



# The Actuary

The Newsletter of the Society of Actuaries

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SEPTEMBER, 1970

## CANADIAN INSTITUTE AND THE ALTERNATE ROUTE

by L. Blake Fewster

The concept of the Alternate Route to obtain credit for the first five examinations of the Society of Actuaries is of special interest to members of the Canadian Institute of Actuaries, 80% of whom qualify by passing the Society examinations.

An interesting and stimulating discussion on the Alternate Route was held at the annual meeting of the Institute in Ottawa on June 12, 1970. The discussion was led by a panel composed of James L. Clare and Ernest R. Vogt along with special guests, Stephen G. Kellison and Julius Vogel. Julius and Ernie presented arguments in favour of the Alternate Route proposal and Steve and Jim presented arguments against the proposal.

Julius Vogel, who is Chairman of the American Academy of Actuaries committee on the Alternate Route, outlined the work of his committee and reported that all of its members favour the adoption of the Alternate Route for the long-term good of the actuarial profession. He mentioned that the most important and also most difficult task involved in implementing the Alternate Route would be the accrediting of colleges and determining the required courses for alternate route qualification. He did, however, feel that the Alternate Route would encourage development and dissemination of new concepts and techniques in actuarial science by removing some of the constraint necessary in the present Society examinations which must be designed for students with a wide variety of backgrounds. The Alternate Route could enhance the role of colleges in actuarial education and would encourage more students to become actuaries.

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## CUMMING AND GOING

The authorities who take notice of the mastheads of periodic publications and any earnest students of the masthead of *The Actuary* since its inception will notice that this is the first issue in which the name of John B. Cumming is missing from the list of Editors. Pressure of other duties has led Jack to resign from the Editorial Board much to the regret of his colleagues.

The Editors have more to do than merely wield a blue pencil and in the early days the non-blue-pencil duties were even greater. To these and to his emendatory tasks Jack Cumming brought enthusiasm and skill in good measure and his continued help has contributed in great degree to the success of the Newsletter. The Society and *The Actuary* are both greatly in his debt and we gladly take this opportunity to say "Thank You." □

## THE NUMBERING UNITED STATES CENSUS 1970

by Dwight K. Bartlett, III

Results of the 1970 Census of the United States are now being compiled and will be available shortly. In general, the information available will be summary enumerations rather than basic data, although there will also be Public Use Sample files giving basic data concerning characteristics of people and households individually on a 1% sample basis. These files will be made available on magnetic tape in the latter part of 1971.

The summary records will enumerate the population according to a variety of characteristics including age, sex, race, occupation, education, marital status, income. There will also be enumerations with respect to housing characteristics such as number of units at the

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## CANADIAN REGULATION OF PENSION PLANS

(Report prepared by Frank M. Kleiler for the U.S. Dept. of Labor)

by Laurence E. Coward

An observer of the United States legislative machinery who is not well informed on its workings can only be filled with wonder at the tortuous manner in which the United States makes its laws. Painstaking research combines with naked lobbying; authoritative discussion goes hand in hand with emotional propaganda; thorough staff work is accompanied by political jockeying. Proposals for legislation to regulate private pension plans have been in this pressure cooker for some four years. Currently at least five pension bills are pending in Washington. Front runners are the Dent bill, the Javits bill, and an Administration bill supported by the Department of Labor.

Frank M. Kleiler, Director of the Office of Labor Management and Welfare Pension Reports, United States Department of Labor, was given a special assignment to survey the Canadian pension scene, in particular the Pension Benefits Acts in force in four provinces and the Pension Benefits Standards Act of the Government of Canada. He visited Canada during October and November 1969 and interviewed dozens of officials, actuaries and other interested parties. His comprehensive report was designed to be useful as background information to policy planners in the United States.

Mr. Kleiler's report surveys the history and present functioning of employer pension plans, the Old Age Security Act, the Canada (Quebec) Pension Plan, the Pension Benefits Acts, Canadian Government Annuities, Profit Sharing Plans and the Income Tax Act in relation to pensions. It also includes inter-

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GUEST EDITORIAL

EACH of the Fellows will soon be receiving a copy of the 1970 Report of the Nominating Committee along with the Program for the Annual Meeting. The preparation of this report began with the formation of the Nominating Committee early in the year. By action of the first Board of Governors of the Society, this Committee has consisted each year of the two Immediate Past-Presidents and three other Fellows selected by them, with at least one resident from (1) the north-eastern states, (2) elsewhere in the United States and (3) Canada. (For the history of the Society's election procedures, see TSA I, p 38, and TSA XXI, p 605.)

