



THE MANITOBA PROFESSIONAL ENGINEER

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Province of Manitoba



CASSETA, ON EXHIBITION AT THE C.N.E. TORONTO
(See Story on Page 6)

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WINNIPEG, MANITOBA, SEPTEMBER, 1965

President's Message

By S. J. BORGFORD, P. Eng.

A consulting engineer remarked to me that he felt the Association should be directed more to the needs of the Consultant. Now he says, it is too 'Employee-Engineer' oriented. The Consultant is in direct contact with the public and is financially liable for his work.

An Employee-Engineer remarked that he felt the Association should be directed more to the needs of the Employee Engineer. Now he says it is too 'Consultant' oriented. The Employee-Engineer forms the bulk of the membership and the Consultant only a small percentage.

Some who are eligible for membership but are not members say "Why should I join—what good will the Association do for me?"

Some, who are not professional engineers feel that there is discrimination because they are not allowed to become members without writing exams.

Briefly, the main purpose of the Association is the protection of the public. This is the underlying theme of all our actions. The term 'professional' implies that all our activities should have this high intent.

The Association of Professional Engineers was chartered to administer the Act. It is their duty, through Council to set educational and practical standards for admission to the Association, to accept members into the

Association and to maintain a register of its members. This gives the public a gauge of the level of responsibility of the Engineer. It is a relative gauge and the standard is ever-increasing.

Before there was an Act anyone could represent himself as an Engineer making reports or designs. The public had no assurance of the competence of the person. Today, the term 'Engineer' is respected because it has earned a reputation, it has been protected by the Act.

It may well be that the Association should consider the desirability of having members take additional formal studies every three or four years in order to maintain their licence. Continuing education is a 'must' to keep abreast of new development.

The remuneration for the Professional Engineer should be sufficient to allow thorough workmanship on the client's project, to allow the engineer time on keeping up to date, on reference courses, new courses and attending conventions of his specialty, and to allow the Engineer to maintain a proper relationship to the Community.

Continual interest in the Association by its members will ensure its proper development, and along the lines they desire.

**MEMBERS—PLEASE?
JOIN—YOU HAVE TO!**

Lately there has been a great deal of discussion in these columns, in the Council meetings and elsewhere on the problem of membership and how we can increase our numbers to offset the drastic increase in resignations. Faced with the first reduction in total membership in nineteen years coupled with the highest prospective budget, our Council and ourselves are facing a serious problem which must be solved. Either membership increases or services must be curtailed.

Having identified the problem let us now, in true engineering style, examine some possible solutions: Among the suggestions I have heard has been an "every member canvas" to seek out all prospective members and extoll to them all the virtues of the Association — the two fine social dances, the Spring/Fall Golf meets, the special annual meetings and most of all, the fellowship of association. Sounds like a good idea? — Hogwash! I say all these so-called virtues are nothing but Fringe Benefits and have really nothing to do with the main purpose of this Association.

Now before you all start shouting I suggest you read the small pamphlet you received when you first joined. For the benefit of those who may have misplaced theirs, the title on the pamphlet reads "Association of Professional Engineers of the Province of Manitoba." Underneath is a replica of our seal and in small print these profound and extremely important words: (*Founded by Special Act of the Provincial Legislature to administer the terms of "The Engineering Profession Act" being Chapter 38, 1920, of the Statutes of Manitoba, repealed and revised by Chapter 13, SM 1935, and Chapter 63 of the Revised Statutes, 1940*). The purpose of this Association could not be stated more concisely than that.

What has this to do with membership? Two of those "terms" read as follows: "Only those persons who are members of the Association or who have received a licence from the Council as hereinafter provided, shall be entitled within the Province of Manitoba to engage in the practice of professional engineering, or to take or use the title of professional engineer or any abbreviation thereof."

and

"Except as herein otherwise provided, no person shall knowingly employ as a professional engineer or for any work which requires the services of a professional engineer, any person who is not a member of the Association or who is not the holder of a licence issued pursuant to the provisions of this act. SM 35 C13 S20."

The Act goes on to define the "practice of professional engineering" or "practice of engineering" and includes a list of work covered by it. If there are any "prospective members" in the Province of Manitoba and if they are "practising engineering" in accordance with the definitions and work list forming part of the Act, then action should be taken both against the individual and against the organization employing him regardless of whether or not that organization is individual, partnership, small business, corporation or government. Until such a time that the Association has ferreted out, identified and corrected each and every infraction of this Act, we, the members, can not justifiably consider ourselves able administrators. Nor can we "back out" by saying it is the responsibility of Council, for the Act states as follows: "Any information for an offense against this Act or the Bylaws of the Association may be laid by any member of the Association, or by any person appointed by the Council. SM1935 C13 S35.

