with two feeders, one for emergency use only. The incoming voltage is transformed via three dry-type unit substations to distribution voltages of 208/120 and 600/347. Local power requirements in the buildings are provided by small dry-type transformers. Power is provided in each room to accommodate electrical requirements present and future; many of the shops and laboratories have safety shut-off switches located around the walls to turn off power quickly in the event of an accident. A flexible laboratory power supply distribution system provides a source of power for instructional purposes and AC and DC power is available with voltages variable from 0 to 130 volts. A separate power supply has been provided to accommodate the X-ray equipment in the Technological Institute where radiological technicians are trained.

There are three separate sound systems in the building performing separate functions. These are the gymnasium/auditorium public address system which also includes the motion picture projection sound system, the general classroom public address system and a telephone intercom system. The general classroom system may be used for announcements to students generally or to only one or two classrooms at a time. Instructors may use the telephone intercom system to contact the general administra-

tion office from a number of strategic locations in the building complex.

The mechanical design of the Institute was based on the fact that all components of the mechanical systems used would provide instructional facilities for the students in the Trades School and the Technological Institute. The main point of interest in the mechanical field is the boiler room which houses two 300 H.P. natural gas/light oil fired packaged fire tube low pressure boilers which are designed to handle the entire heating load. A 300 H.P. gas/oil fired packaged water tube high pressure boiler is used to provide steam for kitchen services and instructional equipment such as the steam turbine test installation. Also found in the boiler room is the central control panel for the building ventilation systems. The water tube boiler has a double function. It provides steam for the building complex and is also used in the instruction of the operation of water tube steam generating equipment.

In the Technological Institute, the X-ray rooms are located on the third floor and are completely lined with lead. The three rooms are lined with 6,000 pounds of lead. Also included in the X-ray section are two dark rooms for the development of X-ray films and plates. In case the reader is curious about the students practicing X-ray techniques on each other, he will no doubt be relieved to know that special plastic shapes, known as "phantoms", are used so that the students are not exposed to harmful radiation.

The new Manitoba Institute of Technology buildings occupy an area of $7\frac{1}{2}$ acres and comprise three main functions; the training of technologists, pre-employment trades training and training of Industrial Teachers. The Superintendent of the Institute as a whole is Mr. Low, while the Principal of the Technology Division is Mr. E. B. Angood. Principal of the Trades School, or Industrial Division is Mr. Wakefield. As this article is primarily intended for the interest of the engineering profession in Manitoba it was thought that some extra attention should be paid to the Technology Division. As mentioned earlier, the aim of the Technology Division is to provide thoroughly trained Technologists who would be able to assist the members of the medical and engineering professions in the day-to-day mechanical operations of testing, calculating, computing and reporting so that the members of the professions may be left free for more creative work. For example, a medical specialist must nowadays lean heavily on medical technologists to perform various laboratory tests associated with successful diagnoses; the specialist certainly would not have time to do all the tests



himself and keep up with the flow of patients. Similarly, the professional engineer, who in the past has been hampered to a more or less extent by routine techniques in design, may now look forward to enjoying the services of a competent technologist.

The Institute now offers two-year courses in Electrical, Electronics, Mechanical and Civil Technologies. In addition courses in Medical Laboratory Technology, Medical Radiological Technology, Library Assistants, Business Administration and Secretarial Science are offered. For the engineering technologies, the entrance requirements are this year being brought up to Grade XII standards with emphasis on English, Mathematics and Science. The entrance requirements are set by the Department of Education, in consultation with the various advisory committees which planned the courses offered. The laboratories in the engineering technologies, particularly in the mechanical and electrical technologies are planned with a view to getting the most educational use out of a minimum amount of equipment; flexibility in arrangements of equipment is very noticeable and it is easy to see that as new developments in the various technological fields occur, the laboratories at M.I.T. will be readily adaptable



to change. The best way for the reader to appreciate this is to take advantage of the guided tours of the Institute.

