



SOCIETY OF ACTUARIES

Article from:

# The Actuary

April 1980 – Volume 14, No. 4



# The Actuary

The Newsletter of the Society of Actuaries

VOLUME 14, No. 4

APRIL, 1980

## NEW MORTALITY TABLES K(M) AND K(F)

by Michael G. Reilly

*Ed. Note: This article describes the mortality tables that our Board of Governors is recommending to the NAIC as successors to the 1958 CSO Table — see 2(A) of "Summary of Non-Routine Business" in this issue. Mr. Reilly, though not a member of Charles A. Ormsby's special committee that constructed these tables, is on the staff of Committee Vice-Chairman Joseph C. Sibigroth.*

### Need for a Successor to the 1958 CSO Table

Appointed in June 1976 to investigate the need for new valuation mortality tables, the Special Committee determined that mortality of insured lives has improved significantly in the more than twenty years since the exposure period of the 1958 CSO Table. Continued use of the 1958 CSO Table produces life insurance reserves and minimum cash values higher than those based on a table reflecting current mortality levels and has created serious deficiency reserve problems.

The 1958 CSO Table generally represented male mortality with a three-year age setback assumed for females to reflect their lower mortality experience. The Committee developed separate male and female tables because there are significant mortality differences by sex (intercompany experience indicates female to male mortality ratios of 60%), which could not accurately be reflected by an age setback. More female mortality experience is currently available giving greater credibility to a separate female table.

### Constructing the New Basic Tables

The new tables are based on intercompany experience between 1970 and

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## LINDEN N. COLE, DIRECTOR OF EDUCATION

We cordially welcome Linden Cole, F.S.A. 1963, to the key staff post of Director of Education. He tells us that until now he's been a "one employer" actuary, in New Jersey at Mutual Benefit Life. He has had 15 years experience on the Education & Examination Committee, having worked his way up, as he puts it, through the Part 7 hierarchy to Multiple Choice Editor and Part Chairman, then for several years as Education Vice-Chairman and Education Chairman.

Mr. Cole's post was established in 1977, and occupied with distinction by Warren R. Adams. Says Mr. Cole, as he considers the educational scene: "We all know there are limits to how much volunteers can find time to accomplish; with staff support though, the E & E Committee can do the intensive thinking and planning its members wanted to do all along. Witness the excellent program of seminars started during Warren Adams' term.

"With nearly 375 Fellows in the E & E and the Continuing Education Committees, it is obvious that the Society's education efforts will continue to depend on our members' volunteer efforts. Our staff must help their work in such a way that we can respond with all deliberate speed to the inevitable changing needs and new demands upon us. I am honored to be asked to work full-time with our fine volunteers." □

### Actuarial Meetings

April 22, Actuaries Club of Philadelphia

May 8, Baltimore Actuaries Club

May 20, Chicago Actuarial Club

May 22, Actuarial Club of Indianapolis

## NEBRASKA ROLES AND ETHICS SURVEY

*Ed. Note: This, the first of two articles, is a summary of material furnished by Warren R. Luckner. The full survey is available from Prof. Luckner at his address in the Year Book.*

The Actuarial Science Program at University of Nebraska includes a course on Actuarial Roles and Ethics. In 1978 the students in this class sent a questionnaire to 265 persons, mostly alumni of the Program, aimed at finding out how actuaries see themselves, and to what extent ethical questions have impinged upon them. This article gives answers by 61 Fellows — 60 F.S.A.'s and one F.C.A.S.

### What 61 Fellows Said: Roles

*Ques.: Do you consider yourself a professional?*

*Ans.: Yes, 58; No. 3. Most of the Yes responders cited the body of knowledge and skills called for, or the educational standards. Eighteen mentioned the standards of professional conduct. Of the three No's, one said, "Haven't enough responsibility"; one, "Am doing other than actuarial work"; the third regards himself as a "businessman with technical expertise."*

*Ques.: Which (of five given choices) best describes the current market for new actuarial students?*

*Ans.: No Fellow picked unreservedly the top category offered (wide open, no problem getting a job). The majority checked, in nearly equal numbers, the second choice (very good, but need an exam or two), or the third (good, but tightening up somewhat). Six supported the fourth category (fair, has tightened up considerably), and there was one*

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**SUMMARY OF NON-ROUTINE BUSINESS BY BOARD AND EXECUTIVE COMMITTEE, FOUR MONTHS TO FEB. 29**

*by Myles M. Gray, Secretary*

At meetings of the Executive Committee on Dec. 13, 1979 and the Board of Governors on Jan. 24, 1980, the following non-routine business was transacted:

(1) *Finances.* In addition to changing the date when dues become payable (see our March issue) and increasing the dues, the Society, through its Administration and Finance Committee, now has the following schedule of meeting and seminar fees: Spring Meetings, \$55; Annual Meeting, \$75; 1-Day Seminars, \$110; 2-Day Seminars, \$125.

