



# The Actuary

NOV 1987

## The Newsletter of the Society of Actuaries

VOL. 20, No. 9

November, 1986

### THE SOCIETY'S LIBRARY

Members may not be aware that the Society of Actuaries has had, since its inception, a library; and that since February 1986 the library has had a professional librarian. This article is intended to make us all more aware of the library facilities we already have, and the plans for the future.

The librarian is Joan Chapa, hired early this year on a part-time basis, but to become full-time in 1987. Joan took her training in Library Science at Illinois State University and the University of Illinois, earning a Master's degree from the latter in 1981. She has also been a practicing librarian in the public library of Mount Prospect, Il.

The Society library was inherited from its predecessor organizations, the Actuarial Society of America and the American Institute of Actuaries, when these two organizations merged to form the Society of Actuaries in 1949. The very beginnings of the library were from a bequest to the old Society from the estate of William D. Whiting, who died in 1899. The library later grew, largely through the contributions of members. A notable gift of actuarial books came in 1936 from C.D. Higham of London.

With the formation of the Society of Actuaries the library moved to Chicago, to be administered by the Society secretary; but in 1964 the library moved back to New York. There it was housed and administered by the Insurance Society of New York and the College of Insurance. The collection came back to Chicago in 1980, and moved again when the Society office moved to Itasca. It is only since the appointment of a professional librarian, however, that the library is beginning to receive the attention it deserves.

(Continued on page 3)

### ELECTIONS 1986

The results announced at the Annual Meeting in Chicago are:

#### President-Elect

Gary Corbett

#### Vice-Presidents

Allan D. Affleck

Robert C. Dowsett

John O. Montgomery

#### Secretary

Richard V. Minck

#### Treasurer

Michael J. Cowell

#### Director of Publications

Anthony T. Spano

#### Board of Governors

A. Norman Crowder, III

Phyllis A. Doran

Curtis E. Huntington

Richard K. Kischuk

James J. Murphy

Michael R. Winn

2,743 valid ballots were cast, 48.9% of the eligible voters. The 1985 percentage was identical. Only 14 invalid ballots were received.

### 1987 AERF GRANTS COMPETITION

The Actuarial Education and Research Fund (AERF) is sponsoring a 1987 grants competition. One or more grants, ranging from \$5,000 to \$10,000, will be available through AERF and its constituent organizations to support actuarial education or research projects. Funds may be used to compensate grant recipients or to cover expenses for services utilized in carrying out the project.

The goal of the competition is the production of publications which will advance actuarial science especially in regard to practical applications. For this purpose, proposals are invited from members of the actuarial organizations

(Continued on page 3)

### TAXATION OF INSURANCE COMPANIES — ACT OF 1986

By John H. Elken

The Tax Reform Act of 1986 has now become law, though its various effective dates are still in the future. The Act involves sweeping changes, generally lowering tax rates and broadening the taxable income base. While in total the rate reductions are offset by base broadening, individuals as a whole will pay less and corporations more.

The Act makes important changes in the taxation of insurance products and the rules governing employee benefit plans, both of interest to actuaries; but these are outside of the scope of this article. Here we concentrate on the corporate income tax, and how the Act affects the taxation of insurance companies.

#### In General

The top corporate tax rate is reduced from 46% to 34%, effective July 1, 1987. Calendar year taxpayers will pay the blended rate (40%) for 1987. Lower rates apply to corporate incomes under \$75,000, but these savings are recaptured by a 5% surtax on income between \$100,000 and \$335,000. The effect is that all corporations with incomes in excess of \$335,000 pay tax at the 34% rate after Jan. 1, 1988, subject of course to all other provisions of the new law.