Wendell Milliman and I, as the two Past-Presidents, were careful to see to it that our Committee would be fully representative. You will find that it includes a member from Canada and that, in the United States, the geographical areas Central, Northeast, South and West are each represented. In addition, two members are in non-company employment—one a consultant and the other in academic life.

The Committee set about immediately to find the best qualified candidates from each geographical area and from company and non-company employment. A suitable choice of candidates was sought which would not only be representative of the membership but also provide a range of candidates for each office—overall, approximately three times the number of Vice-Presidential and Board vacancies to be filled. In making its choices, active participation in the Society's affairs as measured by previous election to office, service on Society committees, papers published in the *Transactions* and related activities was an important consideration.

This year's Report will show Society related biographical data for each nominee to assist the voters. Furthermore, a simplification in the preferential balloting for Vice-President and Board membership has been introduced in the hope of reducing the number of improperly completed and therefore invalid ballots.

Each Fellow who expects to vote at the meeting is asked to study the Report carefully ahead of time. As is customary, the Report will bring out the distribution of the Board of Governors necessary if approximate proportional representation of the membership is to be attained. The desirability of approaching this objective will be stressed to the members during the course of the elections. The Committee urges each of you to vote in such a way that, with appropriate regard for other criteria which may govern your selection of candidates, no geographical area and neither type of employment will be significantly under represented.

Morton D. Miller  
 Chairman, 1970 Nominating Committee

LETTERS

Memorial Fund

Sir:

The members of the Society, unfortunately, are not themselves immune from the Laws of Mortality. Those of us who have attained the rank of "Senior Citizens" (even though we do not like the term) are seeing the passing of an increasing number of those who have been our friends and colleagues for many years. The Year Book lists nearly a hundred Fellows and Associates who have gone in the last five years. Many of them have made lasting contributions to the Profession and to society as a whole. A few names come to mind immediately; Arthur Hunter, Albert Linton, Ray Murphy, Bruce and Pearce Shepherd, Mal Davis, Sam Milligan, Bill Anderson and Joe Maclean. Many others could be added.

The standard recognition is an obituary notice in the *Transactions*. Then if we know the person well enough we go to the funeral and perhaps send flowers or make a contribution to the Heart Fund or Cancer Society, or to the individual's favorite cause. Certain recent deaths which hit rather close have caused me to feel this is not enough.

I am therefore suggesting the possibility of the Society establishing a Memorial Fund to which our members could contribute in memory of those who leave us, past, present, and future. The proceeds, income or principal, could be used in some way for the benefit of the Actuarial Profession. Just how I will not venture to say, but surely there must be many worthwhile avenues. Perhaps this could be left to the discretion of the Board. The existence of the Fund, its purpose and the names of those for whom contributions have been made, could be carried in the Year Book as in the case of Triennial Prize winners and Past Officers.

I am using your columns to solicit opinions from the members as to the desirability of the idea and of possible means of implementing it. Having known actuaries for practically all of my sixty-eight years, I am sure that they will not be backward about coming forward with ideas, both pro and con.

Douglas S. Craig

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**Letters***(Continued from page 2)***Invitation**

Sir:

1970 is Manitoba's Centennial Year and exciting events continue throughout the year. A \$132,000 sweepstake on the Manitoba Derby. Buffalo steaks. The Davis Cup Playdowns. Fireworks. Parades. A Royal visit by Queen Elizabeth and her family. And the FIRST CANADIAN INSTITUTE OF ACTUARIES' MEETING TO BE HELD IN WINNIPEG. Hosted by the Actuaries' Club of Winnipeg, the meeting will be held October 15th and 16th at the International Inn. We urge all members of the actuarial profession to join in the Province's festivities and attend the C.I.A. meeting in October. If you require further details, feel free to contact me at The Great-West Life Assurance Company in Winnipeg.

James R. Grant

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**Why Not Become an Actuary**

Sir:

The June issue of *The Actuary* carried a most interesting and thought-provoking article "Why Not Become an Actuary" by Peter G. Brown, a summer actuarial trainee for a large company, a recent graduate of Princeton University, and soon to be in Switzerland for skiing and attending journalism school. Mr. Brown's well-composed and thoughtful remarks are well worth study and analysis.

In my way of thinking, his views are an excellent illustration of one personal problem facing today's affluent, intelligent graduates—namely, having such a high economic base readily available to them that they are compelled to do nothing which they do not feel like doing. I believe that often we frail and sinful human beings find that after we are compelled to do a thing that we did not think we wanted to do, then later we find that it was really very worthwhile since we had not realized many aspects thereof that appeared later through experience.