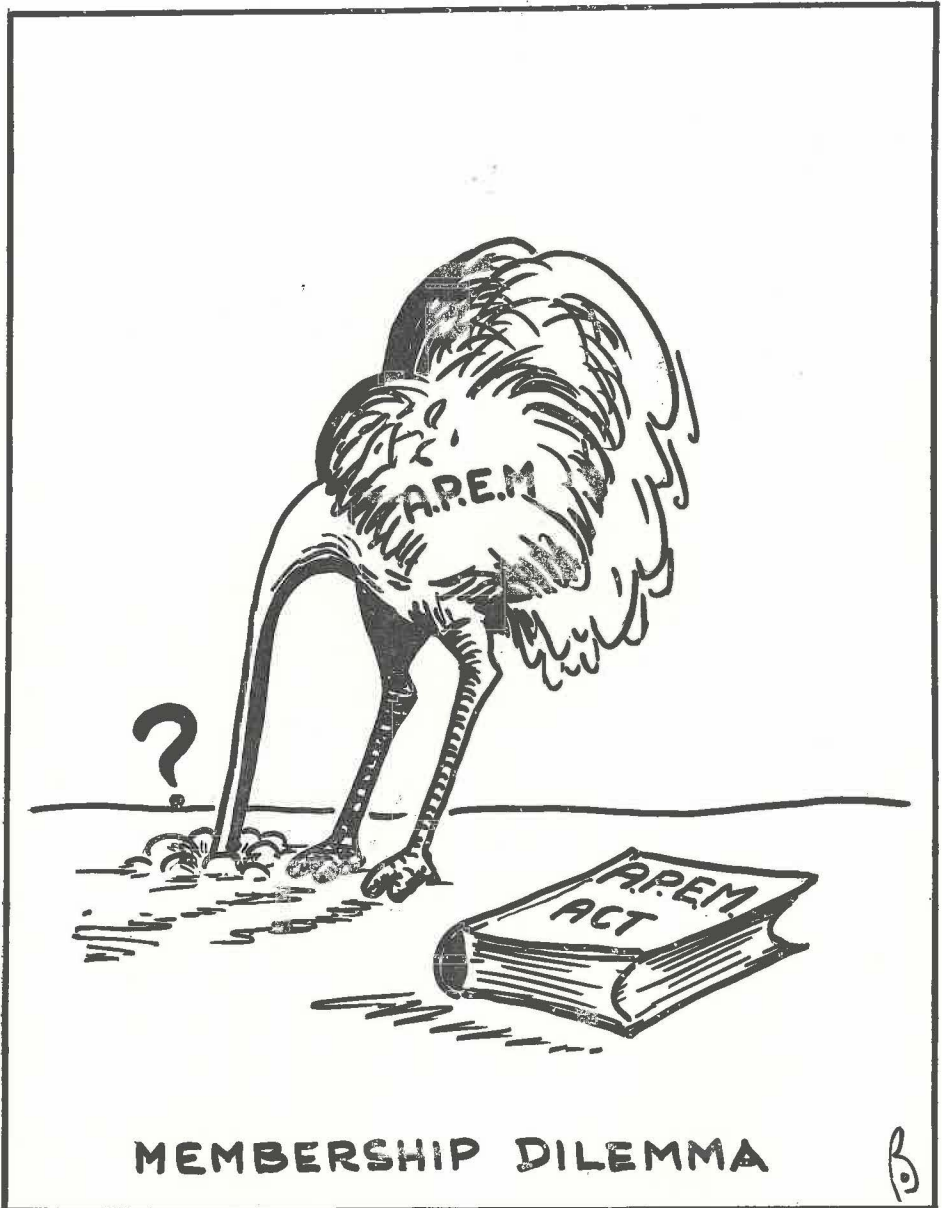
So there, gentlemen, are the basic facts of the case. If we wish to increase membership and if we wish to have the respect and recognition of the public, then I suggest that we start by identifying every position within the Province of Manitoba that is covered by the Act and enforcing the terms of the Act as they are written. The Act is there, the rest is up to us. — G.R.K.



WHITHER A.P.E.M.?

It is becoming increasingly apparent that money talks in a loud clear voice, with engineers. At the Special Meeting called in the Fall of 1964 to consider the proposals to increase the annual fee from \$15.00 to \$25.00 and the registration Fee from \$20.00 to \$30.00, membership stood at approximately 1400 and it was anticipated that we would have over 1650 members in 1966. The following figures will indicate the effect the fee increase has had on both the number of members and registrations:

	No. of Members at Year End	No. Registered
1955	609	67
1956	832	256
1957	884	96
1958	977	118
1959	1089	140
1960	1147	101
1961	1221	111
1962	1288	121
1963	1356	116
1964	1397	128
1965 (July 31st)	1306	53 to July 31st (end of third quarter)



In 1955 the registration fee was \$25.00 and the number registered was 67. In 1956 the registration fee was lowered to \$12.00 and registration jumped to 256.

