



SOCIETY OF ACTUARIES

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COMMITTEE ON FUTURISM

by Roy R. Anderson

In October 1975 the annual meeting of the Society had the privilege of listening to Dr. Jay S. Mendell give an address on "The Actuary as a Futurist." Prior to that occasion it is doubtful if many of the Society members had ever heard of being a Futurist or of Futurism. This ignorance will now be dispelled because a Committee on Futurism has been appointed and the formal charge to the Committee reads:

"The Committee will acquaint the Society of Actuaries with the activity known as 'futurism'. The goal will be to stimulate actuaries to adopt a broad view of the future in making their current decisions. In order to achieve this goal, the Committee will study changes in the total environment that are of interest to actuaries, speculate about their future effects, and interpret the inter-related consequences of these changes to those financial systems designed and managed by actuaries."

What is "Futurism"? It is *not* forecasting future events — such as the weather forecasting that some of us did years ago. Rather, "Futurism" is primarily the process of perceiving the events of the present that offer evidence that fundamental changes are now occurring in some of our "systems." Then, having perceived such evidence, we must interpret it. Finally, we may then suggest "alternative futures" — i.e., possible directions the changes may take us. Dr. Mandell's address (Record 1.4) gives part of the picture and the Trend Analysis Reports of the ACLI further illustrate the subject.

At the Annual Meeting in Boston this Fall, the Committee is planning to conduct a Concurrent Session on "Futurism." The session will be introduced by an explanation of what Futurism is all about. Members of the Committee have taken individual responsibility for developing information on subjects such as energy, population and food, health care, health sciences, and "futures" organizations — e.g., the Club of Rome. We'll probably choose three of these for presentation in Boston.

The purpose of the Boston session will

Competition No. 8

Dr. Ellen Torrance has called our attention to a rather serious emerging national problem:

"In the year 1975 the U.S. population grew from 211.9 million to 213.6 million, and the number of FSA's grew from 2,575 to 2,779. Assuming the same rates of increase, by the year 2140 AD there will be more FSA's than people."

Rather than refer the matter to the Committee on Futurism (to be appointed) or to the Commodities Market, which is seeking SEC approval to trade in actuarial futures, we invite our readers to submit creative suggestions for bringing the problem under control.

The prize is "Actuaries and Financial Planning", a history of the profession and an examination of the actuary's role in human affairs.

Rules

1. All entries must be original (and printable).
2. The Editor and Competition Editor are *Ex-Officio* not eligible.
3. Only one copy please, to be sent to
Competition Editor
The Actuary
Mail Drop 13-2
1740 Broadway
New York, New York 10019
4. Entries must be mailed by April 1.
5. Competition Editor's decision is sometimes puzzling.

be two-fold. First, to give the membership an idea of how much is going on that will have tremendous impact on society — and on our Society of Actuaries. This is a message that has already been made evident by the work of the Trend Analysis Program of the ACLI. The second purpose will be to receive from the audience suggestions as to how best the Committee on Futurism can serve the membership.

The membership of the Committee is:
Donald R. Anderson Sue W. Ogden
James C.H. Anderson Bernard Ritterbush
George R. Dinney Claude Thau
Wilfred A. Kraegel Roy R. Anderson,
Chairman

BOOK REVIEW

John A. Beekman, *Two Stochastic Processes*, Almqvist & Wiksell, Stockholm, Sweden, 1974.

by Richard W. Ziock

The two stochastic processes referred to in the title are the Gaussian Markov and the collective risk stochastic processes. Both the theory and applications are examined. The applications include insurance, physics, electrical engineering, and statistics. Only applications in insurance and statistics will be of interest to actuaries.

The book attempts to cover a lot of ground in very few pages. One of the ways this is accomplished is by stating the more difficult theorems without proofs (although references for the proof are given). This is probably an advantage for most actuarial readers since that makes it possible to get a feel for the subject without getting bogged down in proofs. Another technique the author uses is to refer frequently to other sources in the literature. The heavy use of references should make the book very valuable to researchers.

Most mathematical books these days totally neglect the historical aspects of the subject's development. Happily this is not the case with this book, which has ample historical information.

A very positive feature of the book is the numerous problems at the end of each chapter and most of the problems have detailed solutions at the end of the book.

Mathematically the book is not simple, nor especially in parts is it truly difficult. It isn't easy to describe the mathematical maturity needed for any particular book. Perhaps my own experience is relevant. I first read this book in draft form about two years ago just before I commenced a year of course work which led to the M.S. degree in Mathematics. At that time much was not clear to me. Upon re-reading the book recently, after receiving the M.S., I found it much easier than previously. I suspect this will be approximately the case for many: the more mathematical background the better.

In the United States the book is available through the Halsted Press Division of John Wiley and Sons of New York.

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