



SOCIETY OF ACTUARIES

Article from:

# The Actuary

July/August 1988 – Volume 22, No. 7



## The Newsletter of the Society of Actuaries

VOL. 22, NO. 7  
JULY/AUGUST 1988

# THE Actuary

## American Actuaries In Japan

by Valeria S. and G. Clinton Myers

What can you say about a country that selects *Rising Sun Evening News* for the name of a major daily paper? One thing you can say without fear of contradiction is that life in Japan for an American is not business as usual.

It was our good fortune in January 1985 to be transferred to Tokyo to continue our efforts toward obtaining a license from the Japanese Ministry of Finance (MOF) for our Dutch parent company, Nationale-Nederlanden. The desired license was for the sale of life insurance to the domestic market - a privilege then enjoyed by only six foreign companies, all of which were of American extraction. Japan had previously been identified as an area with strong insurance consciousness, a rather antiquated line of products and tremendous growth potential. The availability to us of a nationwide marketing organization under Shell, a Dutch compatriot with a longstanding presence in Japan, provided critical access to the Japanese consumer.

Our responsibilities were primarily in the product and systems areas and represented a continuation of the previous two years' work in the home office in The Netherlands. While English was the official language of the Dutch/American/Australian/Japanese collaboration, it will of course only get you so far in Japan. To help us understand the details of Japanese laws, regulations and guidelines pertaining to product pricing and valuation, we were fortunate to have the able assistance of Mr. Yoshio Isogai, a Fellow of the Japanese Institute of Actuaries (FIAJ) and then

Continued on page 4 column 2

## Society Ambassadorial Visit to Asia

by Gary Corbett

The Society is becoming significantly more active on the international scene. Reasons include the growing number of Society members and students residing abroad, the internationalization of financial services and, probably most important, the fact that we are regarded by many actuaries in other countries as the premier actuarial organization in the world, largely supplanting the U.K. Institute, particularly in the Far East. Contributing to this increased stature is the preference of many developing countries for the American versus the British economic model. For whatever reason, actuaries in other countries look to us as a source of significant assistance. Our Board has decided to make our resources available where we can be helpful, provided our expenditure of time and money is modest.

Just last year we established a Committee on International Relations to oversee relationships with actuarial organizations and actuaries outside the United States and Canada. Late last year Past President Harold Ingraham signed a Memorandum of

Understanding with Nankai University in Tianjin, China, to establish an actuarial science program within the University's Department of Finance. Seven courses in this program will be taught by Society of Actuaries and Casualty Actuarial Society members.

In recent years, Society presidents have expanded their international travel beyond the traditional visits to the United Kingdom. In late 1985 Dick Robertson represented the Society at a meeting of the Southeast Asian Actuarial Association in Manila; in 1986 Harold Ingraham visited Mexico, Taiwan, the United Kingdom and, in 1987, Ireland. This year I visited Australia, Japan, China and Hong Kong.

My wife and I flew to Tokyo March 12 and returned to Atlanta three weeks later. Our visit to Japan had been arranged by Shuji Naito, Vice President for International Affairs of the Institute of Actuaries of Japan (IAJ), and by Mitsui Life's Chief Representative in the U.K., Kazuaki Naito in New York. We first met Kazuaki Naito

Continued on page 2 column 2

### In this issue:

Society Ambassadorial Visit to Asia	
Gary Corbett	1
American Actuaries In Japan	
Valeria S. and G. Clinton Myers	1
COP Task Force on Strengthening the Profession	
Allan D. Affleck	6
Research Report	
Mark G. Doherty	7
The Individual Life Insurance and Annuity Product Development Section	
Alice M. Neenan	7

Guaranteed Returns - A Tragedy of the Commons?	
Donald R. Sondergeld	8
FAS No. 97 Brings Sweeping Changes	
Mark D.J. Evans	10
FAS No. 97 - Handling Persistency	
Kicker Features	
Bradley M. Smith	11
Letters to Editor	12
SOA Symposium on AIDS	14
Actucrossword, Actucrostic	15-16

# THE Actuary

## The Newsletter of the Society of Actuaries

VOLUME 22, NO. 7  
JULY/AUGUST 1988

Associate Editor responsible for this issue

Linda B. Emory



### Editor

Linda B. Emory, F.S.A.

### Associate Editors

Barnet N. Berin, F.S.A.  
M. David R. Brown, F.S.A.  
Daniel F. Case, F.S.A.  
Richard K. Kischuk, F.S.A.  
Irwin T. Vanderhoof, F.S.A.

### Competition Editor

Charles G. Groeschell, F.S.A.

