




**THE  
MANITOBA**

**P**ROFESSIONAL  
**ENG**INEER



bulletin of the  
association of  
professional  
engineers  
of the  
province of manitoba

april, 1974



Published by the Association of Professional Engineers of the Province of Manitoba  
710 - 177 Lombard Avenue, Winnipeg, Manitoba R3B 0W9

*President* - G. A. De Pauw, P. Eng.

*Vice-President* - D. R. Grimes, P. Eng.

*Managing Director and Registrar* - T. W. Algeo, P. Eng.

*Council* - C. R. Bouskill, N. P. Feschuk, A. W. Gilliland, E. F. Glass, J. S. Hicks,  
C. R. McBain, A. G. Moffatt, R. E. Scouten.

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

*Editor* - E. A. Speers, P. Eng.

*Associate Editor* - J. W. J. Lewis, P. Eng.

*Committee Members* - R. M. Stokes, R. A. Kane, F. S. Gira, C. H. Templeton,  
R. R. Foster, R. J. Rennie, W. R. Newton, A. G. Kuluk, L. J. Whitney,  
B. R. Hryhorczuk, R. C. Isaak, S. J. Armstrong, J. Westdal, K. D. Gissing, R. Ludwick,  
A. C. Jorgenson, D. G. Ramsey.

Opinions expressed are not necessarily those held by the A. P. E. M. or the Council of the A. P. E. M

WINNIPEG, MANITOBA, APRIL, 1974

## President's Message

By G. A. DE PAUW, P. Eng.

The time is going by so quickly your President wonders how any of his objectives can be achieved in one short year.

I have so far managed to meet with many of the engineers located in small and large communities outside of Winnipeg and found this to be a most rewarding experience. I want to thank the engineers in Thompson, Lynn Lake and Pine Falls for the kind welcome I received during my visit to their communities. I am satisfied that useful and sincere communication has taken place. The time was well spent and beneficial to all. In this, one of my objectives to improve communication with the membership has been achieved.

I was also pleased to accept an invitation from a few of the engineers located in Winnipeg, and plans are underway to visit Brandon, The Pas and Pinawa. So much for that.

All this visiting has kept me so busy that I forgot about the Bulletin deadline. Consequently this will be a short message.

However, you might like to know that the President did communicate with Debbie, Age 8. Unfortunately Debbie's Father won't allow me to tell you what transpired.

The Association Council and Committee members have been very active. Your Committee on Safety in Engineering Practice is investigating the Powerview Arena failure and will submit a preliminary report to Council soon. Several other situations are being investigated, and the Practice and Ethics Committee is meeting regularly.

The Legislation Committee, with the help of Mrs. Dunklee, has completed work on the proposed changes to the By-laws, which now have Council's final approval. With the help of staff the proposed revisions to the Act are well in hand and should be ready for consideration by Council soon.

Some time ago Mr. Hood, President of the Canadian Council of Professional Engineers, while President of this Association, in a letter dated October 29, 1971

addressed to all members of the Association, stated that "One of our objectives is the preparation of a new Engineering Profession Act which would reflect the current needs of the public and the members of the profession."

It is becoming clear that to do a meaningful job of reaching this objective, it is necessary to:

1. Define the needs of
  - (a) Society
  - (b) The Membership

What are some of the needs of society as they relate to the Engineering Profession? I suggest that, among others, these are:

- (a) Being able to confidently accept the advice of a Professional Engineer knowing that the design and solutions will
  - (i) be efficient and economical
  - (ii) safely perform without danger to the user or occupant for a reasonably expected period of time, that is, that the work will stand the test of time.
- (b) In the event of difficulty, know that the Engineer responsible for the work is available for consultation and that adequate records of the "as constructed work" were kept and can be made available to the client-owner in order to permit evaluation and execution of repair of the work should this become necessary.
- (c) Competent Professional Engineers' services are available at reasonable cost.

Further, I suggest that the needs of the membership are as follows:

- (a) Professional recognition as an individual.
- (b) Fellowship with his colleagues.
- (c) Opportunity to develop professionally.
- (d) Reasonable security of employment.
- (e) Adequate remuneration for his efforts in relation to other groups in our society.

- (f) The right to enter into meaningful negotiations regarding his employment and working environment.

I ardently believe that the fulfilling of the needs itemized above can only be met through the meaningful action of this Association under the powers granted it by the Legislature through the Professional Engineering Act.

However, the Act, to be effective, must leave the power to Register, Discipline, Prosecute and Fine for violation of the Act with the Professional body, operating independently and free of Government intervention. If the revisions of our Act alter and weaken the power the Association now has, then we, as elected councillors of this Association, will have failed the membership and the citizens (the public) of the supposedly free society under which we all exist.

How can this best be accomplished? Let me know what you think.



"Now see here, Georgel"



**COUNCILLOR A. W. GILLILAND**

Andy Gilliland is a welcome addition to Council. Andy's early years were spent in Great Britain until 1955, when his family moved to Canada. One of Andy's first

undertakings on arriving in this Country was to enroll at Queen's University where in 1961 he received his degree in Civil Engineering.

After graduation, Andy joined Commonwealth Construction Co. Limited, and remained with that firm until 1966. In 1966, Andy moved to Supercrete Limited where he is now Precast Marketing Manager.

Andy and his wife Edith, are kept busy with two sons, Bill age 11, and Jim age 3. The family enjoys outdoor activities, snowshoeing in winter, and canoeing and camping in summer. Andy also coaches minor pee wee hockey, and is a self-admitted "eating member" of the Winnipeg Squash Club.

On the professional side, Councillor Gilliland is active in several organizations besides the A.P.E.M. Andy is on the Council of the Winnipeg Builders' Exchange; the Provincial Apprenticeship Board; the Council of Queen's University; and is a Director of the Canadian Prestressed Concrete Institute.

