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WINNIPEG, MANITOBA, MARCH, 1971

President's Message

By R. HOOD, P. Eng.

As we go into 1971, your Association is challenged with the responsibility of re-aligning the legislative and operating mechanics to suit the context of society in which the engineering profession presently operates, to re-evaluate the responsibilities that a professional status in a community demands, and to establish programs which will improve the capacity of a professional engineer to maintain and advance his professional standing.

The urgency required for action predicates that we do not spend our time determining what came first, the chicken or the egg. We must act immediately to meet the present situation, and at the same time, investigate the future broad requirement of society with regard to the professional engineer, and plan programs involving the total engineering community that will enable us to meet the changing needs.

To this end, your Council has accepted their responsibility for leadership and direction in this challenge. As a starting point they have given consideration to broad objectives for the ensuing year and have established priorities for the planning of activities to meet those objectives.

The terms of reference of all standing committees have been reviewed (and where necessary redefined) keeping in mind the broad objectives that are being sought.

In certain instances, existing committees have been eliminated. Concern has been expressed that there may be an overlap of some of the areas of interest of certain committees. However, I consider that if viewed in the positive, this will lead to a faster expression of different points of view so that a more realistic framework can be expressed in future policies of the Association.

In order to relieve fears that the direction pointed out is orientated to our provincial association inventing something new, Council has expressly indicated that it expects and intends to encourage a more significant involvement by CCPE in co-ordinating the efforts of the various provincial associations on problems common to the profession regardless of geographic boundaries. At the same time, we are not prepared to accept the purely eastern orientation that has been so evident in previous national bodies.

Significant to the basic objectives, certain specific steps have been taken.

The Practice and Ethics Committee has now been approved by the membership and its membership has been constituted by Council. The first committee is to be chaired by C. R. Bouskill, P. Eng., with the members being: C. E. Birston, F. M. Fowler, K. A. Hand, J. H. MacDonald, R. C. Sommerville, T. E. Weber. Two fundamental principles must be accepted by the membership in order for this committee to function effectively. The first is that its

purpose is not to be abused to gain facetious objectives and, secondly, the key to this committee achieving its purpose is to retain its informality in order that questionable actions can be assessed before they become major problems. I say this with no thought of belittling the power of the committee.

With regard to the future of the profession in this increasingly complex society, the Advisory Committee has been reconstituted to investigate the possible future role of our profession in the context of a multi discipline requirement and to recommend policies which will enable our profession to not only contribute, but to lead into more practical and effective means of coping with the increased complexities that we face.

One area of major concern has to be the development of members who will contribute and enhance our professional status. This concern falls into four basic categories: the encouragement of top potential students to enter the profession, an area which is effectively being explored by the Career & Guidance Committee; the development of suitable undergraduate and graduate students to meet the needs of both society and the profession, together with the introduction of the requirement of a professional attitude, an aspect to be acted on by the existing Membership Committee and a newly formed committee for liaison with the academic staff; the need for programs for the development and maintenance of a suitable working environment for a continuing improvement of the practising engineer, which is being considered by the Employee Engineers Committee and Consulting Engineers Committee; and last but not least, the need for projecting a more positive image of the professional engineer's sense of responsibility and his contribution to our way of life is being assigned for action by the Bulletin Committee for internal and external consumption.

In addition to the foregoing, it is anticipated that concrete steps will be taken via the Legislative Committee to institute the necessary steps for the scrutiny of our present act and by-laws and for the possible changing of both.

In conclusion, I would like to state the obvious. Either we get the full and active support of all members of this Association in these activities, or else we have to face the reality that our profession will be absorbed by other movements and our

actions will be governed by the state, directly.



ANNUAL MEETING SWINGS A LITTLE

The new environment of the Winnipeg Inn and a new meeting format breathed life into the annual meeting and attracted the largest attendance of engineers since 1959.

A committee headed by Rudy Isack, his mod dress the envy of the crowd, ran the free bar and found that the expected stampede did not materialize. This remarkably temperate performance was credited to the natural shyness and reserve of today's engineer.

The meeting opened with an announcement that there would be no guest speaker. This was greeted by extended applause from the delegates. Next on the program was guest speaker Mr. Angel from St. John's, Newfoundland, President of the Canadian Council of Professional Engineers. His introduction by President Adam was somewhat embarrassed in view of the previous announcement and its reception. Mr. Angel was able to maintain his good humour, however, and gave a comprehensive rundown on CCPE activities, explaining where the \$2.40 per engineer per year is spent. Not only does CCPE tie the autonomous provincial organizations together for a common goal and sit on international boards but they must lead the way in employee-employer relations. "Engineers are doers, not talkers—to their financial detriment," he said.

Following the speaker there was a mutual backslapping session between the Bulletin Committee and Council with Editor Bob Stokes congratulating the Council on its year of hard work and Councillor Stu Barkwell remarking on the Bulletin's stimulating articles and reports.

The business meeting was highlighted by a motion duly moved and seconded but never withdrawn or voted on.

The discussion period centered on the new discipline by-law with Councillor DePauw explaining to the gathering why he was unable to support the by-law in Council. This part of the program was interrupted by unscheduled music emanating from a dance in the next room. Don Sampson at the mike was trying to drive

home a point over the din of the music, finally gave up and concluded his remarks with "I shall ask Mrs. Dunklee for the next dance." At 12:45 a.m. Mrs. Dunklee, still a wallflower, was waiting for Mr. Sampson to honour his commitment.

Incoming President Russell Hood cut the 50th anniversary birthday cake in fine style, despite the claim of one nit-picking engineer that there were only 49 candles.
— K.M.J.



COUNCIL MEETINGS

Bulletin Under Fire

At the last regular meeting of the 1970 Council on November 3rd, President Adam reported on a controversy which developed over the forthcoming Annual Meeting issue of the Bulletin. Councillor De Pauw had written a letter to the Bulletin editor for publication in which he outlined his minority position in opposition to the Discipline By-law. President Adam attempted to have the Bulletin editor reject the letter, since the publication would contain no comparable argument in favor of the By-law. He was, however, unable to get Editor Stokes to "see his responsibility."

The ensuing deadlock was broken when Councillor De Pauw was prevailed upon to graciously withdraw the letter.

Councillors joined in a free-wheeling discussion as to the powers and responsibilities of the Bulletin Committee, the editorial function of Council, and the question of Council showing a united front to the membership on important issues.

Toward the end of the meeting, Councillor Baracos provided a round or two of refreshment as a farewell gesture to the Council he has served so faithfully and so effectively for many years.

The Bull Session continued after the close of the meeting, with the main topic being the lack of knowledge among the membership about the Canadian Council of Professional Engineers (C.C.P.E.) and all the wunnerful things they do for us. Soon all the guys went home and the party . . . broke . . . up. — K.M.J.

Editor's Note: When Mr. DePauw's letter was received by the Bulletin Committee, because it opposed the proposed by-law,

a copy was turned over to the Executive with the object of giving them an opportunity to present their case in the same issue. They declined.

Council Sets Policy — Establishes Priorities

On Saturday, December 19, 1970 when most of the membership were out in the pressing crowds doing last minute shopping for those important people in their lives, a concerned Council met in the quiet chambers and planned their course of action in carrying out the responsibilities of the Association to the population of Manitoba on behalf of the 1800 members. Seated around the table with President R. Hood and Secretary-Registrar, T. W. Algeo were Councillors: J. D. Adam, A. M. Lansdown, W. R. Newton, L. S. Earp, G. A. DePauw, S. Barkwell, K. Hallson, and C. R. McBain.