### Features Editor

Deborah Adler Poppel, F.S.A.

### Assistant Editors

Gary E. Dahlman, F.S.A.  
Stephen H. Frankel, F.S.A.  
Charles Habeck, F.S.A.  
Curtis E. Huntington, F.S.A.  
David S. Lee, F.S.A.

### Society Staff Contacts

(312) 773-3010

Diana Montgomery  
Staff Editor

Linda M. Delgadillo  
Director of Communications

### Correspondence should be addressed

*The Actuary*  
P.O. Box 105006  
Atlanta, GA 30348-5006

### Copyright © 1988, Society of Actuaries

*The Actuary* is published monthly (except July and August) by the SOCIETY OF ACTUARIES, 500 Park Boulevard, Itasca, IL 60143.

Gary Corbett, President;

Anthony T. Spano, Secretary;

Michael J. Cowell, Treasurer;

David A. Jeggle, Director of Publications.

Non-member subscriptions:

students, \$5.50; others, \$6.50. Send

subscriptions to: Society of Actuaries,

P.O. Box 95668, Chicago, IL 60694.

The Society is not responsible for statements made or opinions expressed herein. All contributions are subject to editing. Submissions must be signed.

### *Ambassadorial Visit cont'd.*

at the SOA annual meeting in Montreal, and he has accepted my invitation to join us again at our 1988 annual meeting in Boston. Tokyo is an exciting but visually uninteresting city. Few older buildings survived the war and relatively few American-style skyscrapers have been built. The Imperial Palace and grounds in the center of the city are a beautiful oasis.

There are five FSAs currently living in Japan, but the focus of my visit was my address to about 200 members of the IAJ on March 16. I talked on *The Future of the Actuary/The Actuary of the Future*, presenting material similar to that included in my talks to North American actuarial clubs. I also discussed the organization of the actuarial profession in North America and the valuation actuary movement. Major points were illustrated by bilingual slides, and the speech was translated paragraph by paragraph into Japanese.

In an active Q&A period following the speech, the audience displayed considerable interest in continuing care retirement communities and other aspects of providing for an aging population. Much credit belongs to Meiji Mutual which made the meeting arrangements and supplied a superb translator, Hideyuki Yoshida, FIAJ, FSA. At the conclusion of the speech, I presented a silver bowl on behalf of the Society of Actuaries to the Institute to commemorate the visit.

I visited six companies (Dai-ichi, Meiji, Mitsui, Nippon, Prudential and Sumitomo) in Tokyo and Osaka, meeting always with the chief actuary and often with the president or a managing director. A major problem facing these companies is reporting foreign exchange losses resulting from the fall in the dollar. The increased yield from U.S. dollar securities flows into profit over a number of years, but the companies are required to account for any foreign exchange losses immediately. All the companies were interested in asset/liability management, a term which, like many others, they use untranslated from the English. Japanese actuaries are in the process of strengthening their expertise in such technical areas as asset/liability management by increasing the technical subjects covered by their E&E program.

I exchanged gifts with most of the companies, presenting their execu-

tives with a Cross pen and pencil set with the Society logo. Their gifts to me took a number of forms and, where appropriate, will be displayed in the Society's office.

Our week in Japan ended all too soon with a flight to Beijing on Sunday, March 20. The contrasts between Japan and China are marked:

- formality versus informality
- luxury versus subsistence
- color versus drabness (it was still very much winter in Northern China)

Even though the country is still very poor, we were extremely impressed with the attitude of the Chinese people. They are, indeed, building a new China. Everyone is free to state his or her own views, including criticism of past and present leaders, and competition is encouraged in virtually all areas of life. The Cultural Revolution was a great tragedy for China, setting the country back at least 10 years — nothing happened in the way of economic, technological or educational advances during that period.

We were met at Beijing airport by Wei-Ping Zhang, an instructor in the Department of Finance at Nankai University and our guide for our entire stay in China. We were driven the 90 miles southeast from Beijing to Tianjin on a reasonably good road filled with trucks, tractors and bicycles. In Tianjin, a major port city of eight million people on the Haihe River, we were something of a novelty to many of the residents, who obviously have met few foreigners.

Nankai University, on the other hand, has a long tradition of foreign scholars. Our actuarial program there will be in keeping with that tradition. Because the program itself was described by Harold Ingraham in the April 1988 issue of *The Actuary*, I'll make only a few brief comments.

On Monday, I met with officials of the Finance Department and with the vice president of the university. On Tuesday morning I spoke to approximately 20 graduate students about the insurance industry and the actuarial profession in North America. Mr. Zhang translated, but many of the students understood much of what I said, and their questions were in reasonably good English.