Andy Gilliland brings to the Council of our Association, a backlog of experience in Association affairs. Andy has served on the Employee Engineer's Committee, the Admissions Review Board; the Nominating Committee; the Legislation Committee of which he was chairman for two years; and has recently represented the Association on the Manscett Board of Directors and Certification Board.

During his term of office on Council, Andy would like to see resolved the matter of an engineering "self-interest" organization, distinct from the A.P.E.M. Andy believes that the ambitions of the salaried engineer should be responded to; the desire for leadership and assistance in the area of salary and personal benefits must be satisfied. Andy does not believe that the A.P.E.M. should be active in this area; however, Andy also recognizes that the profession must stick together as one entity and not become split up and fragmented. Andy is of the opinion that the A.P.E.M. should eventually handle licensing and discipline, and the "other" body should handle all other functions of common interest to the membership, possibly with a national connection through C.C.P.E.

Other matters in which Councillor Gilliland has a keen interest are the corporate practice of engineering (whether or not it should be licensed as such), and the

accessibility of Council to the rural engineer.

In the months ahead, whatever matters are being considered by Council, or whatever tasks are to be carried out, it is certain that Andy's level-headed approach will be of benefit to the Association.

—R.R.F.



## RELATIVITY OF ENGINEERING COURSES

Anyone reading this article who practises in Mechanical or Electrical will probably find it completely irrelevant to their memories of the university years. This is easy to explain since I graduated from Civil and on writing this article discovered how very little I actually know about my brothers in these other honorable (I am sure) fields. I developed some pretty good friendships during first year but on being separated into the six main areas (Civil, Electrical, Mechanical, Geological, Agricultural and fail). We lost touch. At the beginning of second year I found myself without the old group. Even in practise I rarely seem to have much contact with people in other disciplines and therefore I will restrict myself to writing about Civil Engineering in this article.

Students tend to be very biased and critical when asked if they think that their courses are relevant to their interests or their discipline. If anyone had asked me in first or second year if I was enjoying my calculus courses I probably would have cursed and hit him right in the mouth. Do any of you Civils out there remember your third year advanced mathematics? Memory block, eh! Well you took it. The mind has a way of blocking repulsive or traumatic experiences from your conscious thought. I think the reason this third year course hurt so much was that during first and second year you expect a lot of tough maths and applied mechanics, but by the time you get to third year you feel that this kind of grind should be over and done with. During fourth year one course we all tried to skip or forget was the pavement design course. It was probably a very good course but for some reason it was a tough one to sit through.

The above mentioned complaints were generally shared by most of the fellows in the class. I will now discuss some of

the courses I personally feel were not very appealing or informative to me. I should mention here that the distaste for these courses does not necessarily reflect on the ability or charisma of the instructors, but I will admit that after sitting through the first couple of weeks of classes in some courses it was difficult to have much empathy for the instructor. I am certain that some of the Professors were aware of this and here and now I would like to salute these brave souls who actually volunteered to teach these courses, especially the ones who braved the cold weather to cross from the Mathematics Department to receive an even colder reception in the class rooms of the famed beerdrinkers. I am sure that some of these Professors were instrumental in getting the drinking age lowered and a pub instituted on campus; to get rid of the trouble-makers in the class.

After struggling through first and second year maths, mechanics and strength of materials, I was convinced that a career in structures was not for me. In third year the steel structures course was a constant source of worry and it was only by sweet-talking the Professor that I obtain a "D" in fourth year. Miraculously enough there were a number of choices which allowed one to take courses directly related to one's interests. As a result I obtained the first decent grade point average in my career as a university student. I notice that there is an even greater number of choices in the current calendar but I understand that the courses are slotted in such a manner that one ends up taking what the Faculty of Engineering considers basic courses. Some of these courses do bring out some very basic thoughts in students, but I don't think these are printable.

One area I have not discussed yet is that of the non-technical electives. Has a nice ring to it doesn't it? These non-technical electives were added to the program to make narrow-technically-minded engineers into financial wizards or an authority on slobbering dogs (Pavlov's). The most common choices for their electives were generally Economics I and Psychology I with the less keen people switching Economics for Geography or some other course where rumor was that there were lots of females. Yes, females. By the time third and fourth year rolled around, biological urges were finally beginning to over-shadow the young engineers quest for expertise in developing quadratics or third order differential equations. The non-technical electives thus gave the students

an opportunity to pursue the flirtatious creatures who laughed at suggestions of going to a Frat House or Beerfest Party, but liked to go to dances and movies. Strange! Although these non-technical electives were interesting, it was hard to get serious about a course where maths or moment couplings were not mentioned or even considered important. I personally feel that those twelve credit hours could be put to better use by introducing courses in engineering, perhaps not technical, but at least related to engineering. I admit that I am unfavourably prejudiced against these courses since the ideas my female classmates evoked in my mind led to my getting married after third year.

Another course that has not been mentioned yet is the second year computers course. This was one course that I could not grasp. I sincerely tried, but I still obtained an "F" for my efforts. Oh well it happens to the best of us, three other fellows followed the same route. We were the laughing stock of third year civil in the fall. No one fails computers. I tackled the course with renewed enthusiasm, having spent the summer working in a lumber yard where the hot sun always seemed to shine, and promptly failed again. This time it was no longer funny, the other three fellows passed. I now had the dubious distinction of being the first fourth year student to carry a second year computers course. I doggedly attended computer classes with the lowly second year students, pretending that a new language was being taught this year and I wanted to pick it up. I managed to scrape through a couple of term tests but when it came time to hand in the term project I was out of ideas, still not having learned the fundamentals, and gave up on the project in favour of studying my other courses. I was very fortunate in that I had several friends who stood by me and comforted me with words like: "Don't worry, they will never fail a graduating student for a miserable second year course." After many sessions at the "Monty" and repeated encouragement, I happily believed them. They had spent too much money on me now and they would have to pass me. I spent all my spare time that whole summer working on the incomplete term assignment. They had given me an incomplete, and I couldn't graduate. Finally with the help of a friendly draftsman, I handed in a project that was acceptable. Ever since then, I have had an aversion for computers. To complete the irony of this mess, guess who was appointed to the Department's Computer Com-

mittee at my present place of employment.