Let me cite one personal example. As a high school student, I very much detested studying Latin as I was required to do in order to enter the college of my choice; years later when I very much wanted to learn Spanish, I was extremely grateful that I had studied Latin.

Second, when I graduated from the University of Iowa in 1934 and no actuarial jobs were immediately available to me, I was not enthusiastic about taking a temporary two-month job in Washington, but this led to a most challenging and stimulating career of over 35 years in the Social Security field, which in retrospect I cannot imagine anything that I would rather have done.

It is most interesting that Mr. Brown, like many other current graduates, makes much of not working for insurance companies or other big business organizations because there is not sufficient social significance there and because these organizations are "not now responding rapidly enough to societal needs." It is interesting that with all these lofty ideals and ambitions, and with the great knowledge that seems to prevail so abundantly among recent graduates, none of them make enough effort to determine the great applicability of actuarial science in governmental benefit programs where there is such a crying shortage of actuarial talent!

Robert J. Myers

\* \* \* \*

Sir:

I am moved to comment on the article in the June issue of *The Actuary* by Peter G. Brown, *Why Not Become An Actuary*.

Peter has concluded correctly that what the actuarial profession seeks is the polished executive who regards actuarial science as only one trick in a sizeable and varied bag of tricks. What Peter fails to realize is that it is sometimes very difficult to pluck such an individual, ready made, right off campus — even from among those "educated amidst the the personal and political turmoil of an eastern university . . ."

I am afraid that Peter is not entirely to blame for this misunderstanding. Chances are that the company that hired him stressed the more appealing executive image in the first place. When Peter finally perceived that there was going to be a somewhat tiresome apprenticeship involved, he opted for skiing in Switzerland. His only suggestion for improving our recruiting problems is to stress the executive image even more and throw in a social and political commitment to boot! When in heaven's name will they have time to pass the examinations?

Our recruiting problems will never be solved by trying to please the Peters in the world. We will go on financing ski trips while Society membership lags. It may take a long time, but salvation lies in encouraging earnest, "somewhat unsophisticated," young men to plan on an actuarial career from an early age. The Society's efforts in publicizing the profession at the high school level are in the right direction. Individual companies, however, are still waiting for high-risk high school students to grow into college juniors and seniors before talking careers with them. Increasingly, it is becoming obvious that this is much too late and that the effort must be made much earlier to recruit the kind of people we want.

Finally, I would like to caution Peter about two things:

1. Older actuaries, having attended more mathematics classes than sociology classes, know that you can't maximize a function with respect to two independent variables. It is only the more recent college graduates who are inclined to seek the greatest good for the greatest number.
2. It is quite possible that poor, unsophisticated John will be better prepared to solve society's problems through his association with the night janitorial staff than he would have been through associations made on the slopes.

William Daniel Smith

\* \* \* \*

**What Is An Actuary?**

Sir:

In April, I had the privilege of serving on a panel discussion on continuing education proposals for the Society. I have participated in various other discussions in which questions were raised about what subjects are appropriate for Society programs, education, etc.

My views seem to differ from those of many Society Members. Underlying much of this discussion are probably different assumptions about the scope of our common professional interest. I therefore wish to raise some questions:

- What characteristics make our profession unique?
- Is it our technical expertise in life and health insurance and employee benefit plans?

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**Letters***(Continued from page 3)*

- Is it our ability to use life contingencies?
- Is it our ability to use a combination of mathematics, probability, statistics, and business judgement to develop solutions to real world business problems?
- Is the development of life contingencies only one of the ways we can do this?
- What kinds of careers should be open to members of our profession?
- What is reasonable for a new FSA to expect?
- What does the professional designation mean to individuals in their careers?
- What is the scope of common interest to our profession, of specialized interest within our profession?

I raise these questions because I believe there are significant differences in attitudes and expectations among individual members—and probably between generations. I asked myself "What is an Actuary?" and decided that it all depended on who was answering.

Yet when we discuss scope and content of programs and the examination syllabus, we discuss these issues without facing them squarely.

I feel that facing that squarely might be far more productive and that we all must ask ourselves "Who are we, and whom do we wish to be?"

As far as I know, no mechanism exists for the consideration of these questions. If you feel they are important, perhaps *The Actuary* can provide a forum for this discussion.

*Anna Maria Rappaport*

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**Actuaries in Social Security Program**

*Sir:*

In the April issue of *The Actuary*, Peter F. Chapman has written a lucid letter concerning the social security system. One portion was addressed particularly to the role played by the actuaries in the social security program.

