



# The Actuary

The Newsletter of the Society of Actuaries

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DECEMBER, 1976

## TOO MANY OLD PEOPLE?

by Arthur Pedoe

"The United States has a new Federal Agency for old people, the National Institute on Aging, a reflection of an inexorable demographic trend that is altering the nature of America's population."

*New York Times, October 24, 1976*

We are here concerned with people aged 65 and over. They are receiving a great deal of attention these days and many newspaper items in the United States, Canada and Britain, referring to them, are of particular interest to actuaries.

Many angry letters were addressed to the London newspapers when at a conference there a doctor stated that people over 65 should live more dangerously and not coddle themselves so that there would be fewer of them! The speaker was Sir Richard Doll, M.D., F.R.S., Regius Professor of Medicine at Oxford, who had received a United Nations award for cancer research in 1962.

Curiously, a former Regius Professor of Medicine, some years ago, gained unfavourable publicity by a similar statement — Chloroform at 60! This was Sir William Osler who had done much to raise the standard of medicine in the United States while at the Johns Hopkins Medical School.

An article in the *New York Times* (Jan. 12, 1975), "The Scandal of Care for the Old," refers to the failure of public policy in nursing home care in the United States. Governor Carey has started two broad investigations into the N.Y. State nursing home industry following a series of charges of fraud, abuse of patients, and political protection. Medicaid in the U.S. has burgeoned to a \$10-billion a year industry: "a bonanza for alert entrepreneurs."

The increasing demands of older

(Continued on page 7)

To All Our Readers,  
A Happy New Year!  
The Editors

## INTERNATIONAL CONGRESS IN JAPAN

by Laurence E. Coward

No country in the world has a higher reputation for hospitality and efficiency than Japan. Those of us who attended the 20th International Congress of Actuaries held in Tokyo from Oct. 25 to Nov. 1, 1976, including about 120 United States actuaries and 40 Canadian actuaries and their "accompanying persons", had a fine opportunity to observe and enjoy these qualities. We were received with the utmost kindness and could not fail to be impressed by the excellence of the arrangements made for our convenience and pleasure by our Japanese hosts.

At the opening meeting at the Takarazuka Theatre we were greatly honoured by the presence of His Imperial Highness the Crown Prince and the Crown Princess of Japan. The Crown Prince, the Minister of Finance, and the President of the Congress gave speeches of greeting in Japanese — they were brief and printed translations were provided. We were entertained by a performance of kotos, a type of Japanese harp. To conclude, the Tokyo Symphony Orchestra showed its virtuosity by playing an exciting modern Japanese composition.

The business sections at such a large international meeting are bound to be

(Continued on page 3)

## ACTUARIES ARE NOT FOR THE BIRDS

by Don Rholl, M.A.A.A.

*Note: We are indebted to Mr. Rholl and to Milliman & Robertson, Inc. for permission to reprint this article which appeared in the M & R Management Report.*

Once upon a time there was a large wooded area that covered many acres. It was a favorite place for certain birds to live because there were so many worms and insects living there. And, of course, one of the most important jobs of birds is to keep the worm and insect problem under control.

Over the years, four distinct types of birds had come to inhabit the woods. There was the soabird, the fratbird, the casbird and the conbird. In these woods each type of bird was able to find the insects and worms that were suitable to it. None of the types could handle all the problems of all the different insects and worms, although some did try. As time passed, however, the birds learned to respect the fact that each bird had developed certain specialties and they tended to migrate to areas where they could use their specialties. As a result, each type of bird grew in numbers and all types prospered.

Even though the birds recognized their individual strengths and weaknesses, the caretaker of the woods came to them with a problem. Apparently the residents who needed the services of the birds really didn't know which bird to call on for a particular problem because they were confused about the birds' specialties and whether or not they really were qualified for serving!

Well! You can imagine the chagrin of the birds. After all, wasn't each member of each bird type qualified to per-

(Continued on page 7)

# The Actuary

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 articles, criticisms, and discussions in this publication.

## EDITORIAL

ALL members of the Society will have by this time received the 1976 Annual Meeting Report and will be aware of both the ARC proposal of the Woody Committee and the fact that it has been endorsed as a basis for negotiation with other bodies by the Board of Governors. In view of that, it is perhaps not surprising that it is difficult to satisfy Andy Webster's demand for an editorial from the President without discussing reorganization. However, it should be recognized that what follows is solely the opinion of one actuary and not that of the Society.

