

# Article from:

# The Actuary

January 1969 – volume 3 - Issue 1

### REVEILLE AT SLEEPY HOLLOW

by Martin Stempel

(Editor's Note: We are indebted to the author and to Prudential's house organ, "Ack-Ack," for permission to reprint this article.)

On Oct. 3, the Actuaries Club of New York met at the Hilton Inn in Tarrytown, N. Y. The morning program on the "Social Responsibility of the Insurance Industry" was the most interesting part of the meeting to this observer.

Robert W. Goldfarb's keynote speech was designed to be rousing. He stated that he would be satisfied if he stimulated one member of the audience to volunteer to work for the Urban Coalition. He listed investments, sales, personnel, and social security and medicare as areas in which actuaries could become involved professionally to aid in the solution of social problems. He urged consideration of the social impact of an investment besides the concern for safety and yield which result directly from our fiduciary responsibilities. According to Mr. Goldfarb, this third factor would be included in investment policy not only out of concern for humanity, but also for reasons of selfinterest in the protection of the existing investment in our cities.

#### Sales, Employment

In the area of sales, Mr. Goldfarb, who is the Associate Director of the Urban Coalition, stated that a diminishing number of the poor have insurance. He suggested trying to sell insurance at cost without commissions in ghetto storefronts to break the cycle of one poor generation following another. Mr. Goldfarb may have overstated the influence of actuaries in these matters, but his talk fostered awareness of our social responsibilities as corporate citizens.

Professor Lawrence F. Johnson of the University of Massachusetts spoke about hiring the hard-core unemployed. He is black and has been successful in projects in this area. His tone was calm and his outlook practical. He began his talk with a description of what it means to be black in America. He reported statistics on the number of cases of rat bite, poverty level income and broken families. Professor Johnson urged that we recruit black actuaries as well as clerks.

#### **ACTUARIAL MEETINGS**

Feb. 13, 1969, Baltimore Actuaries Club

Feb. 19, 1969, Actuaries Club of Des Moines

Feb. 26, 1969, Nebraska Actuaries Club, Omaha

Mar. 13, 1969, Baltimore Actuaries Club

Mar. 19, 1969, Actuaries Club of Des Moines

Mar. 27, 1969, Actuaries Club of Hartford

He stated this requires commitment by the highest levels of management, objective study of hiring rules and tests, the allocation of funds for training and efforts to convince the current staff of job security and equal opportunity for all. He urged going to the ghetto to hire and to establish neighborhood offices to do business in the community.

## **Duke Conference**

(Continued from page 1)

of changes in the national economy to models in the insurance business. Later, Professor James L. McKenney of Harvard discussed corporate models with emphasis on their use in management planning.

Professor Donald S. Burdick of Duke presented a summary of the essential theoretical issues involved in simulation techniques and dealt at some length with experimental design and data analysis.

Professor C. West Churchman of the University of California at Berkeley provided a thought-provoking conclusion to the conference, He touched on the reliability of mathematical models for business purposes and enlarged on the special merits of simulation as a fundamental scientific approach towards a better understanding of complex systems. He stressed the need for looking at such systems from many different viewpoints, for more careful examination of the logical assumptions made about such systems, and for more experimentation with the aid of computers.

Sidney Benjamin, Chairman of the Research Committee of the Institute of Actuaries, was the opening speaker in the area of simulation applications in insurance. Mr. Benjamin has been pioneer in the simulation of mortal fluctuations. He discussed a number of problems illustrating the wide range of applications of simulation in insurance, and showed how most of them might be tackled with his own ingenious adaptations of Monte Carlo methods. Among the problems dealt with were reversions, graduation, maturity guarantees in equity-linked policies, retention limits, delays in distribution of claims, and profit sharing formulae.

John Boermeester read a paper on "A Russian Roulette and Splitting Simulation Model." This method can be used with advantage to estimate claim distributions when analytical models are not appropriate.

Hilary Seal gave a lucid exposition of the probabilities of ruin in a risk business, and described his simulation experiments with the Erlang-Lundberg model. His results would appear to indicate that even in well-run businesses the probability of ruin may be greater than is sometimes supposed. The subject of risk theory will be brought with easier reach of American actuaries who Seal's forthcoming book, Stochastic Theory of a Risk Business, is published by John Wiley in the spring of 1969.

Dwight K. Bartlett III and Edward A. Lew discussed applications of simulation to agency problems, within the framework of Markov processes. Douglas O. Sanders presented the results of his investigations with individual life reinsurance retention limits, using simulated distribution samples. Space does not permit personal acknowledgment of the many other significant contributions.

David G. Halmstad and Robert E. Hunstad offered conference participants an opportunity to play a "management game," which simulated the decisions of top management in a life insurance company. This required a complex variety of judgments on actuarial, agency, financial, and underwriting questions. Despite premature termination of the exercise due to the failure of the computer print-out, it was among the major successes of the conference.

A limited number of copies of the audresses, papers, and discussions will be available at the office of the Society in April.