The Trade School offers a host of courses which do not, of course, approach the level of the technological courses. There are shops where radio servicing, television servicing, welding, electrical wiring, factory woodworking, plumbing and drafting are taught, to name but a few. Commercial cooking and baking are also taught in the Trade School and the Institute cafeteria is run in conjunction with these courses, thus again demonstrating the dual roles of instruction and actual operation which characterizes such an amount of the courses offered, particularly in the Trade School. The drafting is where we came in, remember? Several girls are presently enrolled in the architectural and mechanical drafting courses and it is quite likely they will, in due course, be able to relieve draftsmen in industry and the professions from the drudgery of copy-work. So maybe, Mr. Engineer, you will see a girl, or maybe two or three, sitting in your drafting office one of these fine days! Another course which is taught at the School is barbering; if you feel like having your hair cut, go on out to M.I.T. where it will cost you twenty-five cents to have a student cut your hair, though possibly the School cannot guarantee excellent results all the time! The visitor to the Institute in general will be interested to note that quite a few companies supplying equipment for instructional purposes, did so at or below cost, and several companies donated equipment free of charge. The setting up of the Trades School laboratories and shops was a comparatively easy matter, compared with the Technological Institute classrooms and laboratories, principally because the Trade School management had had quite a lot of experience in its particular field of education in the old M.T.I. on Portage Avenue. The formal training of technologists, however, is a comparatively new concept in Canada and before setting out plans for the new Institute at Brooklands, other Institutes in Canada and the United States were thoroughly studied so as to combine the best possible arrangement under one roof. In addition, several advisory committees were set up to assist in the planning of the technological courses, in the actual physical layout of the laboratories and in the acquisition of the most up-to-date but multi-purpose instructional equipment that could be obtained — not only to save space but precious funds as well. The members of these committees gave unstintingly of their time and energy, completely without remuneration; that busy professional men would devote such energy to such a project reflects their concern that an

adequate supply of trained technologists be available as soon as possible. The following gentlemen comprised the various advisory committees:

Electrical—

E. A. Dillon
A. C. Warrender
Prof. McMath
I. A. Grosney
D. S. G. Ross
E. B. Angood

Mechanical—

C. M. Hovey
W. J. Patton
Prof. Chant
H. Skinner
E. B. Angood

Electronics—

H. Haakon
G. A. Muir
H. T. Wormell
Prof. McMath
E. B. Angood

Civil—

J. Hoogstraten
C. S. Landon
O. Marantz
H. Young
E. B. Angood

This brief article will give the reader but a very general idea of what the new Manitoba Institute of Technology is like and what it is trying to do. The best way to fully appreciate what is happening at M.I.T. is to visit the institute; you will be impressed at what you will see and hear. For example, as mentioned earlier, the Institute is situated close to the International Airport. One might fear that a DC-8 would possibly land on the campus of the Institute by mistake through reception of radio signals emanating from the radio operators laboratories which might jam the airport radio. Not so, for the whole area where radio operation is taught is completely shielded so that no stray radio signals could leave the building. Seemingly little items like this, for example, appear all over the Institute and are cause for reflection by the visitor on the detail which was gone into to produce this latest educational institution in our Province.

In preparing this article, the author is deeply indebted to Mr. E. B. Angood, Principal of the Technology Division, who gave of his time and information most willingly.



COURSES AVAILABLE

The Emergency Measures Organization regularly conducts courses at Arnprior for selected professional engineers and architects, dealing with the effects of nuclear weapons and associated engineering problems. All expenses connected with attending the courses are met. Would any engineer interested in attending one of these courses please contact the office—WH3 6745.

A.P.E.M. COUNCIL MEETING

December 13, 1963

Present at the first meeting of the current year were President Chappell, Past President Weber, Registrar Marantz, and Councillors Borgford, Finnbogason, Harland, Rettie, Russell, and Somerville.