Corporate capital gains rates move from 28% to 34% for gains realized in tax years beginning after Dec. 31, 1986. While the rate of tax soon becomes the same as for ordinary income, the separate identity of capital gains (and losses) will be retained, to allow for limits on deductibility of losses and to

(Continued on page 4)

# The Actuary

Editor ..... C.L. TROWBRIDGE  
 Associate Editors..... DEBORAH ADLER POPPEL  
                                     DAVID S. WILLIAMS  
                                     JOSEPH W.S. YAU  
 Competition Editor..... CHARLES G. GROESCHELL  
 Editor Emeritus..... ANDREW C. WEBSTER

Correspondence should be addressed:

*The Actuary*  
 P.O. Box 19253  
 Seattle, WA 98109  
 Tel: (206) 281-9151

*Published monthly (except July and August) by the SOCIETY OF ACTUARIES, 500 Park Boulevard, Itasca, IL 60143. Richard S. Robertson, President, Richard V. Minck, Secretary, Michael B. McGuinness, Treasurer, Anthony T. Spano, Director of Publications. Non-member subscriptions: students, \$5.50; others, \$6.50.*

*The Society is not responsible for statements made or opinions expressed herein. All contributions are subject to editing. Submissions must be signed.*

## EDITORIAL

There is an interesting sidelight to the election results announced on page 1. Gary Corbett, who will become the Society President a year from now, is only the fifth resident of Canada to be elected to the Society's highest office since its formation in 1949, and only the second Canadian to be elected in the 15 elections conducted since the first mail ballot in 1972. Robin Leckie, elected seven years ago, was the first. Prior to elections by mail, there was some expectation that a Canadian might be elected in those years when the annual meeting was held in Canada. Since Canadians constitute nearly 20% of the total membership, one Canadian president out of every five appeals somehow to our sense of what is just.

Perhaps equally interesting is that for this next year there will be two of the six vice-presidents from north of the border. One Canadian vice-president was elected in each of the years 1984, 1985, and 1986, whereas the only other Canadian vice-presidents elected by mail were the three chosen in 1974, 1977, and 1979. Six Canadian VPs out of 32 is perhaps representative of the Canadian proportion of total membership, but three out of 24 (the results for the 12 years 1972-1983 incl.) was not. During those same 12 years four VPs were chosen from the ranks of a smaller minority, the less-than-10% of our members who are female.

In the late 1970's, noting that there had been no Canadian President since 1967, the Society election committees became concerned. Not only had there been no recent Canadian presidents, but the number of Canadians who had served as vice-president, then as now a necessary-though-not-sufficient step toward the presidency, was far too low. Although election committees have continually suggested the advisability of proportional representation, it seemed that the desired results were not forthcoming.

The tendency for a predominantly American electorate to elect predominantly American VPs continued through 1983; but the last three elections, for whatever reason, have been different. The Executive Committee for this coming year numbers three Canadians among its 11 members, and the 31-member Board has five. Canadians seem to be taking their rightful place as leaders of a truly two-nation organization.

Those of us who live in the U.S. will do well to recognize that in proportion to its population Canada has twice as many actuaries. Canadian actuaries have achieved more recognition in their own country than American actuaries have ever been able to gain in the U.S. Despite its much smaller population, Canada has kept up with its southern neighbor in university-based actuarial education. And finally we must recognize that Canada has bred and trained many who have emigrated to make their actuarial marks south of the border. At least four, and there may well be more, SOA past-presidents, counted in the statistics as Americans, got their start in Canada.

When the history of actuarial endeavor in North America is compiled, as it will be in connection with the celebration in 1989, it will surely be found that the Canadian contribution looms large. It seems entirely fitting that in that year of celebration the immediate past-president of the Society will be a Canadian.

C.L.T.

## WORKDAY PROBLEMS

An actuary for a mutual life insurance company wants to fund an extraordinary charge of \$1,000,000 out of surplus five years hence. He intends to accumulate this amount by investing today \$X of assets in an instrument that earns 7.5% (pre-tax) annually.

The earnings are subject to gain from operations (GFO) tax at a 36.8% rate, and surplus is subject to the equity tax. The differential earnings rate (DER) is 7.8%, so surplus is effectively taxed at  $.368 * .078 = 2.87\%$ . Assuming no change in the tax law, and that the GFO and DER rates remain at their current levels, determine X.

If interest is paid at year end, and equity tax is paid at year end on the average of the beginning ( $F_0$ ) and end of year ( $F_1$ ) funds (where end of year is after payment of the equity tax), the discount factor for each year is 0.9819. This is the result of solving  $F_1 = F_0 * (1 + .632 * .075) - \text{Equity Tax}$ , and  $\text{Equity Tax} = .5(F_0 + F_1) * .0287$  for  $F_0 / F_1$ .

