




**THE
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PROFESSIONAL
ENGINEER



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of the
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WINNIPEG, MANITOBA, OCTOBER, 1969

FOREIGN AID

By E. E. LACH, P.Eng.

Canadians should be aware that our country is one of the biggest Aid spenders, proportionately, in the world. From a modest beginning 19 years ago Canadian Foreign Aid now reaches 72 countries in every area of the globe. However, while \$338,140,000 for the 1969-70 fiscal year appears to be a praiseworthy goal, it together with that of the other "have nations" falls far short of the actual needs.

In 1961 the United Nations declared the start of The Decade of Development. Each rich nation during this period would try to come up to a minimum of one percent of its Gross National Product for assistance to the underdeveloped world. If this was an accurate assessment of the needs, the seriousness of the situation can be readily recognized when we realize that now within two years of the end of this decade Canada's figure of \$338,140,000 is only 0.49 percent of the Gross National Product — and Canada is a leader! I believe it is because of this stark realization that our present Federal Government still pursues the objective of devoting one percent of the Gross National Product to foreign aid. Prime Minister Trudeau has given high priority to foreign aid and through his Ministers indicated that Canada's NATO Forces may be disbanded to yield more money and help for the hungry and angry Third World as it is often referred to.

As an individual and a Canadian citizen I heartily endorse the high priority and goals our Federal Government has placed on foreign aid and yet I believe our efforts

in this area are subject to legitimate criticism.

I do not intend to get into the discussion that Canada's image among the Third World nations is hardly that of a knight in shining armour rushing to their rescue, an argument that was advanced in a recent article in the Winnipeg Free Press Weekend Magazine.

The area where real constructive criticism is due in my opinion is how the \$338,140,000 is spent and what are the final results of this effort. Prime Minister Trudeau, this spring told the House of Commons that "Canada is on the threshold of another new role" in external affairs. He said that technological advances and rising expectations of underdeveloped countries had created "a revolutionary period which dwarfs by comparison the changes of past centuries." The government in its review was placing emphasis on "imaginative concepts of assistance to developing countries."

Space and time do not permit listing and discussion of Canada's present Aid Programs, although generally Canada participates in a number of economic, educational and technical assistance programs abroad. Much of this assistance is extended under bilateral grant aid programs in the form of Canadian goods and services. Oldest and largest of the bilateral grant aid programs is the Colombo Plan for Co-operative Economic Development in south and southeast Asia under which Canada has made available some \$800,000,000 in assistance since 1951. Capital project assistance which includes the construction of power stations, transmission lines and industrial plants; the

supply of machinery and equipment and the carrying out of surveys and feasibility studies accounts for nearly half of Canada's aid expenditure. Members of the Engineering Profession may be more aware of the Foreign Aid Program because such a large part of it is in the form of Technical Assistance provided by Canadian Consulting Engineering Firms or University personnel with whom they may have personal contact. Canada's Foreign Aid Program comes under the Department of External Affairs but is administered by the International Development Agency. Maybe my understanding of Foreign Aid is far out of line, however, I cannot see Aid, in the true sense, being properly handled under this Department. The main function of the Department of External Affairs is the protection and advancement of Canadian interests abroad. Surely this situation could result in our aid dollars being used with Canadian Interests, private or national, in mind rather than that of the recipient country. In fact, this is a criticism that has been voiced by the Third World.

This brings me to the main argument concerning the whole matter of Foreign Aid. Everyone in the Western World has been made aware of the hunger that exists in the world today. We have even been exposed to threatening stories about the dangers of over-population in the near future and yet the governments of grain producing countries of the world are struggling with the problems of over supply and surpluses.

These same countries are Foreign Aid Spenders yet why are they not giving what is really in demand—what we in Canada have—and what it is our responsibility to give as fellow humans. As a Christian I believe that the goods and wealth that we as a Nation possess carries with it the responsibilities of caring for those in need. Regardless of the various philosophies and religious beliefs we do have a conscience—if people are starving we realize that action must be taken.

Why then are our politicians not providing from our food surpluses in this stark situation? One argument may be that this would be "dumping" which could damage the international price. However, if the product is consumed the demand and price should increase. Anyhow, if this pricing is the real problem why not face it and solve it rather than planning cutbacks in production at government expense.

From the information presented to me in daily newscasts and newspapers I am convinced that we are not placing sufficient emphasis in our Aid on the immediate needs of the underprivileged people but rather bending over backwards to please egotistical political leaders. Granted it may be difficult for the Department of External Affairs to reject a recipient countries' view on the type of aid it wants, yet it is high time we carried a little more weight and showed concern for individuals by insisting on Food Aid rather than being swayed by a political leader's whims to provide funds and technical knowledge.

Surely, the whole Foreign Aid program needs to be subjected to continuous scrutiny if we the taxpayers are to provide the type of help we are prepared to support. I'm sure that most of us view it similarly to our community United Way Program. This welfare program certainly doesn't exist to suit the various organizations but rather for the benefit of the individuals they serve and care for.