While registration fees and annual fees in other professions are in some instances more than four times the amount paid in this

Association, the above figures would seem to indicate that this Association can only thrive and grow if both the annual fee and the registration fee are kept at a very low figure.

What course is then to be followed? Should the fees be maintained at their present or higher levels and growth be retarded or should

the fees be reduced in an effort to recapture former growth trends? Is this to become an Association of only those engineers who are legally required to practise, paying high fees to furnish the funds required for the operation of the Association, or is it to revert to its former position with moderate fees, being an Association embracing all eligible engineers whether they are practising, retired, out of province or working under direct supervision?

In the 12-month period from July 31, 1964 to July 31, 1965 this Association lost 212 members or approximately 15%. If this trend is allowed to continue, those who remain will be faced with the prospect of another fee increase in order to provide operational funds.

—B.W.



VACATION TIME FOR ENGINEERS

Members of this Association spent their vacations in divergent ways ranging from a quiet fishing excursion to a world tour. Ray and Pearl Williams went to Japan and Hong Kong in the spring. Ray spent the summer putting the finishing touches on his totem pole and seeing that his wife got their garden into such fine shape that they won 2nd prize in the Free Press metropolitan home grounds contest. George Balacko and his wife flew to Montreal for some gay night life.

Bill Lynn and his wife had combined "separate" vacations. She went with him to Clear Lake for a week while he golfed and then he went with her for a week to Minneapolis while she indulged in her favourite sport, shopping. The Antenbrings flew to Australia in the early spring. Ray Jonasson spent most of his vacation looking for golf balls at Falcon Lake.

The Hoogstratens, Retties, Harlands and Chappells spent four relaxing days at a quiet retreat in the pines. Peg Hoogstraten proved to be the horseshoe pitching champ. The Ed Magills went to a lodge at Sioux Narrows where they determined that the rain which fell there looked very much like the rain which fell in Winnipeg.

Lou Earp and his family returned from a vacation at Clearwater Bay in a blaze of glory or in a blaze anyway. On the home-ward trip they got as far as Grant Avenue when smoke began emerging from under the hood of the car. Lou quickly evacuated his wife and four children, the fire department was summoned and they doused the flames that were emerging. It is rumored that tenants in a nearby apartment block are looking for a well-tanned mystery lady who dashed into the block and set off the fire alarm thinking it would summon the fire department

only to find that it brought the tenants rushing ino the street clutching their stocks, bonds, jewels and other valuables.

Bill Hutchinson took his family to Clearwater Bay where he spent the time painting the camp and fishing without success. He managed to pilot his family back to Oak St. in a less dramatic way than his neighbor, Lou Earp.

Curious as to what those engineers did who managed to get vacations, Charlie Ripley took his family to the Whiteshell for a weekend and came home both impressed and envious. John Lewis took his family on a camping trip to the West Coast, travelling the Canadian route both ways. He reports that he was in Vancouver for the last day of fine weather for this year (Vancouver Chamber of Commerce, please note) and has decided that he is mentally ready to retire to the Okanagan Valley immediately, however since he is not financially quite ready for such a premature retirement, he is going to investigate post graduate courses in orchard engineering.

Eligible Bachelor Ken Courage drove non-stop to Miami and then flew to Jamaica to watch the bathing beauties.

Boris Hryhorczuk, being a real family man, is saving his holidays for duck shooting season.

Glover Anderson combined business and pleasure and pleasure and pleasure on a trip to Monaco. Unfortunately losses at roulette are not deductible for income tax purposes.

Ivor Cross found himself to be the only Canadian among 250 passengers on a Canadian boat travelling up the west coast.



NEW MEMBERS

The following have been registered as professional engineers: J. A. G. Brown, R. S. Phillips, W. D. West, R. L. Buckley, H. E. Martel, E. C. Sherwin, R. B. F. Watson, T. H. Young, R. F. Gee, N. Orr, P. B. Lawrence, W. Burnyiuk, A. C. R. Albery, W. J. Aspinall, E. B. Clark, M. A. Gifford, R. G. Hilker, P. E. Jarvis, M. T. Kostelnyk, G. C. Koch, R. A. Baumgartner, F. M. Szmigielski, R. C. Adams, A. A. Allart, J. S. Archer, L. T. Baydack, J. W. Bradstock, G. W. Crabtree, B. C. Davey, M. T. Eastwood, L. R. Howson, B. R. Jones, T. J. Judge, R. Kahl, W. G. McKay, R. D. McLatchy, N. W. Peitsch, R. Petri, M. R. Provart, R. S. Solmundson, B. F. Thompson, R. A. Baturin, J. B. Black, W. H. Kauk, M. W. Leobold, L. K. Lyle, W. K. Mann, D. A. K. Moir, A. L. Strang, H. B. Wall, G. C. Koopmans, V. Kambersky, R. G. Zahalan, H. H. Bush, F. S. Gamey, B. M. Rotoff, D. G. MacLennan, D. M. Heys, K. R. Craig.

