VOLUME 14, No. 5

May, 1980

# FIRST HALMSTAD PRIZE TO PHELIM P. BOYLE

The first David Garrick Halmstad prize has been awarded to Dr. Phelim P. Boyle, F.I.A., F.C.I.A., for his 1978 paper in the Journal of the Institute of Actuaries, Immunization Under Stochastic Models of the Term Structure. The ceremony took place on April 14, 1980, at the Society meeting in Hartford. David Halmstad's widow Dorothy, made the presentation.

Dr. Boyle is Associate Professor, Division of Finance, Faculty of Commerce, iversity of British Columbia. He was born in Ireland and received his Ph.D. from Trinity College, Dublin. He was an actuary with the Irish Life Assurance Company, Dublin, and with Duncan C. Fraser & Company, Liverpool.

#### History of This Award

The idea of a prize for actuarial research in David Halmstad's memory was conceived shortly after his untimely death in 1977. David's friends and colleagues responded so generously that the interest on the money collected is sufficient to provide an annual prize of a respectable amount. Administration is now in the hands of the Actuarial Education and Research Fund. The Award Committee consists of Courtland C. Smith, Matt B. Tucker, David J. Grady F.C.A.S., and John C. Wooddy (Chairman).

#### Nominations Invited

To find the best paper on actuarial research published in 1979, the Society's Committee on Research will review eight jor actuarial journals, and will make three or four suggestions to the Award Committee. But nominations of papers wherever published are more than welcome and should be sent to Courtland C. Smith at his address in the Year Book.

#### PART OF THE HMO STORY

by John K. Kittredge

Joseph L. Falkson, Ph.D.: HMOs and the Politics of Health System Reform, 231 pp., American Hospital Association and Robert J. Brady Company, Chicago, 1979. \$9.75, paperback, \$12.75, casebound.

The process by which our U.S. government establishes policies and implements them is varied and intricate. Many not close to the operation may suppose that Federal legislation and regulation emerge logically and systematically. A reading of Dr. Falkson's book will dispel such a notion.

HMOs and the Politics of Health System Reform is not so much a book about Health Maintenance Organizations as a recitation of their legislative and regulatory structuring. Through the formative years 1969-1978 it traces the emergence of the HMO concept and then the government"s role in stimulating, or inhibiting, HMO growth. It gives a fascinating view of the actions of various players in formulating and implementing Federal policy. But readers wanting to learn about HMOs themselves will have to turn to other sources.

The author traces HMO political developments starting with the Nixon Administration's 1969-70 search for a suitable health policy. A meeting between HEW executives and Dr. Paul M. Ellwood (now President of InterStudy) in the latter's hotel room on Feb. 5, 1970 is described in detail. There the concept was sold to key HEW people, and the term "Health Maintenance Organization" was adopted. This led to HEW Secretary Finch's announcement of a policy of support for HMOs on March 25. There is then a full report of the background of President Nixon's Feb. 18, 1971 message to the Congress officially supporting HMOs. Even without specifically direct-

## (Continued on page 3)

# EXAMINATION RESTRUCTURING—WHY?

by James J. Murphy, Education Chairman

Large changes—some already announced, and all to be completed by 1981—are being made in our examination syllabus

The new syllabus consists of ten exams, organized into three sub-divisions. Parts 1-5 cover Actuarial Mathematics; Parts 6 and 7, Introductory Actuarial Practice; Parts 8, 9 and 10, Advanced Actuarial Practice.

Transition arrangements, always a problem, will be less troublesome than usual. Those for Parts 3, 4 and 5 are straightforward; for Parts 6-10 a simple approach will give credit for entire exams, avoiding fractional credits or any limit in the transition period.

#### Purposes

We had several goals in mind as we developed this new syllabus.

Goal 1: To select and organize our education material so that it becomes more directly relevant to the practice of actuarial science.

Goal 2: To improve and modernize the mathematical content of our exams.

Goal 3: To provide a flexible system that will meet the needs of existing and emerging actuarial specialties. A "common core" foundation is established in Parts 6 and 7; a flexible structure for advanced study is the basis for Parts 9 and 10.

Goal 4: To improve the organization and content of educational material in the employee benefits subjects.

Goal 5: To meet the urgent need for stronger actuarial education in the fields of economics and investments. One entire examination (Part 8) will be de-

(Continued on page 5)

# he Actuar

E. J. MOORHEAD

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The Society is not responsible for statements made or opinions expressed herein. All contributions are subject to editing.

## EDITORIAL

#### BOOKISHNESS

"The Society of Actuaries library . . . is currently in a transitional stage and is expected to be operational on a limited basis within a year."