The Councillors had in their possession a list of 9 items (later increased to 11), which currently confront the Association and range in urgency and depth from the Employee Engineer problem to a working relationship with educational authorities. Chairman R. Hood stated that in order for him to lead in carrying out the policy set out by the listed items and further, to establish priorities, Council must be in agreement with the fact that the welfare of the membership is necessary if one is to properly administer the Engineering Profession Act—the main purpose of which is to protect the public. To this end a motion was requested by the Chairman.

Two motions went down to defeat but only because they failed to state clearly the unanimous support of the Councillors for the proposed policy.

Following active discussion on both motions Council agreed that a motion would only add restrictions to what was implied by the Act and what was really necessary was a statement on policy to the Membership. Chairman R. Hood was directed to bring this policy statement to the membership by a President's message in the Bulletin.

Having thus accepted the list of 9 items as Council responsibilities and adding a further two, the Council set to work and established their priority in terms of an A or B rating.

The review of the terms of reference of the committees was given top priority

and required that 6 Councillors review the present mandates and bring their recommendations to the next meeting. (Somehow I was reminded of an article in the October issue of the Bulletin.)

By means of a motion Council accepted the recommendation of the Awards Committee that the Association agree to participate with the University of Manitoba and the Canadian National Railway in the "Canada North Lands Award," subject to the agreement of the other two organizations.

The meeting adjourned and the Councillors partook in liquid refreshments and less orderly discussion. — E.E.L.

Committees, Committees, Committees

At the February 2, 1971 meeting of Council there was expression of considerable concern over allegations that non-registered engineers are now employed at the forest industries complex at The Pas. Council decided not to take action at this time, pending receipt of further information.

Nine applications for registration, 8 transfers and one reinstatement were handled, 4 Engineers in training accepted and 3 licenses granted.

Council considered the recommendation of the Employee Engineers Committee that Council officially recognize the Society of Engineers of the Manitoba Telephone System. Councillor De Pauw read aloud the May, 1967 policy statement of Council concerning collective bargaining for engineers, thus triggering off a debate on whether such a policy was still relevant in light of developments in the last few years. The general feeling of Council seemed to be that the Association should continue to oppose the inclusion of professional engineers in any group formed for the sole purpose of collective bargaining. The motion concerning recognition of the S.E.M.T.S. was tabled in order to allow Councillors to review the Society's aims in terms of the 1967 policy statement.

Councillors were quick to table an item concerning University course ratings. It was suggested that this would be an appropriate topic for referral to the new University Liaison Committee.

Council accepted the suggestion of the Canadian Council of Professional Engineers that a committee of the APEM study the first volume of the Report of the Senate

Committee on Science Policy. The first volume consists of a critical review of Canadian science policy while the 2nd volume will contain recommendations of the Senate Committee. By studying the first report the Committee will be able to grasp the implications of the second report and make an appropriate response to the Government soon after the second volume appears. The matter was referred to the APEM's Research and Development Committee.

Next, Council settled down to a lengthy review of the recommended terms of reference of its twenty committees. The terms of reference of the Admissions Committee were agreed on readily enough but the next committee to be discussed was the Bulletin Committee. There was considerable discussion on whether the membership of the Bulletin Committee was to be reported to Council or ratified by Council or both, or neither. Council's awareness of having a Bulletin reporter in the room seemed to increase at this point, so your agent decided that the sudden onset of writer's cramp would be appropriate.

Council eventually moved on to the Consulting Engineers Committee and it was agreed that the new terms of reference should include the former Architects-Engineers Committee as a sub-committee. The terms of reference of the Legislation Committee and the new Research and Development Committee were accepted readily as was the recommendation that the function of the Public Relations Committee be performed by the Bulletin Committee.

The Brandon Area, Career Guidance and Counselling, and Employee Engineers Committees' terms of reference were agreed on though Council digressed into a discussion of just what was the law of supply and demand. Discussion of the Membership and Safety in Engineering Practise Committees was tabled pending receipt of further information from Councillor McBain, who was absent. The Social and Sports Committees' terms of reference were accepted.

A motion was made and passed to add one more member to the Executive Committee, thus making its composition identical to the Finance Committee. However, Council decided that the two Committees should operate as separate entities. There was considerable discussion of the terms of reference of the Advisory Committee, mainly concerning its composition, but few changes were made.

The recommendations concerning the Awards, Premises, and the new University Liaison Committees were adopted without change.

All of the Committees are to present brief reports to Council three times a year. Once the terms of reference of all the committees have been made final, these terms of reference will be publicized in the Bulletin.

Council then adopted a list of members on the 1971 Committees. It was agreed that only APEM members can serve on a Committee, although Committee members may invite any non-member to assist them in their deliberations, if this seems appropriate.

As all of the fresh fruit, cookies, and coffee were finished and the supper hour long departed, Council postponed discussion of the other agenda items and adjourned the meeting. — R.A.H.

New Council Gets Down To Business

The new Council with President Hood in the chair showed determination in getting down to business when they forged ahead with their first regular meeting December 8th, despite the lack of a quorum. Councillor Hallson on his late arrival was assured that all the foregoing had been straightforward and there was no need to go backward for a review. With this assurance he agreed to a retroactive quorum.

The inaugural meeting was highlighted by a move by the new Council to provide for more orderly dispatch of the Association's business. The terms of reference for all committees are to come under review. Time is to be set aside at regular meetings to discuss policy topics such as collective bargaining for engineers and administration of the Act. Policy matters are then to be rated as to priority and will be dealt with in that order.

President Hood also expressed dissatisfaction with the public image of the Professional Engineer. It was therefore agreed that the Public Relations Committee be reactivated and combined with the Bulletin Committee.

Council spent considerable time discussing the resolutions of the Canadian Council. Of particular interest was resolution 836 in which CCPE not only strongly recommended bargaining units for engin-

eers but agreed to set up a "nationwide framework for collective bargaining." Councillor Newton stated that he doesn't want acceptance of the CCPE report to be construed as approval of this resolution by Council. Council agreed, however, that they should take the lead in organization of collective units.

In other business Council asked for a letter to be sent to Peter Warren of the Winnipeg Tribune expressing disappointment in the method of publication of some remarks by Transportation Minister Borowski, in which he suggested a lack of integrity among engineers. Council felt that unsupported and unrefuted statements of this kind appearing in a column apparently dedicated to factual reporting could be taken for truth by many readers.

A technician resident in Manitoba was able to enter the Ontario Association of Professional Engineers through a special grandfather clause for mining engineers. Council now has an application for his transfer to Manitoba. Concern was expressed over this kind of back door entry to the Association and the matter was referred to the Admissions Board for further consideration.

Ways and means of establishing a Council member from outside of the Winnipeg area received Council's attention. Provision for this can be simply made as follows: Councillor Adam must resign his Council seat (his term has one year to run). He then becomes an ex-officio member in his capacity as Past President. This allows the election of another member to Council. The position could be filled from the outlying areas provided the many problems relating to travel expenses, meeting times and dates can be ironed out. Council tabled the idea.

Ed Klassen reported to Council at the January 5th meeting from the high priority Employee Engineers Committee. This group is concerned with collective bargaining and the formation of professional negotiating units. Mr. Klassen advised that a report of the results of the employee-employer relations questionnaire would be available in the Spring.

