



SOCIETY OF ACTUARIES

Article From:

The Actuary

November 1984 – Volume No. 18, Issue No. 9



The Actuary

NOV 13 1984

The Newsletter of the Society of Actuaries

VOL. 18, No. 9

November, 1984

PROFESSIONAL SERVICES

by James A. Attwood

Ed. Note: A NEW SERIES. The following article is the first of a new series. Outgoing President, Dwight Bartlett, asked Executive Committee members, particularly the Vice Presidents, to use these columns to tell about activity within their assigned areas. Incoming President, Pres Bassett, heartily endorses this concept and hopes that the councils of the various Sections will do likewise.

This series of articles may be expected to appear in about half the future issues over the next two years, and will be the special responsibility of Julius Vogel, a Past President of the Society and Associate Editor of *The Actuary*.

Dwight Bartlett asked each of his four Vice Presidents to tell readers of *The Actuary* what is occurring within that officer's area of responsibility. The area assigned to me is that of Professional Services.

Unlike the better-defined areas reporting to other Vice Presidents, that of Professional Services has no over-all Policy Committee. This is probably because the six Society Committees classified under Professional Services (listed on page 19 of the Yearbook) do not form a cohesive whole. One of the stated purposes of the Society is to provide programs and facilities for the professional development of its members. The six Committees each have a part to play in the accomplishment of the objective, but otherwise they are dissimilar.

The Guides themselves are the primary product of the Committee on Guides to Professional Conduct. The most recent version appears on page 35

(Continued on page 3)

ELECTIONS 1984

The results announced at our Annual Meeting in Toronto are:

President-Elect

Richard S. Robertson

Vice Presidents

Gary Corbett

Samuel H. Turner

Secretary

Richard V. Minck

Treasurer

Michael B. McGuinness

Director of Publications

Anthony T. Spano

Board of Governors

John C. Angle

Cecil D. Bykerk

Donald D. Cody

W. James MacGinnitie

R. Steven Radcliffe

James F. Reiskytl

The number of votes cast, from among 5213 eligible voters was 2,635 (50.5%).

In 1982 and 1983, these percentages were 52% and 51%.

Call for Papers

1985 Annual Meeting of The American Risk and Insurance Association

Vancouver, British Columbia

You are encouraged to submit a proposal for a presentation at the 1985 ARIA meeting. Proposals should include: title, purpose, research methodology, and a timetable for completion of the paper.

The deadline for submission is: January 15, 1985. Submit proposals to the ARIA Vice President and 1985 Program Chairman:

J. David Cummins
The Wharton School
3641 Locust Walk/CE
The University of Pennsylvania
Philadelphia, PA 19104

MACHINES AS AIDS TO ACTUARIES UP TO 1914

by E.J. Moorhead

This is a collection, undoubtedly incomplete, of items about actuaries who many years ago saw the need and opportunities for calculating and tabulating equipment in their work.

1. In 1869, Walter C. Wright of Boston (20 years later to become a charter member of the Actuarial Society) published an announcement reading thus:

The Subscriber proposes to supply, to order, Life Insurance Companies, Statistical Bureaus, and Offices that require a large amount of numerical operations, an instrument called the "ARITHMETER", to facilitate Multiplication and Division, invented by his father, and abundantly tested by him both in his private business, and as Insurance Commissioner of Massachusetts. The construction and proper graduation of one of these instruments on a scale sufficiently extensive to make it a practical substitute for the logarithm table, is a matter of considerable expense, involving a large amount of painful and skillful labor. But the instrument once finished is permanent, always ready, and equivalent, when there is full work for it, to the labor of several computers, especially in the valuation of policies, ascertaining the ratios or percentages of numbers, and distributing surplus, especially on the contribution plan. The price of the instrument is \$600. — one-half in advance ...

Mr. Wright's father was the eminent Elizur; the "several computers" were people, not machines; and, the last we

(Continued on page 8)

Machines As Aids

(Continued from page 1)

knew, one of these Arithmeters was on display in the actuarial department of the New England Mutual Life.

2. The New York Tribune in 1890 reported an Actuarial Society meeting of April 25th at which prospective uses of the recently announced Hollerith equipment were discussed. It was mentioned that Prudential of Newark expected to use the machine.