Although I may appear to be short sighted I am well aware that Capital Project Assistance such as the nuclear power plant being built in Karachi, Pakistan (\$52,000,000) could result in creating an "oasis" with desirable standards of living under the right technical and political leadership; similarly water conservation projects, transportation projects, education, etc. The concern is however, that people are starving in the world and our government wishes to cut back food production on the Prairies.

All of us who live on the Prairies are affected economically by a lack of wheat sales. If those millions of dollars from some 600,000,000 bushels of wheat are not injected into our economy annually it would provide repercussions even in the Canadian economy as a whole because Canada depends largely on Massive Exports. During the 1968-69 crop year Canada experienced its worst year of wheat exports since 1962-63. Alarm bells are ringing as far as the Canadian economy is concerned at this present time as well; according to a recent Free Press editorial. The Prime Minister has made no bones about Canada's critical struggle against inflation. Maybe this pressing situation will force a cut in some "Canadian Prestige" type foreign aid programs.

What priority for instance should be placed on the program which brought

2073 foreign students to Canada for studies?

Canadians generally are inspired by the overwhelming mineral resources of the North, however, one doesn't have to go beyond the tree-line to recognize the tremendous potential of the Prairie Provinces: some 85,200,000 acres of improved land with ideal topsoils and climates to produce annually, mainly for export, a vast supply of grains and oilseeds. Further to this is the fact that over the years a most industrious group known as the Western Farmer has become established, western universities have developed improved grains and the Federal and Provincial Governments have developed and enacted legislation to protect the industry.

This is part of the heritage of the Prairie Provinces! Surely, the answer isn't "turning it off" when 50 percent of the world's population goes to bed hungry every night. Individual concern and commitment, however, will have to increase if we are to avoid such a foolish but diplomatic solution.



THE COUNCIL AND THE BULLETIN

This publication can claim a broad circulation and is read by many individuals who may not be professional engineers. Circulation includes not only Provincial and Territorial Associations and the Corporation and C.C.P.E., but also newspapers, radio stations and libraries including a number at national level. From the comments received from time to time it appears evident that readers often regard articles appearing in the Manitoba Professional Engineer as reflecting the opinions or policy of the Council or the Association. A recent article appearing in the Winnipeg Free Press is a case in point.

To clear up any misunderstanding in respect of the relationship between the committee responsible for the production of the Bulletin and the Council, it is felt necessary to re-emphasize Council's position. In order to encourage a free expression of opinion by members of the Bulletin Committee and to encourage a free exchange of opinion amongst the membership at large, the Council has adopted a hands-off attitude in respect of the contents of the Manitoba Professional Engineer. In this regard then all articles appearing in the Bulletin are either the

collective opinion of the members of the Bulletin Committee or those of the individual writers. In the event that Council feels that a policy statement on a subject of concern to the Association is warranted or when it appears that a statement of position has become important, Council can and will submit these to the Bulletin Committee for inclusion in the Bulletin. Such articles will be noted as originating with Council.

To further insure that no misunderstanding might arise as to the origin of article content, all pieces contained in the Professional Engineer will be designated as either being editorial or will be assigned a by-line or they will terminate with the initials of the contributor.

It is hoped that articles appearing in the Bulletin will, from time to time, inspire members of the association to a desire to express their own opinions on the subjects covered. Members who feel so moved may contribute their opinion by submitting signed letters to the Editor and these will be printed as such. The Bulletin places only one restriction on its obligation in this regard and that is that such letters must originate from and be signed by a member of the Association. This is your Bulletin and it is hoped that it will be a sounding board for and an inspiration to all members of the Association.

— Bulletin Committee.



CAVALCADE FOR SPORTS

The annual Golf Tournament was held at Southwood on September 15th and a successful tournament resulted because past chairman, Don Miller turned the precipitation off at 9:00 a.m. and arranged to have the sun out by tee-off time.

Seventy-five members, including Lloyd McGinnis and Larry Greer waved to Doug Grimes as they went by the Pembina-Jubilee construction on their way to the golf course. Fred Young got in some last minute practice shots with his putter in a telephone booth, but did not manage to win the Cup as he had done previously. The Sullivan Cup was won by Alex Brown. In spite of an almost hysterical finish, Ken Lailey tied for low gross with Al Macatavish. Two hours after his appointment to the Sports Committee, Bob Jeske also won a prize. However, an impartial observer noted that this was the

first honest tournament that had been run in a long time because Terry Monastyrski, who is a member of the Sports Committee, did not win a prize. He has lodged an appeal with co-chairman, Ralph Gamble to have this situation rectified.