Council officially acknowledged the value of bull sessions following Council meetings. To keep the membership well informed on the aftermath discussions, the Bulletin may have to assign a second reporter to these meetings to cover the midnight shift. — K.M.J.

HOOD — THAT'S H-O-O-D



R. HOOD, P. Eng.

Russell Hood is the A.P.E.M. President for 1971. With a name as simple as that you would think there would be no problems but it isn't so. Listening to Russ trying to get his name across over the phone can be quite an experience; it goes something like this. The name is ood — no, ood — ood, eitch, double ow, dee. That's Hood in Australian.

Our new President was born and raised in Sydney, Australia, where he graduated from the University of New South Wales in 1953 with a degree in Civil Engineering. He spent the next five years with the Department of Railways in the City of Sydney and the New South Wales Electricity Commission on various civil projects. In an attempt to avoid the monotonous sunshine of his homeland, Russ emigrated to Canada in 1958 to "make his poke." It was planned as a five-year stay, but the effects of our invigorating climate and panorama of ever-changing seasons have proven too strong — Russ

has never thawed out enough to move back.

On coming to Canada Russ joined Underwood McLellan and Associates Limited in Saskatoon as a resident engineer. He was later moved to Winnipeg where he progressed rapidly from Roads Engineer to Chief Engineer to his present position as Manager of the Manitoba Branch responsible for all the Company's activities in Manitoba and Northwestern Ontario.

Russ has been active in Association activities since his arrival; his achievements include two years on Council, six years on the membership Committee (two as Chairman), five years on the Technicians Committee and two years on the Bulletin Committee. In addition to his Association duties, Russ is involved in many other interests. He is an active member of the Engineering Institute of Canada, the Association of Consulting Engineers of Canada, the Canadian Good Roads Association and an Associate of the Highway Research Board. For the past two years Russ has been a Director of the Victoria Hospital Board, deeply involved in their new hospital building program. He is also a member of the Royal Order of Masons and the Winnipeg Squash Club.

Despite his very busy schedule Russ has found time to help his wife Joy raise two boys and two girls who are already showing signs of the inherent Australian talent for championship swimming.

Russ is noted for the energy and enthusiasm he puts into everything he does, and his term as President will be no exception. He is frankly concerned about the apparent apathy of the majority of members and hopes to stimulate a more active interest in Association affairs especially by those outside the Metro Area. He is also concerned about the public image of the Professional Engineer, which he wants to improve through a more active engineering participation in public and social programs and a wider publication of engineering projects and involvements.

The Bulletin Committee wishes Russ the best of luck in what is sure to be a challenging year. — R.J.B.

BITING COMMENT

When dog bites man it's no news;

When man bites dog it's no news;

When dog bites snowmobile seat —
now that's news.

John Wilfrid James Lewis, P. Eng.

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SHOCK IT TO . . . WHOM?

By P. FESCHUK, P. Eng.

At the invitation of Dr. Peter Curry, Chairman of the University and Community Council, a number of the profession gathered with the Council in the Senate Chambers, University of Manitoba to discuss "Is the Faculty of Engineering meeting the needs of society in its training of engineers?" The University and Community Council, which draws its membership from various university and student governing bodies and the community at large, is charged by the University Act with the duty "to foster mutual understanding between the University and general public."

Carson Templeton introduced those in attendance to the purpose of the meeting and said that the University and Community Council was examining all the faculties on campus. In anticipation that a number of the profession may overstate their case or get carried away with their oratory, Mr. Templeton presented a member of the University and Community Council with a fog horn to be blown when speeches rose to the level of sounding of self praise and/or lacking brevity.

Dean Hoogstraten provided the gathering with some facts and figures on the faculty and the engineering curriculum. "The Faculty of Engineering enrollment composes 9.2% of the university undergraduate enrollment, 9.2% of the graduate enrollment, and not too surprising 9.2% of the total university enrollment," announced the Dean. "Staffing of the faculty consists of 70 staff members and 42 support staff. Approximately 1/2 of the staff is engaged in research which brings in 1/4 million dollars a year to the university coffers through N.R.C. grants. Student enrollment consists of 1150 undergraduates and 123 graduate students. The Engineering program is basically a four year program but the student, if he wishes,

is allowed up to six years to complete. On the average the students receive 18 hours of lectures and eight hours of labs per week. Courses are designed with an eye to the future and hopefully are related to the anticipated needs of the profession over the next 35 years. Much of the decisions on what would be taught is based on the fact that 50% of the graduates entered traditional engineering fields of design and operation, 20% development, 5% research, and 25% management. The engineering course allows electives in both technical and non-technical areas with one arts elective compulsory in both the third and fourth years." Dean Hoogstraten went on to say that although the faculty had taken steps in steering the engineering program in the direction which they thought the trend in engineering was going they did not want to suggest that they had any pat answers.

Quoting from the December 17, 1970 issue of the Engineering News Record, George De Pauw suggested that since there was going to be such a tremendous demand for technicians (1,000,000 new positions by 1980 in the U.S.A.) and since by definition what is referred to as engineering in the Engineering Profession Act is the same as engineering technology defined by A.S.E.E. in the U.S.A., we should stop fooling ourselves and change the Association's name to The Association of Professional Technicians of Manitoba. "The engineering profession requires highly trained and competent technicians," Mr. De Pauw stated. "We should stop wasting the taxpayers money and close down the faculty which is expensive to maintain and let the Red River Community College produce the engineers."

W. Saltzberg stated that the professors on campus were pre-occupied with making the students in the image of themselves. "The engineering education of today is producing idea men who want to design the Verrazano Narrows Bridge, unfortunately, we in Manitoba have no Verrazano Narrows Bridges to design, just structures over Plum Creek," argued W. Saltzberg.

John Adam stated that the technician-engineer argument is fostered by a lack of good management where graduate engineers are not challenged in their work but given assignments that could be more efficiently carried out by Red River Community College graduates.

Sam Block noted that the era of the apprenticeship engineer is over. Gone are the days of slugging it out for 3 to 5 years

as a surveyor before advancing to a position more suited to your training. "With the Red River Community College graduate technicians taking positions previously occupied by junior engineers and now that graduate engineers are better trained, it is both unnecessary and unwise to retain this apprenticeship," suggested Mr. Block.

Craig Sommerville questioned the goal of the faculty. Had anyone looked at whether 9.2% enrollment in engineering studies was a good number? Perhaps the undergraduate program was suffering because of the graduate program. Mr. Sommerville stated he liked Red River Community College's approach of asking employers what they wanted in the way of graduate technicians. He stated he had never been approached with this type of question by the Faculty of Engineering.

One of the members of the University and Community Council directed a question to Dean Hoogstraten stating that he knew that the Faculty of Architecture had a fine reputation as a school of architecture and he wondered if the Dean could say how the Manitoba Faculty of Engineering stood amongst the school of engineering in Canada.

Dean Hoogstraten rose to answer the question amongst shouts of "Blow the horn!" Dean Hoogstraten stated he didn't want to take anything away from the Faculty of Architecture but suggested that one of the reasons that the school is considered amongst the best in Canada is that there are only three or four schools of Architecture in Canada. Terry Algeo noted that the Faculty was accredited by C.C.P.E. and therefore must be a reasonably good school of engineering.