3. In 1894, John K. Gore, then a 30-year-old assistant actuary of the Prudential — he became an Actuarial Society member in 1896 and its president in 1908 — patented an “apparatus for sorting cards and compiling statistics”, said to have been “used continuously for more than 35 years during which (the company) built up a record of saving perhaps unparalleled by that of any other office machine or system ever used”. In a 1978 report, Prudential’s Blair E. Olmstead wrote that the basic Gore machine was a sorter which operated at an average rate of about 15,000 cards per hour. After sorting, the cards were counted using an International Postal machine which operated at the rate of 850 cards per minute.

There exist many illustrations of Mr. Gore’s extraordinary ingenuity. A 1937 letter says:

Prior to the invention of his machine he had brought manual processes to a high degree of refinement. For instance, his clerical staff was instructed how to riffle a convenient lift of cards evenly and count them by listening as they were snapped under the thumb . . . And in adding also, many ingenious methods evolved (including) the so-called Nicholson method. Nicholson found that there were only 165 possible combinations of 3 significant figures, and taught students to regard these combinations very much as a combination of letters is subconsciously regarded as a word. For example, “cat” is interpreted as a word, not a mere succession of letters; similarly Nicholson system users would interpret the figures 7, 8, 9 as 24 without any thought whatever of its component parts. In short, the 165 combinations were memorized, becom-

ing a sort of word-alphabet. . . . Clerks attained a dexterity and facility in handling cards and making simple calculations that in this day would seem unbelievable.

4. Geoffrey D. Austrian’s 1982 book, **Herman Hollerith: Forgotten Giant of Information Processing**, contains only a few references to life insurance uses, but its dust cover displays an early 45-column card of an unnamed life company. Five life companies — Mutual Benefit, New York Life, Phoenix Mutual, Prudential and Travelers — are identified as having displayed early interest in Hollerith’s invention.

5. The index to the first 15 volumes of the old Transactions lists the following relevant papers:

- Tate’s Arithmometer, An Improved Quotient Register, by M. H. Peiler (Aetna), Vol. II, 1891
- Some Uses for the Hollerith Machines, by H. N. Kaufman (Phoenix Mutual), Vol. XI, 1909
- Installation of a Perforated Card System, by P.C.H. Papps (Mutual Benefit) Vol. XV, 1914

Kaufman’s paper was accorded an unusual honor, earning for its author a “second prize” though there was no first prize, from a prize fund donated by David Parks Fackler. The paper was discussed by Robert Henderson (Equitable Society) and James B. Gibb (Penn Mutual). □

SIGHTINGS

Dennis Harms spotted the following in a post-Olympics editorial in The Houston Post:

“Carl Lewis is no favorite of mine. . . He is too calculating for me, too absorbed in his own ambitions. He takes as much as possible and, as he demonstrated in the long-jump final, gives as little as possible in return. Rooting for Carl Lewis is like cheering for an actuary.”

Thomas N. Taylor created his own sighting — indeed a “sighting” citing — in the Greensboro News and Record. He sent a letter to a columnist that included:

“So little is ever said about actuaries that the Society of Actuaries asks its members to send in ‘sightings’ of the word ‘actuary’ in print.”

Lisa Ryder excitedly spied a sailboat named “Atacuari” on Lake Ontario. She thought perhaps its owner was “an actuary with a mind for convoluting his profession to find a unique name for his boat.” However, on inquiry she was told that the “Atacuari” is a river in South America. (Sounds like grist for the Trivial Pursuit mill.)

Charles A. Peirce found a redundant reference to “gifted actuaries” in the New York Times.

Linden N. Cole and Raymond D. Berry both sent us a piece from the Wall Street Journal, where comedian and former accountant Bob Newhart laments the lack of a television program about the accounting profession. He says,

“accountants are considered so dull that even ‘Space Actuary’ . . . would have a better chance of making it on TV.”

Jarvis Farley, FCAS, saw the following in “Sweet and Low”, an Emma Lathen novel:

“Qualifying as an actuary does not exempt anyone from the human condition”.

Follow up to Editorial Comment in June Issue

My question of whether people read this column resulted in responses from Susan Silverman, Stephen C. Frechtling, Susan Parry Whelchel, Michael Mudry, and James B. Germain. Their notes were all positive, supportive, and complimentary — indeed, I’m almost embarrassed to have asked the question! Jim Germain put it particularly well:

“The more bizarre the items, the better. As to ‘actuaries in proper context’, that’s boring, whether in person or in print.”

Thanks for your responses.

D.A.P.