77 E suppose that the Society has always had a library. It is a fair guess that its first acquisition was "No. 1, Papers and Transactions, Actuarial Society of America," which came off the press in May 1889. For as long as we had a headquarters it must have been shelved there—that it, until 1961 when it was decided (TSA XIII, 276) to start paying a modest fee so that it might enjoy professional care in the Library of the Insurance Society of New York. One collateral benefit of this arrangement was that our members were privileged also to borrow books from the Insurance Society's own large collection.

In 1978, by which time we owned nearly 3,000 volumes, the Board of Governors approved a recommendation by the then Executive Director, Peter W. Plumley, that the arrangement with the Insurance Society be ended and our books make the journey back to Chicago, to be looked after by our own staff. This was not just an economy move, though some may have decided that it was wasteful to pay a fee for the small usage of library facilities by our members. A dominant point seems to have been that we had acquired a Director of Education and a Communications Manager, both of whom could put our books to good use in their work.

It was understood that no librarian was to be hired. Hence somebody would have to be on the alert to prevent the collection from becoming an orphan, and gradually being scattered to the winds. The risk of that is small as long as enough of us firmly believe that the old Transactions, Year Books, and the like form a precious link betwen us and our professional forebears.

The word "archives" rather than "library" has become the correct label for what those books now comprise. The lending library function is to be played down, though we are assured that a member who has special need for a particular volume can and will be accommodated.

Happily, Executive Director O'Connor is asking our incoming Director of Education, Linden Cole, to see that books are not lost, and that the sets of our own publications are kept complete by faithfully adding newly emerging issues. Mr. Cole being the book-lover that he is, all of us can be content that this is in excellent hands; maybe he will go so far as to seek replacements for copies that have disappeared or suffered major damage through the years.

A few of us will mourn the passing of the old order, not without justification. But what is important is that the new minor role of this collection not gradually become no role at all. It must not suffer the "out of sight, out of mind" fate.

Another step we should take, on behalf particularly of members who don't have easy access to our books of the distant past, is to discover and announce the locations of good collections of actuarial books around this continent, whose curators are willing to have them consulted by actuaries and others who want to trace a subject back to its early days or just to find out what happened in, say 1911. If interest in the past ceases to be lively, the Society will have taken a step greatly to be regretted.

#### DIRECTOR OF RESEARCH

The Board of Governors has authorized a new full-time position in our headquarters staff. The Director of Research will assist in managing the Society's current and future research projects. A search for suitable candidates is under way. Information may be obtained from John E. O'Connor, Jr., Executive Direc-

#### CONSEQUENCES OF LONGER LIVES

by LaVerne W. Cain

Almost 300 of us turned up for the symposium, "The Future of Life Expectancy," in Chicago on March 10-11. Its purpose was to enlighten people whose work is affected by what a growing ex does to the population mix. Although under three-way sponsorship-the Association of Life Insurance Medical Directors, the Home Office Life Underwriters Association, and the Society of Actuaries-there were far more actuaries there than physicians or underwriters.

The challenge of keeping the subje from being dull and deadly was well met by Robert D. Shapiro's program committee, who managed to assemble an excellent faculty of speakers from life insurance, government, business, academia, and private practice. The presentations ranged far beyond the advertised subject, examining past, present, and probable future mortality patterns and implications for the elderly, society, and industry.

To set the stage, Theodore J. Gordon, a renowned futurist, put the effects of expected lengthening of life into focus by introducing us to such technologies as "curve squaring" and "life span extending." He and other speakers weren't agreed on what all this will do to us, but I, for one, came away cheerful about the prospect. On an individual level, we heard from Dr. Donald B. Ardell about highlevel "wellness" (!), and how to absorb this concept into our lives.

As a bonus we were given a great deal of useful mortality and demographic data. I obtained more good figures in two days than I have collected in th past 20 years. Proceedings will be available free to those who were there, and at a modest charge to other members of the three sponsoring bodies. If this subject interests you, these texts will be well worth your reading.

E.J.M.

#### Deaths

Howard G. Eimers, F.S.A. 1958 Hugh E. Stephenson, F.S.A. 1957

# Part of the HMO Story

(Continued from page 1)

ed legislation, HEW subsequently supported HMOs modestly through redirected funds.

Perhaps the most interesting political process was the legislative struggle starting in early 1973 to enact the needed legislation. This culminated in Public Law 93-222, signed by President Nixon on Dec. 29, 1973. Says Dr. Falkson, "In toto, P.L. 93-222 was a monument to the best in democratic politics and the worst in health care planning." The author traces that law's implementation problems, including contests between HEW and the Labor Department on its application to collectively bargained benefits.

Development of the 1976 amendments proceeded rather smoothly and produced much more workable law; this is creited primarily to the influence of the HMO consensus group, a coalition of advocacy groups that drafted those amendments and shepherded them through Congress. The author concludes his saga by telling of Secretary Califano's role in revitalizing waning Federal involvement with the industry, and finally by summarizing the 1978 amendments.