After being employed by the Social Security Administration for 2 years, I would like to share some of my firsthand observations with my professional colleagues. Bob Myers, who was the Chief Actuary for the Social Security

Administration for 23 years, has played a vital role in the development of the social security program. His actuarial advice was sought by the Executive Branch as well as by Congress. His views and recommendations have made great differences in the development of the Social Security program (otherwise a man of his caliber would not have stayed with the program for 36 years). The actuarial cost estimates were taken as a major factor in considering any new program or any significant change in the existing program. Even though the cost estimates do not necessarily deter the expansion of the program. Congress always makes certain that any expansion of the benefits is adequately financed, based on the actuarial cost estimates. Quoting various actuarial reports authored by Bob Myers: "The Social Security Program is actuarially sound."

Mr. Myers has made a vital contribution to the actuarial soundness of the social security program. It is my experience and belief that actuaries will continue to play an important role in the financing of the social security program.

Mr. Chapman stated that decisions are made by-and-large by uninformed politicians. Let us examine the facts. The two most important decision-makers in Congress with regard to the social security program, Congressman Wilbur Mills, Chairman of the House Committee on Ways and Means and Senator Russell Long, Chairman of the Senate Finance Committee, have been in Congress for 31 years and 22 years, respectively. Through these long years of experience as well as the support of very able staff, they have the expertise and the capacity to comprehend the complexity of the social security program.

Mr. Chapman seems to have used some tangential logic to assume that if a social insurance program had expanded, then the actuaries could not have played a vital role in it. Maybe an analogy is in order here. The costs estimated by the actuaries for the private pension plans have not deterred the growth of such plans. Does that mean the actuaries have not played an important role in the funding and the design of private pension plans?

To me, the role of an actuary is not to have a preconceived notion as to

the expansion or the contraction of a plan, but rather he should use his technical expertise to help design the best benefit package with the available fund. Of course, he also performs actuarial analysis and estimates the cost of the plan. If a plan is adopted, the actuary should do everything within his power to make certain the program is adequately financed on an actuarial basis.

*William C. Hsiao*

\* \* \* \*

**Points of Rebellion**

*Sir:*

Mr. Steinig in his book review of *Points of Rebellion*, by William O. Douglas, refers to the important role the life insurance industry can play in revitalizing our society.

This, I believe is quite true. What needs to be pointed out is that a strong case can be made for supporting revitalization on a self-interest profit incentive basis. Certainly a better social and physical environment means fewer claims and other economic advantages to the insurance industry.

*Roy Berg*

\* \* \* \*

**Variable Insurance**

*Sir:*

A combination of events and articles prompts me to write this letter. At the June meeting of the Society, there was an excellent discussion of variable insurance. I concluded that the basic endeavor was to produce an insurance benefit that tended to offset the effects of inflation utilizing common stock investments to that end.

I am inclined to believe that variable insurance using common stocks will not correlate well with the cost of living, (especially with a fixed premium), and that the industry might persuade the investment community to investigate the possibilities of securities that provide a risk return plus an additional variable return that coincides with the debase-ment in currency values. Premiums, cash values, and the investment portion of the dividend would vary in the same fashion. Such a security would be an ideal investment for a type of variable insurance.

*Robert C. Morrow*

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**EXCERPT FROM X CANTOS**

We bring to our readers the conclusion of Kenneth E. Boulding's X Cantos which appeared in the Review Vol. VIII (1969) pp. 29-31.

**CANTO XII.**

A matrix is a set of roles  
 Arranged like banks of pigeon-holes.  
 It is a box of empty boxes,  
 Filled with nothing but paradoxes.  
 Their mathematical operations  
 Involve elaborate permutations  
 In which the x's and the i's and j's  
 Dance algebraical ballets,  
 And in the course of their gyrations  
 Solve simultaneous equations.

**CANTO XIII**

It gives a piece a certain unction  
 When each relation's called a  
     *Function,*  
 And if prestige is what we seek,  
 We write the functions out in Greek.  
 These intellectual acrobatics  
 Are fun, but are not mathematics,  
 For there are subtle traps immense  
 Where all that's symbol is not sense.

*Editor's Epilogue:*

*Dr. Boulding's qualifications have been evident to the readers of "The Actuary" for some time and we are glad that the Program Committee has taken note of these by inviting him to speak at the Society's Denver meeting.* □

**CONFERENCE ON QUANTITATIVE METHODS IN MANAGEMENT**

A Conference on Quantitative Methods in Management, sponsored jointly by the Wharton School of Finance and Commerce, University of Pennsylvania, and by the Committee on Research of the Society of Actuaries will be held in Philadelphia, Nov. 19-21, 1970. It is open to all members of the Society of Actuaries and Casualty Actuarial Society.