To summarize, I think I will only say that as one of my numerous Profs. in computers told me: "It takes a logical mind to write computer programs". With those words of wisdom I will leave you to ponder the relativity of this article. —A.C.J.

★ ★ ★

## I PROTEST

By K. D. GISSING, E.I.T.

When I started University, all I knew about the APEM was that I had to spend two years working as an engineer after graduation to qualify for registration as a P. Eng. My two years are just about up and I still know very little about the Association and what it is doing for me as an engineer. Sure I get the notices like everyone else about the Annual Meeting, the golf tournament, the curling bonspiel, and the annual dinner and dance but until very recently I had no personal contact with the Association.

This indifference to the APEM stems from University days. It was not until the very end of my graduation year that the APEM approached my class to try and entice us to become members. This took place at a dinner at the Montcalm at a time when most students were busy trying to finish their theses and other miscellaneous projects, as well as cramming for those all-important final exams. Quite a few prospective members just didn't have the time or inclination to attend (including me). After graduation I joined the APEM as an E.I.T. because I knew I would need to be registered for my job when I became eligible. Many of us join because we have to and most of us don't get involved in the various operations of the Association because of ignorance. There is only active participation by members in an association when the members are well-informed about it and made welcome. I can't say that I was very well-informed nor was I made very welcome. I was just another member, someone to be added to the mailing list.

The APEM should make a point of approaching engineering students when they are in second or third year, and not with just a once-a-year free dinner and a lot of talk about how great it is to be a member. A lot of students go just for the free meal. Many don't even consider joining the Association until their employers insist that it is required for the job. A good way to introduce students to the workings of the APEM would be to pre-

sent it as a required course possibly in conjunction with a course on business and engineering law. It is time Association members got involved with student engineers. There is a new breed of engineers coming out of the universities who are not afraid to speak their mind and a lot of them are of the opinion that the APEM has little (or nothing) to offer them. Could the problem be that these new graduates are just ignorant of why and how the APEM operates?

★ ★ ★

## PINAWA NEWS

By JOHN WESTDAL, P.Eng.

It was surprising to see in the last Bulletin that there are only 210 rural members of the A.P.E.M. With approximately 40 members out here at Manitoba's Atomic Capital we must have more engineers than any other town except Winnipeg.

We were glad to hear that the A.P.E.M. has undertaken a study of the collapse of the Powerview Arena. A lot of our members here have children who played a number of minor hockey league games in this arena, and they are very interested in hearing the results of the study.

Now for some news about our engineers; Mitch Ohta is the proud father of daughter Cathlene, born in March, a sister for Tammy; Ray Sochaski is back at work after a short vacation in our local hospital; Tom Tabe and wife are leaving on a four-week holiday to the Far East at the end of March and Ron Mazur is finally getting married, in April, and then honeymooning in Spain for a few weeks.

One of our engineers who recently transferred from the A.P.E.O. to the A.P.E.M. says it's true that the A.P.E.M. has more prestige than the A.P.E.O., but this has only occurred recently.

Editor's Note: Perhaps this occurred when Pinawa got its very own correspondent.

★ ★ ★

## STUCK AGAIN

The owner, a man of simple and unpretentious tastes, wanted a factory to do a job at minimum cost. Lacking engineering expertise he hired a firm of ar-

chitects, engineers and planners. As agents for one of the best shoe lace knotting machine manufacturers on the market we were keenly interested in the project and submitted tandem or alternatively duplex models.

Due to a regrettable error in the price we got the order. After a meeting to interpret the order we submitted drawings for approval. The engineer (class of '73) marked up the prints to eliminate the alternating circuitry so that the machine would now tie only left shoes. The drawings were stamped to the effect that "Approval of drawings does not imply that drawings are approved."

It was a festive occasion when the machine arrived at site. Expensive cranes had been hired to mount the machine on its base which bent under its weight. So we sent the cranes away to return another day. The base had been designed by a moonlighting college professor so the owner was stuck to reinforce the base and we were stuck for double handling.

The drive motor burned out after a few weeks in service; the protection circuit supplied by others was inadequate. The architects, engineers and planners do not have an electrical engineer because it is well known that when electrical frivolities burn out they must be replaced under warranty.

The job was not a great commercial success although the machine works well. We fixed up the alternating circuitry, replaced the motor and absorbed the double handling costs. Suppliers are nice guys and don't make waves; after all with this reference job it may be the same consultant on the next job.  
—J.W.J.L.

★ ★ ★

### **Professional Engineers registered March 5, 1974 by Council of the Association**

Burhan Alpay, Douglas Gerald Chapman, Andrew Teddy Chimko, Richard Conway Dorward, Stewart Lyall Henderson, Kenneth Charles Lund, Jeremiah Anyano Nwuba Mora, Adrian John Palmer, James Richard Gordon Prentice, Victor Redko, Frederick William Richter, Dennis Donald Schulte, Brian Gordon Trenholm, Brian John Samuel Wilkins, William Michael Woroby, Gerald James

Zukowski, Hugh McGee Armstrong, Walter Clement Harrison, John Allen Knowles, John Albert Winston May, Herbert Charles Moulding, Peter Wen-Sheng Pay.

### **Engineers in Training enrolled March 5, 1974 by Council of the Association**

Lorne Clayton Robinson, Marshall Opyr, Arthur Kempan, Edward Ryczkowski, David Bruce Letvak.