Much of this meeting was taken up in a detailed discussion of the 1964 budget expense items. Council was keenly interested in both the necessity and the amount of the numerous items. In order to obtain more control, it was decided to review the budget after the first quarter, rather than after the normal six months. Concern was expressed, however, that the advantage, if small, be considered in relation to the considerable extra work involved closing the books at what is normally a very busy time of year.

A committee of three was formed, comprising the President, Past President, and Councillor Rettie, to study the functions of the position of Registrar.

The only other item of general interest and not concerned with infractions of the Engineering Act was Council's decision to authorize that a circular be sent informing members on the occasion EIC technical meetings.—B.W.



USE OF SEAL

Section 19 of The Engineering Profession Act reads as follows:

Every person registered under this Act shall have a seal, the impression of which shall contain the name of the engineer and the words "Registered Engineer, Province of Manitoba," with which all estimates, specifications, reports, working drawings, plans and other documents issued from his hand shall be sealed.

MOVING?

PLEASE let us have your change of address.

Please fill this out and mail it to the Association office, 418 — 265 Portage Avenue, Winnipeg 2.

Name.....

Old Address.....

New Address.....



C. R. McBAIN, P. Eng.

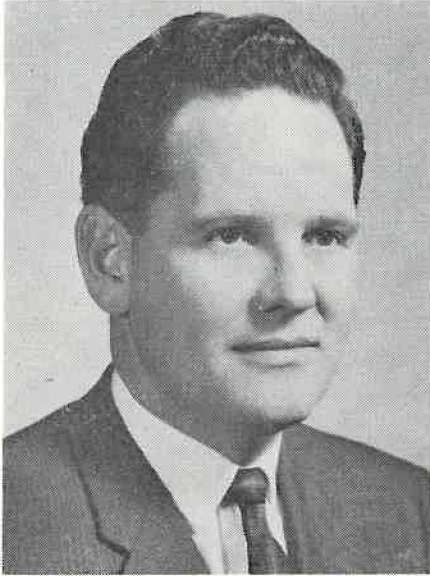
CUB REPORTER TO EDITOR

From Cub Reporter to Editor is the course in journalism carved out by C. R. McBain. Clyde joined the staff of this bulletin in 1958 as a junior reporter and he has worked his way diligently up through the ranks of senior reporter, associate editor, managing editor and now editor.

His editorial style is unique and his method of doling out assignments to reporters has won the admiration of his confreres. (He even smiles as he asks reporters to cover Council meetings).

Clyde's fame is not confined to his curling achievements in Winnipeg. Early in his career he endeared himself to many of the citizens of Portage la Prairie, where his name is still mentioned over the coffee cups in tones of veneration. Last year in Lynn Lake he gained some notoriety by missing the plane which was to transport him to the arms of his wife who was ready to go with him to the annual dance.

Clyde's warm and friendly personality and his quick wit have made him a welcome addition to any group and we are fortunate that he has accepted the appointment of Editor of this Bulletin.—S.J.A.



W. H. FINNBOGASON, P. Eng.

A LUNCHEON WITH W. H. FINNBOGASON, P. Eng.

By A. W. BELL, P. Eng.

Last week when assigned to interview Bill Finnbogason, I suggested we meet over luncheon in order to save time (Bill is a very busy man). I enjoyed both the lunch and the interview and in the process came to know our new councillor much better. What I learned convinced me we have elected a man to council who can make a fine contribution to the conduct of our affairs.

Although Bill is good humoured and easy to get along with, I gained the impression that he holds some very firm views and is not likely to be pushed around. He is a member of the Icelandic-Canadian Club, a group dedicated to keeping alive Icelandic traditions in this country and is very conscious of his heritage. He is very impatient with engineers who treat their profession lightly and he becomes particularly incensed at any abuse of the profession, either by its members or others.

Born in 1923 in Winnipeg, Bill was educated locally, graduating with a B.Sc. in Mechanical Engineering from the University of Manitoba in 1950 after a three-year stint in the R.C.A.F. Upon graduation he took a Graduate Students Training Course with Westinghouse in Hamilton, following which he planned to

continue employment with that company. A trip to Winnipeg in 1952 reminded him that the climate here was much more enjoyable so he accepted an offer to become Assistant Traffic Engineer with the City. In 1955 he was promoted to Traffic Engineer; in 1959 to Streets and Traffic Engineer, and then in 1960 he transferred to the Metropolitan Corporation of Greater Winnipeg, where he was made Streets and Traffic Engineer.

