



SOCIETY OF ACTUARIES

Article from:

The Actuary

December 1993 – Volume 27, No. 10

1992-93 YEAR IN REVIEW

Ask An Actuary

An innovative president and a decisive Board of Governors propelled the 1992-93 Society of Actuaries program year forward, driven by the rapid pace of changes within the businesses actuaries serve. It was not a "business-as-usual" kind of year. It was "heads-up; look what's happening" time.

Public policy events, such as U.S. health care reform, and consumer issues, such as sales illustrations, drew actuaries into the media spotlight. *The Wall Street Journal*, *New York Times*, and the *National Underwriter* were just a few of the publications reporting on actuaries being involved in analysis of the numbers behind the headlines. This media attention brought new focus on the profession.

I am proud to be an actuary, an honorable and respected profession.



At the same time, SOA President Walter Rugland called for members to step forward and become more visible as expert problem solvers in any financial arena. The "Ask An Actuary" program Rugland introduced in his incoming president's address October 1992 (printed in the January 1993 *Actuary*) struck a responsive chord. He asked members to share his vision: "I see the day in the 21st century that whenever a business or government decision maker has a question about risk, her or his first thought will be, 'Ask an actuary.'" An April 1993 article in *The Actuary* reported members' initial response.

By November 1993, members had pinned on and handed out more than 26,000 "Ask An Actuary" buttons all over the world as a tool to initiate conversation about actuaries' capabilities. An information card with eight points about the profession helped

convey the "Ask An Actuary" concept. Members gave buttons to co-workers, clients, students, community leaders, government leaders, news media, and actuarial clubs in several countries.

During the year, the button showed up in some unexpected places. Millions of viewers of the David Letterman show on October 18 saw a member attending the annual meeting in New York hold up his button to the CBS cameras as he walked through Rockefeller Center. An "Ask An Actuary" button appeared in the halls of the U.S. Congress when SOA Board member Alice Rosenblatt testified on health care reform at the House Ways and Means Committee November 9.

Two surveys – (1) among those who requested them from the Society office and (2) among those at the New York annual meeting – gave valuable feedback. Both groups reported positive responses from others, with 93% of Group 1 and 77% of those in Group 2 who said they distributed buttons, experiencing either "very positive" or "somewhat positive" reactions. The top three purposes named by Group 1 for requesting buttons were to:


- Increase awareness of profession
- Boost morale/motivate
- Show pride in profession

Group 1 felt satisfied (50%) or somewhat satisfied (45%) that the button served its intended purpose.

Facing leadership challenges

Part of the "Ask an Actuary" concept was exploring the possibilities of new opportunities in other areas, as well as strengthening actuarial influence in traditional areas.

This came during a growing need to address shrinking job opportunities within traditional actuarial roles. Anecdotal evidence, but no hard numbers, indicated a rise in unemployed actuaries.



The actuarial profession has come of age. It is poised to take a leading role in keeping our businesses and financial systems strong.

Members began to express concern about the future viability of the profession. A survey taken at the three 1993 spring meetings reflected the feelings of nearly 10% of the U.S. membership. While 85% of the respondents to the "You and Your Profession" survey were satisfied with what they were doing professionally, a lesser percentage, 74%, would choose to become an actuary if selecting a career today. Three out of four believed their opportunities at their companies were "excellent" or "good," with 25% rating their opportunities as "average" or "poor." Three out of ten felt "very prepared" to compete in today's employment market, and six of ten felt "somewhat prepared."

In 1993, the number of students in the exam process decreased. For the November 1993 Exam 100, registrants fell 16% from November 1992 registrants. Overall, November exam registrants were down 7.5% from last year.

To be responsive to members' needs and concerns in the current economic and political environment, the SOA Board of Governors had to address several tough questions:

- Could those already in the profession adjust the way they viewed their present roles and future opportunities?
- What could the SOA do to help those in transition who once viewed this profession as providing job security for life?
- Did the SOA's basic education prepare new actuaries for the challenge of adding value to organizations looking at the bottom line?



The SOA's international contacts include students such as these masters' candidates at Nankai University (China). The SOA continues to support the Nankai program with exam fee waivers, textbooks, and curriculum and thesis guidance. The Committee on International Relations has received requests for help from other universities in China, Russia, and Eastern Europe and has sent copies of the Transactions to Bulgaria, Bangladesh, and Moscow. The SOA waives foreign center fees for candidates writing exams in Mexico.