The purpose is to explore a number of quantitative approaches to organizational, management and marketing problems, primarily as viewed by the staff of the Wharton School under Professor Russell Ackoff.

Attendance will be limited to about 50 persons. Members of the two societies have already received the application form. For additional forms write D. G. Halmstad, Secretary of the Committee on Research. □

**SOCIAL SECURITY NOTES**

Note No. 19, 1969, Social Welfare Expenditures in Fiscal Year 1969.

"At \$127 billion, expenditures for social welfare under public programs in fiscal year 1969 continued the pattern of the past four years with another 13-percent annual increase. Even when population growth and rising prices are taken into account, the increase in real terms was 8 percent." Detailed tables summarizing expenditures by type and fiscal year are presented.

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R. J. Myers and F. Bayo *Long-range Cost Estimates for Old-age, Survivors, and Disability Insurance System, 1969, Actuarial Study No. 69, September 1969, Social Security Administration, Washington, D.C., pp. 51.*

This is the latest in a series of actuarial studies reporting the results of valuations of the OASDI system. According to this report, immediately before the enactment of the 1969 social security amendments, the OASDI system was overfinanced by 1.16% of taxable payroll. On the basis of this report, Congress approved a 15% increase in social security benefits effective January 1970, using up the entire actuarial surplus.

—o—

Maurice C. Hart *The Social Security Benefit Formula, Actuarial Note No. 64—January 1970, Social Security Administration, Washington, D.C., pp. 9.*

This note gives a concise history of the development of the social security benefit formula from 1935 through 1969. Included is a table showing the percentage increases granted by each set of social security amendments.

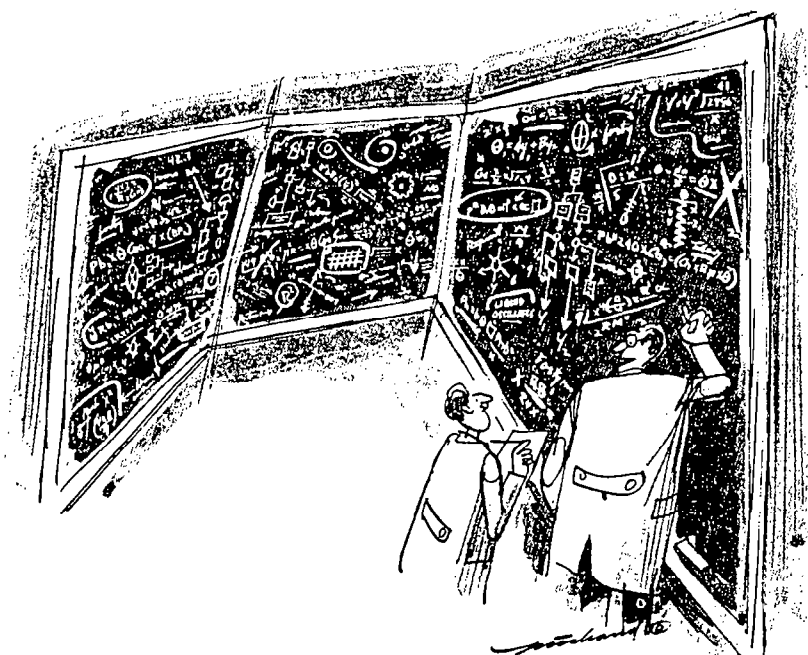
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Note No. 20, 1969, *The Fiscal Impact of the Social Security Program in Calendar 1968.*

"Economic expansion in 1968, unlike that in 1967, proceeded without interruption. Despite this fact, the surplus generated by the social security program in calendar 1968 was only \$1.5 billion, 60 percent of that attained in 1967 (\$2.6 billion). The reason is that while program expenditures grew more slowly in 1968 than in 1967, they still rose faster than program receipts which expanded no more than they did in 1967." More detailed analyses of receipts and expenditures are presented.

*Copies may be obtained gratis from Office of the Actuary, Social Security Administration, Department of Health, Education and Welfare, Washington, D. C. 20201.* □

**COST OF INSURANCE? or ADJUSTED EARNINGS?**



*"I'm getting close to the answer but can't for the life of me remember what the problem was."*

## Canadian Pension Plans

(Continued from page 1)

esting chapters on "Comparison with laws in the United States" and "Opinions of the Clientele" — the Clientele means employers, employees and others affected by the Pension Benefits Acts.

