

## SOCIETY OF ACTUARIES

Article from:

# The Actuary

April 1988 – Volume 22, No. 4

#### Product Profitability cont'd.

scenario, at an assumed 10% investment earnings rate. Profit results were heasured in terms of the present value of statutory book profits per \$1.000 issued (discounted at 12%) and return on investment, where both were measured after provision for federal income taxes and target surplus. Profit results on the two products were as follows:

Product	<b>PV of Profits</b>	ROI
UL	\$0.58	15.1%
VUL	0.58	14.7

Based on the level interest rate scenario, profits after provision for taxes and target surplus were similar for the two products.

This concludes part one of this article. In part two, we will address global pricing issues and the impact of multiple interest rate scenario testing on profitability.

John M. Fenton is a Consulting Actuary at Tillinghast/Towers Perrin. He specializes in the areas of variable insurance products, interest-sensitive product development, and matters related to New York Insurance Law.

Dennis L. Carr is a Consulting Actuary at Tillinghast/Towers Perrin. He was a faculty member for the SOA Seminar on a Multiple trenario Approach to Interest-Sensitive roduct Development in the fall of 1987.

### A Half-Century of Membership

- 7

There are four members who will attain their 50-year mark as Fellows this year, the survivors of the twelve members of the class of 1938: Rueben I. Jacobson Ernest J. Moorhead Richard E. O'Keefe Harry Walker The 50-year Associates who quali-

fied for membership that year are: William J. Burgar Richard F. Deitz William L. Nicholls Maurice C. Polman Henry B. Thiessen John H. Thompson

At the end of 1987, there were 134 50-year members, 95 FSAs and 39 ASAs. The numbers have declined a bit in the past few years due mainly to the small graduating classes in the hid to late 1930s: 20 in 1935, 15 in 936, 17 in 1937 and 12 in 1938. In 1987, the Society welcomed 252 new

Fellows. The Society congratulates the

new 50-year members on their outstanding achievement.

### Actuarial Program at Nankai University

by Harold G. Ingraham, Jr.

t its October 1987 meeting, the Society's Board of Governors unanimously passed a resolution approving a proposal for the Society to assist in establishing an actuarial science program at Nankai University in the People's Republic of China. The program would begin in the fall of 1988. The Board also authorized the Executive Director to supervise the reimbursement of incurred expenses for administering the program, up to a limit of \$5,000, to Dr. Kailin Tuan, Professor of the School of Business and Management at Temple University. Finally, the Board authorized staff resources for the program.

China has been experiencing an economic resurgence during the past decade, and as a part of that, the insurance business has also progressed rapidly. For example, in 1980 China's only insurance company, the People's Insurance Company of China (PICC), had 50 offices with a staff of about 500. In 1986, there were 2,600 offices and 60.000 staff. Also, according to the PICC, some 50 million Chinese families now have homeowners insurance, and 60 million have bought life insurance.

Even with this rapid progression, the insurance business in China has been sorely handicapped by a severe shortage of qualified personnel. especially in the actuarial field. While several major Chinese universities have introduced insurance programs at both the undergraduate and graduate levels. actuarial science has never been taught at the Chinese universities.

Nankai University. one of the leading comprehensive universities in China, with a strong base in liberal arts and sciences and particular strength in mathematics, wishes to establish a graduate program in actuarial science through its College of Economics. The program would have a two-fold purpose: (1) to train and provide qualified actuaries for the PICC and the government (particularly to address social insurance issues) and (2) to train qualified teachers of actuarial science for other Chinese universities. Because there are currently no qualified actuaries working in China, the Chinese have requested assistance from the Society of Actuaries.

This request comes at an auspicious time for the Society since, for a while now, we have been cognizant of increasing our international ties with other learned actuarial bodies. One recent move in that direction was the formation in 1987 of a Committee on International Relations. This committee was specifically charged to take the lead in developing such ties and in encouraging and recognizing the international development of professional standards, not only in the E&E area but also with respect to standards of practice. This includes making our professional resources available to the extent that we can be 🚽 helpful. The Nankai University program provides the Society with a singular opportunity to influence the development and strengthening of the actuarial profession in a most important country.

With this in mind, a Memorandum of Understanding to establish and define the Nankai University actuarial science program was negotiated and signed last November in Tianjin, China, by myself and Nankai University's president, En-Pang Fan. It specifically calls for the following:

- The actuarial science program will be organized and administered by the Department of Finance. Nankai University. in conjunction with Dr. Tuan.
- Twenty to 25 students will be enrolled in the actuarial program. Student selection will be based on performance on the Chinese National Unified Entrance Examinations for Graduate Students. administered in late February. These examinations test student proficiencies in English. political economics. calculus, linear algebra, probability, and statistics.
- The program will start in September 1988, with 12 to 14 courses taught