A number of reasons, all valid, have been advanced for reorganization, including overlapping meetings and duplication of committee effort. Nevertheless, the sole reason important enough for us to consider reorganization seriously is, in my opinion, to achieve public recognition. If that can be achieved at all, a unified body would be more effective than six organizations operating separately.

For well over half a century, the Society and its progenitors have had one of the most rigorous standards of qualification of any profession. In spite of that, outside the narrow circles of life insurance companies and members of our own profession, the public neither seeks nor appreciates the values of our professional opinions.

If we are to receive greater public recognition, we must recognize what is involved. Those professions and trades which enjoy exclusive rights to practice within their fields all owe their power to the blessing of some branch of the government, and that governmental body inevitably demands some degree of control over the examination system that leads to its license — witness the examinations for the enrolled actuary. Further, at least today, for such a license to be given by the government there must be convincing proof that it is the public and not the profession that will benefit. However strong our case, it will require a far more widespread, sophisticated and expensive campaign to persuade governing bodies of that fact than has ever been mounted or even contemplated by the profession.

The problems of reorganization have been with us since well before the establishment of the Academy. Let us all hope that they can be solved to the lasting benefit of the truly professional actuary — whatever his field — despite the continued existence of truly formidable obstacles.

Robert T. Jackson

## LETTERS

### Actuarial Responsibilities

Sir:

Recent discussions of the Guides to Professional Conduct and of the need for disciplinary procedures have raised some disturbing thoughts in my mind. These have been amplified by concurrent discussions of whether actuaries can — or even should — express opinions on matters involving actuarial concepts and affecting our whole social and economic fabric.

Have actuaries lost their sense of responsibility — and responsibility to whom? Maybe I'm getting old, and times *do* change, but I'm afraid they don't always change for the better. Unless my memory fails me, not too many decades ago actuaries had no need to debate whether they had a responsibility and to whom. We just naturally knew that our responsibility was to the people who depended on us — whether they knew it or not — to make sure that the benefits they had been promised would, in fact be paid to them in their old age, or to their beneficiaries after their death.

And we had no hesitation about speaking out if we saw anything that threatened those promises.

We didn't worry about our own sensibilities or quibble over whether our responsibility was to our "client or employer." Our responsibility went far beyond them to the people who trusted us, as well as those who hired us. This is far more specific than references to an amorphous "public."

Why is our profession so afraid to come out with strong statements not watered down to accommodate the most timorous — on such publicly demoralizing issues as the effect of inflation on actuarial reserves and the people's future, or the serious economic and moral problems involved in deferring pension costs to future generations — as our politicians defer the costs of "social" problems that should properly be faced today? How many of us have joined the politicians who can't see beyond the next election and the businessmen who can't see beyond the next balance sheet?

(Continued on page 4)

## International Congress

(Continued from page 1)

rather formal and slow moving. Advance planning is essential, so there is little opportunity for surprise or for spontaneous repartee. Speakers, after giving advance notice of their desire to speak, must come to the microphone and speak fairly slowly since simultaneous translation is provided, the official languages being Japanese, English, French and German. All this takes time and it also takes time to get 1400 actuaries into and out of the meeting for a coffee break.

In spite of this inevitable formality, the Congress is very interesting and well worthwhile. Here are presented national reports on matters of actuarial concern from 25 countries. Here are presented comments on 128 well prepared papers on the four official subjects of the Congress, that is, Standards for Premium Rating, Mortality Rates, Private Pension Schemes, and Mathematical Researches on Insurance Company Management. Here is a unique opportunity to learn from other countries on matters of insurance practices, social security, and professional organization. World wide, actuaries are concerned about the effects of inflation, government intervention and consumerism on their business.

For many actuaries the greatest value of the Congress is in making contacts outside the official meetings, that is in renewing old acquaintances from foreign countries, making new ones, exchanging information and discussing problems of common concern.

It is hard and perhaps unfair to select one item for mention from so many excellent papers. However, I was especially interested in "A Historical Review of the Longevity of the Human Beings" presented by Mr. Hishinuma, President of the Institute of Actuaries of Japan. He quotes statistics bearing on human mortality in the Stone Age, the Roman Era and on through the Medieval Ages to modern times. He attempts to estimate the ultimate life span of the human race, and suggests a possible life expectancy of 77 for a male and 82 for a female.