"Having examined and taken engineering training in Europe and the U.S.A., I find that what is being done here is essentially the same as what is being done in other countries," stated E. Kuiper. E. Kuiper went on to say that philosophically the Faculty of Engineering had three obligations. First, development of the individual; second, development in the student of a concern for social issues; and thirdly, development of the individual as a professional engineer. He felt that the faculty did little towards the personal development of the student, almost nothing in the second, and that development of professional engineers was limited to training rather than education. He felt that the engineering program should be lengthened so that the faculty could have more time to meet its responsibilities in the three

areas he outlined.

Robert R. Handler observed that most of the discussion had centered on three types of engineers and that the three types fashioned were in the eye of the beholder mainly the "Faculty's" engineer, "Society's" engineer, and the "Engineer's" engineer. Mr. Handler stated that much of the turmoil in the profession resulted because many professional engineers are ashamed to be identified as a professional engineer for reasons known only to themselves. Mr. Handler was gratified to see more electives in the engineering curriculum particularly those from the traditional arts curriculum. He hoped that the arts electives had more substance than the arts courses he took in second year engineering.

C. R. Bouskill outlined that he felt it was the role of the University to teach the engineering students to think, to reason, and communicate. He observed that engineers cannot communicate effectively. However, he felt that the faculty had progressed.

Mr. M. Stringam, Senior Stick, Faculty of Engineering, felt that the Profession had failed to communicate what an engineer is to secondary school students. He felt that engineering students are not taught to reason and that the thinkers in the engineering student body either go to graduate school because they feel they missed something or else they cop out of engineering. He felt that this wasn't the fault of the faculty but rather that the students were not motivated.

Bob Keats, an engineering student who was responsible for producing an UMES documentary report on Education in Engineering, stated that most professors do not realize that they put students in a state of apathy. He stated he was happy that the Dean had approved a professor and course evaluation program. He felt that it should be mandatory for engineering professors to take teaching courses offered by the Faculty of Education and that more weight should be placed on teaching competence in the selection of staff.

R. A. Johnson felt that Canadian engineers should not continue to be salesmen of other people's technology and that it is not right to leave research to the scientists since many of the problems of engineering are application type of problems that aren't of interest to the scientist. Mr. Johnson felt that some of the criticism offered at the meeting was warranted but

some was not. He suggested it was the responsibility of the profession to advise the University on the engineering curriculum and that the profession had faulted the faculty and not the faculty the profession as was suggested earlier.

Russ Hood, President of the A.P.E.M., in thanking the University and Community Council for allowing the profession the opportunity of speaking on engineering education, stated that he was not able to represent the profession on this issue since the members had so many diverse opinions on the matter.

Half an hour after announcing there was only 10 minutes left in the discussion period, Dr. Peter Curry closed the discussion.



POLLUTION

By R. J. JEWELL, P. Eng.

Was the topic of an article in England as far back as 1661 according to the December 1970 issue of National Geographic.

Is a topic that commands much attention in the news media of today i.e.: is topical and news worthy.

Basically refers to the despoilation of nature and the slowing down and destruction of ecological processes.

Is basically a product of the industrial revolution and subsequent tremendous growth of technology.

Is probably aggravated by the population explosion which is inextricably related to the escalation of technology.

Affects nearly every living thing in the world today, but apparently man who has caused the pollution is not yet affected as greatly as forms of life lower down on the scale.

Should be the active concern of every thinking person, for the spread of pollution is aided by apathy.

Has in the past spread such that people have been conditioned to accept the resulting destruction without comment. However it is now spreading so rapidly that there is mounting concern being experienced.

Is threatening man's very existence on this planet.

It must be corrected quickly, universally and intelligently.

Will be very expensive to correct, and the cost will eventually be paid by the public, who, as consumers will find that industry must pass on the cost of pollution control devices.

Will most certainly demand sacrifices by people if it is to be even halted let alone reversed.

Is like an iceberg in that most of it is "under the surface" and as yet undetected, or at least not evident.

Must become more the concern of the engineering profession who will eventually provide the anti-pollution technology and hardware.

If man is to survive on this planet, then it is essential that the fight against pollution be handled free of any personal, political, national or international self interests and that the total population be aware of the consequences of further neglect.



ENGINEERS AND BASIC PRINCIPLES

Manitobans generally have felt the effects of the federal government's anti-inflation policy during the past year and perhaps the worst is yet to come. Concerns for the high and increasing rate of unemployment in our country are expressed in every issue of our daily newspapers. Manitoba, with its reputation for extremes, fortunately is faring better than most of the other provinces. Reports have it that a depressed economy still resulted in slow but steady growth during the past year here in Manitoba.

With all due respect to the national unemployment problem, the problem of finding a means whereby our economy will create new jobs at a rate matching the growth of the work force or other economic barriers I do not believe these are the major problems facing our nation today. Neither is bilingualism, a new constitution or race discrimination.

The vital issue today is the preservation of our democratic society and the freedom of choice as we Canadians have known it in our relatively short history.

Overstatement, perhaps, but I think not. During the past year we have witnessed such an acceleration in the eroding forces on our society that one wonders what can yet be salvaged.

It does not require an indepth study to realize that during the past few years some real ills have become firmly entrenched in our society. The ills which were manifested so vividly in the violence and general disregard for law and order during the past year in most Canadian centres. By public press and television we were informed of what I believe to be the fruits of our progressively permissive society. A permissiveness which continues to give the advantage to the criminals and radicals who are only bent on disrupting and destroying our society.

Why was a major political party so concerned about the implementation of the War Measures Act when it knew without doubt the integrity and aspirations of those responsible for its enactment as opposed to those few whose rights they felt were being encroached upon? And still it continues; just recently the Federal Health Minister stated to the effect that Canadians must tolerate and show sympathy towards organizations of the poor even though some of these members break laws. What right does this Minister have to condone the wilful breach of our laws?

Closer to home the Manitoba Attorney General at one time publicly stated that he was prepared to accept a little kicking of policemen in the shins, provided it did not seriously impede them in the carrying out of their duties.

It is my understanding that some fellow Canadians are now concerned that one should have the right to appeal a charge for contempt of court. Realizing to what extreme the Rose brothers carried on before they were cited for contempt we wonder why yet another pitfall must be placed in the path of justice.

In the engineering fields when we encounter a difficult problem, and we surely do have a problem in our society, one must invariably return to basic principles.

To turn our society back on the road to recovery it is vital that all the issues that confront us today such as the legalization of non-medical use of drugs, divorce laws, abortions, doing one's thing without regard for others, and open and willful defiance of public law and order should

be judged solely on basic principles. I fear this is not the case today. Rather, we permit continuous saturation coverage by the news media for a period dependent on the nature of the issue until the public is callous or at best indifferent to even the most objectionable of issues.

While engineers by their training are probably more inclined to take the basic principles approach, I believe all of our present elected representatives are capable of it.

Naturally, opinions will vary on these basic principles which will in turn influence the judgment of the issues of the day but the variation will be infinitely less than by any other approach. For example, one of the foremost principles would be human dignity or the value of a human life. The Christian religion offers tremendous insight here in that man is created by God, loved by God and therefore certainly worthy of respect, courtesy and kindly consideration by his fellow man.

Even this one basic principle offers guidance in reaching a decision on all the issues mentioned earlier.