"The author found relatively little criticism of the basic purpose of the regulatory laws or of their administration thus far. There were mild expressions of resentment against regulation, but it was not expressed with vehemence or bitterness."

The report is written with objectivity and the author's opinions show through only occasionally. The final conclusions are modest and unassailable:

"Despite the lack of complete safeguards, the following conclusions emerge from the study of Canadian regulation of pension plans and a comparison with the laws affecting pension plans in the United States:

- "1. Members of pension plans in Canada have better statutory protection of their pension expectations than do pension plan participants in the United States.
- "2. The Canadian experience thus far proves that there is nothing impractical about regulating pension plans by legislation prescribing minimum standards of vesting, funding and management of investments."

Mr. Kleiler seems surprised that laws regulating pension plans can be passed without the incentive generated by a disaster or obvious abuse or public outcry.

"In the United States the Congress does not normally enact regulatory legislation in any field until after there have been public hearings by Congressional committees which demonstrate that various malpractices have occurred, that rights of individuals have been abused, or that there are cases of serious injustice which warrant government intervention to prevent or inhibit such conditions from continuing.

"If you ask a Canadian pension specialist what atrocities occurred before the enactment of this legislation to warrant governmental imposition of the funding standards, he can think of only one case — the Studebaker shut-down. If you ask what atrocities occurred in the invest-

ment of pension trust funds, he racks his brain and usually responds that he can think of no specific case; but usually he says that because of the large sums of money involved, the same reasons that call for government supervision over banking and insurance companies are applicable to the pension business.

"Accordingly, with little statistical evidence or case histories to establish a need for governmental regulation to assure solvency—but with ample evidence to establish that the lack of adequate vesting rules was depriving workers of their pension expectations — legislators in Canada have undertaken to provide government supervision in all three areas: vesting, funding and investments."

In Canada private pension plans relative to government pensions have played a more important part than in the United States. This was particularly true in the 1960-1965 period when the Ontario's "portable pension" law was being designated, prior to the introduction of the Canada Pension Plan. Moreover, employee pension contributions are tax deductible in Canada, so that the majority of pension plans are contributory and thus can afford to be more generous than in the United States. Accordingly it was thought that a strengthening of employees' rights in private pension plans would lead to a considerable improvement in retirement security at little cost. Indeed, some supporters of the original Pension Benefits Act hoped that it would serve as a bulwark to head off a government-run national pension plan.

This raises a question that is pertinent today in the United States. Would government control of vesting, solvency and investments be a step towards the absorption of virtually all private plans into the social security system? Or would a legislated strengthening of members' rights in private plans reduce the dependence on government and the pressure to increase social security benefits?

Among other interesting points arising out of the report are the following:

1. Mr. Kleiler notes that the United States has always been strong on reporting and disclosure. The Canadian governments, except in Saskatchewan, have steered clear of disclosure — instead the emphasis has been on compulsory vesting, locking-in, solvency and investment control.

2. The governments with Pension Benefits Acts neither try to police the plans nor to collect pensions for individuals. Queries and complaints are dealt with as they arise, but there is no large staff of outside inspectors. The enforcement problem has been eased by the rule of the Canadian income tax department that registration under the pension acts is a precondition for income tax approval.
3. The power to establish or designate a central pension agency to handle pension credits is retained in the Pension Benefits Acts, but has not been used. There seems to be little need in Canada for a central agency, although it has been prominent in the U.S. proposals.
4. I could not find any comment in the report on "vested liability insurance" nor on the absence of this feature in the Canadian laws. The arguments in favour of such insurance are greatly weakened if all pension plans are required to meet solvency standards and to liquidate liabilities over limited periods of years.
5. The effectiveness of the funding rules rests on the competence and integrity of the actuaries who sign the cost certificates and actuarial reports. An actuary is defined in the regulation as a Fellow of the Canadian Institute of Actuaries. Thus the government depends upon the Institute to ensure high standards of competence and ethics in the actuaries who perform important functions under the regulatory laws.
6. The heaviest paper-work burden falls upon the actuaries. They, too, sometimes protest about the burden; but many of them seem to have their tongues in their cheeks. Reports are the main by-products of an actuary's work. The solvency requirements of these regulatory laws have increased the paper work for actuaries, but actuaries get paid for doing paper work.