This implies that a pre-tax rate of 7.5% becomes only 1.8% after GFO and equity tax. Therefore  $X = 1,000,000 (.9819)^5 = \$912717$ .

Does anyone disagree with this surprisingly low after-tax rate? Is the result much different under the new tax law?

## CENSUS BUREAU'S THIRD ANNUAL RESEARCH CONFERENCE

The program for the Census Bureau's Third Annual Research Conference has been set. Response to the Bureau's first "Call for Papers" was overwhelming. More than 115 abstracts were received from which only 30 could be selected. The choices were very difficult; many fine papers and ideas had to be turned away.

ARC III is scheduled to begin Sunday evening, March 29, 1987, and run through 2 p.m. on Wednesday, April 1, 1987, at the Omni International Hotel in Baltimore, Maryland.

The overall theme is "Improving the Quality of Survey Results." The program will devote one session to each of 14 topics.

For additional information contact Carolee Bush, Office of the Director, Bureau of the Census, Washington, DC 20233, 301/763-4900.

## 1987 AERF Grants Competition

(Continued from page 1)

supporting AERF, from faculty members of a U.S. or Canadian university or college who have teaching and research responsibilities in the actuarial or related fields, and others qualified by knowledge and experience to contribute to the goal.

Mark Doherty, the Society of Actuaries' Director of Research, will direct the 1987 Grants Competition. In this capacity, he will work with the AERF Directors and with the Research Policy Committee of the Society, chaired by Cecil Nesbitt, Vice President for Research and Studies.

To begin application, a letter should be submitted, or a call made, to Mark Doherty outlining the scope of the proposed project. He will then supply further information on applying for a project grant, and application forms.

Completed applications will be due Feb. 1, 1987 and will proceed to an Awards Committee drawn from the actuarial and academic professions. Awards will be announced in April 1987.

Correspondence should be addressed to Mark G. Doherty, Director of Research, Society of Actuaries, 500 Park Boulevard, Itasca, IL 60143. Tel. (313) 773-3010.

## ACTEX INVITATION

ACTEX Publications is seeking one or more persons to undertake the writing of a comprehensive textbook on the theory and practice of determining the financial values associated with individual life insurance and annuity products. Among these values are gross premiums, nonforfeiture values, asset shares, reserves, and dividends.

Compensation will be in the form of an initial grant (of up to \$10,000), plus royalties on future sales after the text is published. Proposals from recent retirees are particularly welcome.

For more information, call or write Dick London at ACTEX Publications, Inc., A-12 Wallens Hill Road, Winsted, CT 06098. Tel. (203) 379-5470. □

## DEATHS

Bruce Batho	ASA 1967
James T. Byrne	ASA 1938
John L. B. Heale	ASA 1936

## The Society's Library

(Continued from page 1)

The present library holds some 2,800 volumes, mainly archival in nature. Those interested in the history of the actuarial profession should note that a few volumes date back to the 18th century, the oldest being a book on simple and compound interest published in 1710. Another very old volume is DeMoivre's *Annuities on Lives*, published in 1750. Since these old books are deteriorating, a restoration and preservation project is being planned.

Also in the library are sets (mostly complete) of the transactions, the Reports, and the yearbooks of the various actuarial bodies. Some foreign actuarial organizations are represented, but in the past little attempt has been made to keep these current. This situation is being rectified.

Other materials include study notes, actuarial studies, CSO tables, build and blood pressure, medical impairment, and occupation studies, and seminar handouts. The library receives some 75 periodicals, most received free or purchased at a nominal charge; but with some exceptions it does not retain periodicals due to lack of space.

With the new emphasis there will now be more work on collection development, to provide current materials of value to actuaries. Recommendations for books to be purchased will be gratefully accepted. Books and materials will soon be available for loan, though on a limited basis. Reference books and items archival in nature will not circulate, but an active loan program for other materials will be instituted by the end of 1986. Photocopies of portions of journals, books, and reports may be obtained from the Librarian for a minimal fee.