The author's sources being primarily government people and their consultants, his book fails to document the activities of the private sector in all this, except as manifested through lobbying. Thus an opportunity to show the negative impact upon HMO development caused by the government is lost. Many private sector observers believe that the laws intended to stimulate HMOs may actually have had a net inhibiting effect.

It's unfortunate also that this history runs only through 1978. As a result, the only word of the steady increase in insolvencies among newer HMOs spawned by Federal incentives is in a single footote (p. 194). These insolvencies and the sizeable percentage of Federal grants and loans for HMO development that have yielded no tangible results, raise large questions in retrospect about the wisdom of the policies embodied in HMO legislation and regulation.

# **NEBRASKA SURVEY (2nd instalment)**

Ed. Note: The first instalment (April issue) told what 61 Fellows said. Here is a summary of replies from 35 Associates and 38 Students. Anybody wanting the full report can obtain a copy from Prof. Warren Luckner, 312 Burnett Hall, UNL, Lincoln, NE 68588.

Ques.: Do you consider yourself a professional?

Ans.: "Yes" by 89% of the Associates, 68% of the Students, a perhaps surprisingly high percentage. We don't know how many of those Associates are studying for Fellowship.

Ques.: Rate the current employment market for new actuarial students.

Ans.: It is noteworthy that Associates and Students were, if anything, more positive than Fellows about availability of opportunities.

Ques.: Have you read the Society's Guides and Opinions?

Ans.: Nearly 90% of Associates reported having read them in whole or in part. Very few Students had delved into them.

Ques.: Have you ever encountered a situation which seemed to raise the possibility of doing something contrary to (i) your personal ethics, (ii) the Guides?

Ans.: The proportion of Associates who had run into problems involving personal ethics was nearly as large as for Fellows. There was a scattering of "yes" responses by Students.

This survey by the students at University of Nebraska's Actuarial Science Program will, we hope, encourage others to engage in parallel thinking and research.

#### **NEWS FROM LONDON**

Actuaries in the U.K. are giving penetrating thought and study to "maturity guarantees", i.e., the reserves necessary to support promises contained in investment-linked contracts. An editorial in the March FIASCO asks the pointed question, "how many of these offices (offering policies with such promises) have sufficient strength to be able to continue in this way, given (to borrow a phrase) the expanding funnel of doubt regarding the future?"

The Government Actuary and others were reported as saying that the termi-

# ALLOCATING POLICY LOAN REPAYMENTS

by Charles W. McMahon

The manner in which policy loan repayments are split into principal and interest components is of significance to policyholders because the interest portion is tax-deductible if paid in cash.

A common EDP process applies partial loan payments entirely to principal, interest being worked out at the anniversary. This method eventually gives the correct interest credit, but the interest is belated, usually into the next tax year. And people are more familiar with amortization schedules wherein part of each repayment covers accrued interest.

To change the customary life insurance company system to one that splits each repayment into two parts is not difficult. The key is to carry a special loan balance on the record which can be used to obtain the interest credits up to each repayment date. The policyholder can readily be given a receipt showing the effect of this method upon his principal and interest. This procedure can be applied daily so that irregular as well as regular payments can be accommodated.

This system has been used in my company for several years, has worked smoothly and been well accepted. I have prepared a memorandum of the algebra of the system, which I will be happy to send to any reader who requests it to my address in the Year Book.

nology "probability of ruin," whilst understandable to actuaries, was perhaps not the best phrase to use when communicating beyond the profession. Papers by at least three North American actuaries—Samuel H. Turner, Frank P. Di Paolo and Richard W. Ziock—are in the bibliography offered for studying the maturity guarantees problem.

FIASCO printed an adapted version of our John W. Tomlinson's piece, in our January 1979 issue, marking their more recent change of editors.

The April FIASCO listed no fewer than 17 actuaries who had appeared on a BBC radio program, "Money Box," and asked, as we might ask for this continent, "How many other actuaries have broadcast on radio or television whether in a professional capacity or otherwise?"

E.J.M.

#### THE WISCONSIN IMBROGLIO

Ed. Note: Several Society members testified in a recent lawsuit in which 14 stock life companies and two field men's groups sought to prevent Wisconsin's Insurance Commissioner from requiring that buyers be given (1) a preliminary policy summary that displays the policy's Surrender Cost Index (SCI) but not its Net Payment Cost Index (NPCI) nor its Equivalent Level Annual Dividend (ELAD), and (2) a buyer's guide that describes these figures in a manner objectionable to these plaintiffs. We invited those actuaries to send along concise statements. The letter (P) or (D) denotes a speaker for the Plaintiffs or for the Defendant. The Plaintiffs won the case; the Defendant plans to appeal.