During a meeting with Finance Department officials, they mentioned

*Continued on page 3 column 1*

*Ambassadorial Visit cont'd.*

their need for equipment such as personal computers, VCRs, video cameras, monitors, tape recorders and still cameras — items they cannot afford to purchase in China. If you or your company want to provide any of these, please contact Harold Ingraham, the member of the SOA International Relations Committee responsible for our relations with Nankai University.

We enjoyed our stay at the university, even though the heat had been turned off in all the buildings on March 15. The temperature generally ranged between 30° and 45°F while we were there! At least the hot water was turned on three times a day — and it was hot!

On Tuesday afternoon we took the train to Beijing. We were met by Madam Wang of the Peoples Insurance Company of China (PICC) and driven to the Friendship Hotel, a large, sprawling group of buildings where China accommodates its foreign friends. ("Foreign friends" is no idle term. Foreigners are indeed treated very well. We were not permitted to pay any of our expenses in China, and we were told that any Chinese who harms a foreigner is subject to more severe punishment than if the crime were against another Chinese.)

On Wednesday morning Madam Wang escorted us around The Forbidden City. The former Imperial Palace buildings and grounds are extensive and beautiful, but not as colorful as we expected after having seen *The Last Emperor*, probably because the interiors are not lighted as they were in the movie. We strolled through Tienanmen Square, past the Great Hall of the People and Chairman Mao's Memorial.

In the afternoon, we visited with Wanzhu Cheng, PICC Vice President. Mr. Cheng speaks fluent English, having traveled abroad to visit many insurance companies, and is very knowledgeable about insurance, particularly property and casualty. We discussed the actuarial program at Nankai and he confirmed the PICC's and the Government's support for this program. China is committed to develop a competitive and viable insurance industry and, to its credit, recognizes that this cannot be done without qualified actuaries. There are no actuaries in China today.

The Nankai program, teaching Associateship-level subjects, is only the first step in developing a Chinese

actuarial profession. Fellowship-level subjects should be taught by qualified actuaries knowledgeable in the practical aspects of actuarial work in a given country. Without qualified actuaries, how do you bring recruits from the Associateship to the Fellowship level? And, without such training, how do you produce qualified Fellows? One solution would be for PICC to send graduates, preferably ASAs from the Nankai program, to North America, or perhaps Hong Kong, to receive training and to write the Fellowship examinations. These new Fellows, while admittedly not trained in Chinese insurance and employee benefits practices, would then return to China and become the nucleus for their actuarial profession. In years to come, the Society might be asking you to help by persuading your company to employ a Chinese ASA for the time necessary for him or her to attain Fellowship. You need have no fear about the technical capability of these individuals. The selection process for entering the Nankai program is extremely rigorous.

It will take time but, if China can stay the course, I see it becoming a major player on the world financial scene within 20-30 years.

My visit to China had one immediate impact. The March 24 issue of the *China Times*, an English

language newspaper published in Beijing, contained a crossword for which the clue was "insurance expert." The answer was, of course, "actuary." How many crosswords in North America use such a clue? And, if they did, how many readers would know the answer?

We left Beijing in a snowstorm for our flight to Hong Kong. Our stay there was brief, just long enough to address the Actuarial Association of Hong Kong regarding current issues in the Society of Actuaries. I devoted much of the talk to E&E matters, since many in the audience are writing our examinations. An important reason for including Hong Kong in our itinerary was that the Society has more members here (36) who qualified for membership by passing our examinations than in any country outside the United States and Canada.

On March 25 we flew to Sydney, one of the most beautifully situated cities in the world. The weather for our weekend was superb — mid-70's, dry and sunny. We had been to Sydney for the International Congress in 1984, so we did not do much sightseeing on this trip. We did explore the new Darling Harbor area, including "First State," an exhibit chronicling the 200-year-history of New South Wales.

*Continued on page 4 column 1*



SOA President Gary Corbett, right, presents commemorative silver bowl to Tim Trahair, President of the Institute of Actuaries of Australia. Corbett presented a similar bowl to the Institute of Actuaries of Japan.

*Ambassadorial Visit cont'd.*

The week was taken up with Institute of Actuaries of Australia (IAA) meetings and with company visits. As was the case in Japan, Australian actuaries are very interested in what is happening in North America, and 122 are Associates (not by examination) of the Society. There are four FSAs and eight ASAs by examination in Australia.