Bill was married in 1944 to the former Nona Smith and they have made their home on Triton Bay in St. Vital. He is a family man (with 3 girls and 1 boy), except during the hunting season when his chief interest lies in hunting ducks. Curling and golf take up only a small part of his leisure time since he finds himself quite busy attending meetings of the many associations and committees to which he belongs. Among these are:

- Western Canada Traffic & Parking Association (of which he was a Founder and First President).
- Canadian Section, Institute of Traffic Engineers (past chairman).
- Canadian Council on Uniform Traffic Control Devices (immediate past chairman).
- Highway Traffic and Co-ordination Board.
- Winnipeg Parking Authority.

and in addition he has served for three years on the Board of Trustees of the First Lutheran Church.

In spite of all these activities, Bill is anxious to devote some of his energies to the affairs of the Association of Professional Engineers. He feels that more engineers should participate in association activities, and become more aware of engineering as a profession. He feels that Council should make efforts to stimulate enthusiasm among the members at large; "part of our trouble stems from poor public relations" he says, and it is his hope that this can be improved in the near future.

Bill is a strong advocate of the establishment of a Professional Engineers Club where members could rub shoulders and become better acquainted with one another. The need for such a facility was clearly demonstrated at the last annual meeting he felt, when various members expressed a sense of discontent over their inability to participate in engineering affairs. A relatively small percentage can act on committees and there is little other chance to participate. While he has not clearly estab-

lished in his own mind what form such a club should take he feels the time is ripe for serious consideration of such a project.

Bill approaches his coming term on Council with enthusiasm and optimism, and I could not but be convinced that we will all benefit from his presence on Council. Good luck to him.

♦ ♦ ♦

COUNCIL MEETING

January 16, 1964

Present at this meeting were President Chappell, Registrar Marantz, and Councillors Borgford, Finnbogason, Harland, and Sommerville.

The first item on the agenda was to consider the investment of the relatively large amounts of money which accumulates in the current account at the bank during the early part of the year when fees are paid. The Association's auditor had recommended that a \$5,000 Guarantee Trust Certificate be purchased to yield $4\frac{1}{8}\%$. This Certificate must be held for a minimum of 30 days, and thereafter can be cashed as funds are required. The auditor's recommendation was agreed to by Council.

Council ratified the Board of Examiners recommendation to accredit several courses of the Royal Military College for the purpose of registration in this Association.

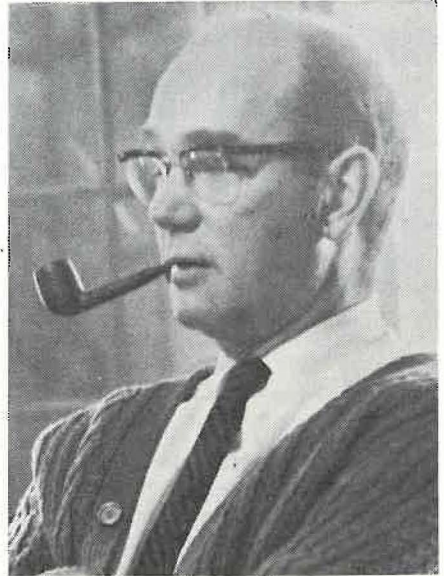
A request had been made for representation of the APEM on the Joint Committee on Building Materials. Similar requests had been made to the Association of Architects and the Winnipeg Builders Exchange. It was decided that the President would ask Mr. Hurwitz to serve on this committee.

It was mentioned that Professor Dolhun had been appointed to represent the Association on the Parks Advisory Board.—B.W.