By Bradford S. Gile, (D). (These views do not necessarily reflect the opinions or positions of Mr. Gile's employer, the Wisconsin Commissioner.) I will not argue here about the usefulness of NPCI and ELAD but will discuss cost comparisons between participating and nonparticipating policies. I suspect that if such comparisons were outlawed, the motivating need of plaintiffs to complain would largely evaporate.

In my opinion these are dissimilar forms, non-par itself now being of two dissimilar types—guaranteed cost and adjustable premium. It is true that par policies have non-guaranteed dividends; however, a major guarantee of those contracts, which is backed by statutory provisions in most states, is that dividends will be paid annually according to an equitable plan of surplus distribution. Such a guarantee is not, and cannot be, contained in a non-par policy, so the two forms differ greatly in major guarantees.

Nevertheless, many advocate comparing the two by showing (a) indexes that use 100% of illustrated dividends, and (b) indexes that use no dividends or, equivalently that show the part of the index generated by the illustrated dividends (ELAD). This system has the following fatal defects:

- (1) In case (b), non-guaranteed elements are assigned zero credibility, including any contractual or statutory rights afforded by such values.
- (2) Using illustrated dividends—case (a)—assigns 100% credibility to them, but although it may be correctly inferred

that a guaranteed cost index number is a faithful showing of maximum cost, it is incorrect to infer that the index using illustrated dividends is a faithful display of minimum cost.

(3) Neither assignment of 0% nor of 100% credibility to illustrated dividends is reasonable except when (i) the company involved faces the prospect of liquidation, or (ii) dividends paid never deviate from those illustrated (a practice common to a few stock companies). History has shown that 100% credibility is far more realistic than 0%.

In the absence of an index that fairly and realistically measures the credibility of non-guaranteed values (and policyholder rights thereto), any such comparison between otherwise similar par and non-par policies is highly susceptible to unfair and misleading statements. In my judgment, the danger of misrepresentation is so great that such comparison should be directly outlawed as an unfair trade practice.

By Paul J. Overberg, (P). That entire trial should never have happened. It was the result of a failure of communication—a failure not just of the plaintiffs to communicate with Commissioner Susan Mitchell, but, more importantly, a failure of the insurance industry to communicate with the public.

This failure predates the May 1970 report of the Joint Special Committee on Life Insurance Costs—a report that concluded that the industry's then current system was fine, as long as an interest element was added to it.

But, let's return to yesteryear and ask ourselves, "Why did our critics between the 1930's and 1970 accuse the life companies of confiscating the cash value when the insured died?" Why? Because of the way we sold our policies.

Did the public understand that "net cost" measured the cost only if the policy was surrendered for its cash value? and "net payment" was the "cost" if the insured died? Adding interest to these calculations does not fill the communication void.

I am convinced that Commissioner Mitchell sincerely desires to help the buyer make a more informed decision when buying life insurance from among the over 1,000 different policies to choose from in her state. Somehow, the consu-

mer must be given helpful informati the only question is what that information should be.

I share the Commissioner's concern. As long as we give the buyers four indexes that have strange names and no real meaning, they will agree "the fewer the better." But if we explain what they mean, and perhaps give them more understandable names, buyers will understand cost disclosure and how to compare costs.

The court decision indicated that the public's ability to understand is greater than some of us believe. Let's make cost disclosure meaningful to the public. Then, and perhaps only then, can we make it understandable to our critics.

By William M. Snell, (D). What is the purpose of a cost disclosure system? Is it to protect high cost companies, or to provide the consumer with useful information? I believe it is the latter.

The current NAIC Policy Summary obfuscates disclosure with six index numbers, in effect providing someth for everyone. And most confusing of . is ELAD.

As one of those responsible for reaching a compromise between stock and mutual company interests to bring ELAD into the Model Regulation, I can speak of its value (or lack thereof) better than most actuaries. ELAD confuses agents, companies, regulators, and—worst of all—consumers. The time has come to end that four-year experiment, and drop ELAD. That would still leave four index numbers to be delivered with the policy.

Also, the time has come—it is past due—to adopt up-front disclosure. We must provide something before the prospect signs the application. Yet, the sales process must not be unduly hampered.

The best answer is to use just one index number—the 20-Year Interest-Adjusted Index. The name "Surrender Cost Index" is a misnomer. The policy doesn't have to be surrendered for the index to be valid, a fact pointed out in 1974 by our Society's own committee.

Disclosure should be simple, shortell the prospect whether the propose-policy falls into the category of low cost, average cost, or high cost, not whether the company is No. One or No. Two. Agents can battle that one out, as

(Continued on page 5)

# he Wisconsin Imbroglio

(Continued from page 4)

they have been doing for over 100 years.

This means that range tables are needed in the Buyer's Guide to give meaning to the index figures.

Originally the EPA rating for cars gave two figures. But consumers were confused by them. Now there is only one official EPA rating. Driving habits will result in better or worse performances, but as a comparative index it does an excellent job. We should learn from EPA that one figure is better than two, four, or six.