Whatever influence Mr. Kleiler's report may have on the legislative development in the United States, one thing is clear. He has written the best, concise up-to-date, one-volume description of public and private pension plans in Canada that exists. It is a little humiliating

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## Canadian Pension Plan

(Continued from page 6)

that no Canadian actuary or economist or other person (since Robert M. Clark wrote his 1959 social security report) has tackled this useful project. Had such a book been available in the past, updated once a year, of course, it would have saved me many tedious hours of digging for basic but easily forgotten facts. Mr. Kleiler's report is warmly recommended as a first class reference book for students, pension consultants and all others concerned with pension plans and social security in Canada.

*Editor's Note: A copy of this Report may be obtained without charge on request from the Office of Labor-Management and Welfare-Pension Reports, U.S. Department of Labor, Washington, D.C. 20210.* □

## Letters

(Continued from page 4)

### Antidotes for Inflation

Sir:

Most of us sympathetically favor efforts to protect the purchasing power of persons no longer in the active workforce (and thus having no other means of countering spiraling living costs), through the use of cost-of-living adjustments in pension plans or otherwise. On the other hand, to build a cost-of-living concept into all debt arrangements would appear to pose more serious problems. Proposals so to do the latter appear to be based on theories having no chance of long-range success and actually compounding the evil they seek to alleviate.

Accordingly, the philosophy of accepting and joining the inflationary movement, which appears to have been too easily embraced in *The Actuary* May editorial dealing with "antidotes for inflation," is bound to strike a discordant note with many observers.

Proposals which would feed, as well as feed on, inflation tend to perpetuate the "growth-happy myth" that expansion, production, consumption and population can continue indefinitely on an

## AMERICAN ACADEMY OF ACTUARIES

The Congress recently passed Public Law 91-377 which is an Amendment to the Railroad Retirement Act of 1937. Among other items this law provides for the appointment of a Commission to conduct a study of the Railroad Retirement System and its financing. The Commission is required to recommend to the Congress on or before July 1, 1971 changes in the system to provide adequate benefits on an actuarially sound basis. The law further provides as follows:

"The Commission shall employ the services of an actuarial consultant holding membership in the American Academy of Actuaries and qualified in the evaluation of pension plans."

This is the first time the Academy has been recognized in any federal legislation.

upward geometric curve. The implications of following such a mistaken belief are calamitous, as demographers and other experts on world environmental and population problems have warned. A proposal to marry inflation and unbridled expansion is only one manifestation of this larger problem.

We are all going to have to learn again the art of self-discipline if we are to bring inflationary factors under control. So long as most of us demand more than our earned share of goods and services produced (or are willing to waste our national substance through non-essential or unwise expenditures)—we are going to have to face this problem of inflation.

It may be of interest to note the much higher degree of self-discipline which exists in some other countries, as witness the following excerpt:

"Finland, the tiny (population) country which alone honored its post-World War I financial commitments to the United States, has offered the

world another object lesson in fiscal responsibility.

"As part of a national belt-tightening program following a currency devaluation, executives and laborers alike have willingly accepted controls on salaries and wages. Finns claim that devaluations won't work unless accompanied by tough austerity programs to control inflation as well as by vigorous efforts to increase exports. Even leftist union leaders surprisingly argue that relatively high unemployment is the price that must be paid."

Finland was cited in the May editorial as one of the countries favoring the principle of inflation-linked debt instruments. I understand, however, that it has since abandoned this principle.

England, too, has accepted belt-tightening as a means of bringing its recent economic crises under control, and with some success.

Frank L. Griffin, Jr.

## Actuarial Meetings

- Oct. 4, Actuaries Club of Indiana, Kentucky and Ohio, Indianapolis
- Oct. 7, Nebraska Actuaries Club, Omaha
- Oct. 12, 13, 14, Conference of Actuaries in Public Practice, San Francisco
- Oct. 13, Actuaries' Club of New York, Tarrytown
- Oct. 15, 16, Canadian Institute of Actuaries, Winnipeg
- Oct. 19, Chicago Actuarial Club
- Oct. 21, Seattle Actuarial Club
- Nov. 16, Chicago Actuarial Club
- Nov. 16, 17, Casualty Actuarial Society, Chicago
- Nov. 16, American Academy of Actuaries, Chicago
- Nov. 18, Seattle Actuarial Club
- Nov. 19, 20, Actuaries Club of Southwest
- Nov. 19, 20, Southeastern Actuaries Club, Atlanta

## Alternate Route

(Continued from page 1)

Steve Kellison, who holds the Chair of Actuarial Science at the University of Nebraska, was in sympathy with some of the motivation behind the Alternate Route proposal. However, he felt that a movement away from our high and uniform standards was more serious than the small amount of rigidity in an up-to-date syllabus. Also he suggested that we would greatly increase our commitment to education and examinations by creating something that would be used by only a small number of students. He went on that there is at present a severe shortage of actuaries engaged in teaching and that possible non-accreditation of certain actuarial programs would pose a threat to their continued existence.