Reference service will also be provided through the Librarian. Articles in journals that the Society does not receive may be obtained through the local library system, of which the SOA

## COMPETITION RESULTS

By Charles G. Groeschell

Esther Portnoy and Bob Hohertz continued their unbroken strings of 100% solutions to the Actucrossword puzzles for the year ending in June. However, unlike previous years (when they were the only two who did so), this year there were four additional solvers with ten 100% solutions: Noreen Shapiro, Gary McDonald, Bernie Packer and Ed Goral (with some help from Glen Stark and W. Mudge). These six may nominate someone to receive *The Actuary* until June, 1988.

In addition, there were also six solvers who had nine 100% solutions: Mrs. Clint Edwards, Jan Hux, Bob (C) Martin, Phil (& J sometimes) May, G (& D sometimes) Mazaitis and Barry Mowery.

The interest in solving Actucrosswords increased substantially during the year. Almost 500 solutions were submitted — almost double that of just two years ago. These involved about 200 members, wives, students, relatives, associates and friends.

The June puzzle produced the highest rate of success when all but two of the 54 were correct. Last October was the toughest (only 19 100% solutions out of 34) and the greatest volume was in February when 71 solutions were received (60 being correct).

It seems clear that more and more solvers are becoming familiar with the wily mind and style of our constructor of these puzzles, Graham Deas, FFA from Kent, England. From the many comments, their enjoyment has increased proportionately. □

library is a member. In some cases there may be a nominal charge for reference service.

Future goals include a comprehensive on-line data base for all SOA publications, and data base searching in actuarial, insurance, and related fields.

To this point the main use of the services of our Librarian has been in the investigation of North American actuarial history, a project undertaken by the entire profession in connection with the 1989 celebration. Joan has already proved to be invaluable in this endeavor, and the services she will soon be able to offer to Society members should be equally valuable. □

## Taxation of Insurance Companies

(Continued from page 1)

preserve the 34% rate if the ordinary rate increases (a troublesome reason).

The Alternative Minimum Tax (AMT) has been strengthened. The concept of AMT is that of a minimum tax, calculated as 20% of regular taxable income plus preference income. Preference income includes accelerated depreciation, tax-exempt interest on most nongovernmental-purpose bonds issued since Aug. 7, 1986, and one-half of untaxed but reported profits (book income). Some corporations have been paying little tax, but at the same time reporting significant earnings to their stockholders. Now income reported on financial statements will affect the AMT.

The corporate dividends received deduction is reduced from 85% to 80%. Hence the effective tax rate on such dividends drops from 46% of 15% = 6.9% to 34% of 20% = 6.8% (except for 1987).

### Effect on Life Companies

The 20% taxable income adjustment in present life insurance tax law is repealed Jan. 1, 1987. The effective tax rate for life insurers in 1986 is 80% of 46% or 36.8%, increasing to 100% of 40% for 1987, then falling to 34% in 1988 and later. While technically the increase for 1987 — unique under this bill — comes about through base broadening, most analysts will treat it as a rate adjustment.

For the calculation of "book income", a part of the AMT computation, income reported on financial statements will be the base for the first three years of the new law. If the corporation issues audited GAAP financials, these will be used; if not, financials reported to regulatory bodies will be substituted. The effect is that most stock insurance companies will use GAAP earnings for AMT purposes, while mutuals will use statutory. Attempts by the industry to standardize on statutory have been so far unsuccessful.

After the first three years the "business untaxed reported profits" shifts to "earnings and profits", a concept from current tax law designed to determine whether a distribution to shareholders is from capital or from

earnings. This is not precisely defined, and there are few court cases to make the meaning clear. Tax writing staff was attempting to draft language to improve this situation when this article was being written.

In a late technical amendment, Congress confirmed the grandfathering of pre-1983 modified co-insurance contracts except in case of fraud. The IRS had been challenging certain aspects of these arrangements on audit.

### Effect on Property-Casualty Insurance Companies

Property and casualty insurers experience both the rate reduction and the base broadening. The rates go from 46% in 1986 to 40% in 1987, to 34% in 1988 and thereafter. Other changes affecting these insurers have the effect of lowering reserve deductions.

Eighty percent, rather than 100%, of changes in the unearned premium reserves is allowable as a deduction. Twenty percent of the 1986 reserve is to be brought into income over six years.

The deduction for loss reserves will be reduced by 15% of tax exempt interest and the deductible portion of corporate dividends received.