By Ernest J. Moorhead, (D). When a buyer is confronted with either a favorable NPCI but an unfavorable SCI, or a favorable SCI but an unfavorable NPCI, what line of reasoning would he be wise to employ to reach a decision?

The plaintiffs support the idea that e should prefer the first of these if he intends to keep the policy until death—but should prefer the second if he plans eventually to surrender the policy.

But the vast majority of buyers begin with the expectation of keeping the policy until they die; what happens in practice is that, for one reason or another, they fail in about three cases out of four to do so. If somebody has evidence that the rate of voluntary termination is low among people who say they intend to keep paying premiums until death, let him produce it.

Agents in the main will pick the index that gives them the best chance of selling their policy. Buyers lack the experience that would enable them to decide which index ought most to sway them. And companies know very well that the road to profits is in designing policies whose surrender values are low and training agents to focus buyers' attention on the NPCI and to play down the importance of the SCI.

# **Actucrostics**

Two more of these accompany this issue. Solutions will appear next month.

C.G.G.

# **Examination Restructuring**

(Continued from page 1)

voted to these subjects alone.

Goal 6: To improve the treatment of nationally oriented material. In developing Canadian and U.S. readings, two concepts will be kept in mind: (1) to reap the educational advantages of pointing out the differences between the approaches in our two countries; (2) to separate the specific national details, particularly those of law and regulation.

Goal 7: To make the system more adaptable to the requirements of our various joint sponsors and administrators.

#### Impact

Major revision in organization and content of the Society's education and examination structure has an unavoidable disturbing effect. But it can be quite exciting, even inspiring, as one sees in the enthusiasm and dedication of the many volunteers who work on these changes. We hope most will agree with us that the benefits much more than justify the trouble they entail. We believe we can promise that the new flexibility will cause future changes to become more evolutionary than revolutionary.

Ed. Note: More particulars of these evamination changes will be found in the Record, Vol. 5, No. 4 (Bal Harbour 1979), under the heading, "Current Professional Topics."

# ACTUARIES AND STATISTICIANS LISTEN TO EACH OTHER

by Robert J. Johansen

Ed. Note: Mr. Johansen is Liaison Representative to the American Statistical Association and the Committee of Presidents of Statistical Societies. He developed the plan described in this article.

Three well attended sessions on economic statistics at our annual meeting last October presented by the American Statistical Association begin an interchange between our professions that we hope will long continue. At the joint annual meeting of statistical societies next August, the Society of Actuaries will present two sessions, one on the build and blood pressure study, and the other on actuarial methodology.

# To Friendly Algebraists

With this issue is an enquiry from Messrs. Walter B. Lowrie and Arnold A. Dicke of the Part 3 Committee which we commend to your attention and prompt reply. We hope to be permitted to tell readers how many responses came in.

#### UNSHACKLING THE ACTUARIES

When Representative Bill Archer (R.-Texas) and Prof. Wilbur J. Cohen, a long-time social insurance authority and member of the National Commission on Social Security, were interviewed for a New York Times article, "Social Security: Can Americans Afford It?", they made these comments about actuaries:

Mr. Archer: Well, a lot of our projections have been inaccurate. Many of the actuaries have been caused by political pressures to adopt projections that were not at all realistic. Even today they're still talking about the long-term at 4 percent inflation. We've got to do something to assure that the actuaries are given a free hand....

Mr. Cohen: ... Social Security ought to be made an independent corporation, with its own actuaries.

The article appeared on April 6. Our thanks to Ray M. Peterson for telling us about it.

A number of papers I have heard at A.S.A. meetings are clearly of value to actuaries, and the same is true in reverse. But the sheer sizes of our bodies make full joint meetings out of the question; interchange of speakers on carefully chosen topics appears to be the right answer. The third step in this new cooperative arrangement will be a pair of concurrent sessions at our 1980 annual meeting—one on social indicators, the other on statistical methods and aplications in follow-up studies.

#### Ideas Invited

Society members with ideas for topics they would like statisticians to present at our future meetings, or who would like to appear on a 1981 or later program of the statistical associations, are invited to write to Robert J. Johansen at his Year Book address.

#### **CALL FOR PAPERS**

The 15th Actuarial Research Conference will be held at Pennsylvania State University, Aug. 28-30, 1980. Its topic will be "Financial Modeling of Pensions and Other Life Income Benefits."

Emphasis will be on the dynamics, projection, and probabilistics modeling of pension assets and liabilities, and the role of mathematics, statistics, and economics in studying them. Subjects such as sampling, stratification, and error control, indexing and immunization are within the conference scope. Anyone interested in the conference topic will be welcome.