- What would supplement traditional positions for the mushrooming student population when they obtained their actuarial designations?
- Was research structured well enough to extend actuarial science's knowledge base? Was it timely enough to apply in practice areas in today's workplace? Could strengthened relationships with universities advance research efforts?
- Did continuing education offerings advance practice area knowledge?
- What could the SOA learn from the actuarial profession in other countries addressing similar issues?

The Board knew the future of a strong, yet vulnerable, profession could depend on the way it developed its answers.

Confronting employment issues

Unemployment in the profession became a major concern for the first time in the Society's history. The Board looked for ways to support its members in transition and to strengthen opportunities where possible. The Board took several steps:

- It established the "We Care" program, which initiated deferring dues for up to two years of those members who were unemployed. By January 1994, the We Care Committee plans to have a resume matching service in place.
- The Actuary of the Future Section was established to carry on the member-driven groundwork laid by the Actuary of the Future Task Force

to seek expanded opportunities in nontraditional areas of practice.

- Because of financial constraints for public sector actuaries to participate in Society activities, it adopted a new three-year program for full-time government-employed actuaries that included waiving registration fees to one continuing education event per year and paying travel expenses up to \$2,500 a year to attend committee or task force meetings, similar to the program already in place for full-time academic actuaries.

We are more than "backroom technicians," restricted to the liability side of the balance sheet. Recent advances in actuarial education and research position actuaries as useful advisors in asset management as well.

- A new communication vehicle, *The Presidential Circle*, was used by the SOA president to contact SOA members who have attained CEO, president, or other senior positions within companies that employ actuaries. The purpose was to make them aware of advances in actuarial science and of SOA programs that can add value to their companies' operations.
- The student newsletter, *The Future Actuary*, focused several articles on job hunting in today's environment,

in addition to those on exams and professional development.

Basic education adjusts to marketplace

Although the decline in examination candidates may be a result of a shifting job market for actuaries, it is expected that those staying in the exam system will have a stronger commitment to the profession and a more realistic view of their future opportunities. This year, several steps were taken to make sure candidates obtaining designations are prepared for the marketplace:

- Strengthening the requirement to obtain an Associateship designation from 200 to 300 credits as of July 1995. The additional credits come from the current core Fellowship exams. This will ensure that new ASAs will not only have mastered the mathematical core needed, but also will have a stronger practical foundation and more elective options.

- Implementing the new Finance track to enhance preparing candidates for investment and asset management
- Retaining a testing firm, Professional Examination Services, to work with SOA volunteers and staff to accelerate changing the nature of the SOA exams – shifting the emphasis from testing memorization to testing a wider range of relevant skills
- Changing the catalog lifetime – the guaranteed period of time for which earned examination credit is valid – to three years from six years. This makes it

(continued on page 10)

ASK AN ACTUARY

Year in Review (continued)

easier to accommodate needed changes in educational requirements.

Committees and task forces restructured for faster response

The first year under the SOA's change from a functional to a practice-driven approach reorganized most committee and task force work under one of four practice areas: life insurance, retirement systems, health benefit systems, or financial and investment management. Each practice area manages its own research, education, professional development, and practice advancement. The May 1993 *Actuary* contained an explanation of the new structure.

Our strong quantitative base of knowledge and experience in problem solving positions us to be valuable contributors to the highest levels of decision making in any company.



The health practice area, in particular, was able to respond rapidly under the new structure as events developed in health care reform. SOA staff and members helped in the American Academy of Actuaries' efforts to respond to public policymakers' need for objective analysis. As the November 1993 *Actuary* reports, the Clinton administration, the Academy, and the Society rallied several actuaries prominent in the health care field to serve as volunteers to look at portions of the administration's cost estimates and other issues in the proposal. Several Academy work groups and longer-term SOA task forces continue to analyze issues and participate in hearings on the complex components in this major public policy debate.

The Dynamic Solvency Task Force is another instance where a practice area has stepped in to respond to an important professional issue. The finance and investment management practice area is managing this task force's work, which cuts across all

practice lines. In response to the Academy's position that insurance company management should obtain from a qualified actuary a written financial condition analysis report, the task force has initiated work on a Dynamic Solvency Handbook and held seminars for those who may be appointed to issue this financial condition analysis. April and September 1993 articles in *The Actuary* detail the work of this committee. Four of the five current research projects in the finance and investment management practice area address issues related to dynamic solvency testing.