Japan is smaller than California and has a population five times as large. Four-fifths of the area is mountainous. Since the rest is densely populated, the Japanese have developed a remarkable

discipline, cleanliness, and social cohesion. While everyday dress is western style, the kimono and sandals are often seen and women's lib has a long way to go to reach even the supposedly unsatisfactory western standards.

Prices of food in Japan are high. In the big hotels a cup of coffee or tea costs 200 to 400 Yen (60¢ to \$1.20); cocktails \$3; and a good meal \$10 to \$20 before the wine. However, the complete absence of tipping whether for taxis, meals or other services is most refreshing. At the various receptions and dinners we tried our skill with chopsticks and sampled many Japanese delicacies. Sukiyaki and Tempura were popular, but Sushi was not to everyone's taste.

Thursday was free for various excursions by bus: to Nikko the famous shrine center; to Kamakura and Hakone, a volcano caldera; or to Fuji, the sacred mountain. The goddess of Mount Fuji was shy on the day of our visit and shrouded herself in cloud. In fact we ran into a snowstorm on the way up the mountains requiring the buses to put on chains in order to return on the icy roads. However, on most days we could get a distant but clear view of Fuji from the 17th floor of the Imperial Hotel.

A visit to the Kabukiza Theatre was particularly memorable. Kabuki is a traditional dramatic performance in which female characters are always played by men. It features gorgeous costumes, elaborate makeup, singing, acting, and dancing to illustrate straightforward stories that are easy for westerners to appreciate and enjoy.

Another memorable event was a reception with varied entertainments at the Chinzanso gardens, where sake was drunk from little wooden boxes which many guests took home as souvenirs. We also remember the performance of the opera "Yuzuru", a tender story with very beautiful scenery.

We were amazed that many Japanese actuaries had been studying English for many months past in order to be able to converse with us for the one week of the Congress. This is an illustration of the great pains that were taken throughout to ensure that the Congress was a success. There was always someone ready with a smile and a bow to help solve any problem, reservations were always in order, and transportation was always waiting to take us to any function out-

## PENSIONS AND THE PUBLIC

William C. Greenough and Francis P. King, *Pension Plans and Public Policy*, pp. 311. Columbia University Press, 1976, \$15.

by Stephen L. Brown

Messrs. Greenough and King bring a wealth of experience from their years at TIAA-CREF to this most lucid discussion of the relationships between public policy, social security, and private and public pension plans.

The book divides neatly into three main sections. The first five chapters are descriptive in nature, dealing with the history and current characteristics of public and private pension plans in the U.S. The second section focuses on three important areas requiring public policy decisions — vesting, financing, and income objectives. It is in these chapters that elements of controversy arise and in which the authors make some specific recommendations for the future. Finally, the book finishes with a interesting overview of pension systems in a number of foreign countries.

The chapter which is perhaps the most striking in this excellent book deals with the financing (or, more accurately, the lack of financing) of public pension plans. While many have become aware of the social security financing problems, only recently has the extent of state and municipal financing problems become evident. Even less well known are the huge and growing liabilities being developed by the civil service retirement system and the armed services pension system. When all these elements of the public pension scene are viewed together, it becomes clear that the combination of excessively generous plan provisions and insufficient or no funding is not a viable situation in the long run.

Books like "Pension Plans and Public Policy" represent one of the best methods of making large segments of society aware of the knotty problems and social policy questions inherent in the current U.S. pension structure.

*Note: A more detailed review of this book will appear in the Transactions* □

side the hotel. Everything was under perfect control (except the weather).

Our grateful thanks are due to the Committee of the Congress and in particular to our Japanese hosts for a delightful and memorable experience. □

## Letters

(Continued from page 2)

Have we forgotten that we have one of the most sacred trusts of all — making sure that promises made now are kept many years in the future, many times for beneficiaries of people no longer here to check up on us?

Is this change in focus just an unfortunate side effect of the general decline of moral and intellectual standards in the country, or is it possibly due partly to the exponential growth in our numbers? "Back in our day" most actuaries knew most other actuaries personally. We not only had our own standard to live up to, but we had the example of our truly great seniors and our peers. We knew they were watching us with a severe kindness and affection, and we wanted them to have a high opinion of us. We cared. We had pride in our profession, and didn't want to let it down. Are sheer numbers part of the problem?

I am far from ashamed of my profession, but I'm not so proud and exhilarated as I once was to say "I am an actuary," although it is still my answer when anyone asks me what I "did for a living."