If you might contribute a paper, send an abstract before Aug. 1, 1980. Address enquiries or abstracts to: Prof. Arnold F. Shapiro, 509 B Business Administration Bldg., Penn State University, University Park, PA 16802.

#### RESULTS OF COMPETITION II

by Charles G. Groeschell, Competition Editor

Naming papers for the Society meeting in A.D. 2179 proved to be a popular activity. All your C.E. can do is to give our readers a flavor of the enjoyment that came from receiving them. Among them were:

Superstandard Mortality with Negative Death Rates: George Cherlin

Graduation Cum Laude of Truncated Tax Tables

for Those with Four Dependents (by an author who didn't graduate cum laude, and retired 109 years ago at age 103):
James Bruce

Flashback—208 South La Salle Street Revisited Gregory Kaiser

By far the most prolific entry was from Jerold Scher who submitted two letters each with two titles, and each also forecasting a program item for the same meeting. His titles:

Pricing Under the Investment Day Method The Recent Decision to Extend Academy Membership to Longshoremen Who Have Demonstrated Physical Competence in Their Designated Profession

Prospects For Enactment of National Health Insurance in the Next Decade

Is The Universal Mortality Rate (5 deaths per 1000) Set by The Federal Department of Insurance Adequate?

His program events: New Fellows Luncheon in the Houston Astrodome,

#### **Federal Statistics**

Statistical Abstract of the United States, 1979

This centennial edition of more than 1,000 pages—1,600 tables and charts—summarizes U.S. social, governmental and economic data. Includes Guides to Sources and to State Statistical Abstracts. Available either clothbound (\$12.00, GPO stock no. 003-024-02129-3) or paperbound (\$9.00, 003-024-02130-7) from Superintendent of Documents, U.S. Govt. Printing Office, Washington, DC. 20502.

## Health, United States, 1979

Summarizes mortality, health expenditure, hospitalization and physician use rates, etc. From National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD, 20782.

Tax Subsidies for Medical Care: Current Policies & Alternatives

Examines Federal "subsidies", i.e., tax deductions for employer contributions to health plans, health insurance premiums, large medical expenses, tax-exempt bonds for capital projects at private hospitals, etc. Available free from Congressional Budget Office, Second and D Streets, S.W., Washington, DC. 20515.

County Business Patterns 1977, United States, CBP-77-1.

Useful for actuaries in marketing. Gives figures by county on establishments, payrolls and employment by industry. Follows economic divisions of Standard Industrial Classification Code. Single copy \$7.00, from Superintendent of Documents, address above

Current Estimates from the Health Interview Survey, United States 1978

This National Center for Health Statistics report presents national estimates of acute illnesses and injuries, disability days, and health care utilization for 1978. Data were collected in the 1978 Health Interview Survey of the U.S. non-institutionalized population; comparisons are made with data for the previous two years. Single copies are available free from National Center for Health Statistics, Room 1-57, Center Bldg, 3700 East-West Highway, Hyattsville, MD 20782, Attention: M. Murray.

and Small Company Workshop chaired by a Prudential actuary.

Some more:

An Experiment Introducing Age and Sex Premium Differentials: Ralph Edwards Morbidity of Heavenly Bodies: Stephen Freehtling

Should Dividend Scales Reflect Today's Investment Returns of 125%, Or Yesterday's 250%?: C. J. Caselli

and, plus c'est la même chose:

Inflation—Its Causes and Eventual Cure: Robert Rietz

All entries are being saved for comparison with the program booklet. See you there.

# **Social Security Notes**

Kevin Wells, Present Values of OASDI Benefits in Current-Payment Status, 1979, Actuarial Study No. 80, Social Security Administration, Baltimore, MD 21235, February, 1980.

This Study presents estimates of present values of OASDI benefits in current-payment status by type of benefit on selected valuation dates, 1940-77, also preliminary valuations of such benefits in current-payment status at the end of 1978 and 1979. For each valuation date, percentage distributions and average valuation factors by type of benefit are shown, as well as a comparison of the values of benefits in current payment status with the balance in each Trust Fund.

Steven F. McKay, Computing a Social Security Benefit After the 1977 Amendments, Actuarial Note No. 100, February 1980, pp. 15. Social Security Administration, Baltimore, MD 21235.

This note describes the five types of Social Security PIA benefit computations currently in use. Detailed examples are presented of the methods using t PIA table, wage-indexed formula, and transitional guarantee. Also included are the December 1978 PIA table and the Average Annual Earnings series from 1951 to 1978. This is a permanent reference for persons who compute Primary Insurance Amounts based on the 1977 Social Security Amendments.

Bruce D. Schobel, Experiences of Disabled-Worker Benefits Under OASDI, 1974-78. Actuarial Study No. 81, Social Security Administration, Baltimore, MD 21235, April 1980, pp 41.