It has been standard P&C practice to ignore the time value of money in setting up loss reserves. The Act provides for discounting as of the beginning of 1987. The decrease from the end-of-1986 reserve will not be taken into taxable income (there will be a "fresh start"); but it will add to 1987 "earnings and profits".

The Act repeals the deductions for additions to the protection against loss account (PAL) for mutual P&C companies. The PAL account balances as of the 1986 year-end will be included in income in the same manner as under the former law.

The Act continues to allow full deduction of policyholder dividends for both stock and mutual P&C insurers; but it provides for a Treasury study, including the appropriateness of an ownership differential similar to that already existing for mutual life insurance companies.

### A Competitive Change

A change not directly affecting insurance companies, but of interest to those who compete against Blue Cross and Blue Shield, is that these organiza-

## THE ROLE OF INTEREST IN FINANCING THE OASDI SYSTEM

By Robert J. Myers

Let us assume that the OASDI system is funded in the future so that it is on a current cost basis — which is not the case under current law. Further, assume that the goal is to maintain the trust-fund balance at the level of one year's outgo on a retrospective basis (i.e., measuring the fund balance at the end of the year against outgo for the year). The question then is what effect do the interest earnings of the OASDI Trust Funds have on the overall financing of the system?

This will be considered on the basis of the intermediate (Alternative II-B) estimates contained in the 1986 Trustees Report, as extended by Actuarial Note No. 127, Social Security Administration. Under this estimate, the fund balance at the end of 1993 (\$396.7 billion) is almost exactly equal to the outgo for 1993. If this fund balance is accumulated at the ultimate interest rate used in the actuarial estimates (6.08% compounded annually) until the end of 2055, the result is \$15.4 trillion, which is

(Continued on page 5)

tions will be taxed as if they were stock P&C companies. There are special allowances, set to reach a revenue target, that will be detailed in the final draft.

### Industry Success?

Some observers feel that the insurance industry did rather well. There is ample room for difference of opinion.

If one compares the final result with Treasury proposals, it is clear that the industry was quite successful. An important base broadening proposal which did *not* survive was to use guaranteed cash values in determining the reserve deduction. The 1986 Act continues the federally mandated method of computing tax reserves introduced by the 1984 Act.

In any case, the impact of the new law on the corporate tax of insurance companies is not nearly as negative as appears to be in some other industries. Some insurance companies may pay more tax, others less — but the overall tax paid by the entire industry may not be much different. □

## Rate of Interest (Continued from page 4)

37% higher than the estimated outgo for 2055 (\$11.2 trillion). This indicates that most of the interest earnings of the OASDI Trust Funds is used to keep the fund balance up to the standard of one year's outgo.

A better measurement as to how the interest income of the trust funds is utilized is to determine the interest rate (compounded annually) which, when applied to a fund balance at the end of 1993 equal to the outgo in that year, will accumulate to an amount at the end of 2055 equal to the outgo in that year. Such interest rate turns out to be 5.53%. Thus, it may be said that the interest rate earned by the trust funds in excess of that needed to maintain the fund balance of one year's outgo is

0.55% (i.e., 6.08% minus 5.53%).

Accordingly, each year, it could be said that there is available for financing the outgo an amount equal to 0.55% of such outgo (because the fund balance, by definition, is one year's outgo). Based on the average 75-year cost rate of 13.40% of taxable payroll, the outgo cost financed by the available excess interest amounts to the equivalent of 0.07% of taxable payroll ( $.0055 \times 13.40$ ). The income rate can be lower than the cost rate to this extent.

In summary, it can be seen that, under true current-cost financing, the interest earnings of the OASDI Trust Funds have a small effect in lowering the income requirements to finance the system. A different assumed level as to the relative fund balance would, of course, have a proportionately different effect. □

## INTERESTING QUOTATIONS

From a column by Don Barnes, *National Underwriter*, Sept. 6, 1986:

Someday I am going to start a Society for the Preservation of Actuaries. They are the most maligned men and women in our business, and possibly in any business I know. They tend to have sneaky senses of humor that creep up on you when you least expect it, and blow your pomposity apart. They are also very brilliant people. I promise never to join the crowd that makes fun of actuaries — unless, of course, they deserve it.