I'm old enough to know that there are usually more than two sides to every question, so I hope you can find some way to use these remarks to start a dialogue or multilogue and get other oldsters to reminisce and younger actuaries to declaim. It just might be healthy.

Gilbert W. Fitzhugh

\* \* \* \*

## Pre-Reorganization

Editor's Note: *The writer of the following letter has had a wide company experience and most recently was, until his retirement, Chief Actuary in the Insurance Department of the State of Tennessee. The comments in the letter are his own and are derived from his personal experience.*

Sir:

The letter by Ardian Gill in the October issue shows the original and incisive thinking we have come to expect of him.

The NAIC Task Force under John Montgomery, wrestling with the prob-

lems of getting sensible standards for valuation and minimum non-forfeiture values under modern economic conditions, is to be commended for its valiant efforts, but it must be recognized that the environment in which they have to operate makes impossible the prompt enactment of revised standards so urgently needed by the industry on a nationwide basis.

At best, the process under the present unwieldy system seems likely to take six or seven years. At least one state has not yet enacted the Guertin laws after 35 years! In the meantime, hopelessly obsolete laws prevent the reduction of premium rates for permanent plans of life insurance and annuities that should be the result of current and prospective levels of interest rates. As a result, other forms of savings and investment are steadily eroding the life insurance industry's share of the market.

The idea of an Actuarial Standards Board, the findings of which would be binding upon the states and replace legislative enactments of each state as to minimum reserve standards, seems to be thoroughly sound. If it can work and be accepted for financial accounting standards, why not for actuarial standards too? Our profession came close to abdicating its proper area of responsibility during the development of GAAP. Serious consideration should be given to this constructive suggestion of a Standards Board. We also, unfortunately, missed the boat on ERISA and as a result FSA's have to "enroll" to be recognized, while many persons with much more limited qualifications are being grandfathered. Let us not miss the boat again!

The recent proposal of Senator Brooks regarding federal charters and solvency standards for insurance companies should give pause to state legislators if the state supervisory system is to survive. Its days may well be numbered unless the NAIC has the wisdom and courage to create a strong central professional staff in a convenient location, comprised of actuaries, lawyers, and qualified examiners who would act for and advise the several states. Such a group could well replace the departmental staffs in many states where the financial rewards are not at a level to attract first class individuals.

The requirement of actuarial certification of the annual statement to which Mr. Gill refers is a big step forward. However, many states have not adopted adequate regulations and standards as to who is recognized as an "accredited actuary." In my brief regulatory experience I found that there are states which have accepted the certification of a CLU or an accounting officer of a company who happens to have been signing annual statements in the past and who could have no claim to be qualified to certify to the highly technical requirements involved.

Even in states with adequate regulations there may be a conflict with the reciprocal provisions in the law which recognize the certification of an annual statement which is acceptable to the Commissioner of the company's home state. This severely lowers regulatory standards for companies domiciled in the many states where adequate standards for accredited actuaries have not been adopted.

Strong opposition to the idea of a large, central NAIC staff may be expected, and politics will inevitably rear its ugly head. However, unless something is done to correct the present highly unsatisfactory situation, I am convinced that in the long run there will be a federal solution, as there has been in so many other areas where state regulation has proven to be inadequate.

C.F.B. Richardson

\* \* \* \*

Sir:

Recently a hearing was held in Wisconsin to consider the best way to change the basis of determining valuation and nonforfeiture values. It was suggested by Professor Spencer Kimball, who has been recodifying the Wisconsin Insurance Laws, that changes be made by regulation after a suitable hearing by the Insurance Commissioner.

At a meeting held by Professor Kimball, I agreed with him, on the basis that the technical knowledge required in this area is more than one can expect state legislators to have. The passage of legislation depends mostly on the support or nonsupport of the Insurance Commissioner and the industry in each state.

(Continued on page 5)

## Letters

(Continued from page 4)

We are now faced with the situation in which changes in this area are occurring very rapidly. We have not as yet completed the change to 4% interest for individual life insurance, including the other changes regarding the new annuity mortality tables for both individual annuities and group annuities. Yet in December 1976, the NAIC adopted new bases to be recommended to state legislatures for changes in both valuation and nonforfeiture laws.