Out-of-town golfers included Bill Kasperski of Gillam, Chuck Harman of Portage la Prairie, and Bob Byers of East Poplar Point. Council was ably represented by Bill Finnbogason, who also won a prize of 1,000 gallons of water donated by Jim MacBride of Metro Waterworks, which Bill may pick up if he will provide his own containers. Past chairman, Harold Wilson, having already won every prize possible, was awarded a carload of soil conditioner, also generously donated by Metro via Jim MacBride. Mr. Ralph Hood represented the Australian Embassy at the head table.

All those present were invited to adjourn to the Stag being held for Henry Borger and it appeared that everyone accepted the invitation. A telephone survey the following morning indicated that more than the usual number of engineers were "in conference."

All athletes are reminded of the Curling Bonspiel which will take place this winter. Teams should be formed as soon as possible in order to get in a good deal of practice before this event.

Prizes were donated by Canadian Johns-Manville and W. L. Wardrop. Reid Crowther donated Terry Monastyrski and Ralph Gamble.

Chairman Gordon Kirby is still trying to figure out the handicapping system, which in previous years has always resulted in the chairman's winning a prize. Although he deserves a better fate, Bill Lynn won the booby prize, which, was a mod style greeting card. — S.J.A.



COUNCIL MEETING JULY 16, 1969

The Council meeting opened with the president and nine Councillors present. The major portion of the meeting was devoted to routine business. The accounts were passed and five registrations were approved.

There was a good deal of discussion concerning the policy for registration of engineers who obtain a masters degree,

but do not hold an accredited bachelors degree.

It was decided to maintain the present policy of requiring two years of suitable experience plus an accredited degree rather than the normal procedure of one year's experience plus a masters degree.

However, it was decided that the applicant's experience before receiving the masters degree would be considered, and if acceptable, could be included in the two year requirement. — R.M.S.



TOWARDS BUILDING AN ENGINEERING COMMUNITY IN MANITOBA

In the brief but highly technological decade that started with Sputnik I, we have watched astronauts pick up rocks on the moon and take the first steps into man's investigation of our solar system. To meet the challenge of this "space race," more and more importance has been placed on education, with the emphasis on engineering and the sciences. Manitoba's educational system accelerated to meet this changed demand, but . . .

EDUCATION ALONE IS NOT ENOUGH

Are we in Manitoba also providing sufficient job opportunities for the increasingly skilled, highly specialized graduates of our three Universities and the new Institutes of Technology?

Obviously not! **Sixty-six percent** of the 1968 graduating class in Engineering accepted employment **outside** Manitoba. Some of them returned, and we attracted a few engineers who had been educated elsewhere, but those that left the province far outnumbered those that remained. And some of the most talented graduates were lost permanently.

If we are to reverse this trend we must not only provide immediate employment opportunities for every Science and Engineering graduate, but we must also show him that there is more than one employer waiting to utilize his talents.

Only when he can see that Manitoba offers an opportunity for him to rub shoulders with scientists and engineers in a wide variety of categories, will he feel that Manitoba has an engineering environment

in which he can stretch his imagination and develop his potential to the fullest.

We who are established, must actively look for and speak up for, and actually go out of our way to provide challenging employment for the young men who have yet to be established. The benefit of having their intellect in our province will far outweigh the public expenditures incurred in their education. — (Courtesy of Templeton Engineering Company).



EIC NEWS

Home Study Courses

For several years the APEO (Association of Professional Engineers of Ontario) has offered to all registered engineers in Canada home study courses run by the University of Toronto extension department but administered by the APEO. Last January the Executive Committee of the Institute received favorably a suggestion made by the APEO through its Director of Special Services, Blake H. Goodings, that the EIC take over from APEO the administration of these correspondence courses. The reason for the transfer of this responsibility was that it fitted better with the role of the EIC as a national body responsible for providing engineers with opportunities for technical development.

Following approval of their recommendation by the Chairman of the Continuing Education Committee of the EIC, Vice-President R. A. Chant, the Executive Committee commended the APEO for its move and agreed to give the program full support of the EIC headquarters. It is hoped that the present enrolment of 100 might be gradually increased through the co-operation of the provincial associations of professional engineers and other technical societies in Canada.

Contact EIC, Montreal for further information.



FLIN FLON NEWS

By M. N. COLLISON, P.Eng.

Several Winnipeggers, members of A.P.E.M. and employees of H.B.M.S. recently moved to Toronto. These are: E. S. Austin, P.Eng., President; H. A. McKenzie, P.Eng., Vice-President; M. A. DeVette, P.Eng., Elect. Eng.

Also moved from Flin Flon was: W. A. Morrice, P.Eng., Exec. Vice-President.

In case you missed the announcement when it was made a few months ago, D. J. Robertson, P.Eng. is now General Manager and J. R. Sadler, P.Eng., Asst. General Manager, of Hudson Bay Mining & Smelting Co. Ltd.

The Sadlers, Bob, Eleanor and five children have just returned from a four week camping trip to California. Included in their itinerary were such points as: Black Hills, S.D., Grand Canyon, Las Vegas, San Francisco and Yellowstone Park. All report a most enjoyable trip but HOT. In addition to the memories they also brought back a four week old Terrier pup.