Another basic principle is man's inherent characteristic of not being capable of complete self discipline. This after all is the main reason for the development of law and order into our society and therefore if this basic principle has not altered recently, the maintenance of law and order is still vital today.

This to my mind is the vital issue of our time and only time will tell if we are yet able to halt the decay of our society in terms of the freedoms and privileges as we have known them in the past.

— E.E.L.



PHILOSOPHICALLY YOURS

As the scale of the balance must necessarily sink under the weight placed upon it, so must the mind yield to evident things.

— Cicero.

The more a mind is empty and without counterpoise, the more easily it gives beneath the weight of the first persuasive argument. That is why children, common people, women, and sick people are more subject to being led by the ears.

— Montaigne.

ELECTION RESULTS

The scrutineers have reported as follows:

Total number of ballots mailed out	1793
Total number of ballots returned	639
Percentage returned	35.4%
Spoiled ballots	10

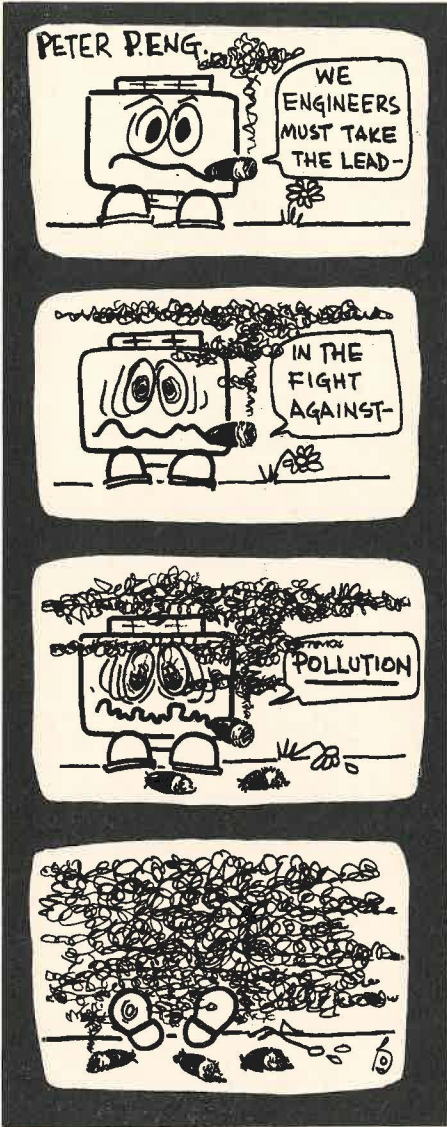
Councillors elected for 2 year term:

- S. BARKWELL
- L. S. EARP
- K. HALLSON
- A. M. LANSDOWN
- W. R. NEWTON

A breakdown of the results follows:

Quota 105

Names of Candidates	1st Count	2nd Count Transfer of Shkordoff	3rd Count Transfer of Klassen	4th Count Transfer of Summach	5th Count Transfer of Foster	6th Count	7th Count Transfer of Henderson	8th Count Transfer of Sinclair	9th Count Transfer of Wilson
						Transfer of Earp (Surplus)			
Barkwell, S.....	102	105E	105E	105E	105E	105E	105E	105E	105E
Earp, L. S.....	97	99	101	104	111E	105E	105E	105E	105E
Foster, R. R.....	23	25	27	31	..	..	..	..	..
Hallson, K.....	73	73	76	81	83	85	95	104	116E
Henderson, I. B.....	26	26	30	30	33	33	..	..	..
Isberg, W. N.....	38	40	41	44	47	48	58	64	75
Klassen, E. H.....	19	20	..	..	..	..	..	..	..
Lansdown, A. M.....	75	76	79	81	92	93	98	102	114E
Newton, W. R.....	74	77	78	81	83	84	87	99	111E
Shkordoff, T.....	19	..	..	..	..	..	..	..	..
Sinclair, J. P.....	30	30	32	32	33	34	36	..	..
Summach, A. J.....	20	24	25	..	..	..	..	..	..
Wilson, H.....	33	34	35	40	42	42	45	50	..
Non-Transferable ballots .....	..	..	..	..	..	..	..	..	3
Totals	629	629	629	629	629	629	629	629	629



QUIT SMOKING !

If you don't want to accept the medical evidence which proves that smoking contributes to lung cancer and heart problems, then keep your head in the sand and puff away and let's just hope you aren't one day confronted with the ultimate in proof. If you do believe that smoking impairs your health and you want to kick the habit you are invited to join a newly organized group of fellow engineers with the same problem.

First of all a few facts must be faced. Not only is smoking harmful to your health, it is a dirty habit. If you smoke you smell and everything around you is contaminated — your clothes, the clothes of other people who don't like it, drapes, rugs, your breath, your hair. Any non-smoker can describe in one word how a room smells that has a partially filled ash tray in it — "Ugh!" Any non-smoker can smell tobacco on your breath and your clothes.

It's a habit most of us picked up when we were immature and were trying either to look mature and were deluded into thinking smoking did it, or we just wanted to be part of the gang—we thought it was smart. Not very many people start smoking after they are thirty. They have too much sense.

There are as many rationalizations for smoking as there are smokers. Some think they need to do something with their hands, some think it relaxes them, and in part these are both true. But there are thousands of other uses to which the hands can be put and as to the relaxing bit, do smokers look more relaxed than non-smokers—or is the reverse true? Then there are those who claim they smoke for pleasure. There is some satisfaction in inhaling clear fresh air, or even in smelling flowers, but neither is exactly a real fun thing, so it is difficult to buy the blowing of smoke around as pure delight.

There are some psychologists who say smokers are generally people who didn't really want to be weaned—they want to keep something in their mouths. They progress from breast feeding, to thumb sucking to nail biting, to pencil and pen chewing, to smoking. Well, fellows, how about growing up and getting weaned. Grow up and face the fact that it is totally irresponsible to smoke. You may make your wife into a young widow and render your children fatherless.

To launch the campaign the first two "volunteers" are Editor Bob Stokes and Councillor Bill Newton. If you wish to join their ranks just telephone the office and turn in your name or send it in by mail (or ask your wife to do it before she becomes a widow.)

We will set a deadline for you as soon as we have your name. But you might as well start right now by getting behind you all the degrading performances that often accompany stopping smoking. Stop buying cigarettes and just mooch from your friends and associates. When you are

at home go through all your pockets, every drawer, turn the house upside down looking for just one or two more fags. Once you are satisfied there isn't another whole cigarette left in the house start in on the butts. With the help of a pin or a hair clip you can usually get a couple of puffs from an old butt. Once all this nonsense is behind you, you are ready to quit seriously.

Look forward positively to all the advantages that go along without smoking. You will once again begin to taste food and notice flavours you haven't sensed since you were very young. Your sense of smell will become more acute and you can really enjoy the aroma of roast beef and Yorkshire pudding cooking in the oven, or the scent of flowers or freshly cut grass. You won't be offending other people. And best of all, you will live longer, and be healthier while you are doing it. You will also have more time for other things. It takes time to smoke. It is a diversion from what you ought to be doing.

Councillor Bill Newton and Editor Bob Stokes will kick this campaign off by stopping smoking the day this Bulletin is published. If you would like to join up please let us hear from you. We'll be glad to help you over the rough spots. We'd far sooner do that than be a pall bearer. — T.B.C.