This means we will be working in 1977 on changing to 4½% interest rate for valuation for individual life insurance, 5½% for nonforfeiture laws, with other changes for individual annuities and group annuities. In addition, we will be changing the age setback from three years to six years on a permissive basis. With 51 jurisdictions (50 states plus the District of Columbia), it will be at least four years before this can be accomplished. By the time that has taken place, new mortality tables will be developed for life insurance, one for male lives and one for female lives. We will also be updating the 1964 morbidity tables used in disability income. All of these changes tend to create chaos in knowing what the basis is in a given state.

This would suggest that any statute be general in nature, with the actual details of the interest rate and the mortality or morbidity table being spelled out in a regulation. The regulation would only be adopted after an appropriate public hearing has been held. But even this is time-consuming, as anyone who has followed the adoption of model regulations knows. What we need is a quick and realistic way to adopt new bases whenever a change is appropriate.

Currently we have "Commissioners' Values" to use in determining admitted assets in our annual statement. Why could we not also have "Commissioners' Values" to use in determining liabilities?

A group working out of the Central Office of the NAIC, consisting of actuaries of State Insurance Departments and industry advisory committee, could determine what the appropriate method would be for a year hence. This would permit each company to accomplish the systems work to make the necessary

changes. This would require delegation of authority by each commissioner, but to some extent, this authority has already been delegated in determining assets.

Another approach is to have the actuarial profession, working through retired actuaries with knowledge in this area, be the group that is advising the NAIC as to what the appropriate basis should be. By using retired actuaries, we not only draw on talented people, but we also avoid any conflict of interest that might otherwise be considered to exist.

Certainly the long delay that now takes place in developing nonforfeiture and valuation bases needs to be reduced. These are two approaches, any other ideas that others might have would be helpful.

William M. Snell

\* \* \* \*

### The Professional Actuary

Sir:

The special supplement issue of September, with regard to the possible reorganization of the actuarial profession, contained several references to the American Society of Pension Actuaries. With all the kindness and humility that I can muster, I am constrained to assert that, in my opinion, ASPA is not truly a professional actuarial body, by which I mean a body of professional actuaries. As professional actuaries, we must continue to make this clear to the public, so that they can be certain to receive proper guidance and advice in actuarial matters.

At best, ASPA is an organization of capable pension consultants. ASPA consists of a tiny proportion of persons who have professional actuarial qualifications and a large proportion of insurance salesmen and lawyers.

It is time for actuaries to stand up and assert to the public that only a professional actuary is an actuary, and that a pension technician is solely that, and not an actuary.

Some may make the argument that ASPA, despite its evident limitations and weaknesses, just will not go away and that therefore we should accommodate to it. I stand strongly on the principle that what is wrong is wrong and that any form of appeasement is unde-

sirable — and will, in the long run, produce adverse results.

The route to professional recognition as an actuary has always been — and still is — open — through the Society of Actuaries, the American Academy of Actuaries, the Casualty Actuarial Society, and the Conference of Actuaries in Public Practice.

Robert J. Myers

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### Reorganization

Sir:

Whatever evolves with respect to the restructure of the actuarial profession including the future role of the Society of Actuaries as it relates to the American Academy of Actuaries will, I hope, be decided by secret ballot. Although this idea may appear self-evident, I clearly remember the Society meeting in Boston in April of 1964 when accreditation was the subject and the American Academy of Actuaries the proposed vehicle to accomplish this end. There were hundreds of members in attendance and after a presentation, there was a call from the platform to vote for a resolution favoring the proposed Academy. It passed unanimously. Had there been a secret ballot, it most probably would have still passed but the results might have varied since unanimity on any issue is a very rare flower.

H. J. Saffeir

\* \* \* \*

### Level Income Option

Sir:

Mr. Williams' article on the level income option (September, 1976) makes me think how subtle the usual treatment of this option must seem to laymen. Usually, the plan administrator has available a table of the plan's early retirement factors  $f_x$  and a table of special factors  $g_x$  which determine the charge against immediate life income in order to provide a temporary annuity to 65 equal to the Social Security benefit available at 65, i.e.

$$(1) \quad g_x = \frac{[N_x - N_{65}]}{N_x}$$

(for convenience, I am omitting the upper-12 from the notation).