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SLIDES, PLEASE

Members of the Public Relations Committee are preparing a film strip showing Engineers at work in Manitoba for use in career guidance lectures in high schools. They would like to borrow color slides (any size) showing projects or Engineers performing their duties. The slides will be copied and returned immediately. Please send the slides, a brief description of what is shown, your name and return address to the Association office. Credits will be given in the film strip for all slides used.



"ROCKY" RUSSELL

G. A. RUSSELL, P. Eng.

By R. H. SCHILLING, P. Eng.

George A. Russell is presently Associate Professor of Geology at The University of Manitoba, and he was elected to Council of this Association at the recent annual meeting. Prof. Russell was born and educated in St. Paul, Minnesota. He received the degree of E.M. (Geology) from the University of Minnesota in 1934, and his M.Sc. from Queen's University in 1935. From 1935 to 1945 he worked as a mine geologist in Idaho, Montana, South Dakota, Minnesota, Manitoba and Ontario. He then completed two years of graduate study at the University of Minnesota and was appointed to the teaching staff of The University of Manitoba in 1947.

Since his appointment, Prof. Russell has taken an active interest in engineering education and is a frequent contributor to the Engineering student publication "The Slide Rule." His current field of research is the study of subsurface geology of Metro Winnipeg and its relation to building, construction and water supply. Another project which receives his attention is the application of earth sciences to determine mine locations. He is also collaborating with the Civil Engineering Department in the study of stabilization of clays.

He is married and has four children. His hobbies include painting and figure skating.



Left to right: Ray Crawford, Vice-Chairman of the Social Committee; Mrs. Crawford; Mrs. Chorley, and Vic Chorley, Chairman of the Social Committee.

ANNUAL DANCE SMASHING SUCCESS

Large bouquets to the members of the Social Committee who planned the Annual Dance which was held in the Royal Alexandra Hotel. The festivities started at 6:30 with a reception in the Crystal Ballroom, followed by a fabulous Buffet Dinner in the Colonial Room and the Tea Lounge. Dancing followed in the Crystal Ballroom and the Banquet Room. The music was excellent and members mingled in the two ballrooms. The number of engineers appearing in "black ties" increased sharply over previous years, and this coupled with some lovely gowns worn by the ladies gave a very festive atmosphere to the occasion.



Left to right: Mrs. Weber, Past President Tom Weber, Mrs. Rettie, Councillor Jim Rettie, Mrs. Borgford, Vice-President Scotty Borgford.

From time to time the charge is heard that Council is made up of a "lot of old fogies." It was interesting to note Craig Sommerville and Tom Weber, two of those fogies, doing a very energetic version of the twist. President Ben Chappell and Councillor Jim Rettie were also observed gliding gracefully across the floor with their wives, showing evidence of their participation in the Engineers' Wives Dancing Classes.

Our thanks to Vic Chorley, Chairman, Ray Crawford, Vice-Chairman, and the other members of the Social Committee, for a most enjoyable evening.—S.J.A.



At the Annual Dance (front row, left to right): R. C. Sommerville, Mrs. Sommerville, Mrs. Hoogstraten, Mrs. Chappell, Mrs. Finnbogason, W. H. Finnbogason; (back row): J. Hoogstraten, B. Chappell.



COUNCIL MEETING January 8th, 1964

Present were President Chappell, Vice-President Borgford, Registrar Marantz and Councillors Harland, Rettie, Sommerville, Hoogstraten, Finnbogason and Russell.

The accounts for the last three months of 1963 were presented to council and approved.

Council approved the granting of licenses to five persons, enrolled two engineers-in-training and accepted one transfer and eleven applications for registration. Two applications for registration were deferred pending further information of the applicants' experience.

—R.S.

Flin Flon News

By M. N. COLLISON, P. Eng.

A. L. Parres, P. Eng., reports that he is very busy with several prospective mines and so has been keeping himself well occupied with his business.