Plastic Houses

By E. A. SPEERS, *P. Eng.*

With the advent of plastics, particularly the foamed plastics, a new dimension has been added to the techniques available for architectural design and building construction.

Free-form concepts of structural design, complex curves and convolutions are generally recognized as the creative architecture of the future. While reinforced concrete has in the past been recognized as the logical material to obtain these configurations, its real potential has not been realized due to the need to construct wooden preforms.

Light weight preforms may be required in forming foamed plastics but these may range from permanent wooden moulds to collapsible air-inflated rubber or plastic forms.

Rigid urethane foams can be produced in varying controlled densities. At two pounds per cubic foot it represents the most efficient insulating material known. At twenty pounds per cubic foot density the elastic modulus in compression approximates 20,000 psi, while the compressive strength approximates 800 psi. The compressive strength and other physical strength properties vary with the type of foaming system. Knowing the density and compressive strength values for a given foam, the compressive strength of that type of foam at another density can be predicted from pre-ferred curves.

Foams available commercially exhibit various reactions under varying conditions of heat and humidity. Nevertheless it is possible to formulate urethane foams showing a minimum of change over wide conditions. One fire resistant formulation for use in motel units being fabricated as "Cassetas" by Northwest Design & Fabrication Limited at its plant in Transcona, shows less than 5% change in repeated heat cycles from room temperature to over 220°F and no detectable change from room temperature to -70°F.

When rigid polyurethane is foamed between rigid sheets such as fiberglass-polyester skins or in panel constructions utilizing plywood or asbestos, a strong structural member is formed having a high insulating value.

The "Casseta" design is an elliptical arch. To meet the Building Code requirements, various tests were undertaken by Erwin Weiszmann & Associates, structural and civil engineers. Loads due to snow were simulated

by sandbag loadings. Snowload requirements in Canada vary considerably from, say Glacier, B.C. at 129 psf, to a design snowload requirement for Winnipeg of 36 psf. Loadings of 920 sandbags representing 172.5 psf, showed a reported maximum deflection of 7/16" total vertical deflection which proved to be elastic deformation on unloading after a 21 day period.

Loads due to wind were simulated using four Viscount aircraft engines at the Winnipeg International Airport. The National Building Code of Canada (1960) specifies wind loads for corresponding buildings in Winnipeg of 13.6 psf. The Viscount aircraft generated 21.1 psf without detectable deformation.

This interesting development in Transcona under the direction of Mr. D. S. Paterson, President and General Manager, is reported to be the largest plastic structure produced commercially for housing. "Casseta" motel complexes are contracted to be erected in Syracuse, New York and in Hawaii on the island of Maui.

Many further new techniques in building construction may now be available. For instance, plastic film may be designed as an air-inflatable shape holding form onto which urethane foam may be sprayed to complete a self-supporting structure. Cut outs for doors and windows are made. On this foamed shell reinforcing bars may then be placed and cement sprayed on to complete the reinforced concrete structure with integral thermal insulation and a finished outer coat at a cost level that could not be duplicated by other methods.

A dome structure of two inches thick rigid urethane foam will support the dead weight of a three inch thick outer layer of uncured reinforced concrete with a safety factor of over 200%.

The simplicity of producing repetitive forms in advanced free-form designs points out solutions to mass housing in underdeveloped areas and supplies techniques required for housing under population explosion conditions. Much experimental work is required and one needs to keep abreast of the literature as new materials and methods are reported at an increasing rate.

Council Meetings

June 3, 1965

Present were President Borgford, Vice-president Harland and Councillors Rettie, Sommerville, Fowler, Past President Chappell, and Registrar Algeo.

Mr. Algeo was officially appointed as Registrar and Signing Officer.

The Council then approved 8 licences, 4 Engineers in Training and 3 transfers.

After extensive discussion concerning several applicants, 19 registrations were accepted.

The next item on the Agenda was the Consulting Engineers Fee Schedule and the agreement form between clients and consultants. It was pointed out that this form was only a suggested form of an agreement. It was therefore decided that it would not bear the phrase "Approved by Council" similar to the Ontario agreement form but would bear the phrase "Printed Under the Authority of the Association of Professional Engineers."