★ ★ ★

### **RED RIVER BALL SMASH HIT**

A first class committee, excellent food and music, imaginative decor and participatory guests helped make the Red River Ball a smashing success. Attendance was up 30% over 1973 and the highest in eleven years. The Social Committee offered three prizes for the best posters done by members of a Saturday morning art class at the Winnipeg Art Gallery. The average age of the artists was ten. The theme was Winnipeg's Centennial, and the posters depicted pioneers, Indians, forts (including Fort Knox) and the transition from teepees to skyscrapers. The judges of the art entries were President George De Pauw, Social Committee Chairman Bryan Johnston, Bill Finnbogason, Mrs. Bryan Norrie and Mrs. Bob Foster. Rumors that the male judges found the lady judges more attractive than the posters were not denied. Doug Whalley was the unofficial judge of the ladies' dresses and by 3:30 a.m. had reached the decision that Sandy Norrie had won in the diaphanous gown category.

Also on display were four vintage cars, loaned for the evening by the Classic and Antique Automobile Club of Manitoba. The Committee may not have to go to the Antique Car Club for displays next year as we may be able to persuade Ed Debusschere to lend us his 1960 model for the evening, Al Myska may donate his 1966 Anglia, and Mike Schioler has a vintage station wagon that is well on the way to its second hundred thousand, and if we carry plenty of insurance and rope them off from the public, we may be able to borrow these antiques complete with goggled drivers.

The reception was held in the Sun Spot among the palms and around the pool,



At the Ball — Mr. and Mrs. Bill Sullivan, Mr. and Mrs. Boris Hryhorczuk,  
Mr. and Mrs. McBain

and we are happy to report that no engineer teetered into the pond. Cornish game hen (selected because Winnipeg's first mayor was named Cornish) was served at dinner and aren't we lucky the first mayor's name wasn't wiener. Another clever satirical place mat emerged from our secret source and many compliments were received on its wit and humor. For the benefit of those who could not attend the ball, the place mat is reproduced as this issue's centre fold. Don't miss the fine print!

Freshmen Councillors Allan Moffatt and Ted Glass were among those present.

Bob McKibbin came in from Birtle, in costume, complete with top hat, and George Bowhay came in from Pinawa (without top hat.)

The guests were all divided (by lot) into groups. Seated at the Governor's Table were President and Mrs. De Pauw, Vice-President and Mrs. Grimes, Past President

and Mrs. McBain and a foreign diplomat and his wife. Seated among the Royalists were Australian immigrant Russ Hood and South African Les Oakes. Among the Squatters were Andy Blackery and Nick Diakiw. The River Boat Gamblers included the following well known names, Tully, Peake, Philp, Anderson, Steeves, Marshall, Sherwin. Rum Runners included Becker, Conway, Willms, Hutchison. With the Missionaries were the Reverends Rooke, Thornton-Trump, Glanville, McBride, Barry, Fisher and Schmidt, and next year Bob Morrison will be under this heading because he was actually proselyting in the middle of the dance. Under Highwaymen appeared the following, Livingston, Young, Wong, Saltzberg, Price. Carpetbaggers headed up the largest group and on analysis it was discovered that all members of Council and consultants were in this category. The exclusive category of Saloon Keepers was reserved for members of the Social Committee plus distinguished guests of Finnbogason and Hryhorczuk.

Past Presidents Weber and Sommerville, together with the McKnights and Durnins, had such a good time they were still sitting at their table when the lights went out, but they slipped out some time during the night because when the boys on the Committee returned at 9 a.m. to arrange for the removal of the antique cars, the group had vanished.

Ken Hallson and Hilda Weber won top honors for the most energy on the dance floor after midnight, and it was reported that they were going to be outfitted with bumpers for next year.

Those who left early missed Ed Pentland's "streaking" act; he ended it draped in a centennial flag. We were pleased to have Gerry Clayton with us. He attends one dance every twenty years, and we will look forward to seeing him again in 1994.

Someone suggested that the Committee did such a splendid job they should be kept at it until they were as vintage as the antique cars. Certainly it will be a hard act to follow and our thanks go to Chairman Bryan Johnston and his elves, Dave Duncan, Bryan Norrie, Ed Pentland, Dave Sexton, Jim Linton, Larry Morison, George Pratt, Rod McRae, Bill Sullivan, Wayne Stewart and Barry Rowley. —S.J.A.



LETTERS

Opinions expressed in Letters to the Editor are not necessarily those held by the Bulletin Committee, the A.P.E.M. or the Council of the A.P.E.M.

ON THE CARPET

The Editor

Dear Sir:

We noticed in the February issue that you were called up on the carpet before Council because of the contents of the Bulletin, the charges apparently being that you have too much political comment, that the amount of political comment is all right, that you have too much humour, that the amount of humour is fine, that there should be a lot of changes and that you are putting out a fine publication and should carry on as before. While we cannot concur with all of the foregoing, we do agree that you should have been hauled up on the carpet. According to your own

statistics published on page 7, you devote 3.1% to C.C.P.E. news, 9.1% to Council, 1.8% to Social News and 6.8% to Human Interest, to name the first four categories. (With C.C.P.E. being in Ottawa aren't any of its activities political? If not, then why doesn't it move to a more central location like Winnipeg?)

We have more people at our dance than attend the annual meeting or all the combined sports events, so obviously here is where the action is, yet we get only 1.8% of your space. We decided to take an impartial poll at random to determine what the members actually read and enjoy and we are pleased to share the results with you.