Programs restructured for flexibility

One of the directions set in the 1992 Strategic Plan now being implemented is that "continuing education programs provide skills actuaries need to address the current financial, economic, and public policy issues." This year, a task force recommended some changes that the Board adopted in October to accomplish this. As a result, the traditional spring meeting format has been changed from three meetings to two traditional meetings and a third new special event meeting. The latter will be planned by a special Program Committee Workshop to have a different, more flexible format to help broaden the actuary's role and perspective and may involve other professions as co-sponsors.

Ask an actuary when you need to measure, model, and communicate the implications of any future contingent event.



The Program Committee also was restructured so two separate committees – one for spring meetings and one for the annual meeting – will operate independently under its own chairperson. Representatives from each special interest Section will be represented on both.

Sections continue to give grass roots support

Not all of the 13 special interest Sections fit neatly under one of the practice areas in the new structure. However, Sections continue to be a major source for identifying continuing education and program needs of its members.

Highlights of each Section's activities this year include:

- The Actuary of the Future Section, with more than 450 members, is new this year and has published its first newsletter.

- In its second year, the Computer Section has 2,300 members and was influential in encouraging the establishment of the electronic bulletin board.

- The Education and Research Section sponsored the successful Actuarial Research Conference, which honored Jim Hickman at the University of Wisconsin. It administers the ASA/FSA grant program and has almost 750 members.

- With 1,200 members, the Futurism Section continues to work at identifying projects and setting goals.

- In conjunction with the American Academy of Actuaries Health Practice Council, the Health Section has been spending much time lending its members' expertise to the administration's health care reform discussions. It has almost 3,200 members.

- With 3,363 members, the Product Development Section continues to sponsor seminars and engage speakers at spring and annual meetings. It began a Section research prize to honor the memory of Alice Neenan, a prominent member.

- In its second year, the International Section has 1,300 members. Its Council includes those in the United States, Canada, Australia, and Singapore. It has started a program to send donated books to help start actuarial programs outside North America.

- The Investment Section awarded the second biennial Redington Prize to

Robert Reitano, had a successful seminar, and was active in developing the finance track and the Dynamic Solvency Handbook. It has 3,500 members.

- With 3,100 members, the Financial Reporting Section sponsored a seminar and supported the Valuation Actuary Symposium.

- The Nontraditional Marketing Section, with 1,050 members, has concentrated on research this year, with two major projects nearing completion.

- With 4,000 members, the Pension Section is the largest Section. This year it sponsored several publications, seminars, and meeting sessions.

- The Reinsurance Section sponsored a reinsurance mortality research project and maintains an active newsletter schedule. It has almost 1,500 members.

- One of the newest Sections and the smallest with about 400 members, the Smaller Insurance Company Section is a strong advocate of smaller insurance company actuaries. It has published a newsletter and sponsored meeting sessions in the past year.

Developing resources

For the past several months, the Resource Development Committee has studied the feasibility of expanding its development program in the current economic environment. It concluded that an effective strategy for keeping the profession strong would be to invest in what it knows and does best – research and education. New knowledge and educational initiatives could be a powerful force to withstand market erosion, declining competitiveness, and surplus of actuaries. Successfully retooling and vitalizing the profession, however, requires significant resources and long-term focus.

In October 1993, the Board established the Society of Actuaries Foundation to take on the challenge. A separate trustee structure will include trustees with specialized expertise from outside the profession. To

show its commitment, the Board gave \$500,000 as seed money, pledged up to \$500,000 more to match dollar-for-dollar money donated by members to the Foundation, and agreed to cover all staff and indirect costs within the SOA operating budget. This guarantees that every dollar donated is a dollar used for research and education.

We are ready to be visible members of the problem-solving team in many industries, not just the insurance and employee benefits fields.



The Foundation's independent status gives it enhanced opportunities to be innovative and explore new research methodologies and educational applications for specific issues and industries. It opens important new funding sources, broadens the Society's leadership base, and supports development of relationships between the profession and many new constituencies.

Broadening research

With a commitment to the Foundation and funding for research, one of the SOA's top priorities is to expand research efforts. Special emphasis is on applications of emerging technologies to actuarial practice, new areas for applications of actuarial science, applications of research from other disciplines, and public and business policy issues.

Three significant research projects this year include:

- Credit Risk/Private Placements and Commercial Mortgages – Preliminary results of data collected on these two major asset categories from 1986-89 were the subject of seminars at Boston and Quebec spring meetings. A report on this research is now available. This is the first time a study has used actuarial techniques and models to show the total economic impact of credit risk events (restructures, defaults, foreclosures, bankruptcies), rather than

just showing the rate at which they're occurring. The study is continuing.