At an Institute meeting on Monday night in Sydney, I presented the president with a silver bowl engraved with the greetings of the actuarial profession in North America (see photo). On Tuesday morning I described to their newly formed Planning Committee how the Society's Planning Committee functions, the issues the Committee has considered in the last three years and the major issues facing the Society and the profession today — E&E, research, principles, strengthening the profession, The Future of the Actuary/The Actuary of the Future, and the growing international role of the Society.

That afternoon I lunched with the actuarial science faculty of Macquarie University and spoke to the actuarial students about FES/FEM and other issues. Approximately 50% of Australian actuaries come through the Macquarie program, most supported by company scholarships. Associateship-level examinations are waived for Macquarie graduates.

My last official duty was a luncheon Thursday with a dozen senior actuaries in Melbourne, where I spoke on my experiences in China, FES/FEM and the organization of the actuarial profession in North America, including recommendations for strengthening our position in the United States.

After a day with relatives near Melbourne, we flew back to Atlanta — 26 hours door to door, including a 13:30 hop from Sydney to Los Angeles. We were tired, but agreed it was probably the most interesting and educational three weeks of our lives. I'm confident our hosts in all four countries also benefited by our visit and that the Society's international presence was significantly enhanced.

Next June, at our Centennial Meeting in Washington, we are looking forward to returning their gracious hospitality.

Gary Corbett is President of the SOA for 1987-88. He is with Tillinghast/Towers Perrin.

*Americans In Japan cont'd.*

manager at Asahi Life Insurance Company — at that time the fourth largest participant in Japan's life market. Asahi Life's involvement was the result of its role as head of the Life Association of Japan during the year that our representative office was established in Tokyo. It is the local custom that the company then in that role offer assistance to any foreign insurers seeking entry to the Japanese market.

The range of life products offered in Japan has been limited. With the exception of the foreign companies which all sell nonparticipating products, the market is almost entirely mutual. Products marketed in the mid-1980s included little more than traditional endowment, term, and annuity policies with health, accidental death and term riders. Whole life was not offered until recently. One of the most successful new products, introduced by American Family and subsequently offered by others, provides indemnity benefits for cancer — the leading cause of death in Japan. The combination of this popular product with a novel marketing arrangement through corporate agents quickly resulted in large sales and the prospect of soon covering 10% of the population.

The proverbial bread and butter of the market, however, remains the endowment policy. While tax-deferred accumulations explain part of its appeal, we understood the true explanation to be more subtle. In Japan it is the responsibility of the individual and the family to save for retirement and final expenses. The purchase of term insurance is seen as a partial abdication of that responsibility. In Fall 1986 a variable life product was introduced to the market.

A particularly appealing area in Japan, implied by the much noted and pronounced aging of the Japanese population, is annuity products. Because Japanese employers generally provide a relatively small lump sum at retirement, and demographic trends put the welfare safety net under increasing strains, the life industry feels it has found some fertile ground. Annuities, however, have been a product line from which the foreign-based life companies have been largely foreclosed under a sort of "Catch-22." The MOF first required that annuities be sold only in a participating format. It then required that no company sell participating business until its

domestic operation reached a cumulatively profitable position. Barring a prohibitive capital infusion, foreign participants' only option has been patience.

Product pricing in Japan follows the "equation" approach and leaves little to the discretion of the actuary once the benefit structure and premium period have been set. The required mortality rates are based upon recent domestic industry insured life experience. Interest rates are also prescribed by MOF and vary primarily by par/non-par form and benefit period. While acquisition expenses were also inflexibly prescribed (presumably to ensure comparability across companies in their adjusted reserves), a degree of latitude proved to be available in setting maintenance expense assumptions. A unique feature in Japan was the requirement that any subsequent liberalization in pricing/valuation assumptions mandated by MOF be applied to both new issues and in-force business — bringing a decidedly new meaning to the term "nonparticipating."

The rather circumscribed role of the actuary in pricing was seen again in valuation, where the method and basis were defined by MOF. Additionally, none of the Japanese actuaries who had joined our company by the time of our departure had been exposed to the practice of profit testing either in their examination series or on the job. The overriding concern in Japan seems to be on preserving/enhancing market share with the implicit assumption that if you spread expenses far enough, profits will take care of themselves. The area of actuarial practice that appeared to enjoy the least regulatory constraint was in setting policyholder dividends, although the total was subject to MOF approval.

It should be noted that MOF officials involved in negotiations with life company representatives were not necessarily actuaries or even insurance professionals. In many cases they were bureaucrats on rotation in MOF's insurance division. It also was our understanding that the insurance division of MOF was largely a spokesman for the vested domestic interests and would not likely be accommodating toward any proposed novelties which might "disturb" the market (although MOF has at times used the foreign firms as a small testing ground for