Council then considered a request from the Technicians Association that they be able to use the services of the Registrar of the Engineers Association. Mr. Algeo was authorized to process and screen applicants for the Technicians Association until the end of the fiscal year.

There was then some discussion concerning the Canadian Council's brief on collective bargaining. This brief was brought about by the Federal Government's proposal to include bargaining rights for Federal Civil Servants. As the Manitoba Government has a similar program under consideration the position of Engineers in the Manitoba Civil Service was also discussed. It was decided that the Executive Committee would be authorized to write to the Ministers concerned and ask that engineers be exempted from collective bargaining. It was also decided that meetings would be held with engineers in the civil service regarding the formation of a body of engineers to speak to the government on their behalf.

— R.M.S.

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June 16, 1965.

Present were President Borgford, Vice-president Harland, Past President Chappell, Councillors Sommerville, Fowler, Finnbogason, McGinnis, Registrar Algeo and Past Registrar Weber.

The purpose of this meeting was to consider the minutes of the Annual Meeting of Canadian Council of Professional Engineers.

Council agreed with Canadian Council's recommendations that engineering competitions be limited to people eligible for registration or licensing in the Province where the competition takes place.

There was then a discussion concerning Engineers' participation in the World's Fair. It has been proposed that a plaza consisting of a symbol of engineering be constructed to represent engineers. If approved, this is to be paid for by donations from engineers across Canada. Authorization was given to approach Manitoba members for donations.

The next item considered was Canadian Council's recommendations concerning collective bargaining in the Federal Civil Service with the engineers included in the collective bargaining agreement. The Canadian Council proposed to encourage the formation of an engineering group within the Civil Service to protect the interests of Engineers and to assist this group in dealing with the government. When it was moved that this proposal be approved by the Manitoba Council it provoked the liveliest discussion that has arisen this year.

There was some concern expressed that this would constitute the formation of separate Engineering Associations and encourage the formation of more independent associations. It was suggested that the existing associations become the bargaining agents for engineers, or members will lose interest in the Association.

The opposing arguments raised were that engineers do not need groups to bargain for them and that the Association was set up to protect the public. It was also pointed out that the Association or any Committee of it does not have the legal right to bargain for engineers. It was agreed by most councillors that the worst alternative was to have the formation of separate groups completely independent of the Canadian Council and Provincial Associations. When the issue came to a vote it was decided to approve Canadian Council recommendations by a vote of 4 to 3 with the Chairman casting the deciding vote. It was decided to investigate the legality of the Association's assisting engineers in the conditions of their employment.

The final item considered was Canadian Council's recommendation that a committee be formed to consider the formation of a

National Engineers Week. This proposal was rejected as unprofessional.

R.M.S.



July 7, 1965.

Present were President Borgford, Vice-President Harland, Past President Chappell, Councillors Sommerville, Fowler, Finnbogason, Rettie, Registrar Algeo and Past Registrar Weber.

The Registrar's report was received. It was decided that the Registrar would make a report to Council once a month.

Council then heard delegates from the Association of Consulting Engineers. They appeared before Council to inform them that a Winnipeg Branch had been formed and to outline the composition and functions of their organization.

Applications were then approved for 9 licences, 5 Engineers in Training, 8 registrations, 1 transfer and 2 reinstatements.

The next item under consideration was the steps to be taken against members who had not paid their dues. There was a lengthy discussion concerning the wording of a letter to be sent to these members. There was some discussion as to whether some personal contact should be made before legal action is threatened to recover the seal. It was decided that the present policy of giving a list of delinquent members to Council so that unofficial personal contact can be made, be maintained.

The minutes of the Public Relations Committee were received. The members of this Committee were approved after the addition of one name by Council.

The composition of the Nominating Committee was then discussed. It was decided that it would be made up of Councillors Harland and Fowler from Council, Past Presidents Weber and Chappell as well as two members from the membership at large.

A recommendation from the sports committee that a Cup be purchased to be called the Landon Cup and to be awarded to the winner of the Engineers Spring Golf Tournament, was approved.

The date for the Annual Meeting was set at November 25, 1965.

R.M.S.



August 11, 1965.

Present were President Borgford, Vice-President Harland and Councillors McGinnis, Sommerville, Fowler and Registrar Algeo.

The first part of the meeting was taken up

by routine business. Council accepted 13 Engineers in Training, 2 transfers, 5 registrations, 3 licences and 7 reinstatements.

Some discussion then followed concerning arrangements for the annual meeting. It was decided that the Agenda would be decided by the Executive Committee of Council and the Social Committee would take care of all other arrangements. It was decided that a panel discussion would be held at this year's meeting to be arranged by C. Burgoyne, R. C. Sommerville and W. H. Finnbogason.

A letter from the Specification Writers Association recommending a standard format for building specifications was considered. This letter requested Council to promote the use of this format. The letter was referred to the Consulting Engineers Committee for their opinion.