G. J. J. Mould, P. Eng., along with George Kent, P. Eng., and Mrs. Kent, recently spent three weeks in Skelleftehamn, Sweden, assisting Bolidens Gruvaktiebolag in starting up a new zinc fuming plant. Geoff has just returned via Stockholm, Copenhagen, Paris and London. He said his visits to these places were enjoyable, the weather was wonderful, and he is glad to be home. The Kents, who returned earlier, reported a wonderful trip, which included a visit in London en route and in Rome

and Brussels on the return trip. They report that they experienced the same mild weather in Sweden as we have been having here and, also, a very enjoyable visit with Mr. Eric Austin, P. Eng., and Mrs. Austin while in Rome.

This latter couple were on their way to southern Africa where their plans included an extended tour of various mining properties. A recent letter from Mr. Austin reports that these properties have been extremely interesting and that they are really enjoying their visit. They are now in Johannesburg and expect to be away for another month.

S. F. Liss, P. Eng., has been in Winnipeg for several weeks undergoing medical treatment.

R. F. Pearson, P. Eng., underwent surgery early in December for the removal of his appendix. Frank reports he is feeling fine and is back with his first love, square dancing.



ENGINEERING RINK WINS ALUMNI BONSPIEL EVENT

The R. J. Byers Engineering Rink won the Consolation Event in the recent University of Manitoba Alumni Bonspiel. Personnel of the rink was as follows: Clyde McBain, Skip; Bob Byers, Third; Ken Jardine, Second; Charlie McIntyre, Lead. They defeated another fine Engineering rink ably skipped by George Tough in the Final. Personnel of the Tough rink included: George Tough, Skip; Bob Kirk, Third; Al Buchanan, Second; Glover Anderson, Lead.



MEMBERS OF THE 1963 COUNCIL TAKEN AT THE ANNUAL MEETING, NOV. 28, 1963 (Left to right) — R. Noonan, B. Chappell, S. J. Borgford, O. Marantz, J. R. Rettie, T. E. Weber, R. C. Sommerville, R. T. Harland (Missing from the picture: J. Hoogstraten, R. E. Chant).

COUNCIL MEETING

The second meeting of Council for 1964 took place on February 8th. The members present were President Chappell, Registrar Marantz, and Councillors Borgford, Sommerville, Russell, Finnbogason, Harland, Weber, Rettie.

Considerable time was devoted to assessing applications for Professional Engineering membership. Two applications submitted by geologists were referred to the Board of Examiners for further study. Two former members were reinstated, two members were admitted on transfer from other Associations and an Engineering Pupil and an Engineer in Training were enrolled.

Council gave approval to the Canadian Council proposal for the establishment of a National Accreditation Board. Accreditation was given to the course in Civil Engineering given by the Royal Military College at Kingston.

Council agreed to make a contribution as a patron to the student publication "The Slide Rule" and also agreed to pay for part of the cost of refreshments for students at the Kipling Ritual Ceremony.—R.H.S.

NEW MEMBERS

The following have been registered so far this year: R. Reynaud, M. Coodin, P. M. Cook, K. G. Courage, E. D. Forsyth, C. W. Jack, T. J. Partridge, C. F. Ripley, G. P. Thomas, L. P. Williams, L. L. Charriere, R. G. Hunter, W. M. Cardigan, L. A. Citulec, E. J. Crowther, D. M. Davison, L. J. Eibner, H. B. Elder, G. R. Kendall, J. A. MacKenzie, A. Melnick, M. J. Minor, W. W. Papove, W. A. Reid, J. A. Sharp, R. Shortreed, G. D. Smith, R. H. Whitehouse, G. K. Yuill, G. W. Laycock.



ENGINEER IS CURLING CHAMP

Congratulations to Harvey Mazinke, P. Eng., and Engineer in Training H. Martel, who were on the Manitoba rink at the Canadian Curling Championships at Charlottetown, having won the Manitoba Championship earlier.

COMMITTEES 1964**SOCIAL—**

V. W. Chorley, Chairman; R. S. Crawford, Vice-Chairman; D. R. Grimes, L. S. Earp, A. G. Burrows, J. E. Scotten, R. H. Zimmerman, C. A. Roylance, C. W. Alexander, J. A. Caverly, B. P. Menlove.