Thus, for example, if the accrued benefit payable at 65 for life is AB and the expected Social Security benefit is PIA, the early retirement benefit  $EB_x$  is obtained as:

(Continued on page 6)

**Letters**

(Continued from page 5)

(2)  $EB_x = AB \cdot f_x$

And if the employee further elects to integrate his private and public pensions, his initial level amount of private pension  $LB_x$  is obtained by reducing the sum of  $EB_x$  and PIA as follows:

(3)  $LB_x = EB_x + PIA - [PIA \cdot g_x]$

That this is a correct formulation can be demonstrated by noting that the present value of  $LB_x$  as a temporary annuity to 65 followed by an annuity equal to  $(LB_x - PIA)$  equals the present value of a life annuity for  $EB_x$ :

(4)  $LB_x (N_x - N_{65}) + (LB_x - PIA) N_{65}$   
 $= LB_x N_x - PIA (N_{65})$   
 $= EB_x N_x + PIA (N_x - g_x N_x - N_{65})$   
 $= EB_x N_x$

Now all of this may be quite obvious to an actuary, but to a harried personnel clerk, to an administrator and to a beneficiary it may not make much sense.

Formula (3), however, multiplies the PIA by  $(1 - g_x)$ , and it is clear that this complement is merely the early retirement factor on an actuarial equivalent basis  $ERF_x$  (which may not be the same as the plan's factor  $f_x$ ):

(5)  $ERF_x = N_{65} / N_x = 1 - g_x$

We can then write:

(6)  $LB_x = EB_x + PIA (ERF_x)$

This formula can be explained as follows: the employee will retire with a level amount of income  $LB_x$  which equals the ordinary early retirement benefit under the plan  $EB_x$  plus the early retirement actuarial equivalent of the Social Security benefit expected at 65. Thus, although the plan pension will drop by PIA at 65, the inception of Social Security at that time will keep the benefit level.

In the special case where  $f_x = ERF_x$ , the formula reduces to:

(7)  $LB_x = (AB + PIA) (ERF_x)$

which implies that the integrated level amount can be construed to be the early retirement benefit as if the private plan

**Results of Competition No. 7**

There were no entries to the Competition Editor's challenge "to design a product that either (a) requires grossly excessive minimum nonforfeiture values or (b) permits absurdly low values" assuming the Unruh Report proposals were adopted. Accordingly both prizes, autographed copies of the Report, are awarded to Henry Unruh. C. E.

and Social Security were combined into a single plan.

Formula (7) is so simple that the plan sponsor may consider the extra cost of applying subsidized factors  $f_x$  to PIA worth the reduced effort of administration and explanation.

Formula (6) is also appropriate where the normal form includes a period certain provided the supplement has no certain element in it. In that case, the proof in (4) merely needs to be enhanced by adding the following term throughout (for  $n$  years certain):

$EB_x (\ddot{a}_{\overline{n}|} D_x - (N_x - N_{x+n}))$

Thus, if the employee should retire at 57 and die at 60, the original early retirement amount would be maintained for another  $(n-3)$  years.

Formula (6) is also appropriate where the normal form includes a modified cash refund, provided the declining refund amount is not charged with the portion of those payments attributable to the supplement, i.e.

$PIA (ERF_x)$

*Miguel A. Ramirez*

\* \* \* \*

**Statistical Reformation**

Sir:

A Joint Committee on Government Statistics formed by five professional associations has issued a report including six proposals for reform of the Federal Statistical System. Three of these recommend improvement in: (i) planning, (ii) provision for public access to statistical data, and (iii) analysis and presentation of data. The other three proposals may be of particular interest to the Society of Actuaries. They are as follows:

"A thorough review is needed of pro-

cedures for awarding federal contract for statistical work to non-government people."

"Professional associations should find more effective ways to represent data user needs through federal advisory committees and federal agencies should develop improved ways to use these committees."

"Better means must be found for monitoring the federal statistical system, especially to make both Congress and the executive branch of the government as well as the public aware of what effects statistical quality."

The Committee's report appeared in the November 1976 issue of *The American Statistician* and will be in a forthcoming issue of *The Statistical Reporter*.

*Robert J. Johansen*

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**Hijacking**

Sir:

This is written in response to Peter Plumley's article on airplane hijacking which appeared in the October issue of *The Actuary*. Normally, the letters you publish deal with actuarial topics which may or may not have been discussed in earlier issues. However, Mr. Plumley's letter dealt with not only the actuarial aspect of hijackings but the moral aspect as well. It is this latter aspect upon which I should like to comment.

Mr. Plumley remarks, "... one must at least respect the courage, if not the judgment, of these hijackers." I strongly disagree and feel one must not respect any hijacker in any way, shape, or form. Terrorists (so-called freedom fighters or otherwise) continue to demonstrate a wanton disregard for lives of innocent people. Airplane hijackings are only one of many ways in which this mentality manifests itself, others being massacres at airports, destruction of school buses carrying children, murders of Olympic athletes, etc.