Consideration was then given to the fact that copies of the Engineering Act are out of date. It was decided that enough money would be included in next year's budget to reprint new copies.

The last part of the meeting was taken up by extensive discussions concerning violations of the Act.

The meeting closed after it was decided that the Sports Committee would be asked to investigate the possibility of an engineers bonspiel.

R.M.S.



THE LANDON CUP

At a meeting held on July 7th, Council acceded to a request received from the Sports Committee, asking Council to provide a trophy for competition at the Annual Spring Golf Tournament, to be known as the Landon Cup. The trophy is established at this time in honor of Dr. Landon's 80th birthday which falls in 1965, and in recognition of his many years of faithful service to the Association.

Dr. Landon was Registrar of the Association from 1934 until 1960 and was President in 1961.



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.

FORE! ENGINEERS AT GOLF

By J. N. WARRENER, P. Eng.

The Spring Golf Tournament was a resounding success thanks to the efforts of Sports Committee Chairman Siggie Goodbrandson and his henchmen, Lloyd McGinnis, Harold Wilson, Don Miller and the Weatherman. After making such fine arrangements and ordering up such excellent weather, Chairman Goodbrandson had to heed the clarion call to duty and he spent the day inspecting highways.

The ratio of non-golfers to golfers was about 3:1. Sam Block, Lindsay Ingram and Ed Hudson got best value for their money by taking the largest number of strokes. There were some very interesting scores and some even more interesting costumes. Murray Fraser wore the nattiest hat and Gordon McLure was a shoo-in for the award as the best dressed golfer according to the judge at the registration desk. Bob McKnight wore a bright red shirt "so the fellows can see me in the bush and won't hit me." Terry Williams, when asked why he was wearing Bermuda shorts replied, "If you can't golf, you have to look the part."

Larry Kay learned his lesson at the Fall golf tournament. While other golfers were combing the woods for lost balls, he was combing the woods for lost friends. This time he furnished Messrs. Balacko, Sparling and Yours Truly with compasses and all went well.

Kees Vogel played his first game of golf and benefiting from the able tutoring of Ron MacMillan, Bud Christie and Jan Nielsen he made the first 9 with only 96 strokes. Without benefit of their advice he covered the last 9 in 80.

Typical engineering comment made by passing golfer: "This sun dial is fast."

Scotty Carroll is inquiring about the patent rights to the golf ball he used. It was specially equipped with water skis for skipping on water.

Nick Diakiw recorded the highest score of any one playing 18 holes with no clubs. Al Burstein picked up some hot tips from Lou Earp, Terry Monastyrski and Gerry Kendall while sipping a wild concoction during the mid-course refreshment break, which resulted in his winning the low net prize. According to the score sheet Clyde McBain just went around the course for the walk and didn't hit a ball. Genial Stewart Barkwell had the lowest score of any member celebrating the 25th anniversary with his firm that day.

Bill Lynn has vehemently denied charges that he juggled his marker in the ball rack in order to avoid a two-hour wait at the first tee. And we believe him. Knowing how re-

sourceful Bill is, we feel sure he would have found a more subtle way. Considering the splendid prize of imported amber glass donated by his company he was entitled to some special consideration.

Some of the members who wanted additional exercise, took a detour through a newly cultivated field but declined the farmer's invitation to help with the seeding.

As far as can be ascertained from the records Tom Kowalchuk, John Duerksen, Ed Klassen, George Rempel and Peter Higgins are still lost out on the course. Higgins was reported last seen on the 11th hole.

The record turnout of 124 resulted in delays at most holes except the 19th. Prizes were donated by interested individuals. Prize winners included Ken Jardine, Joe Brako, Bob Byers, Tony Luchik, Tom Shkordoff.

* * *



M. N. COLLISON, P. Eng.

Congratulations to M. N. Collison who has recently been appointed Mechanical and Construction Superintendent of Hudson Bay Mining and Smelting Co. Mac Collison has been Flin Flon correspondent for this publication and a member of the Bulletin Committee since 1956, when the first issue was published.

OLD TIMER

By E. A. SPEERS, P. Eng.

One of the more enjoyable tasks of being a reporter for the Bulletin is in interviewing the elders of our technical fraternity. These "Old Timers" are the men who epitomize Engineering in Canada. Their experiences have the excitement and drama to stir the young neophytes of our profession. Their stories of personal experiences are the embodiment of the engineering image. They could well serve to instill a dedication to a technical life.