THE UNIVERSITY AND THE COMMUNITY COUNCIL

On January 21st, invited engineers participated in a meeting of the University and Community Council, held in the Senate Chambers of the University of Manitoba. The topic for the evening was: "Is the Faculty of Engineering meeting the needs of society?" About seventy people attended. After the reception an excellent meal (courtesy of the APEM) and routine business had been completed, the engineers took the floor.

The result was an examination of the very basics of our profession: our goals, our supposed function, our actual function, and our future.

Underlying unity of thought was evident: if we don't clarify our goals and functions soon, we will forfeit our future to the technologists. Many engineers are doing nuts and bolts design, the day to

day application of existing techniques. They will lose these jobs because employers realize that technical school graduates can do them better and more economically.

With the rise of the technical schools, the engineering faculties should enrich their curricula with more courses on the humanities and social sciences, without compromising technical competence. This will produce graduates better equipped to lead and supervise and to make socially responsible decisions. The University of Manitoba Faculty of Engineering is doing just that. Members of the faculty acquitted themselves well, and by their very presence refuted accusations that none of the professors cared or were interested in anything but their own research.

Absolute consensus was impossible from this diverse group, but several speakers felt we must have:

1. close contact between the faculty, the profession and the real world.
2. continual broadening in education to serve the needs of the engineer and the community, not just the needs of the employer.
3. good public relations to ensure that engineers will be used to their best advantage as trailblazers, promoters, planners and managers.

The discussions were encouraging; exchanges were lively, thought-provoking and generally of a high calibre. A good meeting. — R.R.M.



CURLERS AND OTHER SPORTS

Kudos to Terry Monastyrski and his Sports Committee for masterminding a rousing curling bonspiel. A record 32 rinks entered, several of them being five-man teams. A bouquet also to Bob Jeske who selected the very handsome prizes.

Doug Dawson made the mistake of sitting beside the recruiting officer for lunch and found himself on the Sports Committee before the meal was over.

Past President Frank Fowler rendered it almost impossible for us to have any kind of comprehensive and unbiased report on the event. When he saw the reporter arriving he announced in a loud clear voice to all assembled: "You know where that's going to show up if you keep

spouting off!" He curled for Bruce Clapham and it must be admitted that the team collapsed when Frank took off.

For the benefit of those who missed out on the go-go girl at noon, Bob Byers let all interested persons see the truss on his knee. Did you notice Don Miller with the new sideburns and cookie duster? Always in the avant garde of any movement, Doug Grimes was the first to try the new coeducational washrooms. He found himself in a locker room alone with a lady wearing nothing but a towel.

(Ed. Note: Doug Grimes will reveal how he found this out in the next issue.)

Bill Mann said 8 a.m. was an inhuman hour to start a bonspiel. Art Sparling was the only member of his team to arrive on time and he suggested that in future civil servants should be pitted against civil servants for the early draw. He was helped to the consolation prize (losing all three games and scoring the lowest point aggregate), by E. Kurtz, B. Rendall and G. Balacko.

In a duel between our editor and Councillor Hallson, the scoreboard had to be used twice to accommodate the Bulletin Committee efforts.

Winner of the third event was G. Koch, assisted by V. Becker, A. Brown and K. Ebberrn.

A week after the bonspiel the McBain and Kaita rinks had recovered sufficiently from getting to the finals of the second event to have the playoff. The McBain rink won—whether or not this was because Skip McBain was unable to join his teammates in the final game no one would say.

Larry Morison will go against Larry Greer in the finals of the first event as soon as all eight curlers are back in shape.

Some of the lounge events did not wind up until after midnight. The 5:00 p.m. to 6:00 p.m. show was censored and the press was excluded. It sounded hilarious.

President Hood was on hand to present the prizes in the two events completed that day. Rumours that he called his broker from the Highlander to order some shares in Absorbine Jr. were denied.

S.J.A.

WHOOPEE!

Council has approved the Terms of Reference of the Sports Committee as follows: "To be responsible for the organi-

zation of sporting activities or events for the benefit of Association members." Chairman Terry Monastyrski's initial comment was "That's it?" Then he added, "Do we limit ourselves to curling and golf or do we expand our activities to include events that are not necessarily athletic but are sporting?" Terry has promised to write an article for the next issue in which he will ask members for their views. He should get some "sporting" suggestions.



ENGINEERS AVAILABLE

If anyone hears of any engineering positions for recent graduates, please contact the Association office. There are several members of the 1970 graduating class in engineering who have not yet found employment.



LETTERS TO THE EDITOR

WESTERN OUTPOST HEARD FROM

The Editor:

Dear Sir:

I am pleased to note by C. H. Templeton's letter to the editor concerning Councillor DePauw (November 1970 Bulletin) that he has not lost his keen sense of perception and wit. We in Alberta read you.

S.H.H., P. Eng.
Calgary

P.S.—The solemnity of your reply was notably apropos. There's hope for the profession yet.—S.H.H.

Editor's Note: The letter in question was entitled "Councillor DePauw Not for Sale" and our reply read: "We have checked with Mrs. DePauw and George is definitely not for sale until after the storm windows have been put on." We have rechecked the situation with Mrs. DePauw who advises that she is now considering the highest bid, which came in from Mrs. Templeton.

MINISTER'S MANIFESTO

The Editor:

Dear Sir:

Hey you!! St. Pete, with keys to the gate, You better watch out, by gee, I can banish a guy for five whole days If he can't find just one key.

I expect you've noticed I'm now in charge
Of all departments down here;
I can go hog wild and do wot I like,
Even Ed don't interfere.

I've caused quite a stir since I got my
power,
And I refuse to apologize,
So you'd better watch your step up there
Or I'll be demoting all youse guys.

Yours truly,
P.E.N.,
Vancouver, B.C.

The Editor:

Dear Sir:

I assume that S.J.A. was trying to be amusing in his letter which was published in your October issue. I found his attempt at humour not only irritating but distasteful.

Does he think that women are not capable of working at menial or strenuous jobs? I suggest that someday he take a good look at the cleaning women who clean his office building every night. I imagine most of them would be delighted to work for \$3.00 or \$4.00 an hour on the broken water mains or the garbage trucks or the 80 ft. ladders. It is much easier to support a family on \$500.00 a month than it is on \$250.00 a month.

As for women university presidents and prime ministers, there are several Canadian women who are not only capable but even might do a superior job than the present occupants of these positions and if the present wage differential were maintained they would do it for one-half the pay.

I was not surprised at S.J.A.'s attitude towards the working woman but apparently he is also contemptuous of the housewife as well. To quote him, he states the housewife duties are "pushing the buttons on the automatic washer, dryer and dish washing machine." In this observation he is correct but Canadian pioneer history shows us that women were once equal partners with their husbands while opening up the Canadian wilderness. They assisted in the development of the home and the protection of the home. There is no reason why the modern woman cannot also contribute equally, if we would encourage her to be something more than a social parasite.

S.J.A.'s letter may have made amusing

reading for the professional engineers of Manitoba but to the working women who are struggling to support their families alone on the wages and in jobs that S.J.A. considers suitable for women, his letter was thoughtless and insulting.

Mrs. E. V. Graham,

Pinawa, Man.

Editor's Note: At press time S.J.A. was in the kitchen trying out a new recipe for a shrimp cheese souffle and was not available for comment. However, we do wish to point out to Mrs. Graham that our publication is written for engineers and not for "working women who are struggling to support their families." We are, of course, gratified to have engineers' wives taking an interest in our articles.