Whether the cause may be justified or not, humanity cannot continue to condone such senseless acts and certainly cannot be expected to respect the perpetrators. To do otherwise would lend implicit justification to the terrorist activities of any person or persons who feel the cause they espouse warrants such activities.

*Mitchell L. Barlas*

## Hot for the Birds

(Continued from page 1)

form certain services and wasn't the total job being done to the satisfaction of all the users of the service? But some thought that maybe an additional mark of qualification was necessary. And so they called a meeting to discuss the designation. Aca was finally chosen as the special additional designation. Some qualifications and requirements were set down for becoming an aca. Any bird from any type, not just from the soas, frats, cas' and cons, meeting those requirements could call him (or her) self an acabird.

Well, it wasn't *quite* that simple. You see there was still much loyalty to their original type name. So, there were now nine types of birds, although many birds were being counted in two groups. There were soabirds, soacabirds, fratbirds, fratacabirds, casbirds, casacabirds, conbirds, conacabirds and just plain acabirds. And the caretaker was happy because most of the residents were happy. And the residents were happy because they knew that when they called on an acabird they were really getting a qualified bird, although very few residents knew what particular insect and worm problem the bird was qualified for.

Nevertheless, things were quiet for a while and all the birds prospered. It took a visit by the owner to create another disruptive period. You see, the owner, Big Daddy, thought that one particular area of the woods was not being cared for properly. It was the home of the penworms, profitbugs and fringebeetles. And so Big Daddy decreed (he was the ultimate authority, you know) that a special group was to be selected to handle this area. And he chose the name enbirds for these specialists. Of course, the idea was that these specialists would be volunteers from the ranks of those who had previous experience with the problems of penworms, profitbugs, and fringebeetles. But the birds said it was kind of a ho hum thing to create a new bird type and quite unnecessary to reclassify the birds.

But wait! Big Daddy didn't say enbirds would be all birds! Suddenly, the birds realized that they were being asked to join a group with non-birds in it! Well, heavens to meadowlarks, what will

## Deaths

John N. Allman  
Carl R. Ashman  
C. Cather Boyle  
Barrett N. Coates  
George A. Cooke  
Wilbur M. Johnson  
George W. Shelly  
J. Paul Vallerand

they do next? Acabirds are one thing, but non-birds are something else. What was wrong with Big Daddy? Had he forgotten this was bird territory?

Well, as you might expect, Big Daddy won out. The caretaker was saddled with quite a job of sorting out all types, because now there were soabirds, soacabirds, soacenacabirds, fratbirds, fratacabirds, fratenacabirds, conbirds, conacabirds, conenacabirds, casbirds, casacabirds, casenacabirds, enacabirds, just plain acabirds and just plain enbirds. Fifteen types in all! You can imagine how confused the residents were now. Their sense of values had become so distorted they couldn't even state with assurance that a bird in the hand is worth two in the bush.

Now the work was begun on the penworms, profitbugs and fringebeetles. And how are all these various classes of birds going to get along? Will the new birds be welcomed by the old bird group? Will the old birds consider the new birds as intruders? Is there a greater power than Big Daddy? I'm sure you'll all keep tuned in for the next episode because this story will be continued. But for now that's a birdseye view of the current situation. □

## CONGRATULATIONS

We are pleased to learn that A. Hae-worth Robertson, Chief Actuary of the Social Security Administration, has recently received the Social Security Commissioner's Citation Award for his cogent reports, advice, and guidance to the Commissioner, the Executive Branch, and the Congress and we extend our congratulations to Mr. Robertson.

## Too Many Old People?

(Continued from page 1)

people in the Welfare State may have given rise to Sir Richard Doll's remark. The news media in England report abuses and catastrophes in the system. The medical correspondent of a well-known English weekly, *The Spectator*, John Linklater, M.D., wrote in one article: "We now live in a fantastic Welfare State with a shortage of doctors so acute . . ." and in another: ". . . the public is becoming increasingly aware that the National Health Service is being strained to the breaking point . . . It was designed by fools to be operated by saints." Another responsible London newspaper reported that almost half the population in mental hospitals are over 65 and about half of these are over 75.