G. H. Kent, P.Eng. has leased a lot for a cabin out at Beaver Lake. So far the major project is to bring in a well. Kay, his wife, has become adept at the ancient art of "Witching."

L. W. Ogryzlo, P.Eng. and wife Grace escaped from Toronto long enough to spend parts of July and August at their summer home at Bakers Narrows on Little Athapapaskow Lake. While he did get into town occasionally he could not be lured out to the Golf Course. Speaking of the golf course, yours truly won a pair of shoes in the Labour Day Tournament. Talk about walking on air!

W. J. Stickney, P.Eng. along with wife Irene enjoyed a three week vacation trip to "Man and His World," Thousand Islands and other points in the Toronto area. They also visited with their daughter Jill and her husband in Burlington.

S. F. Liss, P.Eng. toured the Prairie Provinces for his holiday. Stan, Dot and three of their children visited relatives as well as taking in such sights as Gardiner Dam and Diefenbaker Lake, Badlands at Drumheller and as far north as The Banks of Athabasca River.

J. R. Bray, P.Eng. wife Helen and two children also made a grand tour using their camper trailer. They went from the Okanagan to Vancouver and down the west coast Highway No. 101 to Los Angeles, returning via Las Vegas and Salt Lake City to Flin Flon. Bob reports a good time was had by all.

Ethel Collison, wife, and I spent a few days in Helena, Mont., in July visiting with my sister and her family and also my mother and father who were there from

Washington, D.C. A good visit in real nice 90° weather — just perfect for golf.



NEW MEMBERS

The following new members have been registered:

- | | |
|-----------------|--------------------|
| F. T. Brown | J. Engweiler |
| P. C. Ellard | D. M. Halchuk |
| E. G. Macdonald | K. Jamil |
| J. D. Kern | S. P. Spicoluk |
| I. R. Robinson | R. J. Tarry |
| T. A. Simons | S. Tomczyszyn |
| R. S. Brittain | W. G. Brander |
| B. A. Faurschou | K. T. Matheson |
| A. A. Fergusson | E. T. Bonk |
| R. E. Marttila | G. L. Brown |
| C. K. Andres | R. G. Catlin |
| L. R. Borland | T. W. Currie |
| K. A. Buhr | H. B. Kim |
| R. Herchl | S. D. Lyles |
| R. D. Keeler | A. W. McIsaac |
| R. G. Kirby | G. J. Macdonald |
| D. R. Lewis | E. J. Manzie |
| D. G. Turner | K. J. Puckall |
| D. W. Tyerman | A. H. Robbins |
| D. A. Donald | H. I. Senger |
| F. Ramlal | W. N. Sullivan |
| B. Amos | J. S. Townsend |
| A. G. Bereza | T. K. Tseng |
| W. S. Cusitar | J. R. Korol |
| A. Epp | J. Goodmundson |
| L. P. Fedoruk | C. A. L. Hogg |
| P. W. Harvey | L. E. Reed |
| D. M. Henderson | J. T. Ward |
| H. J. Henrikson | A. D. Carlson |
| D. Kontzamanis | M. A. Grandin |
| D. B. McKibbin | D. Ptak |
| L. Podheiser | J. P. Sinclair |
| D. Ramnarine | M. Avrin |
| M. Simic | H. R. Wilcox |
| R. W. Suderman | J. L. Babletek |
| B. R. Wood | D. P. Jardine |
| S. J. Staseson | A. E. Meade, Jr. |
| H. M. Chorney | D. W. Patterson |
| R. W. Cumming | D. E. Render |
| J. E. Franklin | R. A. Sillitto |
| D. G. Hysop | K. R. Preston |
| A. Nemetz | O. E. Leigh |
| W. C. McNeilly | A. J. Schwinghamer |
| A. L. Stevinson | S. K. Singh |



EXPO FLIGHT TO JAPAN

A 21-day tour to Expo 70 in Japan for Canadian Professional Engineers by charter flight has been arranged. The total tour cost is \$1,150.00 Canadian funds per

person and includes 3 days at Expo 70, 4 days in Hong Kong and extensive sight-seeing in major cities and areas of engineering and cultural interest in Japan. For reservations or further information contact Mrs. E. de Lisle, Canadian Council of Professional Engineers, 401-116 Albert St., Ottawa 4, Ontario.



SLIDE RULE WINNERS

Each year the Association presents a slide rule to each of the top three students entering engineering at the University of Manitoba. This year's winners with their senior matriculation averages are Robert W. Langdon, 92.0%, William L. McMillan, 90.8% and Miss Lindy M. Lee, 89.4%.



INTERESTING POSITION VACANT

This bulletin requires a reporter who will make a commitment to devote two hours at noon once a month (usually a Wednesday) to attending a meeting and preparing an interesting resume of it. The meeting itself may frequently be dull and routine but the reporter will be rewarded with an insight into the democratic process by which our Association is run. A sense of humour would be an asset.