\*\*\*\*

From "A Short Account of the History of Mathematics", W.W. Rouse Ball, 4th Edition, 1908:

The numbers  $e$  and  $\pi$  would enter into mathematical analysis from whatever side the subject was approached. The latter represents among other things the ratio of the circumference of a circle to its diameter, but it is a mere accident that that is taken for its definition. De Morgan (1806-1871) in the *Budget of Paradoxes* tells an anecdote which illustrates how little the usual definition suggests its real origin. He was explaining to an actuary what was the chance that at the end of a given time a certain proportion of some group of people would be alive; and quoted the actuarial formula involving  $\pi$ , which, in answer to a question, he explained

stood for the ratio of the circumference of a circle to its diameter. His acquaintance, who had so far listened to the explanation with interest, interrupted him and explained, "My dear friend, that must be a delusion; what can a circle have to do with the number of people alive at the end of a given time?"

\*\*\*\*

From a review of "Actuarial Mathematics", appearing in the June/July issue of the *American Mathematical Monthly*, and written by Louis M. Friedler:

The book under review is well motivated and is suitable for the self-study that is the usual preparation for the Part 4 exam. However, the mathematician reading this book may not find it completely smooth going. Although computation is less stressed than in Jordan, actuaries must be familiar with many standard formulas, so parts of this book become quite tedious. . . . The authors state in the introduction that the necessary prerequisites include only calculus and undergraduate probability, yet they occasionally use mathematics beyond that level.

Nevertheless, this new approach is a major improvement on Jordan. We can only hope that the questions on the Part 4 exam will eventually change to reflect not only the new material but the new emphasis on understanding. □

## LETTERS

### SS Trust Funds

Sir:

I completely agree with the general thesis of Dwight Bartlett's letter (September) that the likely huge build-up of the OASDI Trust Funds beginning in 1990 is most undesirable.

I have written and spoken out on this matter at numerous times in the recent past. I believe that the best solution is to provide for automatic adjustment of the OASDI tax rates, beginning in 1990, such that the ratio of the fund balance to annual outgo would be held within a certain range (possibly 50-60%). Another way would be to revise the long range tax schedule in the law.

The Academy's Committee on Social Insurance is currently developing a report on the measurement of the actuarial status of the SS system. It will deal with the funding of the program, among other aspects.

There is a factual error in the Bartlett letter, which in no way affects the validity of his argument. He tells us that Social Security finances are considered part of the unified budget at present, but that they will not be so treated in future years as provided in the 1983 amendments. That legislation provided that OASI, DI, and HI would be out of the unified budget after fiscal 1992. He overlooks the legislation of 1985 (PL 99-177) which removed OASI and DI beginning with fiscal 1986. This legislation, which also contains the Gramm-Rudman-Hollings budget procedure, confuses the situation because the operations of the OASDI Trust Funds are included in the targets for the deficit reduction procedures! Legislation currently pending would provide the same treatment for HI.

Robert J. Myers

\*\*\*\*

Sir:

Dwight Bartlett uses the phrase "somewhat fictional Trust Funds". Whether or not federal government trust funds are a "fiction" is a complex question involving economic and accounting considerations as well as actuarial ones. I agonized over this question some 20 years ago after a short

(Continued on page 6)

## Letters

(Continued from page 5)

period of federal service in the then Bureau of the Budget. My conclusion was (and still is) that such trust funds are valid funds in every sense of the word, and that there is nothing "fictional" about them. A comprehensive discussion appears in my paper "Financing the Federal Retirement Systems" in TSA XVI, 1964.

Walter Shur

\*\*\*\*

Sir:

I consider the possibility of large fund balances in the OASI and DI Trust Funds in the years ahead to be a false issue for three reasons:

1. FICA taxes are used to finance HI benefits as well as OASI and DI benefits. Traditionally, FICA taxes have been reallocated among the three programs as necessary to keep all of the programs solvent. Such a reallocation will definitely be necessary to keep the HI program solvent after the 1990s, leaving no significant funds for OASI and DI.