Mr. J. L. Charles, P. Eng. (Civil), author and lecturer, retired last April as consulting engineer for the Canadian National Railways



MR. J. L. CHARLES, P. Eng.

at the age of 72 years. Mr. Charles is the author of a definitive article, "Railways March Northward" in the Canadian Geographical Journal, January 1961. Lecturer by invitation at the Pan American Railway Congress in Mexico City he spoke on surveying for the Great Slave Lake Railway, the first in the Northwest Territories and one of Mr. Charles' last major works.

Starting in 1910 with the Grand Trunk Pacific Railway between Calgary and Edmonton, a brief outline of Mr. Charles' activity would contain the following highlights: surveying for the main line west of Jasper (1911), with transportation involving Fraser River scows, their own bush-made hand sleds, and dug-out canoes, down to Prince George, the building of the Hudson Bay Railway to

Churchill, lines from Sherridon to Lynn Lake, Manitoba, Terrace to Kitimat in B.C., from Sipiwesk to Thompson and the lines serving the Steep Rock Ore mines at Atikokan, and from Optic to Chisel and Stall Lakes in Manitoba.

Mr. Charles' activities have not been restricted to Canada. Under the aegis of Canadian Aero Service he was consultant in surveying for the Liberian Mining Company for a narrow gauge railway line to the Bonus Hills Mining deposits in West Africa.

Mr. Charles is a veteran of two world wars, serving in Europe with the Canadian Railway Troops in the First World War, attaining the rank of Major and awarded the D.S.O. During World War Two he recruited the 20th Field Company of the Royal Canadian Engineers in Winnipeg and commanded the unit on the Pacific coast until seconded for special railway surveying duties to the U.S. Army.

A past president, honorary life member of our Association of Professional Engineers, Mr. Charles is also a past chairman and life member of the Winnipeg Branch of the Engineering Institute of Canada. A grand "Old Timer".

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J. S. ROPER AND J. E. WHENHAM LEAVE PROVINCE

J. S. Roper has moved from Winnipeg to Regina to accept the position of Manager of the Saskatchewan Mining Association. Jack is very well known in mining circles and will certainly be missed by his many friends in this Association. Jack served for seven years as a member of the Legislation Committee. We extend our best wishes to Jack Roper and express the hope that he will be a frequent visitor to Winnipeg.

J. E. Whenham has accepted the appointment of Director of Physical Plant at Carleton University in Ottawa and he and his wife have moved to that city. While we are pleased for Jim's sake that this opportunity has come his way, it is with considerable reluctance that we view his departure from Manitoba. Jim has been a very valuable member of this Association. He has served for several years on the Advisory Committee and was its Chairman for two years. He was also a member of the Engineers-Architects Committee. He was serving his second term as President of the Manitoba Association of Architects at the time of his departure. Carleton University is indeed fortunate to have secured his services. He will most certainly be missed in this Association but he carries with him our best wishes for his future in Ottawa.

OLD TIMER



G. R. PRATT, P. Eng.

Mr. George R. Pratt, P. Eng. (Mechanical, Civil), Life member of our Association of Professional Engineers is one of the original founders of the Association.

Emigrating from London in 1904 at the age of 28 years Mr. Pratt's first Canadian job was to set up the Western Shops for the Canadian Pacific Railway. Later he was in charge of the western lines and it was Mr. Pratt's task to introduce the first diesel locomotives at the site of the Connaught Tunnel in 1915.

From 1921 to 1927 Mr. Pratt was with the Alberta Government in charge of research and development of practical uses and markets for their coal resources. Lectures and demonstrations made across Canada served to advertise the variety of formations of coal available. Mr. Pratt wrote a book on "Coal Truths" which has served as an authoritative reference to western coals.

From 1929 to 1932 Mr. Pratt was with United Construction of Philadelphia, later setting up the Toronto office of this firm and the steam electric plant at Glace Bay, Nova Scotia and Minto, New Brunswick.

Mr. Pratt has written a three volume manuscript on the "Story of Creation of the Physical Universe" and has illustrated the volumes with many explanatory plates done with the finesse of a man skilled in drafting.

Drafting, sketching and painting have served as additional hobbies for this man who

has been as curious with paint as he has been with life. An honorary life member of the Winnipeg Sketch Club, he can look back on hundreds of paintings made over his last thirty years of retirement. Now, at ninety years of age, Mr. Pratt lives comfortably surrounded with the fruits of a vigorous lifetime—requiring only five hours sleep a night, his production represents about 140 years of an average man's life. (The accompanying sketch of Mr. George R. Pratt was done by Mary Johnston of the Winnipeg Sketch Club).

For several years we have had the pleasure of having one of Mr. Pratt's original paintings hanging in the Association office. —E.A.S.



Flin Flon News

By M. N. COLLISON, P. Eng.

L. W. Ogryzlo, P. Eng., Director of Exploration for the Hudson Bay Mining and Smelting Co. has been transferred to Toronto and left here the middle of July to take up his duties there.