— J.W.J.L.



WHAT IT COSTS TO BELONG

Although one always imagines other groups to be full of dynamic dedicated enthusiasts, the truth is probably closer to the attitude of "They don't do nothing for me, don't know why I keep on paying them." Annual dues for other professional associations run \$50 to \$100 per year. Trades union dues are typically \$70 per year with a \$60 initiation fee. Insurance and pension plans raise the dues where applicable.

These figures correspond to basic membership such as the \$25 a year we pay to the A.P.E.M. We can conclude that even if "they don't do nothing" we don't pay "them" too much. Thinking more positively we could say that we get good value for a very small investment. During the past year there has been a growing interest in such engineering oriented themes as eco-

conomic development, town planning and pollution control. This is in addition to handling a growing volume of interprovincial and international correspondence. Let's supplement the twenty-five bucks with a show of interest in the annual meeting. As with everything else you only get out what you put in. — J.W.J.L.



YEAR OF THE CONFERENCE — 1970

Manitoba Centennial Year, 1970, will be well celebrated in conferences. Many of the Manitoba Hotels and conference accommodations are already booked. Not to be outdone, the engineering profession will take an active part in two conferences — An International Symposium on Legal Aspects of Pollution, to be held in March, 1970; and a conference on Resource Management and the Engineer, to be held in October, 1970.

The International Symposium on Legal Aspects of Pollution is being jointly sponsored by the School of Law, University of North Dakota and the Faculty of Law, University of Manitoba. The E.I.C. will assist in preparing for the conference. It is hoped that the engineering profession will get involved in this conference and make the profession's thoughts on pollution known. Prof. E. Shapiro, Department of Professional Studies, Extension Division, University of Manitoba, is looking after all the details pertaining to the conference.

The conference, Resource Management and the Engineer, is being jointly sponsored by the Winnipeg Branch of the Engineering Institute of Canada and the Department of Mines and Natural Resources of the Province of Manitoba. The conference committee consists of J. Atchison, Papers Chairman; A. Kuluk, Finance Chairman; R. Zimmerman, Publicity Chairman; W. R. Newton, Registration and Accommodation Chairman, and P. Feschuk, Conference Chairman. — P.F.



CONTINUING EDUCATION

Anyone faced with the problem of selecting a non-credit course that would be beneficial to his professional career is faced with a barrage of institutions providing a long list of courses in the humani-

ties, arts, business administration and technical fields. The institutions providing courses include the Extension Division, University of Manitoba; Manitoba Institute of Management; Manitoba Department of Education; Manitoba Department of Industry and Commerce; Manitoba Institute of Technology; Manitoba Institute of Applied Arts; I.B.M.; Canadian Welding Bureau; E.I.C.; local school boards; and many other institutions.

Before the prospective course participant throws up his hands before this mountain of institutions, it should be pointed out that most of the management courses offered in Manitoba are covered by a bulletin entitled "Continuing Management Education, 1969-70" which is available by phoning W. S. Jeffries at the Manitoba Department of Education at 775-0261, Extension 142, or writing to W. S. Jeffries, Department of Education, 512 - 1181 Portage Avenue, Winnipeg.

Courses offered by the Extension Division of the University of Manitoba are covered by brochures issued by the Extension Division. The following courses are to be offered this fall: Technical courses such as Fortan IV; Direct Current Transmission; Finite Element Methods in Engineering and Structural Engineering Computer Workshop as well as a number of management courses such as Business Administration and Its Setting; Financial Management; Human Problems of Management; Marketing Management; Management Reading Skills; Estate Planning; and Management by Objectives. Brochures on these courses are available by calling Prof. E. Shapiro at the Extension Division at 474-9623 or writing to Prof. E. Shapiro, Department of Professional Studies, Extension Division, University of Manitoba, Winnipeg 19, Manitoba.

Courses offered by the Manitoba Institute of Technology and Manitoba Institute of Applied Arts were published in the two daily papers in early September. Further information may be obtained by phoning M.I.T., and M.I.A.A. at 786-6361 or writing to M.I.T. and M.I.A.A. at 2055 Notre Dame Avenue, Winnipeg.

International Business Machines is presently preparing to offer courses in the use of I.B.M. Computers, Fortran Programming, Systems Design, as well as, holding periodic engineering seminars on a fee basis. For information on these courses call R. W. Taylor at 942-2181 or write R. W. Taylor, I.B.M. Education Centre, 373 Broadway Avenue, Winnipeg 1, Manitoba.

The E.I.C. has made available home study courses for those of us that wish to come home on wintery evenings and not move out of the house till the next morning. Put away those thoughts of a quiet evening with an ale and a Randolphe Scott movie. Sharpen your pencil. "Home Study Courses for Professional Engineers" are here! The home study courses include mathematics, applied mathematics, technical subjects, accounting, administration, economics, education, english, law, political science, psychology, and statistics for a total of 38 courses. Courses were designed by and all marking of assignments and tests are handled by the University of Toronto, Extension Division. The booklet "Home Study Courses for the Professional Engineer" is available from Co-ordinator Home Study Courses, The Engineering Institute of Canada, 2050 Mansfield Street, Room 700, Montreal 110, Quebec.