PUBLIC RELATIONS—

G. T. Trotter, Chairman; R. R. Dutka, J. G. B. Iliffe, A. Soroka, G. R. Thompson, C. J. Goodwin, J. W. J. Lewis, R. M. McIntosh, A. F. Eshmade, C. Burgoyne, R. H. Drysdale.

AWARDS—

T. E. Weber, Chairman; R. E. Chant, C. S. Landon, W. L. Wardrop, L. A. Bateman, N. S. Bubbis.

SALARY—

D. S. G. Ross, Chairman; F. G. Denson, G. C. Durham.

MEMBERSHIP—

R. Hood, Chairman; D. J. Sampson, E. P. Debusschere, H. C. Sage, H. R. Skinner, H. Dashevsky, J. W. E. Brako, N. B. Cameron, T. J. Monastyrski, P. E. Ebbehoj, R. H. Junker, D. S. Simons, N. Blaine.

BULLETIN—

C. R. McBain, Chairman; I. W. Thomas, G. R. Kirk, B. Whitfield, A. W. Bell, R. M. Stokes, T. G. H. McKibbin, E. A. Speers, G. T. Trotter.

ADVISORY—

J. D. Adams, Chairman; A. Baracos, E. E. Robertson, J. E. Whenham, M. J. Gobert, G. R. Reshaur, C. P. Wright, R. W. McKnight, H. F. Burns, G. Schotch, R. S. Williams.

BOARD OF EXAMINERS—

A. H. Pask, G. A. Russell, S.G. Anderson, R. A. Johnson, C. P. Bennett, C. R. Bouskill, M. J. Lupton, A. J. Carlson, E. Dolhun, G. C. Davis, R. Schilling.

LEGISLATION—

R. T. Harland, Chairman; T. E. Storey, S. Barkwell, R. Noonan, E. S. Magill, H. Young, J. S. Roper.

ENGINEERING TECHNICIANS—

A. C. Warrender, Chairman; A. Penman, M. Del Begio, J. W. A. Godfrey, C. M. Hovey, H. W. Grant, A. H. Pask, J. T. Atchison.

STUDENT LIAISON—

E. F. Mackenzie, Chairman; A. Priestley, A. G. Burrows, R. W. Haywood, L. W. Blackman.

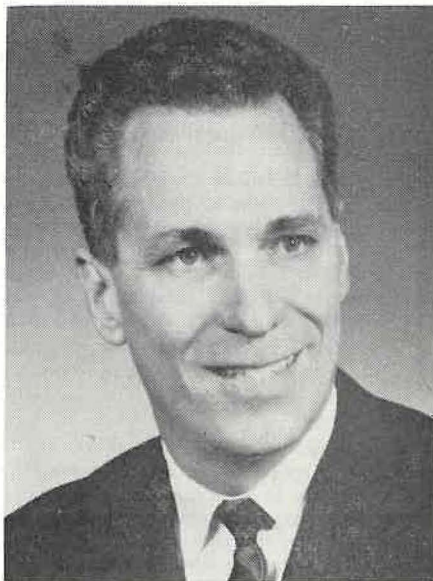
CONSULTING ENGINEERS—

A. G. Moffatt, Chairman; J. L. Greer, G. E. McLure, A. A. Laughlin, R. Hugo, A. O. Dyre-grov, M. Mindess, V. S. Buckler, R. E. Scouten.

SPORTS—

R. J. Byers, S. Goodbrandson, L. R. McInnis, H. Wilson.

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**ENGINEER ELECTED PRESIDENT
OF ARCHITECTS**

J. E. WHENHAM, P. Eng.

The Manitoba Association of Architects
Recently held an annual meeting here
They needed a first class President,
So they elected an Engineer.

