

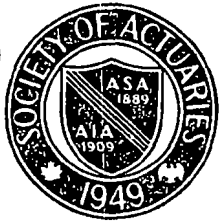


SOCIETY OF ACTUARIES

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PATTERNS OF MORTALITY

Editors: Richard B. Singer, M.D. and Louis Levinson, F.S.A., *Medical Risks: Patterns of Mortality and Survival*, Lexington Books, D.C. Heath and Company, Lexington, Mass., 1976, \$25.00.

by Frank E. Rooke

"Monumental" is an adjective one hears in reference to this book and it certainly seems apt both in regard to the tremendous amount of work in its preparation and, more importantly, its value to those to whom it is directed. The book contains a mine of information in the form of mortality indices relating to a large number of "risk factors", mainly specific diseases, abnormal physical findings, or abnormal findings on medical tests.

The book is described as a reference volume sponsored by the Association of Life Insurance Medical Directors of America and the Society of Actuaries. For the history of the evolution of the book the reader is referred to the Preface. There is a long list of contributors — 22 in all — whose assistance is gratefully acknowledged by the Mortality Monograph Committee who were responsible for the total production of the volume. A special word of appreciation is due the Editors, Richard B. Singer, M.D. and Louis Levinson.

This volume breaks new ground in that for the first time the bulk of the data presented is drawn from sources outside insured populations, thus covering many patient groups and conditions not likely to be found among persons who have been issued life insurance.

To a considerable extent, therefore, this book is based on reports of follow-up studies reported in medical literature. Over 2,000 articles were evaluated in the search to find those with data in a form suitable for producing the mortality indices desired. Results from these

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

The Society of Actuaries and the American Academy of Actuaries have submitted a joint brief *amici curiae* in the case of the *City of Los Angeles et al. versus Marie Manhart et al.* scheduled for the October term of the Supreme Court of the United States. The pension plan of the City of Los Angeles, Department of Water and Power, requires larger contributions from female employees than from their male counterparts. The 9th U.S. Circuit Court of Appeals held that this violated Title VII of the 1964 Federal Civil Rights Act as amended by the Equal Employment Opportunity Act of 1972. This title prohibits discrimination by sex in employment, including compensation. The decision has been appealed to the Supreme Court.

MINORITY SCHOLARSHIP PROGRAM

by Eugene M. Woodard

In the June, 1977 issue of *The Actuary*, I reported on a change in direction of the Society's Minority Recruiting Program. Basically, the article discussed the discontinuance of the Lincoln University Summer Institute and the formation of a new expanded actuarial scholarship program. This is a report on the scholarship awards granted for the school year beginning in the Fall of 1977.

Scholarship material was distributed earlier this year to a number of colleges and universities throughout the U.S. As a result, the Society received 36 appli-

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REORGANIZATION OF THE ACTUARIAL PROFESSION

by Anna M. Rappaport

There are many problems facing the actuarial profession in the mid and late 1970's. The profession is small, but it is also divided. There are several actuarial organizations in North America, and as a result different groups are addressing limited energy to the same problems. It seems clear that it makes little sense to have 6-8 organizations representing the needs of under 10,000 people.

The Board of Governors of the Society of Actuaries has recognized that the profession would be stronger if unified, and in October 1976 it unanimously endorsed a proposal for reorganization of the actuarial profession. The full report of the ARC Committee together with the motion adopted by the Board was mailed to the membership late in 1976.

The Board authorized the appointment of a Committee to proceed with the reorganization. The Committee has been set up with Julius Vogel as Chairman, and Barbara Lautzenheiser as Vice Chairman. The Committee members are Paul Barnhart, David Carpenter, Richard Daskais, Robin Leckie, Jim MacGinnitie, Anna Rappaport and Gathings Stewart.

The Committee has met twice. Its mission is to serve as a negotiating body for the Society of Actuaries, so that a proposal could be developed in enough detail to be brought to the boards and members of all the actuarial bodies for them to vote on. The ARC proposal was deliberately left vague so it could be a starting point for negotiations.

At present, the Society of Actuaries is the only body which has endorsed the principles of the ARC proposal. The

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BOOK REVIEW**Pension Mathematics**

Howard E. Winklevoss, *Pension Mathematics: with Numerical Illustrations*, pp. 243 (1st Ed.); published for the Pension Research Council by Richard D. Irwin, Inc., Homewood, Ill. 60430.

by Ronald A. Fletcher and Owen O'Neil

The stated objective of this book is to analyze pension costs in detail, including the manner in which such costs vary under different actuarial assumptions, funding methods, and benefit provisions.