There doesn't seem to be much information available on courses offered outside Metropolitan Winnipeg except for the E.I.C. Home Study Courses and a few courses that may be offered at Northern Manitoba Vocational Centre at the Pas and the Manitoba Vocational Centre at Brandon. It is expected that good news will again be forthcoming from Pinawa where members of the staff set up a number of courses last year for fellow employees. — P. Feschuk, P.Eng.

E.I.C. Winnipeg Branch,
Continuing Education Committee



COUNCIL MEETING, SEPT. 17

President Blackman opened the meeting by presenting a bronze buffalo, suitably inscribed, to Ben Chappell, a past president of the Association. Mr. Chappell, who has been in Zambia, Africa, for a year, is moving to Victoria, B.C. to take up residence.

The Association's solicitor attended the meeting to discuss the probable format of a forthcoming hearing resulting from the receipt of a sworn complaint. All members of Council were to attend the hearing and nine subpoenas were served to others who were to be present.

The matter of the roof failure at the Holy Redeemer Parish Centre was referred by Council to the Committee on Safety in Engineering Practice.

The usual accounts, licences, applications were dealt with by Council.

The date for the Annual General Meeting was set for November 27th, 1969, and it was announced that Premier Schreyer had been asked to be the guest speaker and had accepted.

Council considered the matter of an engineering report which had been submitted to the Minister of Mines and Natural Resources by an individual not registered or licensed to practise professional engineering in the Province of Manitoba. Council decided to write directly to the individual concerned regarding this matter and also to the Minister, expressing the Association's concern over the fact that the Province would employ an individual to carry out a study relating to major engineering works, who is not licensed or registered to practise engineering in the Province, as required by the Statutes of Manitoba. — S.J.A.



COMING EVENTS

Western Construction Materials and Equipment Show, November 6, 7, 8, at Exhibition Park, Vancouver.

Snow and Ice Conference, sponsored by the Snow and Ice Sub-committee of the Associate Committee on Geotechnical Research, National Research Council, to be held October 23, 24, in the Multi-Purpose Room of MacEwan Hall, University of Calgary, Calgary, Alberta.



LIST OF CONSULTING ENGINEERS

Some months ago the Association sent out a questionnaire which was to be completed and returned by those members who wanted to appear on a list of consulting engineers.

The completed forms were turned over to the Consulting Engineers Committee, who held several meetings to consider the format of the proposed list. (There are 6 consulting engineers and 3 non-consultants on the Consulting Engineers Committee.) In recent years there has been little demand for such a list and it also became apparent that it is impractical to keep such a list current. The yellow pages of the telephone directory give listings of

consulting engineers which are updated annually and it was felt that this list could suffice. The Committee, therefore, recommended to Council that further publication of such a list be suspended and Council concurred in the recommendation.

Our thanks go to all those members who took the time to complete and return the questionnaire.



LAW FOR ENGINEERS

The Seminar on Law for Engineers held this Fall proved very popular with members of the Association and was oversubscribed and it was not possible to accept applications from all those wishing to attend.

The Association office would be interested in receiving the reactions of those who attended. If there are members who would like to take in such a seminar if arrangements could be made for a repeat, would they please call the Association office to indicate their interest. If another seminar were arranged, the price would likely be advanced slightly to include the lunches and coffee, in order to avoid confusion.



HEAT TRANSFER CONFERENCE

Under the sponsorship of the National Research Council and the Western Canadian Universities, the THIRD WESTERN CANADIAN HEAT TRANSFER CONFERENCE will be held in EDMONTON during MAY 28 - 29th, 1970.

Papers based on original research or development work in heat transfer and closely related areas are invited. Authors must be resident in Western Canada and/or the work must have been executed there.

Papers may be submitted to: Dr. J. E. S. Venart, University of Calgary — Deadline: January 30, 1970.

Enquiries to: Dr. G. S. H. Lock, University of Alberta — Phone 432-4077.



Following are two articles concerning the pros and cons of exporting natural

resources. We invite readers to submit opinions in letters to the Editor if they feel: that some arguments have been omitted; they wish to further develop these arguments or if they wish to criticize.

EXPORT OF RESOURCES ! WHY NOT?

There has been much discussion lately about exporting our water and power resource to areas south of the border. The general argument against such exports is that we will need these resources eventually for our own industrial development. There may be some truth in this but is a vast industrial complex a necessarily good thing? Industries often bring with them many problems, such as air and water pollution. They also bring large numbers of people. This will be followed by all of the other conditions which many people may not find attractive such as bumper to bumper traffic and overcrowding. Industrial development seldom reduces the tax load since the additional required schools and services usually cost whatever the industry pays in taxes.