This Study presents data on the incidence and termination experience for 1974-77 and 1975-78 of disabled-worker benefits under OASDI. Tables give rates of incidence and termination of disability by age and sex of the exposed population. Termination rates are subdivided according to the period (duration) of entitlement to DI benefits. Also included are an analysis of trends and a comparison with earlier published figures. DI incidence rates are shown to have declined since the mid-70's while termin tion rates have increased.

Copies may be obtained free from the Office of the Actuary, Suite 700, Altmeyer Building, Social Security Administration, Baltimore, MD 21235.

## LETTERS

# **Estimating Social Security Benefits**

Sir:

Richard Carson (February issue) assumes in his method that wage indices will increase at a constant 7% annually and that an individual's wage history will match that progression.

But the 1977 amendment not only introduced wage-indexing, it also raised the wage base from 1978's \$17,700 to \$29,700 in 1981, after which automatic changes in the wage base would take effect.

If the ratio of the 1982 to the 1981 wage bases were to be the same as the ratio of the wage indices for those years (clearly impossible), and the other wage bases after 1982 would also emerge in this fashion, then a person's AIME, indexed to 1981, is independent of the wage indices after 1981. (This involves the extra assumption that wages be indexed through age 64, not just to age 60).

Thus, for anyone born in 1951 or later, the AIME indexed to 1981, would be his 1981 monthly wage but not greater than (\$29,700 ÷ 12). The maximum AIME decreases for each birth-year prior to 1951, as does the point below which the AIME equals the estimated monthly wage. The latter decreases more rapidly till it reaches a limit at birth-year 1929. Finally, since indexing is to 1981, the bend-points in the PIA formula must be adjusted from 1977 to 1981.

Frank Kovacs

Sir:

Several limitations to the Carson method need mentioning: (1) it applies to retirement at age 65 at the beginning of a calendar year; (2) the birth-year must be 1917 or later; (3) the CPI must increase at the same rate as average wages do, which we hope won't be the case.

But using his and these assumptions, I cannot come close to duplicating Mr. Carson's results. I believe his first range uld be up to \$1,106 instead of \$1,025; I reach my figure by projecting the smallest indexed earnings used in the PIA computation for a person with maximum covered earnings in all years (such smallest year being 1961) who attains age 65 in early 1982.

Then, using his assumptions, I derive the approximate AIME to be .896E, not .955E. His \$1,258 is the correct AIME for a person reaching age 65 in early 1982 who always had maximum taxable earnings. But such an individual would, I think, have 1979 earnings a bit less than Mr. Carson's \$2,200; I make it \$2,162 monthly. In the long run, the \$1,258 is too low. In the eventual conditions, as projected back to the 1979 earnings level, it would be as high as \$1,928.

Robert J. Myers

# That Dubious CPI

Sir.

I agree with Geoffrey Calvert (January issue) that the CPI needs correcting, but is it the tool that ought to be used for, say, Social Security increases?

When gasoline became expensive, our nation's average standard of living had to decrease; there were fewer goods to go round. The standard of living for those with CPI-indexed incomes was maintained, but declined just that much further for the rest.

And should the CPI or any other such index be determined by those whose immediate or future incomes will depend upon it? One should not put the fox in the chicken coop.

Ralph E. Edwards

# Oldest Canadian Fellow at Death

Sir:

You missed J. M. (Jack) Laing! At his death in January 1979 he was 95½, surpassing by far C. C. Sinclair's years (March issue).

The question whether you read your own newsletter comes up, since Horace Holmes' appreciation of Mr. Laing graced your May 1979 issue.

Another puzzle is why Mr. Laing's name is missing from the list on p. 207 of our 1980 Year Book.

For the sake of respect to our old-timers and interest to our members, would it not be worthwhile to list our veterans who are still alive and who had attained Fellowship, say, 60 or more years ago?

John A. Oates K. von Schilling

Ed. Note: Yes.

# How To Elect The Best People

Sir:

Peter Plumley (February issue) wishes us to quiz Board candidates on key issues they will face during their terms of office. If so, we should first retain an astrologer to tell us what issues the Board will vote upon during the three years ahead. But even if the issues were known, I would not care to vote for a candidate who had preconceived notions on future issues, even if they happened to coincide with mine.

To paraphrase Ruskin: The work of management is to act on facts rather than appearances, on demonstrations rather than impressions.

No system is perfect—but I, for one, believe that our current system of nominations and elections to the Board of Governors has served us remarkably well.

J. Jacques Deschênes

# Who Speaks For Whom?

Sir:

The public record of the February 26, 1980 meeting of Study Group No. 1 of the President's Commission on Pension Policy states that the American Academy of Actuaries along with six trade associations (ABA, ACLI, ASPA, ERIC, U.S. Chamber and American Society of Personnel Administrators) have supported the concept of deferring taxation of an employee's pension plan contribution until it is paid during retirement.