The book deals only with defined benefit pensions. The cost illustrations are primarily based upon one model plan, namely a non-contributory final average plan. The author uses statistical charts, numerous tables and mathematical examples to show the possible variations in pension costs.

In the 17 chapters a wide area of pension plan matters is covered, ranging from an initial outline of the various types of benefits, both pension and ancillary, to an explanation and illustration of pension plan cost projections ("cash flow" projections). To take but one example of the treatment of the various subjects, the relative costs of pension benefits and of each of the ancillary benefits are given in detail and the costs of making subsequent changes in any of the plan's provisions are also carefully analyzed.

This book provides a considerable amount of insight into pension costs even though the approach is from a mathematical viewpoint. The author uses a notation unfamiliar to most actuaries and while the translation of the Winklevoss notation to another notation might be an interesting exercise, it serves to emphasize the absence of a standard notation.

The book should be instructive even to the established consulting actuary. Although he will, in most cases, already be familiar with most of the numerical conclusions and relationships, a study of the detailed tables and numerical illustrations can only serve to sharpen his tools. It is the feeling of the reviewers that in most cases this sharpening process will be quite valuable. On the other hand the book is likely to be of quite limited use to a non-actuary who, unless well trained in mathematics, would not normally be able to follow the formulas and mathematical relationships. He might find some interest in the tables

Actuarial Club Meetings

- Dec. 20, Chicago Actuarial Club
- Dec. 21, Seattle Actuarial Club
- Jan. 12, Baltimore Actuaries Club
- Jan. 17, Chicago Actuarial Club
- Jan. 18, Seattle Actuarial Club

and numerical conclusions, but he must beware of treating the results as applicable to all pension plans and situations.

The book might be useful as a part of the required reading for the actuarial student specializing in the pension side of the business, but the presence of errors in the formulas and the occasional use of a wrong symbol may cause the reader inexperienced in pensions some frustrations in understanding the presentation.

In the opinion of the reviewers, the book is probably most useful as a basic reference to those interested in pension cost relationships, examined from a theoretical and mathematical viewpoint. This purpose the book fulfills very well. The book was presumably not intended to provide a practical look into pension consulting practice and related government regulations, or even to provide an insight as to the funding method appropriate to a given set of circumstances.

Note: An additional review by another reviewer will appear in the Transactions. □

Reorganization

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other bodies have indicated a willingness to talk, and have formed or are forming committees.

The Society Committee is engaged in further research to understand better the issues and possibilities. It is also in the process of initiating dialogue, and has been involved in General Sessions and Concurrent Sessions at the Spring 1977 meetings, and in Workshops at the annual meeting of the Society.

The problems facing the profession at the present time are:

- (1) There are an increasing number of public issues involving matters which are of professional interest to actuaries.
- (2) There is duplication of effort be-

tween the various bodies, and often competition. A few dedicated people are being spread increasingly thin.

(3) There is a need to respond to and recognize the needs of specialties in a more effective way.

(4) The management of the profession needs to be streamlined so that energy expended can be used more effectively.

(5) As the profession becomes more and more a public profession, there is a need to have greater public awareness of the profession, and more effective public relations.

(6) There appears to be a possibility of further Federal licensing with government enrollment in new specialties creating new splinter groups of actuaries.

(7) The profession needs to have the capacity to expand its program in areas such as research and continuing education.

(8) A system is needed for regular setting of priorities, and focusing of effort on these priorities.

It should be emphasized that *reorganization is not a magical solution*; it will not solve most of the problems listed above. It is, however, one of a number of steps which can help the profession to solve its problems. Reorganization has the potential for being very helpful in streamlining organization structure, and enabling the profession to better use member's time.

The problems of the profession can be perhaps divided into two groups, internal and external. The external problems are those which are of greatest concern to many actuaries today. The most important step in solving such problems is commitment and a willingness to back that commitment with time and money. Reorganization could be helpful in that a new structure might be better able to focus on priorities and see that concentrated effort is devoted to such priorities. However, no structure will change the outside world, and to seek such change from a change within the profession is sure to lead to disappointment.

The Committee welcomes comments from actuaries. Send them to:

Julius Vogel, F.S.A., Prudential Insurance Company of America, Prudential Plaza, Newark, N.J. 07101. □