2. The so-called pessimistic assumptions are more likely to materialize than the intermediate II-B assumptions, resulting in no significant surplus after the tax rate reallocation to the HI program. Under these "pessimistic" assumptions, FICA tax rates (including the scheduled increases in 1988 and 1990) will be sufficient to pay only 95% of the promised OASDI and HI benefits during the next 25 years and 55% of the promised benefits during the following 25-year period from 2011-2035 when the baby-boomers reach age 65.

3. Future surpluses are predicated upon FICA tax rate increases scheduled for 1988 and 1990 (election years). If such increases are not needed to pay benefits, it would be uncharacteristic for Congress to permit them to go into effect.

As always, our concern should be about deficits not surpluses.

A. Haeworth Robertson

\*\*\*\*

Sir:

I agree with Mr. Bartlett's final conclusions. SS benefits should be funded on a pay-as-you-go basis. In the past, very few actuaries have agreed with me

on this. Recently The Academy's Actuarial Committee on Social Security has endorsed this idea. Now Mr. Bartlett joins us. I always have been optimistic about this idea because no actuary supporting advance funding of SS has ever been able to give me a rational reason for it. Certainly the reasons for needing advance funding for private pension plans do not apply to the funding of SS.

Having agreed with the bottom line I must disagree with other of Mr. Bartlett's ideas:

(1) The idea that U.S. Government Bonds are *not* "real" economic assets, and that the bonds held in private pension plans *are*, startles me. Both are promises to pay backed by giant asset holdings. The asset holdings of the U.S. Government are far greater than the total assets of all corporations added together. U.S. bonds are backed by the taxing power. Bond defaults have occurred in private pension funds. No U.S. Government bond has ever defaulted.

(2) Mr. Bartlett had better not run for federal office. Even a billion dollars in campaign funds could not offset the effect of his statement that the SS Trust Funds are "somewhat fictional". That statement is only true to the extent that *anything* expressed in dollars is somewhat fictional because money is valueless except to the extent that the people believe in the promises of their banks and their governments. The belief of the people is strong enough in those areas that no rational politician would dare refer to them as Mr. Bartlett has.

Charles M. Larson

\*\*\*\*

### Age at Fellowship

Sir:

This will be a sort of footnote to Mohamed Amer's article in the September issue.

Curiosity led me to explore Mr. Amer's uncertainty as to the average age at Fellowship in the cohort under observation. A search of *Transactions* obituaries yielded a sample of 97 of the 162 deaths where the age of Fellowship could be determined.

In this 97-life sample, the average calendar age at Fellowship was 30.9, the median was 30, the mode 29. The oldest age was 56, Lloyd A. H. Warren FSA 1935. The youngest age noted was

William M. Anderson, who completed the exams in 1928 at age 23, but was not admitted to Fellowship until 1930.

Charles N. Walker

*Editor's Note:* Mr. Anderson was Society president in 1955-56, and one of the very few Canadians to attain that office. See Editorial.

\*\*\*\*

### Actuarial Demographics II—Revisited

Sir:

I realize that *The Actuary* has called a halt on the correspondence concerning high schools who have been especially productive in producing actuaries, but I thought your readers might like some information from overseas.

Whitgift School in Croydon, England (approximately 12 miles south of London), by our latest but not necessarily complete count, has produced 19 Fellows, with years of qualification from 1938 to 1985. One of these is a FSA, all the others FIA.

This school dates back to the year 1597, though we have no record of actuaries produced during the first 3 years. British schools do not have an exact equivalent to what is considered "high school graduation" in North America, but if it did, the number of annual graduates might be about 50.

I feel that this is an impressive record.

Brian L. Burnell

\*\*\*\*

### E & E Chairpersons

Sir:

Nathan Epstein proposed (October) that the General Chairperson of E&E have a permanent seat on the Society's Board. Mr. Epstein's letter was not published until long after the votes were cast — but it is interesting to note that *all* of the last *three* E&E Chairpersons are today newly-elected Board members.

In 1985 we elected to the Board the then E&E Vice-General Chairperson, thereby preventing him from assuming the Chair for 1987-88; and those of us with long memories will recall that our new President was E&E General Chairperson some 10 years ago.

Perhaps the prestige and the visibility of the E&E effort will produce the effect that Mr. Epstein wants, with no change in election procedures being necessary.

M. David R. Brown