	Out of a Possible 100
President's Message	41
Reports of Council Meetings	43
Councillor Profiles	26
General Assn. News & Comment	46
Annual Meeting Reports	8
Letters to the Editor	60
E.I.C.	4
C.C.P.E.	7
University Affairs	23
Attempted Humour and Satire	83
Sports News	63
Social News	90
Political quips	66
Technical or Semi-Technical articles	17

We note that President De Pauw in his inaugural message commends your Committee for its work. Except for the fact that you are not devoting enough space to social activities, our survey indicates the President is right, you are publishing what the readers want. As a result of our survey, we would suggest that you publish all the annual reports once a year as you do now, but include in the same issue all the E.I.C., C.C.P.E. and technical data. Then run off ten copies of the edition and have it available in the office in case anyone asks for it. If anyone is really hung up on these topics, give him two copies.

We will look forward to seeing more social reporting in future issues. We also have no objections to your asking one of your senior reporters to do a technical account of our annual ball.

If you have prepared a handbook on

Continued on page 12





# WINNIPEG 2074

## THE NEXT 100 YEARS

PREPARED FOR 100 YEARS BY CITY COUNCIL



what to wear, how and when to bow and in which order to genuflect to whom when one is summoned before Council would you please let us have a copy in case our Chairman should get a subpoena to appear before this august group.

Yours truly,

Social Committee.

Dear Social Committee:

It is all a matter of semantics and the senior reporter who did the survey for us on Bulletin content admits that he did not check the dictionary for a definition of the word "Social" and therein lies quite a lot, as always.

To deal specifically with your "random survey" and the results thereof. The President's message contained references to the annual meeting and he also invited engineers to lunch on a Dutch treat basis, both social functions. On to Reports of Council Meetings — our reporter noted that the Editor had been "invited" to appear before Council, surely a social gesture, and he mentions eating sandwiches so presumably this was a sort of afternoon tea. Definitely in the Social category. In Profiles on Councillors we discovered in the last issue that the President keeps canaries and Allan Moffatt has partners, which makes them both seem sort of sociable. In the General Association News we find that all sorts of really neat social things go on at Flin Flon. We are willing to concede that the annual reports are perhaps almost anti-social and we have under consideration your suggestion that only 10 copies be printed.

To go on to Letters to the Editor, it must have been obvious to all that our most regular contributor, Little Debbie, is so socially conscious her father tried to pull her off our committee. The E.I.C. is an organization and you will find that word under Social in the dictionary. You will also find the word Insurance and CCPE is big in that area. And as for University, we all know that all kinds of social things go on there. Our attempted humour and satire and political quips have often been aimed at socialists.

If you read the curling write-up carefully you must have noticed that the reporter obviously didn't know anything about curling and the whole write-up was devoted to socializing in the lounge. We will concede that the technical articles, if we ever published any, would be sort

of a-social. So it would seem to us that we are bending over backwards to make this as social a publication as possible and actually the 1.8% which we reported in our survey merely involved the mention of your chairman who showed up at the curling luncheon.

We trust that you will see from the foregoing that there is really much more social coverage in our issues than anti-social coverage. In any case, you make the news, we'll print it. —THE EDITOR

◆ ◆ ◆



Bob and Lynne McKibbin at the Red River Ball, wearing costumes that were in vogue a hundred years ago in Winnipeg and are now the in thing in Birtle.

◆ ◆ ◆

## SHADES OF THINGS TO COME

On the occasion of Winnipeg's centennial we gazed into our crystal ball to see what we might expect in the year 2074 and here are some news scoops:

The matter of railway relocation is referred back to committee. Provincial civil servants get 9% increase after 100 years of negotiations. The last surviving member of a once renowned profession (pre-

historic developers), an architect, was found living in a deserted cave at the corner of Broadway and Osborne.

Monorail down Portage Avenue was named the Juba Bullet.

Government introduces Bikopac.

Due to losses on fire insurance the government has banned matches.

Pilot project — traffic engineer comes up with novel idea for slowing down traffic on Wolseley Avenue by planting a tree in the middle of the road.

★ ★ ★



Red River Ball Aristocracy — (left to right) Florence De Pauw, President George De Pauw, Joan Bailey, Social Committee Chairman Bryan Johnston, Liz Grimes, Vice-President Doug Grimes.

### COME NO CLOSER

Edward T. Hall, in the Language of Space says "Personal space in man seems to be comparable to Hediger's flight distance in animals. A lizard can be approached to within six feet before he flees, an antelope within 60 feet, and an alligator takes off at 150 feet. Man himself carries with him a number of hidden zones that

elicit different responses as boundaries are crossed. The behavior appropriate for each zone, the tone of voice used . . . and the distance to each boundary are all a matter of culture, learned early in life." All of which explains why Prime Minister Trudeau lets David Lewis snuggle up.

## ENGINEERING PROFESSION OBJECTS TO NEW COMPETITION BILL

During the last session of the House of Commons the Government introduced Bill C-227, a proposed Act to amend the Combines Investigation Act and thus presented the country with its concept of a new Competition Policy for Canada.

The Bill was not taken beyond first reading before the close of the last session and therefore the Bill as it presently stands (or a modified version of the Bill) will have to be re-introduced at the new session of parliament.

Acting upon behalf of the 75,000 registered members of its constituent associations, the Canadian Council of Professional Engineers submitted its views to the Cabinet Minister responsible, the Honourable Herb Gray with the intent that changes would be made in the Bill. This was done with the hope that changes would be such that possible undesirable consequences which may not have been fully realized or intended would be removed from the Bill.

Essentially the brief asks for the following:

- 1 - The new Competition Bill should not make it a condition for salary negotiations that a group of employees must necessarily be certified under appropriate labor legislation in order to avoid being in contravention of the new Competition Act.
- 2 - Professional engineering services and the applicable fees should be exempted from the application of the new Bill in order that the best interests of the public be served.