(2) *Mortality Tables for Valuation.* (A) The Board recommended, on behalf of the Society, certain mortality tables (described elsewhere in this issue) for consideration by the National Association of Insurance Commissioners. (B) In response to a request for the Society's assistance from the Chairman of the NAIC Committee Technical Task Force on Valuation and Nonforfeiture Value Regulation, the Board authorized forming two special committees to study the possible needs for new mortality bases or tables for Individual Annuities and Group Annuities, and referred the following requests to the Research Policy Committee for recommendations:

- (i) on whether the duties of our permanent committee on mortality should be expanded to include developing new mortality bases or tables for statutory valuation and nonforfeiture value purposes when that committee perceives such needs;
- (ii) on whether new mortality bases or tables may be needed for (a) guaranteed-issue life insurance, (b) renewable term insurance, (c) substandard life insurance, and (d) industrial life insurance.

(3) *Dividend Philosophy.* The Board requested the Committee on Dividend Philosophy to transmit to the corresponding Academy and Canadian Institute committees its latest report (i.e., the amended version after the exposure to members of its September 1979 report), and to continue its work on recommendations for dividends on individual annuities and dividends on participating business of stock life companies.

(4) *Build and Blood Pressure Study.* The Board approved the cost of publishing the new Build and Blood Pressure Study in 1980.

(5) *Discontinuing Annual Banquet.* The Executive Committee agreed to discontinue the Annual Meeting Banquet.

**TRANSACTIONS OF 21st INTERNATIONAL CONGRESS**

The papers prepared for presentation at the International Congress in Switzerland next June, in six volumes, have been distributed to registrants. Though it is unlikely, if indeed it is possible, that other actuaries will subscribe for a set, surely some registrants can spare copies on request, particularly as they will by next autumn possess two sets. Also, authors have supplies of their own papers.

Here are the titles of the six volumes. The meaning of the figures in parentheses is this: the first denotes the total number of papers from all countries; the second, the number by Canadian and U.S. authors.

1. Generalized models of the insurance business. (41—6)

2. Testing hypotheses by statistical investigations. (23—2)

3. Statistical bases and experience in disability, sickness and accident insurance. (27—4)

4. Estimating the value of insurance companies and portfolios. (31—5)

5. Inter-relations between demographic and economic development and Social Security. (27—5)

6. National Reports: The training of the actuary (28—2). The National Report for Canada was written by Nicholas Bauer, and that for U.S.A. by Geoffrey Crofts.

Preliminary information about the next meeting of the ASTIN (Actuarial Studies in Non-Life Insurance) Section, to convene in Loen, Norway on May 31, 1981, is obtainable from Laurence E. Coward in Toronto, or John C. Woody in New York.

**Roles and Ethics Survey**

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outright pessimist (very limited opportunities).

**What 61 Fellows Said: Ethics**

*Ques.: Have you read the Society Guides and Opinions as to Professional Conduct?*

*Ans.:*

	Guides	Opinions
Completely	34	25
In Part	27	27
Not At All		8
No Response		1

*Ques.: What is your opinion of the Guides and Opinions?*

*Ans.:* Favorable/Needed, 45; Unfavorable/No Need, 6; No Response, 10. Those expressing the unfavorable view were either critical of the content (weak, wordy, too general, divorced from real world, incomplete, overbearing), or said that if all this is necessary we really aren't very professional. Many of the favorable verdicts did criticize some elements of the Guides and Opinions.

*Ques.: Have you ever encountered a situation in your actuarial career which seemed to raise the possibility of doing something contrary to (i) your personal ethics, (ii) the Guides to Professional Conduct? If so, please describe the situation and what you did about it.*

*Ans.:*

	Personal Ethics	Guides
Specific	15	8
General	7	5

The lower numbers who identified situations involving the Guides, rather than those involving personal ethics, may indicate that the Guides are more liberal than an actuary's personal ethics—which may be all right if the intent is that the Guides express minimum standards. Types of situations ranged widely: manipulation of data and assumptions, approving cost estimates without review, conflict about equity in rates and dividends, underwriting problems, approving deficient reserves, doing things not really qualified to do.