J. E. Whenham, P. Eng., was elected President of the Manitoba Association of Architects at their annual meeting held in January in Winnipeg. Jim has served this Association as a member and Chairman of the Advisory Committee and as a member of the Engineers-Architects Committee. He is a most capable and genial engineer and we are pleased to note his recognition by a Sister Association.

YOUR IDEAS PLEASE!

The various trade fairs and exhibitions now being held in this Province help to keep the public informed of newly designed and improved manufactured items. However little or no mention is made of the Engineering Profession whose resources are invariably in some way or other involved.

We would suggest therefore that an effort be made to show the public how vast is the Engineering Profession's field of endeavour.

This could perhaps be accomplished by means of a booth displaying at these fairs and exhibitions a collection of photographs illustrating the thousand and one fields of engineering. Such a display would require a focal point which would at once not only attract John Public's eye but would also give him some feeling for the vastness of the Engineering World.

So far our discussions of this project have been only of a very preliminary nature. We do however feel that some sort of symbol is required to act as the focal point and that such a symbol should be three dimensional and, possibly, mobile.

The Public Relations Committee would like to have your ideas as to the form such a symbol should take. How do you view the Engineering Profession? We would greatly appreciate it if you would spare us a few minutes some time to put your ideas down on paper and send them to us at the Association's office.

G. T. TROTTER, P. Eng., Chairman,
Public Relations Committee.



Some criticism of the conduct of our affairs was offered at the Annual Meeting. We are not able to find on the lists of committees the name of any of those who were airing their grievances. Perhaps part of the answer lies here. If those people who feel there is room for improvement would volunteer their services, they might be able to render a much more useful service to the Association and to the profession than can be done by a few words at an annual meeting.

It is very easy to find fault, particularly when one is in possession of only a few facts. It is not so easy to serve.

The suggestion that the business portion of an annual meeting should be livened up makes just as much sense with our Association as it would make at the annual meeting of shareholders of General Motors. Interspersed with the business meeting was a coffee break, and it was followed by a stimulating cocktail hour and a provoking address by an eminent Canadian educator. These would seem to combine

to make a worthwhile few hours for intelligent educated professional men.

SIDNEY J. ARMSTRONG, P. Eng.



Article 27 of The Engineering Profession Act reads as follows:

SUSPENSION AND EXPULSION

Disciplinary Powers of Council

27. (1) The Council may, subject to the by-laws, reprimand, censure or suspend or expel from the Association any member guilty of unprofessional conduct, negligence, or misconduct in the execution of the duties of his office, or convicted of a criminal offence by any court of competent jurisdiction, but shall not take any such action until a complaint under oath has been filed with the registrar and a copy thereof forwarded to the member accused. The Council shall not suspend or expel a member without having previously summoned him to appear to be heard in his defence, nor without having heard evidence under oath offered in support of the complaint and on behalf of the member, if any. The Council shall have the same powers of taking evidence compelling the attendance of witnesses, the production of books, papers and documents and the punishing for contempt or the failure to comply with the orders of the Council as a commissioner appointed to hold a public enquiry has under "The Manitoba Evidence Act." All evidence shall be given under oath and taken down in writing by the registrar or by a reporter duly sworn.

Appeal

(2) Any member so suspended or expelled may, within thirty days after the date of the order of resolution of suspension or expulsion, appeal to a judge of the Court of Queen's Bench from such order or resolution, giving seven days' notice of appeal to the Council, and may require the evidence taken to be filed with the proper officer of the court, whereupon such judge shall decide the matter of appeal upon the evidence so filed and confirm or set aside the suspension or expulsion, without any further right of appeal; and, if the suspension or expulsion be confirmed, the cost of the appeal shall be borne by the member suspended or expelled.

Prohibited from Practice

(3) Unless the order or resolution of suspension or expulsion is set aside on the appeal or the judge or the Council otherwise orders, the member so expelled shall not engage in the practice of professional engineering in Manitoba or the member so suspended shall not practice until expiry of the period of suspension.

No Practice Pending Appeal

(4) Pending an appeal the member so suspended or expelled shall not practise. S.M. 1935, c. 13, s. 27 am.