### C.C.P.E. BRIEF TO MINISTER ON IMMIGRATION POLICY

Acting on a request received from the Honourable Robert Andras, Minister of Manpower and Immigration, the Canadian Council of Professional Engineers undertook to present to the Minister, the collective views of the members of the engineering profession on aspects of the country's Immigration Policy which are of direct concern to the profession.

The Department, headed by Mr. Andras, is in the process of re-assessing its present policy and called upon more than 100 organizations such as C.C.P.E. and the public to assist it in creating a new policy, with respect to both immigration and population, which will meet Canada's needs for the rest of the century.

A task force appointed for this purpose will be producing a "Green Paper" in the Spring of 1974. This will be followed by public discussion and an immigration and population conference to discuss the "Green Paper". New legislation would then be presented to parliament as early as possible.

C.C.P.E.'s brief focused on three main points:

- 1 - Any new policy should be based on the ability of the economy to adequately absorb each specific category of immigrant.
- 2 - Those coming in to work on a temporary basis should be restricted in number in accordance with demand.
- 3 - A method of assessing supply and demand, particularly for highly qualified manpower, must be developed to provide accurate and up-to-date data at all times.

Assistance of C.C.P.E. and the Canadian Engineering Manpower Council particularly with respect to assessing the supply and demand of engineering manpower is offered to the Minister and his officials in the brief.



### FLIN FLON NEWS

By F. S. GIRA, P. Eng.

Our local Figure Skating Club is in the midst of last minute preparations for the presentation of a carnival starring former amateur world champion figure skater Donald Jackson, so my extra curricular activity time is at a premium, however, I have managed the following write ups on Company time.

Mac Collison, P. Eng. finally got away from Flin Flon on the last weekend in January. Prior to his leaving, Mac was honored at several farewells that armed him against Toronto's environment by presenting him with a Multiband Receiving Set and also of all things, a completely

functional, operationally simple, yet highly efficient, fully engraved, solid brass and stainless steel B.S. Grinder.

The grinder (B.S. not as in Bachelor of Science) prompted a few natural questions that were felt better left unanswered. Once again Good Luck Mac and Grind On.

Bob Chalmers, P. Eng., couldn't fight the Call of the Wild any longer and left us to return to the land of the Rowdyman on the first weekend in February, after only a thirteen month absence from that eastern water surrounded portion of Canada that has lately been taking the brunt of the joke industry. Good Luck Bob and watch out for A.P.E.M. correspondence or you may become the Far Far Eastern Correspondent.

Stan Liss, P. Eng., was appointed Consulting Mechanical Engineer effective February 13, 1974. Stan leaves the position of Chief Designer a post he has held since October 1, 1969.

Frank Gira, P. Eng., took in the 25th National Plant Engineering and Maintenance Show and Conference held in Cleveland, Ohio on March 18th to 21st. The seminars were very informative, the show of over 3,000 exhibits was astounding and though tiring as it was to take it all in so short a time, an enthusiastic commendation to all that were or when possible to take advantage of such events.

Any guiding suggestions or even criticisms of the above that would form or mold a greenhorn into the type of correspondent that is required would be greatly appreciated.

Editor's Note: This is the first time in the 18-year history of this esteemed publication that any reporter has ever asked for suggestions or criticisms and we are all in a state of shock, particularly since Mr. Gira seems to be able to spell, an attribute not general among engineers.

\* \* \*

## RESTRICTING SHORTAGES

In accordance with our new policy of restricting political and humorous comments and replacing it with serious issues of the day, this unfunny article is written on a sub-political subject: "Shortages".

My concern is that we are having a shortage of shortages. I think the news media has been so filled with energy

shortages that it has virtually strangled the shortages which have been struggling for recognition. As a result these other shortages have pretty well disappeared from the scene. The shortage of beef, the shortage of pork, the shortage of soybeans, and the shortage of mature judgment have all been relegated to wastebaskets.

As engineers, we must recognize that we have a responsibility to meet the changing conditions and recognize that industry does not come easily to Manitoba. We must immediately get busy and start an industry manufacturing shortages. As Manitobans, we have been very complacent and have not developed the necessary skills. I am sure that if we issue a few temporary licences, we can bring people in from the United States to supply the badly-needed technology.

I have it on good authority that the world market for a supply of shortages is growing tight. And I suspect that in the very near future the Shortage Makers Association is about to announce a dramatic increase in the price of shortages and probably sharply reduce supplies as well. So let's get on the bandwagon now.

Here Manitoba engineers is your chance to do your patriotic duty for your province!!

\* \* \*

## NORTH AMERICAN LIFE ASSURANCE COMPANY POSTGRADUATE SCHOLARSHIPS FOR ENGINEERS

### VALUE:

The value of each scholarship is \$2,000.

### TENURE:

The scholarships are tenable for study at any university approved by the Canadian Council of Professional Engineers.

### FIELDS OF STUDY:

Open, but preference given to engineering related courses.

### ELIGIBILITY:

Member of one of the eleven engineering licensing bodies in Canada. Complete with high honours a first degree in Science or Engineering and have worked in the

field of engineering since graduation.

Deadline: June 1.

Full details of these awards and application forms are available from the Canadian Council of Professional Engineers, 116 Albert Street, Ottawa, Ontario and from the office of your Provincial Association.

Applications should be submitted to the Canadian Council of Professional Engineers, 116 Albert Street, Ottawa, Ontario.

✦ ✦ ✦

### TORTOISE EXPRESS

The invitation to the Red River Ball held on March 9, was mailed to members on February 15. A member in Victoria has advised that he received his invitation on March 12, clearly postmarked February 15.

✦ ✦ ✦

### EMPLOYMENT OPPORTUNITIES

The Technical Service Council, which is located across the hall from the Association office, has job opportunities for professional engineers in various parts of Canada. Members of the Association who are looking for employment, or a change in employment, may contact the Technical Service Council. There is no fee for this service for engineers seeking employment.