♦ ♦ ♦

ARE YOU A PERSON OR A MOUSE?

How do you like being Sexless? The zealous group known as the Women's Libs recently received a real set-back from the Manitoba Government. The ink was hardly dry on the published reports of the Royal Commission on the Status of Women than the Manitoba Government took action. They gave Manitoba women equality, at least in the field of employment.

They did not do this, as perhaps the Women's Libs might have preferred, by raising (or lowering) (or equating) the status of women to that of men. They took a more subtle and unique approach. They rendered us all sexless. One can no longer advertise for a salesman, or presumably even a maid. One must advertise for a "person," or else both sexes must be mentioned. The CBC in a rare moment of good humour on its otherwise dreary 24 Hours program, raised the question of "midwife." Does one advertise for a Mid-person, or as they suggested for a "Mid-wife or Deliveryman."

An engineer can now delegate work to a draughtsperson, or a foreperson. The Federal Government may be asked to change its department's name in Manitoba to Department of Personpower and Immigration. The Office Manager may become the Office Personager.

A typical ad might now read: "Wanted member of personkind to man or to woman fruit stand to sell mandarin or womandarin oranges."

We eagerly await the next mandate (oops sorry) — or womandate — from the Manitoba Government. This form of mania or womania is certainly putting us on the national map. Who knows, the next step may be to change the name of the province to Personitoba, or else to alternate year by year between Manitoba and Womanitoba.

It is all womanifold strange. — A.J.S.



NEW MEMBERS

The following have been admitted to membership in the Association: P. Hardy, S. Kimak, T. M. Noskiewicz, R. I. Coulas, W. H. Doran, W. J. Barlishen, V. Cicha, B. A. Esposito, R. S. French, T. J. Goodman, A. Jakobschuk, J. G. Sampson, R. K. Bhuija, A. Van Raalte, J. H. Churchman, J. W. Davis, M. A. Hallam, T. Kuchta, W. P. Clement, A. B. Thornton-Trump, C. G. Hamilton, R. D. Bodnaruk, R. Diduch, W. R. McGill, C. J. Pentilchuk, L. G. Sigurdson, N. Popplewell, I. Jozsa, D. Jagger, D. A. Crocker, A. J. Pankratz, R. T. Froc, J. C. Culliton, G. Lauzier, A. J. Martine, S. L. Wilson, R. C. McCombe, A. H. Janzen, G. M. King, D. R. McLean, D. Torbiak, P. Wasney, V. H. Wiebe, D. Olynyk, T. H. Gillman, N. Hernadi, R. W. Pollock, B. Sakdinan, Z. Sovik, W. J. C. Stewart, W. J. Strutt, P. Washchyshyn.



ENGINEERS IN TRAINING

The following have been enrolled as Engineers in Training: F. E. Ellis, G. R. Malkoske, L. Cooke, B. C. Weir, T. M. Thorsteinson, A. R. Penner, L. A. Homeniuk, J. Vipler, J. M. I. Bruce, G. R. Henke.



GRADUATES IN ENGINEERING

UNIVERSITY OF MANITOBA

1956	100	1964	112
1957	117	1965	142
1958	142	1966	123
1959	130	1967	118
1960	124	1968	169
1961	164	1969	171
1962	126	1970	200
1963	107		

**THE DISAPPEARANCE OF THE
"COLOURFUL CHARACTER"**

When this writer first started working for a living some fifteen years ago every construction project and every engineering office seemed to have its own "colorful character." This was a breed of man who worked hard, and played hard, bending the rules to accomplish his daily tasks whether work or play, and did everything with zest and a sense of humour. He was a true non-conformist who felt that rules were fine as long as they didn't interfere with getting the work done.

Nowadays a non-conformist seems to be a hate-filled radical spitting his venom at the world, and completely lacking in humour. The "colourful character" didn't hate anyone. In fact in most cases he would be irrepressible, loving life and being loved in return.

Those on the wrong side of thirty can probably recall their own "favourite character," and could spend hours in the coffee shop recounting incidents where he kept a job interesting from start to finish. I don't intend to recount any of these stories here, that being a task more suitable to an evening in the pub, but only to mourn the loss of such characters from our "up-tight" society. — R.M.S.



INTERLINGUA

There are approximately 3,000 languages spoken on earth. Scientific papers are published in at least 34 of them. Two-thirds of the engineering literature appears in English but two-thirds of the world's professional engineers cannot read English, and a still larger proportion of English-reading engineers cannot read scientific literature in other languages. This is the communications problem as outlined in a UNESCO Report on "Scientific & Technical Translating and Other Aspects of the Language Problem."

Leaving qualitative differences aside, a greater part of what is published is inaccessible to most of those who could otherwise benefit from it. Mathematically, we know how to take the lowest common denominator. We also know how to obtain a sand sample of a grain size to pass through any stated series of sieves. If we apply the same principle to the language problem using the romance languages we

come up with a sampling where every word is in at least six languages — and you can read it:-

Le publication de novas scientific in anglese es importante ma non sufficiente. Numerose amicos e admiratores de America non comprende anglese (Anglese es difficile). Multos comprende francese, ma non omnes . . . Il es naturalmente possibile publicar nostre informationes scientific in numerose linguas. Ma traduciones es costose, ardue, e generalmente inexacte. Un excellente solution de iste difficultate es publicar informationes scientific de interesse international in anglese pro America e in interlingua pro populos qui non parla anglese.

Can you see this being used to allow the free flow of ideas and information? Like Music and Mathematics, we may be approaching a language situation of universal appeal, a modern Latin, a language suitable for commerce and trade.

This compilation and principle is called "Interlingua." It is in use in programs for international medical congresses and by the American Medical Association in summaries of their original articles.

With scientific knowledge currently doubling about every seven years, improved communications are required. Central libraries having summaries and complete translations of articles into Interlingua would help solve the problems inherent in the literature explosion. Computers could translate to a common language. The increase in scientific knowledge improves the lowest common denominator aspect of language "mutuality." Words like sputnik, chocolate, nylon, generator, burette, telstar, panti-hose, help break down the language barriers.

Interlingua as a student language for the illiterate beginner and for those working for advanced degrees could serve as a bridge between the native tongue and many others.

An Interlingua dictionary listing the corresponding word in German, English, French, Spanish, Italian, Portuguese and Russian would be the equivalence of 21 bi-lingual dictionaries.

The case for Interlingua, as explained by Dr. Alexander Gode, the originator of the system, is one of "Get tools to jobs and keep improving the tools and possibly extending the jobs, all in step-by-step evolution."

"Interlingua is just a linguistic system built of elements the educated anywhere in the world can be expected to know."

— Saturday Review, September 1961.

The difficulties of normal translation sometimes give rise to devastating effects. There is the case of the American tourist in Paris who attended an American-made cowboy movie that had been supplied with French subtitles to enlighten Parisien audiences. When one cowboy greeted another the "Howdy, Pardner!" came out with a French rendering "Enchante, Monsieur!"

Italian, Germany, French or English can read the Linterlingua sentence:

"Chimpanzee in Africa consume bananas."