Another argument against exporting water is that we have no idea how much water we will need ourselves. To this we need only point out that this country has more fresh water resources than the rest of the world combined. If the time ever comes when this country is short of water, the rest of the world will be in very bad shape.

There is no reason why this country should not export excess of both water or hydro power south of the border provided that we insure there will always be enough for our own use and to provide enough industrial expansion to employ future generations. Even the development of these resources will provide employment, challenge and revenue for future generations.

The whole program will be a boon to the countries to the south as well as providing much needed revenue to ourselves.
— S.M.R.

EXPORT OF RESOURCES ! NEVER

There has been much discussion recently about exporting Canada's excess water resources to dry areas or water short areas of the United States and Northern Mexico. In fact, American engineers have begun referring to "continental" water resources, rather than Canadian or

American. For years there have been proposals for the export of hydro-electric power south of the border. The time has come to evaluate all the possible results of exporting what is probably our most valuable national resource.

If we export water or power, or both, industries which depend on these resources will undoubtedly develop in those areas of the U.S. where only the lack of water and power has prevented development in the past. Would it not be more advantageous to Canada to have the industry come to the water? Especially in western Canada, we constantly hear of the need to move from an agricultural to an industrial economy. Since Canada's water and power resources are located primarily in the west, it would seem illogical to export the prime attraction to industry that we have available. To those who argue that we might as well export excess water and power until it is required, we can only point out that it probably never will be required if industry is not encouraged to locate here now.

Quite apart from the argument for or against exporting water and power from an economic standpoint, there is also the question of how much we really know about the extent of our water resources. When one looks at a map of northern Canada, covered with countless lakes and rivers, it would seem that our water supply is limitless. However, the amount of water required to maintain the levels of these lakes is quite low compared to other areas of the world. Evaporation losses are very low, and in many areas permafrost prevents much of the water from escaping into the ground.

Hydrological information on many far northern rivers is sketchy at best. It is possible that if significant amounts of what is supposedly excess water were diverted to the United States, there could be a considerable and undesirable drop in water levels on many of our northern lakes. It is also possible that in dry periods the flow in our northern rivers would not be sufficient to replenish these lakes. Therefore, before any large-scale commitments for the export of water are made, we must be very sure that we are not destroying our finest natural resource.

—R.M.S.



Fun is like insurance, the older you get, the more it costs.

— Hubbard.

COMING EVENTS

Annual General Meeting, Fort Garry Hotel—Thursday, November 27, 1969.

Curling Bonspiel—Thursday, January 22, 1970, The Highlander.

Wine and Roses Ball—Friday, February 6, 1970, International Inn.



PHILOSOPHICALLY YOURS

Think of the universal substance, of which thou hast a very small portion; and of universal time, of which a short and indivisible interval has been assigned to thee; and of that which is fixed by destiny, and how small a part of it thou art.

—Marcus Aurelius.

How strangely men act — They will not praise those who are living at the same time and living with themselves; but to be themselves praised by posterity, by those whom they have never seen or never will see, this they set much value on. But this is very much the same as if thou shouldst be grieved because those who have lived before did not praise thee.

—Marcus Aurelius.

He that is of a merry heart has a continual feast.

— Proverbs

If Allah had wished he would have made all men alike, but he wished to test you by what he gave to each of you.

— Koran.

The rich man has his motor car,
His country and his town estate.
He smokes a fifty-cent cigar
And jeers at Fate.

Yet though my lamp burn low and dim,
Though I must slave for likelihood —
Think you that I would change with him?
You bet I would.

— Franklin Pierce Adams.

Insofar as man is untrue to his own law and does not rise to personality, he has failed of the meaning of his life.