✦ ✦ ✦

### METRIC CONVERSION —

#### TARGET DATES

The Metric Commission expects to make a recommendation to the Federal Minister of Industry, Trade and Commerce to submit to the Cabinet a time framework for the conversion program for approval as Government policy. Although it applies mainly to industries and interest groups, the effect will extend to all areas of the economy.

1. Investigation phase — active now and will peak in 1974.
2. Planning phase — 1974 to 1975.
3. Scheduling phase — 1975 to 1976.

4. Implementation phase — 1975 to peak in 1978.

5. Normal day-to-day transactions in the economy should be entirely in metric units by end of 1980.

Although no dates have been published, information obtained indicates the following planned dates for conversion in a few areas.

- (a) Weather forecasts — 1975
- (b) Grain transactions — 1976
- (c) Road signs and speedometers — 1977
- (d) Road construction — 1979

The Commission has emphasized that it has no powers of compulsion and, as conversion is voluntary, no target dates can be established by the Commission as irrevocable. These dates are for guidance and co-ordination purposes only.

✦ ✦ ✦

### PROFESSIONAL ADVERTISING

It may come as a surprise to some members, but the Canadian Council of Professional Engineers has, since 1967, endorsed a set of rules for professional advertising by engineers. The "Suggested Rules for Professional Advertising" were adopted as a general guideline for the constituent Associations of CCPE at the November, 1967 meeting of the Board of Directors, and were subsequently approved as such by all Associations.

The rules cover such matters as professional cards, personnel announcements, vehicle identification, letterheads, brochures, jobsite signs, office signs, and other like items. Certain types of advertising such as radio and television advertising and the use of gifts and "give-away" gadgets, are specifically prohibited. Also of note is the stipulation that: "an engineer shall not link his name to a product, process or method which he uses or specifies, in an advertisement sponsored by those interested in the sale of such product, process, or method".

The rules for professional advertising are presently under review. The CCPE Executive, at its meeting of January 20th, requested the constituent Associations to review the rules and to submit comments. Copies of the present rules are available

at the Association office, and all members who advertise their professional services should be familiar with them. —R.R.F.

◆ ◆ ◆

### DRIVING OFF THE SPLEEN

In Moby Dick, Herman Melville wrote "I thought I would sail about a little and see the watery part of the world. It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself growing grim about the mouth; whenever it is a damp, drizzly November in my soul; whenever I find myself involuntarily pausing before coffin warehouses . . . then I account it high time to get to sea as soon as I can." Maybe that explains why we don't hear of too many politicians with spleen problems — they are at sea most of the time.

◆ ◆ ◆

"With minerals resting on it, nutrients sinking into it, geologic history locked in its sedimentary layers, and petroleum beneath it, the sea's bottom is at least as interesting and certainly more useful to mankind than the moon's backside." — Dean Athelstan Spilhaus, Institute of Technology, Minnesota University.

◆ ◆ ◆

### TECHNICAL REPORT No. 1.7

In accordance with our new policy of publishing serious technical reports instead of attempts at humor and political cynicism, we proudly present this technical report on the design of sewers.

"First you gotta decide whether you are gonna design water sewers or sanitary sewers. If it is the first, you use the Rational Formula which isn't really rational at all because you don't know why it works and usually it doesn't.

If your thing is sanitary sewers (which certainly aren't sanitary) you use a different approach to the design.

These sewers have to do with human (and some not so human) waste and the first problem is to determine how much. Quality is not considered — just quantity. First you count the number of orifices contributing to the trunk and you divide

by 2 because half of the people will probably be away at conventions or on vacation at any one time.

Then you add 25% because people from Toronto (you note that we did not mention Ottawa nor any political party here, there or anywhere) will probably have an effluent overflow into our lives somewhere. You then compensate for the energy crisis and those who are away learning French or are away threatening the lives of those who do not agree with them.

Having thus arrived at the quantity you assume that nine-tenths of the flow runs downhill. The other one-tenth is propelled into the longitudinal axis of the fan and is lost to the sewer system."

In a technical report to be submitted much later we will continue this technical paper on the latest breakthrough of technology in the design of sewers.

Technical Reporter

◆ ◆ ◆

### PROGRESS

"Motor trucks average some six miles an hour in New York traffic today as against eleven for horse-drawn trucks in 1910."— The Poverty of Abundance.

◆ ◆ ◆

### COUNCIL NEWS

The second meeting of 1974 was another stimulating performance of the democratic process carried out in a manner which could only be deemed as acceptable to the members of our Professional Society.

The meeting moved through the normal items which introduce each meeting, such as the reading of the minutes, consideration of the licences, transfers and registrations. This is a necessary function of council of limited interest to the readership of this much maligned publication, however I do feel compelled to at least reassure you of their consideration.

The first consideration of the evening beyond the mundane was that of committees. This was done and to report each of the items that were considered would not be material for a Pulitzer Prize.

A discussion followed regarding revisions of the by-laws. Of particular concern is that a committee is to be struck to thoroughly review the method of counting votes for the election of councillors. It is a well-known fact that the current method is not fully understood by anyone so the proposed changes are to be fully explained.

A seminar is to be set up regarding the professional liability of consulting engineers. This subject is one which is under heavy discussion with the Bulletin Committee so if this panel is any indication of the membership then this seminar should be well attended.

The meeting dwelt on a few other subjects such as a proposal to meet with a group of Russian engineers currently working in our province, membership statements and a request from the Canadian Medical and Biological Engineering Society to have specialist identification. The later was denied with an option of helping to try and get Bio-Medical Engineering Syllabus on a national basis through C.C.P.E.  
—R.A.K.