One hesitates to quote the foregoing but it is of significance to us on this side of the Atlantic. The Health Minister of the Province of Ontario has warned that if the growth in health costs continued at current rates, the Province would be bankrupt in ten years; the health care system must be made more efficient. Actuaries are aware of the escalation of disability and medical needs at the older ages.

In the United States the proportion of people age 65 and over is 10% and it is increasing; the number is almost 22 million: 9 million men and 12¾ million women. The proportion of those under age 20 is 36%. Thus almost half the population may be assumed to be non-productive. What reaction should we expect from the other half to this increasing burden?

Older people have been organizing themselves to put political pressure behind their demands. At the 1971 White House Conference on Aging (*The Actuary*, May 1972) there were 3,500 participants representing thousands of local conferences. Some of the highlights of the demands presented were that older people should have total cash income in accordance with the "American standard of living," adjusted annually for both cost of living and standards of living. The cost of the programs put forward was a minor consideration. An earlier reference to a plan "designed by fools"

(Continued on page 8)

## Too Many Old People?

(Continued from page 7)

should be taken to heart.

Let it be emphasized that one is full of sympathy with older people in this age of inflation of which they are the worst victims. But in this "permissive generation" all attention is focussed on "demand" and so little on "production"; chronic inflation is the main result.

Actuaries will ask what the mortality trend is among those age 65 and over. In Canada and England the mortality trend has been definitely downwards throughout life. In the United States some confusion may exist, for the U.S. Department of Health, Education and Welfare, (Series 20, No. 11, Sept. 1971) states that for men "for most age groups beginning with 15-19 years, the course of mortality was indeed upward in the 1960's." An increase in mortality at the older ages would tend to offset the problems discussed. However, looking to the future the statement quoted cannot be assumed to hold.

In U.S.H.E.W. Actuarial Study No. 72 (Bayo and McKay, July 1974) the population projections for OASDHI Cost Estimates do assume a downward trend in mortality for men and women in the next 25 years in the United States. To counter any thoughts of the effects of the research going on to increase the life span by 20%, it may be added that the assumed expectation of life for the year 2000 (males) is 13.59 years for age 65 as against 12.99 years for the years 1969-71; for female lives the corresponding figures are 18.12 and 16.83.

In the latest issue of J.I.A., Vol. 103, Part II, there is a paper by H.A.R. Barnett, F.I.A. on *The Non-Mortality of Annuitants*. In the discussion R. D. Clarke, F.I.A. referred to a conference he attended in 1971 in Zurich - - "A Forum on Human Ageing" - - indicating the research of certain biologists and others into ways of slowing down the process of human ageing, to consider youth prolonged to age 50, middle age extended from 50 to 100 and old age from 100 to say, 130. Actuaries would be terribly concerned as to the effect on existing reserves for annuities and pension funds but its effect on social conditions is equally important. Mr. Clarke

## COMMITTEE CHAIRMEN

We are glad to provide an up-to-date list of Chairmen of Committees in advance of publication of the 1977 Year Book.

### Standing Committees

Advisory Committee on Education and Examinations  
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     Editorial Board *The Actuary*  
     Editorial Board *Record*  
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 Continuing Education and Research  
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     Economics and Finance  
     Health Insurance  
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     Life Insurance and Annuities  
     Research  
     Retirement Plans  
     Social Insurance  
     Standard Notation and Nomenclature  
     Theory of Risk  
 Education and Examination  
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     Individual Ordinary Insurance and Annuities  
     Group Annuities  
     Group Life and Health Insurance  
     Self-Administered Retirement Plans  
 Papers  
 Pensions  
 Professional Conduct  
 Professional Development  
 Program  
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 Review

### Special Committees

Dividend Philosophy  
 Establish New Mortality Tables  
 Non-Forfeiture Laws  
 Preparation and Publication of Monetary Values  
 Valuation and Related Problems

### \*General Chairman

was relieved to learn that the biologists were a long way from achieving their objective.

One M.D. who approved Professor Doll's statement added that if more money was to be spent it should be "on further researches on rheumatism, bronchitis, deafness etc. which make approaching old age so wearisome." □

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### Actuarial Meetings

Jan. 13, Baltimore Actuaries Club  
 Jan. 19, San Francisco Actuarial Club  
 Feb. 9, Actuaries Club of Des Moines  
 Feb. 10, Baltimore Actuaries Club

PLEASE send your scheduled meetings as far ahead as possible. And thanks to those who send us a year at a time! □