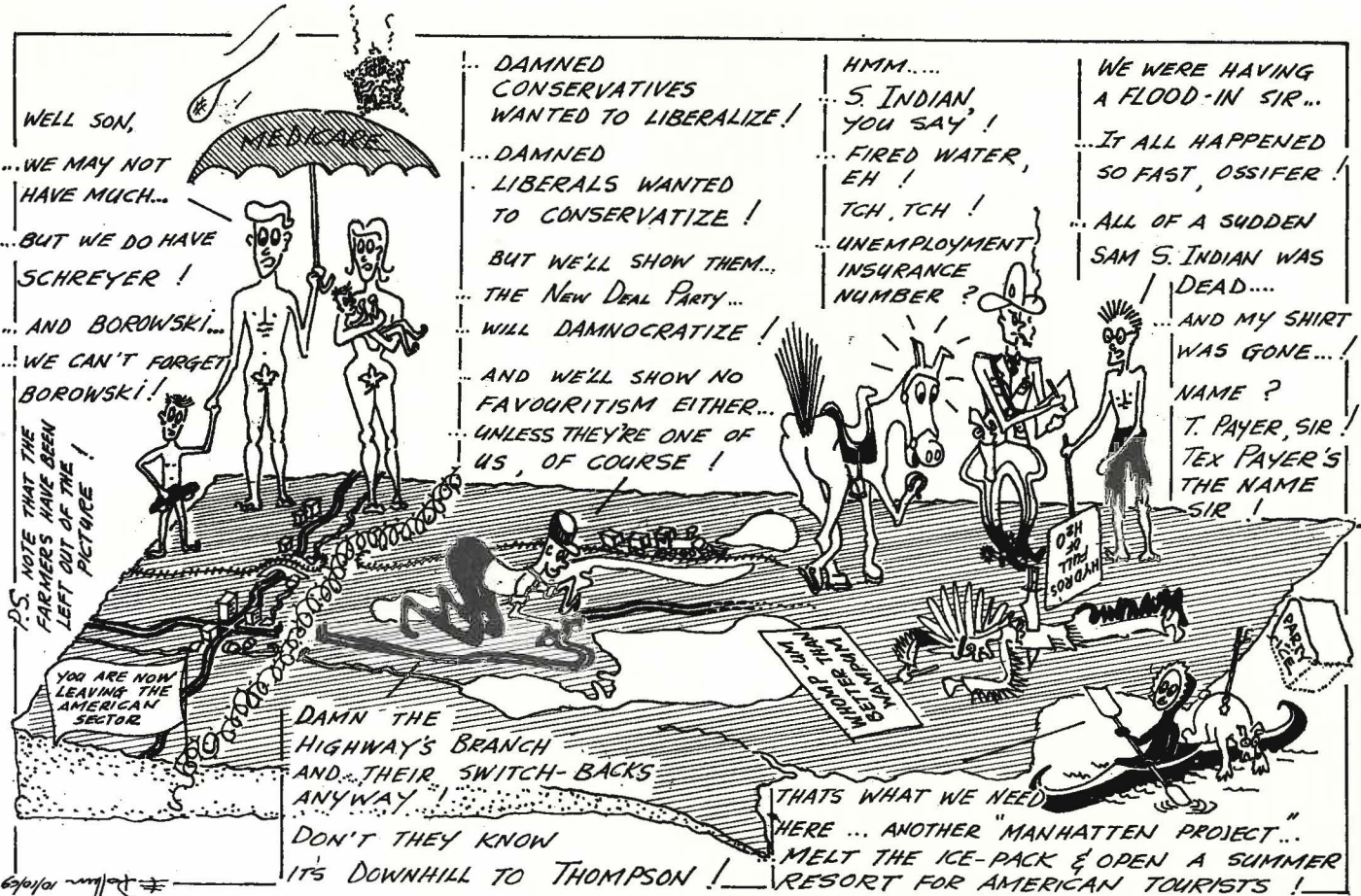
— C. G. Jung.

Home is the place where, when you have to go there, they have to let you in.

— Robert Frost.

As soon as Eve ate the apple of wisdom, she reached for the fig leaf. When a woman begins to think, her first thought is of a new dress.

— Heine.



WELL SON,
 ...WE MAY NOT
 HAVE MUCH...
 ...BUT WE DO HAVE
 SCHREYER!
 ...AND BOROWSKI...
 ...WE CAN'T FORGET
 BOROWSKI!

P.S. NOTE THAT THE
 FARMERS HAVE BEEN
 LEFT OUT OF THE
 PICTURE!

YOU ARE NOW
 LEAVING THE
 AMERICAN
 SECTOR

DAMN THE
 HIGHWAY'S BRANCH
 AND THEIR SWITCH-BACKS
 ANYWAY!

DON'T THEY KNOW
 IT'S DOWNHILL TO THOMPSON!

DAMNED
 CONSERVATIVES
 WANTED TO LIBERALIZE!
 ...DAMNED
 LIBERALS WANTED
 TO CONSERVATIZE!
 BUT WE'LL SHOW THEM...
 THE NEW DEAL PARTY...
 WILL DAMNOCRATIZE!
 AND WE'LL SHOW NO
 FAVOURITISM EITHER...
 UNLESS THEY'RE ONE OF
 US, OF COURSE!

HMM....
 S. INDIAN,
 YOU SAY!
 FIRED WATER,
 EH!
 TGH, TGH!
 UNEMPLOYMENT
 INSURANCE
 NUMBER?

WE WERE HAVING
 A FLOOD-IN SIR...
 IT ALL HAPPENED
 SO FAST, OSSIFER!
 ALL OF A SUDDEN
 SAM S. INDIAN WAS
 DEAD....
 AND MY SHIRT
 WAS GONE...!
 NAME?
 T. PAYER, SIR!
 TEX PAYER'S
 THE NAME
 SIR!

THAT'S WHAT WE NEED
 HERE ... ANOTHER "MANHATTEN PROJECT"...
 MELT THE ICE-PACK & OPEN A SUMMER
 RESORT FOR AMERICAN TOURISTS!

6/20/74
 10/1/74