The Society of Actuaries, of course, has a constitutional provision limiting public expression of professional opinion to "matters within the special professional competence of actuaries," and imposing safeguards against unauthorized expressions.

But the Academy, of which I am not now a member, seems able to speak with impunity for all its members on practically any subject by the simple device of having a small task force decide what it is that all actuaries favor. Perhaps the Academy had given particulars to its members in advance of announcing its support of the tax deductions for pension contributions, but none of my associates who are members recall seeing such material.

(Continued on page 8)

# Letters

(Continued from page 7)

The Academy seems to me to have a choice between being an active trade association taking positions on many public issues or, alternatively, once again becoming a professional body and doing what the articles of incorporation state to be the purposes. The Academy at the moment appears to be neither fish nor fowl.

Paul H. Jackson

#### Miscreants

Sir:

The occasional report about the professional conduct work of various committees prompts the following suggestions:

- (1) The case history, without names, of any violation of our professional code should be reported. As a profession, we all benefit by this kind of disclosure.
- (2) At some executive level, the Society should decide whether individuals who have violated our professional code are thereby disqualified from serving the Society in any future capacity other than as a member.

Barnet N. Berin

# That Which We Call An Actuary . . .

Sir:

The first line of the Society's dehumanizing address label undertakes to identify us by the first three letters of our last names and the first letter of our first names.

I'm sure Gary Fagg hasn't caught on. Ken Hunter's secretary may have a new view of her boss. Are Thurston Farmer, Thomas Farrell, T. Kerry Teague, and Patrick Poon amused? or protected?

Help! Surely we can be reduced to other than a four-letter word.

Paul D. Yeary

#### Student Bafflement

Sur:

Students often want to start studying for their next exam before receiving their first Study Note mailing. The usual solution is to start studying the textbooks listed in the latest Requirements for Admission. But this strategy can backfire.

Last summer, the first mailing of Part

8 Study Notes informed students that the 1979 Requirements called for six chapters that were no longer in the syllabus. Those chapters were the only ones I had read so far.

Requirements does say that changes occur "occasionally" after publishing. Figuring I had been victimized by a fluke, I trusted the 1980 Requirements. It was printed late, so surely it must reflect late changes. Not so. Part 7I students were later told that a 60-page chapter had been erroneously included in the syllabus. I had already read that chapter.

There have been cases also (1979 Part 9, e.g.) where chapters or whole texts weren't listed in the *Requirements* even though on the syllabus.

The message seems clear: Requirements is untrustworthy. Students ambitious enough to start studying early do so at their peril.

Once Requirements is in print, can't changes involving deletions of text material be postponed till the next year unless absolutely necessary? I'd love to see such a rule in force, with violators sentenced to passing more examinations.

Paul G. Schott

# Instant Fellowship

Sir:

It has always been possible for a student to achieve Fellowship immediately following qualification as an Associate. Tilman Moilien and I both did so by passing Parts 5 and 7 of the Joint Examinations a few weeks after the 1948 decision to merge the Society and the American Institute.

Arthur G. Weaver

#### Armageddon

Sir:

Your February editorial struck a sensitive nerve in this actuary. The nuclear arms race is an overwhelming fact, yet most people, consciously or not, develop various ways to ignore it. Our Bal Harbour speaker was one who distracted our attention by raising the specter of a fearful natural cataclism.

A polar shift is completely beyond our control, but the prospect of nuclear war is being increased inexorably by powerful human forces; witness the enthusiasm with which revival of the coi, war is now being embraced.

Make no mistake: the unthinkable world holocaust will inevitably occur this decade, given the vast imbalance between arms race proponents (backed by powerful governments, millions of people, billions of dollars) and disarmament workers (a pitiful ill-financed minority). Thus we plan instant or agonizing death for countless millions with no discrimination. The whole thing is surely the despicable nadir of man's inhumanity to every living creature.

Actuaries, of all people, should confront the facts of the nuclear arms race and its attendant probabilities.

Samuel L. Tucker

#### Washington Thinking

Sir:

The part of the Moss Subcommittee Report that you reviewed in your Februa 1979 issue contains this statement:

"We simply reject the notion . . . that insurance companies should be allowed to fool people into saving for the future. If, from a social policy standpoint, we want people to save and are afraid they will not do so voluntarily, the response has to be crafted on the floors of Congress, not in insurance company boardrooms."

Is this not Orwellian mentality? Only big brother knows if it is good for the people to save and if big brother feels that people must save then he will pass a law . . . Well, 1984 is only four years away!

Frank P. Di Paolo

Ed. Note: The context of this quotation is that the Congress is confronted with life company arguments that it is appropriate to obscure the yield on the savings element of a whole life policy on the grounds that term purchasers will specthe difference rather than save it. Those who look back at our February 1979 review may note that the subject is "Recommendation 1", p. 4 of that issue.