Ernie Vogt, Professor and Head of the Department of Actuarial and Business Mathematics at the University of Manitoba, favoured permitting and encouraging some of the universities in Canada to play a more direct and important role in educating actuaries. Some of Ernie's views have already appeared in the May 1970 edition of *The Actuary*. While he admitted that a mere passing grade in a university course is below the level of understanding required for actuarial exams, he felt that "A" or "B" grade students should satisfy the necessary standards and that the additional drill necessary to pass actuarial examinations, which place so much emphasis on speed, is of doubtful purpose. In summary, he envisaged the possibility of giving full accreditation to a small number of Canadian universities and partial accreditation for certain parts at other universities, with students who complete the requirements of the first five parts either by the alternate or traditional routes being admitted as students of the Canadian Institute of Actuaries (in Canada no real professional recognition is given until a person achieves Fellowship standing in the Canadian Institute of Actuaries).

Jim Clare, who has been a long time member of the Society's Education and Examination Committee, opposed the Alternate Route and felt that it was not necessary to have an Alternate Route in order to achieve improvement in actuarial education. He favoured the anonymity and uniformity of standards at-

### So You're Good at Math!

The announcement in our April 1970 issue of the Price Schedule for the booklet has brought to the Society's office a flood of orders for 0 booklets at 10¢ each. (Some of the orders did not include the 10¢.)

We are glad to find our readers taking advantage of this remarkable offer. For those unconvinced of the tremendous bargain may we point out that

One (1) booklet has 12 pages

No (0) booklet has 2031 pages

"Such an opportunity may not occur again."

tained through the Society's present system which may not be possible with the Alternate Route. If one of the purposes of the Alternate Route is to cut down substantially on the subjects examined by the Society in Parts 1 and 2, that problem could be solved directly by eliminating those subjects from the Society's syllabus rather than rushing into the Alternate Route.

Both Jim and Steve referred to the proposal of joint sponsorship of examinations by all actuarial bodies in North America and felt that further work in this area would be preferable to attempting to solve the severe problems they see associated with Alternate Route.

There was the suggestion that the Alternate Route concept is an inevitable development at least to some degree as it has been in the legal and medical professions. Others felt that too much emphasis in a university on specific actuarial courses would tend to produce technicians rather than persons with a well-rounded education. This point may be of particular concern in Canada where most university actuarial education is concentrated at the under-graduate level.

*Editor's Note: As Society members are aware, this important subject of the Alternate Route is to be discussed at the Denver meeting. A complete transcript of the presentation at that meeting will be sent to all Society members immediately and thereafter the columns of The Actuary will be open to comments from the members.* □

## The Numbering

(Continued from page 1)

address, presence of telephone, kitchen facilities, other utilities, value, vacancy status, etc. In addition, there will be some joint population-housing reports. The enumerations for other than basic items will be based on 20, 15 or 5% samples since not everyone was asked to answer all the questions.

The data will be available in a variety of forms including printed reports, magnetic computer tapes, microfilm, and microfiche. However, persons interested in serious use of the data for research purposes will probably find the summary records on magnetic tape most suitable. Tapes were tentatively scheduled to be available beginning in August, 1970 with the complete set available by the end of 1971. Inquiries about the tapes should be addressed to Chief, Central Users' Service, Bureau of the Census, Washington, D. C., 20233.

The Life Insurance Agency Management Association is having prepared for use by member companies special tapes of the data in a form particularly suited for life insurance marketing research. Inquiries should be addressed to Alfred G. Whitney, Director of Market Research, LIAMA, 170 Sigourney Street, Hartford, Connecticut, 06105.

The Bureau of the Census is already planning for future censuses. Currently being considered by Congress is a bill which would provide for a census in 1975 which would probably be more limited in the types of data it would attempt to collect but which would at least update the age, sex and race enumerations by geographical subdivisions. The interim census is needed for practically any serious use of official vital statistics. For example, no reliable life tables can be constructed for subdivisions of the United States between censuses.

Those supporting this legislation should notify their Congressmen.

The Bureau is also giving thought to the 1980 Census. It is glad to entertain suggestions concerning the items of data collected in the census. In designing the census the Bureau must, however, be mindful of the mandatory nature of the census. Data collected must therefore be clearly useful in implementing the public welfare. Address suggestions and questions about the census to: Director, Bureau of the Census, U.S. Department of Commerce, Wash., D. C. 20233. □