Barton Fairbairn, P. Eng. is being transferred to Snow Lake early in September where he will be assuming the duties of Chief Engineer of Mines for the Snow Lake area. Bart also became the proud father of another son on August 29th. This is their third boy and as a result no name has been selected since all hopes and expectations were for a girl.

Frank Gira, P. Eng., has just returned from his vacation, part of which was spent visiting relatives in southern Manitoba and part on duty with the Militia assisting with the erection of two bridges at Wekusko Falls near Snow Lake. Frank has been promoted to Captain in the Royal Canadian Engineers Militia. Frank also became the father of a son in June and just prior to that time he had received a promotion from draftsman to mechanical engineer. As such he will be assisting this correspondent.



Mr. and Mrs. Collison spent a few days in Winnipeg early in August shopping and visiting a few friends, and then went to Helena, Montana, where they enjoyed a Collison family reunion occasioned by the celebration in October of the 50th Wedding Anniversary of Mr. Collison's parents. Hudson Bay Mining & Smelting Co. has announced the appointment of M. N. Collison, P. Eng., as Mechanical and Construction Superintendent.

In Memorium

THOMAS COVELLO, P. Eng.

Thomas Covello, B.A. Sc., M.E.I.C., P. Eng., one of the principals of Read Jones Christoffersen Ltd., Consulting Engineers, and his wife Dorothy were passengers in the CPA aircraft which, on July 8th exploded en route to Prince George. They were among those who lost their lives. They leave four small children, Carl, Murray, Patrick and Brian in Winnipeg.

Tom Covello graduated with Honours in Civil Engineering from the University of British Columbia. Following graduation he was employed as a structural engineer in Vancouver, Calgary and Edmonton. Three years ago he moved to Winnipeg to manage the structural design office of Read, Jones and Christoffersen. He was well known in western Canada both through his competence as a structural designer and his association with the Engineering Institute of Canada. For several years he was the enthusiastic secretary of the Vancouver Branch of the Engineering Institute of Canada. Many executive members will remember him for the warmth and humour he brought to so many meetings.

While in Winnipeg, Tom Covello was an active participant in the structural design of several well-known Winnipeg buildings. Among these are the Regency Towers, St. Paul's College at the University of Manitoba, Benedictine Mother House, and the Reimer Express Terminal. He was also the designer of the outstanding Edmonton Exhibition Racing Stable.

Tom Covello will be long remembered by his many friends and associates as a first rate engineer, a citizen with a genuine sense of responsibility towards his fellow men, a warm-hearted friend with his own particular delightful humour, and a man of great honesty and deep humility.—R.S.

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EMPLOYEE ENGINEER MEETING

There was a fairly good turnout to the smoker meeting held at the Montcalm Motor Hotel last Tuesday evening. The whole affair was highly organized. After a very brief period at the bar we were instructed to take our seats at one of the nine or ten tables, each with eight places. The registrar was asked to read the notice of call of the meeting after which the agenda and rules of conduct were quickly approved.

The unwary participant who had in mind

a pleasant social evening was about this time awakening to the fact that this was business. The whole purpose of the evening, from the agenda presented, was ostensibly to find out what the employee engineer wants the APEM to do for him. As an introduction to this general topic, Mr. Weber was asked to give a resume of recent developments in employee-employer relations in Government and in industry. This talk was devoted almost entirely to the history and present status of bargaining between engineer employees and the Federal and Provincial Governments. One got the feeling that this was the main topic of the evening.

After this introduction we were asked to look under our chairs. Those with a 'c' printed on were the Chairman at each table and those with an 's' Secretary. This method of selection could, and probably did, lead to some embarrassing situations, especially when discussing collective bargaining. Each table was asked to have its own discussion on the subjects listed on the agenda:

1. Collective Bargaining;
2. Placement Service;
3. Education;
4. Working Conditions;
5. Salaries;
6. Legal Interpretation;
7. Utilization of the Engineer.

After forty-five minutes the Secretary of each table was to have prepared a summary of the thoughts and comments of his table on each of the topics.

Forty-five minutes was, of course, far too short a time both to discuss such a wide range of subjects satisfactorily and to prepare a summary representative of eight people at a table. It is even felt that it would be wrong to draw any conclusions from the evening.

After this was over a motion was introduced that "it be recommended to our Council that an Employee Engineers Committee be formed as soon as possible to investigate, consider and recommend courses of action and policy to Council on those matters relating to or affecting Employee Engineers in their practice of engineering." After some uninspired discussion this motion was passed. This previously prepared motion only confirmed the thought that the purpose of the evening was to discuss bargaining.

It is interesting to note that according to the Act, neither Council nor the Association has any authority to concern itself with bargaining. —B.W.