- Option Pricing Models as Alternatives to Cash Flow Testing – This project will provide a learning tool for actuaries to understand the theory and practice of option pricing methodologies. Strengths and limitations of various models are compared. Phase I is completed, and Phase II is underway.

- Catastrophic Claims Health Data Base – This project includes data from 25 companies, a good response for a new study to gain better understanding of large claims (more than \$25,000 annual claim cost).

Several prizes for research papers were awarded this year:

- James A. Tilley won the 1993 Annual Prize for "An Actuarial Layman's Guide to Building Stochastic Interest Rate Generators," for the best *TSA* paper released in preprint form between July 1, 1992, and June 30, 1993.

- Richard Daskais and David LeSueur received the 1993 L. Ronald Hill Memorial Prize for "An Introduction to Duration for Pension Actuaries," published in the June 1993 *Pension Forum*.

- Patrick L. Brockett's 1991 paper, "Information Theoretic Approach to Actuarial Science: A Unification and Extension of Relevant Theory and Applications," published in the *TSA*, Vol. XLIII, received the Halmstad Prize given by the Actuarial Education and Research Fund (AERF).

- Howard L. Slaney received the 1993 AERF Practitioner's Award for "A Bond Manager's Method for ALM, (Asset Liability Matching)" and Adam J. Reese received an honorable mention for "Health Care Costs in the Last Year of Life." This award recognizes research done in a nonacademic setting, performed in the working environment.

High tech moves communications to new levels

Timely global communications among actuaries is becoming a reality. Using

(continued on page 12)

Year in Review (continued)



Pride in accomplishment made the Fellowship Admission Course "graduation" a cause to celebrate for 381 new FSAs this year. Monica Gajdel gives her Dallas FAC experience a "thumbs up."

available technology to provide the latest information and a means for member interaction, ACTUARIES ONLINE was presented in a prototype phase at the New York annual meeting. Many members already on CompuServe, a computer information service, are eagerly awaiting this electronic forum for actuaries that goes into operation February 1994. A September 1993 *Actuary* article and several Section newsletters give full details.

Continuing Education also made plans this year to help close the international gap through multiple satellites broadcasting a teleconference across national borders in 1994.

Continuing Education's Computer Assisted Learning (CAL) sessions were

very popular for presenting highly technical subjects at meetings this year. The participant watches a lecture on a PC screen, answers questions and executes exercises on the screen, and can replay portions of the lecture as needed.

In other high-tech developments, desktop publishing, either in-house or through service bureaus, became the preferred method for SOA publications this year, saving production costs and time. The 29 Section newsletters, ranging in size from 4 to 28 pages, for 13 different Sections, were created in-house, as was the new Speaker's Kit and *The Presidential Circle*.

The research library enhanced its services this year through access to Nexis/Lexis, which added extended online literature searching capabilities, and access to the Online Computer Library Center, an automated interlibrary loan service.

International cooperation

Part of the answer to meeting professional challenges may come from interchange with actuarial organizations overseas struggling with the same issues.

An informal organization dubbed "The McCrossan Group" met twice last year to discuss standards of practice, accreditation levels, code of conduct, and discipline. Paul McCrossan, past president of the Canadian Institute of Actuaries and an SOA Board member, originated the group. Members included presidents and presidents-elect from the six North American organizations representing

actuaries, and leaders of organizations in Ireland, New Zealand, Australia, South Africa, and the United Kingdom. An editorial in the February 1993 *Actuary* and articles in the July 1993 *Actuarial Update*, the American Academy of Actuaries newsletter, and *The Bulletin* of the Canadian Institute of Actuaries detail the progress of that group.

We have a unique set of skills. Ask how what we know can help you succeed in controlling the future of your business.

ASK AN ACTUARY

At the second meeting in May 1993, the framework for the "International Federation of Actuarial Associations" (IFAA) was developed. The IFAA would complement the work of the International Actuarial Association (IAA), an organization for individuals. It would articulate and continually refine the unique professional role of actuaries in a global environment, and its members would be organizations that subscribe to established conditions of professionalism. A September 7, 1993, draft document states, "For the world's actuaries of the future, IFAA offers the potential of an international scientifically based profession based on fundamentals of common education and practice application." Discussion continues.

January Board meeting open to members

Interested Society of Actuaries members are welcome to attend the Board of Governors meeting January 13, 1994, near Chicago's O'Hare Airport. Minutes of Board meetings are available on request. For more information on the meeting and minutes, call the SOA office at 708/706-3500.