★ ★ ★

### COUNCIL MEETING MARCH 5, 1974

The meeting began with the dispersal of sandwiches and the acceptance of accounts, minutes, E.I.T.'s, Transfers, Registrations and Reinstatements. As your reporter I feel that I tend to gloss over this area very quickly and this may be of some concern to our membership. I realize the importance of each one of these items, particularly to those individuals involved. This off-handed reporting method could lead to a misconception, that our council glosses over these points also. In fact each person is thoroughly screened, each item considered, and a great deal of thought given to these points. I feel that this should be made clear to everyone because some bad feelings may occur for no reason.

The meeting then considered the minutes of the Board of Examiners meeting of Feb. 18, 1974. The subject of considering a new standard form of agreement prepared by the Consulting Engineers committee was tabled.

A verbal report was given on a visit of your Executive to the exotic communities of Thompson and Lynn Lake. Needless to say the meeting of our Executive and the

Engineers who reside in this area was earmarked by the hospitality of the northern people. The discussion periods covered a wide variety of topics and a feeling seemed to come forward that there is a lot of room for improved understanding, both from Winnipeg to the North, and vice versa.

A letter was received and considered regarding the possibility of amending the current two year requirement to achieve P.ENG. status, with particular consideration to those people working on jobs where extended work hours are a matter of course. A reply is to be sent directly which in essence states that the Council will not be changing this part of the by-law.

The meeting concluded with a report on the Legislation Committee minutes and the recommendations from the employee Engineers Committee. They would like our Association of Professional Engineers to move toward a self-interest type group. They are particularly concerned about current salary levels. This could be done in conjunction with Saskatchewan by a private consulting group.

On this note the meeting more or less comes to an end and I must get this off to press.  
—R.A.K.

★ ★ ★

### COUNCIL MEETING — APRIL 2, 1974

by R. R. FOSTER, P. Eng.

A substitute reporter covered the April 2 meeting of Council; your regular Council reporter being out of town on business. The following account, however, remains in the true and unbiased tradition of Bulletin reporting of Council meetings.

Council convened at four p.m. Licenses, Transfers, and Registrations were quickly dealt with. Council deferred approval of one application for registration until the applicant should obtain additional experience.

The terms of reference for the University Liaison Committee were discussed, particularly with regard to the relationship of the University Liaison Committee to the Membership Committee. The terms of reference will be reviewed.

A proposal by the Membership Committee to hold an informal reception for

E.I.T.'s and their Mentors was approved. A brief discussion ensued on the merits of placing E.I.T.'s on other committees, besides the Membership Committee.

The terms of reference for the Safety in Engineering Practice Committee were discussed, with particular regard to the possible advisability of having the Safety Committee report to the Practice and Ethics Committee instead of directly to Council. After considerable discussion (two motions made and both subsequently withdrawn) Council decided that it wished to continue to receive Safety Committee reports, except in cases where, at the discretion of the Safety Committee Chairman, a report might prejudice future disciplinary action by Council, in which case the report should be submitted to the Practice and Ethics Committee.

Shortly after five p.m., the routine business of Council was interrupted by the arrival of the Chairman of the Safety Committee, in the company of the Association lawyer. Even to this reporter's untrained eye, it was evident that matters of great import were now to be discussed. Based on his reading of many previous Bulletin reports on Council meetings, your erstwhile reporter waited in breathless anticipation of being ejected from the meeting for reasons of security. Such was not the case, and discussion proceeded on the Powerview Arena Roof Failure.

Council had before it two documents on the Powerview Arena Failure; one a report by the Safety Committee, the other a report to the Committee by an independent Consultant. The Chairman of the Safety Committee introduced the reports, and made a number of general comments on professional responsibility.

A lengthy discussion then took place on the recommendation in the Safety Committee's report that "Council issue a public statement to the news media regarding this failure". A motion was carried that the actual reports not be released but that a statement based on the Safety Committee's report be released. Council was of the opinion that the Committee's report should form the basis of a press release but that elaboration and clarification were required on some points.

A subcommittee was struck to reword the Committee's report for issuance to the media. The subcommittee adjourned to the next room and re-appeared ten minutes later with a press release which was endorsed by Council.

Further discussion took place on the Powerview failure. Council decided to refer the reports to the Practice and Ethics Committee for possible action; also, to write to the Minister of Labor regarding the necessity for the involvement of the Profession in the approval of permits and in inspections, based on the submission of plans and specifications bearing an Engineer's seal as required by the Engineering Act.

Council then moved on to other matters. New expanded duties of the Executive Secretary were approved, including the Secretary's serving and working with some of the key committees, particularly in the areas of program co-ordination and implementation. A number of proposed by-law changes were endorsed, for submission to the membership for approval. Consideration of the C.C.P.E. Committee report brought about discussion on the value of the Association's distributing the joint salary surveys carried out in Alberta and Ontario.

The meeting adjourned at about eight p.m. Your reporter was unmolested, was afforded full share in the sandwiches and cookies, and was not ejected from the meeting at any point. Quote of the evening, by Councillor \*\*\*\*\*, "In the middle of my yawn, I lost something there..."

★ ★ ★

### PHILOSOPHICALLY YOURS

If the book we are reading does not wake us, as with a first hammering on our skull, why then do we read it? We would also be happy if we had no books, and such books as make us happy we could, if need be, write ourselves. But what we must have are those books which come upon us like ill-fortune, and distress us deeply, like the death of one we love better than ourselves, like suicide. A book must be an ice-axe to break the sea frozen inside us.

— Frank Kafka.

---

## MOVING?

PLEASE let us have your change of address

---



At the Red River Ball — Mr. and Mrs. Bob Morrison, Mr. and Mrs. Barry Rowley,  
Mr. and Mrs. George Pratt



At the Centennial Ball — Mr. and Mrs. Bob Foster, Mr. and Mrs. Bryan Norrie,  
Mr. and Mrs. Bill Finnbogason