Compare:-

English	peace
Latin	pax
French	paix
Italian	pace
Spanish	paz
Interlingua	pace

Try reading a report in Science News March 17, 1966:-

"Scientia International

Novas del mense in interlingua
Vaccination: Le Fortias Armate de Canada considera le adoption de un quivalente vaccine que be essite desvelopate pro illos. Le vaccine protage contra typhoide, paratyphoide, tetano, diphtheria, e poliomyelitis."

— E.A.S.

★ ★ ★

ALUMNI ASSOCIATION OF THE UNIVERSITY OF MANITOBA

"The purpose of every alumni association should be to substitute organized alumni loyalty for unorganized goodwill and to secure the maximum efficiency for every ounce of alumni effort invested. Here in Manitoba, among the graduates of the local university, there is abundance of unorganized goodwill. This must be substituted for organized loyalty — and here we have the reason for the formation of Manitoba Alumni Association." So wrote George T. McIntosh, first secretary of the Alumni Association in September 1921.

In 1921 the membership was only three dollars and included a subscription to the

official alumni publication. The values of membership have increased materially. The Alumni Journal, free use of the swimming pool, the skating rink, the gymnasium, the libraries, film showings and other events, are part of the assets available to alumni and their families. What other "club" offers such bounty. This year "the specials" included the Royal Winnipeg Ballet Season Tickets at a preferred rate.

Other "personal development" possibilities are there for those who wish to join the Alumni Board of Directors to work on the various committees, to be appointees to the University and Community Council, and to the University Senate.

At present 8 engineers are on the Board of Directors, 2 are on the Executive and 10 are on the University and Community Council.

It has been suggested that the fee for membership in the Engineers' Alumni (\$1.00) be collected at the same time as the University of Manitoba Alumni fee (\$5.00), so that for \$6.00 you can participate in the above, plus enjoy the fellowship of the annual Engineers' Alumni dinner.

"Participate and get involved," particularly if you are one of the ten thousand graduates living in Winnipeg who have not yet taken advantage of these facilities, by joining the club. — E.A.S.

* * *

SEVENTH E.I.C. REGION II TECHNICAL DEVELOPMENT PROGRAMME

The seventh Engineering Institute of Canada Region 11 Technical Development Programme will be held at the University of Manitoba from May 10 to May 14, 1971. Further details to be announced.

◆ ◆ ◆

GROUP NEGOTIATION FOR ENGINEERS?

By R. SCULLER, E.I.T.

Collective bargaining is a method of determining the terms and conditions of employment by negotiations between management representatives and worker representatives. A prerequisite is the formation and organization of unions, similar to the labor movement which started its rapid expansion in 1933. It presupposes willingness of organized workers and

employers to negotiate, and to come to an agreement which can be put in writing. Each party must be able to exert some pressure to support his position, to allow "bargaining" to take place; employers may cease to employ, employees may "strike." The alternative to this bargaining is arbitration, with compulsory acceptance.

How can collective bargaining be applied to the professional engineer? Unionism does not often succeed at the professional level, yet some of the advantages of collective bargaining can be of benefit here. To the young engineer just out of university, collective bargaining could ensure him of a just and reasonable salary, or perhaps a minimum wage, with adequate working conditions which he would otherwise be too inexperienced to negotiate for himself.

Can this modified system be brought about? Should the Association of Professional Engineers take up the gambit of collective bargaining for the junior engineer? This has been done effectively in other countries. Here in Canada, the Association of Professional Engineers could become the agency for professional negotiations. Already the salary survey data supplied by the A.P.E. is indicative that we have accepted some bargaining reference, although the actual negotiations still remain the task of the individual. Perhaps an extension of this small beginning should be seriously considered. The young engineer here must now pit himself against the wiles and wits of the more experienced company executives, and is often the loser in the resultant employment agreement.

For the senior engineer however, collective bargaining becomes meaningless in most cases as the engineer is often aligned with management in a company. He may be self-employed, or in such a position that collective bargaining can have no relevance for him. Because his work and responsibilities are so specialized, only individual negotiations of his employment conditions can be applicable to his situation.

There appears little need or value at this time for a union for engineers, but some organization of a modified nature could have importance as a vehicle for liaison between employers and the new engineer, to assure him of a just employment contract, on which basis he could personally negotiate his future working conditions.

EIC STUDENT — OLDTIMERS' DINNER

Engineering students and graduate engineers met again for a friendly evening on January 20, 1971. This year 125 students escorted by 125 engineer sponsors met for reception, dinner and featured speaker.

It can now be divulged that younger engineers were matched with first year students and the old fogies with final year. This gives you an interesting insight into how you seem to your peers.

It is doubted whether students received penetrating advice on their careers, but the engineers were reassured to see that the students are not wild radicals. Maybe the students found the old sweats quite human, at least while buying the drinks. Congratulations on a good evening to Chairman Al Macatavish and organizer Jack Karras, and Ed Tymofichuk.

— J.W.J.L.



FLIN FLON NEWS

By M. N. COLLISON, P. Eng.

As you have learned through the regular news channels the plants of the Hudson Bay Mining and Smelting Co. Ltd., in Flin Flon and Snow Lake are shutdown by a strike of the tradesmen who perform our maintenance and repair work. I can add no further details to what has already been stated, other than there are several members of the Association of Professional Engineers of the Province of Manitoba who are engaged in the maintenance of the plant and essential services.

Yours truly and wife, Ethel, spent Christmas at Pamour, Ontario with our married son and his bride of last June. Don't believe the statements made by our national air line that there is no need to reconfirm reservations.



E.I.C. CONTINUING EDUCATION

1970 - 1971

The 1970-1971 Committee started its program in June, 1970. Through the Extension Division of the University of Manitoba a questionnaire was sent to all Engineers in the Province to determine what courses should be offered in the Continuing Education Program. The non-technical topics such as Business Management, Engineer-

ing Economics, Environmental Control and Law received a very heavy response. This can be attributed to: (a) A need for non-technical training and due to a growing emphasis on the quality of our environment, engineers realize the need to work with other disciplines, (b) the general nature of the topics would appeal to all engineers whether they are in Civil, Mechanical or Electrical.

There are numerous non-technical courses offered by the University and the Red River Community College, however, often these courses are of a lower standard than desired by engineers. It is the responsibility of the E.I.C. to work in co-operation with the University and R.R.C.C. to plan suitable courses and to make the engineering community aware of these courses. Courses offered last fall, in co-operation with the University, were Reading Skills, Calculus and Computer workshop, however, the enrollments for the last two were insufficient to warrant formal courses. Study groups are now being planned for these courses.

In co-operation with R.R.C.C. the E.I.C. is presently offering a 10 week course (1 night a week) in Effective Supervision and Human Relations.

Twelve courses are being planned for the 1971 Spring Technical Development Program to be held in May. The Extension Division of the University is handling all physical and financial arrangements. Courses which will be offered are: Analog Computers, Ice Theory and Formations, Plastics, Paint Technology, Report Writing, Groundwater in Manitoba, Law for Engineers, Air Pollution, Cultural Ecology, Noise Control and Integrated Circuits. More information on these courses will be forthcoming in publications shortly.

The initial planning has also been started to hold a conference in November, 1971 on the Social Responsibility of the Engineers. A workshop format is visualized. The engineering community will be polled in order to gain thoughts and ideas on the theme and contents of the conference.

W. M. VELDMAN, P. Eng.
Chairman, Continuing Education
Winnipeg Branch

WEDDING BELLS

With one stroke, the Prime Minister has surely done more for the women and youth of this country than all the commissions in history.